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## **ECONOMICS, POLITICS, SOCIETY AND CULTURE**

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## The new theory of the Arctic and Northern development: multi-scale interdisciplinary synthesis<sup>\*</sup>

 Nadezhda Yu. ZAMYATINA, Cand. Sci. (Geogr.), leading researcher Tel.: +7-906-095-22-62. E-mail: nadezam@yandex.ru Moscow State University, Moscow, Russia
 Alexander N. PILYASOV, Dr. Sci. (Geogr.), Professor Tel.: +7-916-629-54-29. E-mail: pelyasov@mail.ru Institute of Regional Consulting, Moscow, Russia

Abstract. After the bright achievements of the Soviet development school in the past 30 years, there was a long pause. Meanwhile, the need for a broad scientific generalization of practical efforts to deploy large and small economic projects in the Arctic and the North is enormous. The authors set the task of developing a new complex theory of the North and the Arctic development, which would be a synthesis of the best achievements of the Soviet school, foreign frontier studies and the modern regional science studies of the innovative development. In the authors' view, its key feature is the emphasis on local development and the endogenous factors of the development, which had no attention before. Constructive synthesis of external and internal factors of colonization should be formed "from below", from the territory itself, not from the federal center. Four new research priorities in the new study of the North and the Arctic development are identified and described in detail with a focus on: the analysis of local institutional capital; conflicts and contradictions of the natural resource development of the territory. The new ideology of studying the Northern and Arctic development is supposed to be tested during the field and expeditionary study in the North and the Arctic regions.

**Keywords:** the North and the Arctic development, resource management, glocality, large and small forms of development, a multi-scale process.

### Introduction

After the bright achievements of the Soviet development school in the past 30 years, there was a long pause. A new theory of development, adequate to the current realities of globalization, post-industrial transformation, knowledge economy, multi-agent participation in this process and the variety of ownership forms, has not yet been proposed. In fact, modern development of the Arctic and North of Russia remains without a proper theoretical and methodological apparatus. Research in this area is limited to particular topics (e.g., resource availability, indigenous people, outflow of youth, etc.), and the problem is not only in absence or weakness of generalizing works, but also in the fundamental impossibility of using foreign theories for the Arctic and northern conditions because of the other development factors, social effects of economic processes, as well as the private, fractional, non-conceptual nature of most research done in the North and the Arctic Canada, the United States and Northern Europe.

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For the first time, the task is to form such a holistic theory for the North and the Arctic basing on the fundamental zonal regularities. On the one hand, none of the foreign countries is able to do this simply because of the smaller size of the territory of the Arctic and the North and, consequently, the objectively smaller scale of development and the lesser need for its conceptualization: why should they to reinvent a revolutionary new bicycle, if it is possible to manage a more comfortable simple extrapolation of the mainstream concepts prevailing in the temperate zone to the North and the Arctic?

On the other hand, modern methodology, theories and tools of foreign regional science (a complex of sciences aimed at studying regional development, incl. economic, geographical, sociological and other approaches and methods) are formed on the basis of densely populated territories with a dense network of urban settlements (mainly in Western Europe and North America). These methodology does not consider the real development the extreme arctic and northern zones.

It turns out that Russia is simply doomed to creativity in this area by the size of its northern and arctic areas and the scale of the related problems of development and nature management.

#### The relevance of the research

Over the past 25 years, a world-class social science has undergone a methodological revolution. The focus of researchers has radically shifted. Earlier attention was focused on the external factors of systems (in the economy this was manifested in the concept of exogenous economic growth, in sociology — in attention to the external environment, in demography — in the concepts of transitions that involve unified stages of development for all communities, etc.). In 1980s-90s, researchers turned to the study of internal factors of systems. In the economy, this was indicated as a transition to the endogenous theory of economic growth, in sociology — to the study of micro-level processes, in demography — to the birth of institutional demography and a departure from the theory of a single stage demographic transition.

There was an idea of the heterogeneity of internal factors of social systems, which, in previous approaches, were supposed to be homogeneous. This methodological revolution has captured a wide range of social disciplines and the concepts and theories they develop. It radically transformed the methodology and methods, strategy and tactics of research. In economics, sociology, anthropology, history, practically simultaneously a breakthrough occurred, as they say, "inside the black box" of regional development.

It is paradoxical, however, that the theory of economic development of the North and the Arctic has not undergone this transformation, and it retains by default the old postulates that processes are viewed from the standpoint of exclusively external influences: investments from the federal budget or investments of transnational companies, aimed at building large infrastructure facilities (megaprojects) and creating poles of growth.

This approach represents the economic development as determined from above; its initiators and drivers are the forces external to the territory (federal level), and the development itself is seen as territorially homogeneous, indifferent to the specific place of its deployment. The conceptual apparatus for studying the development for objective reasons remained the same and almost had no changes since 1980s. This clearly confirms our analysis of one and a half thousand works registered in the RINC system of the past 25 years, containing the key words "development of the North and the Arctic": in the vast majority of the territorial specifics of development have not been considered; they are considered only as a reservoir of resources or local features and the territory has not been considered.

True, the concept of a frontier continues to be developed abroad. Macro- and micro-levels are traditionally studied through this approach. However, due to the marginal position of the new development territories in foreign countries (Alaska in the USA, Arctic territories for Canada, Greenland in Denmark, Lapland in Scandinavia, etc.), the frontier theory is still not a complete system .

Thus, in Russia, a powerful but Soviet theory that has "decayed" but is still in use, and abroad — a more modern theory, but a more private and narrower one.

Meanwhile, in other sciences, a methodological revolution took place, which requires a fundamental revision of the studying object of the development theory. In social sciences, the concept of territory becomes an important actor of social, economic, and, first of all, innovative processes. Local specificity and local processes lie in the basis of the concepts of regional and local innovation systems, innovation environment, cluster development, and modern innovative development.

The world picture, based on our empirical observations, suggests that an inadequate approach to local specifics is unacceptable. At the moment, it seems impossible to ignore the local context of social and economic development, incl. the development of resources in the North and the Arctic. The super task is to modernize the theory of development by incorporating modern approaches in it, consisting the systemic unity of global and local processes (the "glocal" principle). Only in this theory, in our opinion, is be able to reach positions adequate to the contemporary level of development of the world social science.

It is important that this methodological breakthrough cannot be accomplished in foreign sciences and be perceived as "foreign best practices" by us. The theory of economic development is traditionally the Russian sphere of research, attention to which is due to the unprecedented scale of the development of Siberia, the North and the Arctic, their immense importance in the development of Russia. Simply because of objective reasons, neither the Scandinavian North and the Arctic, nor Greenland, the Canadian Arctic, or Alaska, can have a large-scale theory of development.

The applied relevance of the development of such a new theory is determined by the multifaceted problems and contradictions that accompany the modern development of resources and areas of the North and the Arctic: the need to harmonize the interests of indigenous smallnumbered peoples of the North and resource companies, the development of "rejuvenation" mechanisms for old industrial and monoprofile territories of the North and the Arctic, the new large projects on the shelf and land with a lack of experience and competencies, etc.

### Three sources or parts of the new development theory

A new theory of development for the North and the Arctic, requires integration of the three main blocks of scientific research. The first block is the Soviet school of religious studies. The second is the science of the last two decades, carried out within the framework of the foreign frontier school and a number of other study areas related to the resource use. The third block combines areas of foreign and Russian regional science. Most of them were developed without any attention to the specifics of the Arctic territories, but still they can be a source of valuable methodological and methodological provisions suitable for the analysis of the Northern and Arctic territories and their development. All three blocs have been developing almost independently, and the task is to integrate them. Let us consider each block separately.

**The first block**. In Soviet times, the major areas in social and economic research of the development of the North were: industrial and transport development [1, Slavin S.V.]; settlement of deserted territories [2, Pokshishevsky V.V.]; assessment of natural resources and their territorial combinations [3, Mints A.A., pp. 16-39]; economic complexes in Siberia [4, Bandman M.K., pp. 8-114]; complex development of the North [5, Vityazeva V.A., pp. 107-110]. Subsequently, all of them were further developed and became the basis of a holistic theory of economic development of the North environment of the North reprint the state of the USSR, finally shaped in the 1970s.

Joint efforts of specialists led to a single theory of economic development of the North: its conceptual apparatus and the idea of economic spatial systems as an object of development were introduced to the scientific community. Dramatically expanded methodological possibilities of scientific analysis made the development an economic and geographical process, resulted in new spatial structures and aimed at the reconstruction of the social and economic space [6, Kosmachev K.P., p. 8]. A very constructive concept was developed by P.K. Kosmachev. He understood the development as "deep" and "wide" and worked out its variations in space and in time [6, Kosmachev K.P., pp. 9, 66].

By the end of the 1980s, the apparatus of the theory had been shaped by the efforts of Soviet development schools. It consists of several large parts: types of development, stages (or phases), degrees and cycles of development, routes and bases — elements of the territorial structure of development. The idea of cycles of development has many interpretations: cycles as types of development [7, Zaitsev I. F.]; historical and geographical cycles [8, Dergachev V.A., pp. 82-86], resource cycles [9, Mosunov V.P., Nikulnikov S.Yu., Sysoev A.A.; 10, Komar I.V.], and others. Knowledge of territorial and economic structures, providing high efficiency of the development process, has become an important area of research of the Irkutsk school [11, Kosmachev K.P. et al., pp. 84-92]. The key idea there was the concept of a supporting frame — an interconnected organically integral system of linear communications (routes of development) and node or point objects (bases of development).

A new stage in the development theory of the Northern territories was opened by radical economic reform in Russia — the change from planning and command to the market economy paradigm of the development of the North. New themes came to dominate the social and economic studies of the North: structural policies [12], the ratio of the market and the public mechanisms in the development of Northern territories [13, Luzin G.P., Pavlov K.P.], local markets [14, Pilyasov A.N.], privatization, the social consequences of economic reforms [15, Navasartov S.M., pp. 48-52], etc.

In the 1990s and 2000s, Russian scientists carried out a purposeful adaptation of foreign experience in the Northern economy to the new realities of the Russian North [16-19, Pilyasov A.N.]. In fact, they created a base for the integration of Russian (Soviet) and foreign Northern studies. Here, it is necessary to note three monographs ("Northern economy and radical reform (American experience and Russian realities)"; "Russian North and federalism: in search of new models" and "From paternalism to partnership (construction of new relations of the peoples of the North and the state)"). These books accumulated experience of the resource and economic development of Alaska and partly North of Canada and applied it to the Russian Northern territories. Among the specific features of the Russian North, the authors mentioned: a much longer age of economic development than it was in the other countries; more powerful industry, the specifics of the transformation of the administrative — command economic model and its effects on the of development of the North. All these issues explained the huge variety of versions of the Northern economy in the Russian North.

It is in these works of the second half of the 1990s, for the first time, we saw the idea of the special phenomenon of the Northern economy and its complete concept. In the Northern economy, institutions are closely linked to natural resources and their life cycle. Relatively young resource provinces required one institutions, older ones — the others and the oldest provinces — the third [20, Kryukov V.A.]. Nevertheless, there are some general laws of resource management institutions. equal for all the regions of the world.

The generalization of more than one thousand Russian research works on the development for the past 15-20 years (the e-library data base; keywords: "economic development", "development of the North and the Arctic") testifies to significant progress compared to the Soviet time. The search for the key words "development of territories and resources of the Arctic and the North", "development of the Arctic and the North" gave more than a thousand names of published sources. Then, we carried out several rounds of "cleaning":

 all the literature on the history of development, settlement, development of the Arctic and North territories was excluded: for the purposes of our study, a time period of the last two decades is necessary; we needed source on new exploration of the resources and spaces of the Arctic and the North of Russia. The historical, centuries-old aspects of the development of the Arctic and North of Russia are beyond the scope of this research project. This reduced the search result for several hundred sources at once;

- All repeated sources were also excluded. It turned out to be several dozen;
- Then the first two hundred sources were examined in order to outline the main rubrics where the new development was stratified. So, there were about 20 themes related to development. Subsequently, all the other hundreds of sources were classified (sorted) by these themes. Simultaneously, the sources with no spatial aspect, or got into our original database accidentally, or did not allow us to clearly define the research topic by name, were excluded. So, minus a few hundred;
- The further selection required the introduction of a few additional headings. It turned out to be 26. As a result, we had almost fifty sources on the new Arctic development, which gave us an account of specific directions of the research within this topic over the past two decades (table 1).

Table 1

Direction	Number of articles, sources
1. Oil and gas development of <b>the shelf</b> <sup>1</sup> as a major economic problem in the Arctic	58
2. Rescue and safety	45
3. Innovative forms of modern development of the North and the Arctic	43
4-5.Infrastructure issues of development of the North and the Arctic	39
4-5. International cooperation and the role of globalization	39
6. Wide complex view - methodology of development	34
7. Development of mineral resources, fuel and energy resources of the North and the Arctic	30
8. Institutional factors of development	29
9. Territorial structures of development	21
10-11. Labor resource factors in the development of the Arctic	15
10-11. Project approach to development	15
12. Foreign experience of development	14
13-14. Environmental factors in the development of the Arctic	11
13-14. Indigenous aspects and issues of development (traditional knowledge)	11
15. Sanctions and development	10
16. Climate change and natural and climatic factors of development	9
17-18. Development Management	8
17-18. Levels and regional versions of the Arctic development	8
19-21. The Northern Sea Route	7
19-21. Recreational development of the North and the Arctic	7
19-21. Engineering, technological and social factors of development	7
22-23. The development of <b>coastal areas and zones</b> of the Arctic	6
22-23. Food security of the development areas of the North and the Arctic	6
24. Large business in development	5
25. Financial and tax factors of development	3
26. Development of marine biological resources of the Arctic and <b>marine biotechnologies</b>	2

The thematic structure of the published research on the development of the North and the Arctic (October 1, 2017 e-library - www.elibrary.ru)

So, we will briefly list the main research directions related to the theme:

<sup>&</sup>lt;sup>1</sup> Bold prints highlight the subjects that were lacking 30 years ago in Soviet development studies.

1. The greatest innovation is the global international context of the development of resources and areas of the North and the Arctic by numerous factors: the possibility of new projects is determined by the global conjuncture of prices for the Arctic resources; Chinese investors have a significant share in the Arctic resource and infrastructure projects; best practices and technologies of other polar countries are being used by Russia in new megaprojects. It is a "plus" trend. On the other hand, sanctions and restrictions in the transfer of advanced technologies and investments inhibit geological exploration and the commissioning of new deposits that have already been discovered on the shelf of the Russian Arctic seas. This is the case when the global conjuncture and globalization works "for a minus" in the development of resources and areas of the Arctic and North of Russia.

2. Another innovation is associated with the rescue and security — the most diverse issue, and not only military one, as it was in the Soviet era — environmental security, food, energy, etc. The development of the Arctic and the North was first understood as a high-risk probabilistic process, and this understanding was facilitated by the arrival of business — large corporate structures (In the USSR, it was simply not acceptable to speak about non-military risks).

3. Absolutely new topic was the development of the shelf and the whole range of investment, environmental, geopolitical and other problems associated with it. Without a doubt, present days are the forefront of research related to the development of the Arctic resources.

4. Of course, in a completely new way, the topic of mastering innovations began to be accentuated. And, during the Soviet times, it was repeatedly stated that the Arctic and the North would certainly require technological and engineering innovations. But, as a rule, it was said so at the lessons of the foreign North development. Now it has become an imperative for the development of the natural resources of the Arctic and the North of Russia. This topic is adjoined by the problems of the Arctic universities and local science, which consolidate qualified labor in the interests of the Arctic innovations.

5. The climate change issue is largely influenced by our foreign colleagues and the reality of the Russian Arctic and the North, where economy, technical base and "social and cultural life" are undergoing disruptive transformations under the influence of climatic instability (frequent accidents on gas- and oil pipelines, cracks in buildings in the Arctic cities due to the defrost of permafrost, etc.). These issues entered the developmental subject matter seriously and, apparently, for a long time.

6. The institutional factors of the development of the North and the Arctic have become a completely new topic. They are understood in many ways: as coordination of interests of all involved parties, incl. the large megaprojects; as the role of incentives and barriers for the economic development, created by the federal, regional and local regulatory framework; and as the role of local authorities reflected in a stimulus-brake of development, etc.

7. A special place in studying the development of the Arctic began is occupied by the coastal areas because of the high natural and social instability that they have. That is, in the Arctic,

a narrow edge of coastal municipal formations is separated out. They are proposed a special palette of methods and approaches for studying the development: e.g., the ideology of maritime planning and eco-system management. Similarly, the themes of the Arctic "islands", lacking a yearround connection with the "mainland" is discussed, and the theme of the Arctic "continent", whose territories are located within the network of permanent terrestrial road communications.

Very few works, where the authors link global, national, regional and local interests and levels of development and apply them to the Arctic and the North (as in was in the Soviet era, researchers prefer to focus at one aspect or level of their study object), are published.

Despite a great number of works on the North and the Arctic issues, it is necessary to state the loss of the integrity of the vision of the development issue, usual for Soviet science.

The second block. Perhaps, the school of the frontier is the most wide-ranging, comprehensive direction of the study of new development in foreign countries. The school of the frontier dates back more than 100 years and has evolved greatly during this time [21-22, Billington R.A.] [23, Turner F.J., pp. 199-227]. So, e.g., the outstanding Japanese economist M. Fujita described the modern frontier in South-East Asia, based on the primary involvement in the economy of the vast labor resources of the rural population in this region [24, Fujita M., Mori T., pp. 39-62]. The frontier turning point here is that the countries-consumers of the mass demanded good transform in the countries-producers. So, the social relations change drastically. A big breakthrough was made in the past 20 years. Modern conceptualization of the frontier in the northern regions is developed in works of the Alaskan economist Lee Huskey. His main research themes (based on publications for the past three decades):

- Modeling of interbranch relations and attention to structural shifts in the economy during resource development like A. Hirschman's ideas about the mutual influence of some economic activities on the others [25-26, Huskey L.]. The author developed the "Anchorage and six districts" model, which together form the state of Alaska (the idea is that the economy of Anchorage, due to the lack of engineering, is much more connected with the surrounding areas of Alaska than with the national level), and the model of the city's northern outpost service bases for the rest of the state (models of inter-district flows of goods, services and labor). In relation to this, the role of the Anchorage in ensuring the resource development of the entire state was analyzed.
- Frontier Arctic economy and its specific laws [27-29, Huskey L.]. In this group of studies, an analysis of the substitution of imports for the frontier was made. It is as a result of structural shifts under the influence of the "growing up" of the economy of the frontier region. An important conclusion is that first the growth of economy leads to faster growth of service due to the effect of import substitution, but then the service sector shrinks because of contraction of resource production. The next is the resource sector, which provides a certain economic stability. Lee Huskey returns to the famous "Jack London's hypothesis" on how (after the fall of the "gold rush") the territories that managed to build the services sector "at the boom stage" remain stable. This group of publications is of great importance in terms of planning the life cycle of resource territories. In fact, it is shown that a long-term strategy for the economic development of the frontiers.

- Development of the remoteness concept [30-31, Huskey L.]. The main idea is the diversity of the remoteness' manifestation: geographical, economic and institutional. The coexistence of geographical, cultural and institutional remoteness does not allow the use of standard methods of promoting economic growth. Therefore, traditional approaches to attracting capital or training may not work in remote areas.
- The three-sector economy of transfers, support and market resources [32, Huskey L., p. 435]. The idea of a mixed three-sector rural economy of Alaska (transfer, traditional and market sectors) is proposed. The smaller the village, the more convergence and hybridization between sectors. The larger the village, the more isolated are these sectors from each other.

The publications by Lee Huskey and his co-authors can be considered the core of the frontier theme. In addition, a number of narrower, more specialized areas of the Arctic research are being developed abroad, incl. new topics that did not sound a decade ago, and topics that, in recent years, have received a new sound:

- City in the North: cities as a new wealth of the northern and arctic territories are associated with the innovative development, post-industrial transformation, creation of the infrastructure for the knowledge economy (universities, business incubators, venture funds, etc.).
- Climate change in the Arctic from very different perspectives: both in terms of gender (different adaptation strategies for climate change chosen by women and men in the Arctic communities), ethnicity (how the ethnic composition of the villages affects the adaptation potential), new opportunities for Arctic shipping, mining industries in the Arctic and North-West, and the positive impact of climate change on Arctic agricultural production.
- Research on the mining industry in the North and in the Arctic is systematized within the framework of a large international project, the Arctic Front. Unlike the past wave of mining activity 30-50 years ago, the new wave of industrialization of the North is mainly supported by global companies multinational resource corporations [33, Nilsen Trond et al.]. Globalization is also manifested in the growth of the share of international shift workers among workers employed in the Arctic megaprojects [34, Heleniak T.]. Compared to the 30-year-ago research on mining industry of the North, the new studies significantly accentuate the social and environmental issues (a man in the mining industry of the Arctic).
- Northern AIC food security health. The development of the local agricultural sector is seen in a much broader context than before – education, local employment, economic independence, etc. [35, Avard Ellen]
- New countries-actors inside and outside the Arctic: Greenland China Asia. New dynamic actors in the Arctic, whose efforts, first of all, quickly change characteristics of the Arctic. Works on Greenland as the most polarized country have changed radically; on the other hand, we see works on China and Asian countries, unexpectedly interested in the Arctic.
- Knowledge economy in the North and in the Arctic. Here we are talking about developing knowledge infrastructure in the Arctic, strengthening existing and creating new research centers and universities to ensure the sustainability of the social and economic development of the Arctic [36, Dorais-Dranaeva], creating local competencies, knowledge of indigenous peoples in the local development [37-38].
- Development of resources of the northern and the Arctic territories in the context of the "governing the commons" and co-management. We are talking about developments in

the study of the resources and public property of the North and the search for forms of conflict-free management somewhere between the adaptation management and comanagement [39-40].

**The third block** — this is the recent work on territorial and spatial development of the densely populated territories in the leading Western countries. Many of them are based on the concept of the new economic geography by the Nobel Prize winner P. Krugman. Also, among the most important areas are the concept of the regional innovation system by F. Cook, the cluster theory, the principles of the new economic policy, and the basic methodological provisions of the institutional economy and geography. The main theoretical provisions are the following:

- Innovations are the ground for the intensification of social and economic development of cities and areas, accelerated by the constant innovative search by the local community (government, business, non-profit organizations, civil society structures, etc.);
- the key actors (driving forces) of social and economic development are endogenous and internal factors. The reliance on endogenous drivers of social and economic development makes it possible to neutralize the negative influence of external factors and rationally use exogenous development opportunities;
- innovative search is carried out in the local innovation system, which includes large, small and medium businesses, institutes for generation and adaptation of new knowledge, educational institutions, administration of a municipal formation or region, and public organizations. The success of the innovation depends on the ability to harmonize the interests of all stakeholders and the nature and forms of communication between them;
- the most important factors of the innovation are soft and institutional: the quality of human capital, the density and quality of the institutional environment, the quality of the innovation infrastructure (organizations active in R&D, transfer and adaptation of new knowledge), absorbing capacity of the local innovation system and local community in terms of assimilating innovations, features of the social capital (incl. the innovative, creative potential of the local diaspora in the other cities and countries around the world), the role of the creative class in the local community, local behavioral and cultural attitudes, and others. An important role in the deployment of the local innovation is given to entrepreneurship.

The most important barriers for the innovations and, correspondingly, the intensification of local social and economic development, are functional, political and cognitive development blocking, typical for old industrial cities and regions. Functional interlocks arise because of the system of contracts of major urban enterprises that has been inertially preserved for decades. Political blockages arise due to the close interaction of the city authorities with the largest players of the local economy (structure-forming enterprises). Cognitive blockages arise because of the ideological obscurity of persons involved in decision-making on the development.

The main provisions of the local science for the past two decades related to the third block of sources are discussed in our earlier works [41-43].

### The novelty of a new complex development study

The main scientific idea of this research is to present the development of the Arctic and North and their resources as a multi-level process that depends on internal and external (global) factors. The key role is played by the local communities and households, that create other levels of development.

Home researchers of the Soviet era had "built" the development mastering it "from above", from the national level of megaprojects, and plunged them into the territory of dislocation, sometimes like "cathedrals in the desert": with a very weak connection to the social expectations and needs of local communities. The novelty of our approach is in turning the pyramid of development and begin to build it "from below": from the local level or the local community, and then to integrate it with the federal infrastructure and projects, rising to the level of regional and zonal development of the North and the Arctic. Thus, from the "atoms" of local development, the regional and zonal are collected. The "great" development of megaprojects and federal routecorridors of development can be successful only if relied on "small", developed "from below" by the efforts of local communities and entrepreneurs. It turns out that in this development, we see endogenous and exogenous components. Endogenous ones are connected with the possibility of looking at all the phenomena of development and economy on a single methodological platform created for the development from the bottom. Exogenous components are associated with large, federal megaprojects and infrastructural objects "from above", included in a single multilevel picture of development.

On the other hand, our foreign colleagues work a lot on the local level, e.g., analyzing the life-supporting nature use (the so-called subsistence) of indigenous people in Alaska [44-45] within the framework of managing resources in public property (E. Ostrom, F. Berkes [46-48], etc.). However, they never linked these studies to the complex phenomenon of economic development, especially at different levels: local, regional, and national.

Meanwhile, efforts to integrate the particular phenomena of the social and economic development of the North and the Arctic (the land claims of indigenous peoples, the resource economy, the traditional lifestyle — reindeer herding and fisheries, etc.) into a single picture of the new development of resources and areas in the North and the Arctic are extremely important and relevant. Once it has been already possible to do: in 1960-1980s, but in another economic model (the Soviet planned economy) and in another (industrial) economic era.

Let us try to outline the conceptual synthesis' contours for creating a new complex theory of development adequate to the modern time, and new research priorities arising in this connection.

Glocality means the balancing of the so-called "top" approach and the "bottom-up" approach in the most important issues of development: the ratio of "imported" and "produced" (e.g., when new megaprojects are being developed) — external market prices on exported goods and home market prices for consumable goods; institutions (co-existence of federal and local norms and rules and scope of authority/authority on critical issues of resource development); knowledge (combinatorics of external expert and local knowledge); and critical elements of local life-support (energy and food).

These specific relationships of global, external and local, local determine the rhythm of the development, the very possibility of its further expansion or, conversely, its contraction. It is important to note that this relationship in the field of knowledge has a fundamentally different character compare to all the other cases, because it is not a question of replacing the global with local knowledge, or vice versa, but the issue of integrating global and formalized knowledge of experts with the local knowledge (incl. indigenous one) about nature, climate and resources.

Let's call the described glocality — linking the levels of development — vertical systemic or polycentric. E.g., it means that we keep in mind a single picture of "great", corporate and exportoriented nature-use and "small" nature use of individuals and community hunters, fishermen, etc. And this is a single development of local spaces and resources, within which intensive communications are being established for transport and land plots in the time of their use.

Glocality/vertical systematic is very important for improving the effectiveness of the development of northern resources and areas. In addition to it, the horizontal systemic nature also has great importance: the coordination of the interests of local actors of the development at the local level.

A natural question arises: why does the local level become so important? What has happened in recent decades? The fact is that modern development systems are incomparably more difficult than the previous ones. Tangible economic effects, incl. the effect of increasing returns on the "smoothness" of communication between the main actors of the development (previously, in the industrial economy — the effect of economies of scale), from new knowledge or innovations are possible only at the local level and only then — at the regional and national levels. It is much more difficult to obtain a linkage that is fruitful for economic effects due to the exceptional complexity of systems of a higher hierarchy level and the impossibility of regular productive personal communication, as well as exchanges of implicit knowledge between the main actors of development.

But in fact, exactly the same happens in biological systems. The most important is the level of the local population, which allows "free crossing": a higher level is "attached" to local. So, it turns out their combination.

The elevation of the local level and the local systemic nature as the main factor that ensures economic effects means a stronger, unprecedented socialization of the development than it was in the past. The fact is that communication and interaction of the main actors could be established only in the absence of conflicts, with high negotiability and trust. If these elements are not found, a deduction is obtained instead of the economic development effect.

So, the local system's importance in obtaining economic effects in modern conditions of innovative development grows many times and assumes conflict-free. Conflicts of the development actors destroy synergy and positive externalities (knowledge flows, learning from each other, perception of best practices, etc.), and therefore destructive.

The quantitative dynamics of the development results is important (this has been studied before), but also the importance of the institutional and organizational dynamics is high. It works through the emergence, development and dying of key organizational forms/structures of development: both economic (large and small, different forms of ownership) and structuring the development space (evolution of the ATD) and landscape dynamics (incl. the one caused by climate change, etc.).

After these general considerations, the question inevitably arises: how should the methodology be developed? Where are the main focus points?

**The first research priority** is the analysis of local institutional capital. So, several areas are distinguished:

- serious analysis of archival sources and personal interviews about the institutions existed in the past, preserved in the memory of generations and are remembered with great warmth (e.g., fairs between the nomadic and sedentary population of Chukotka). At the same time, institutions are understood not just as the spiritual envelope of something, but also as a social and technical unity of norms, structures, rules and a material, physical sub-stratum densely adjoining them: e.g., temporary roads created and used by indigenous peoples, and now abandoned (but they have the opportunity to be restored);
- analysis of the currently existing, sometimes informal norms and rules of local nature management (customary law), the prevailing representations/blockages/taboos/beliefs (e.g., about sacred sites), prices that directly affect both large and local small resource projects;
- analysis of the adequacy of federal and regional norms and rules to specific local conditions in the field of "large" and "small" nature use. For example, to what extent does the current legislation on the timing of hunting for catching game, fur-bearing animals, salmon trout and others correspond to population and seasonal rhythms and cycles, as well as to the needs of local hunters and fishermen? The fact is that the Russian northern realities abound in cases when even from the regional level, for example, the Chukotka Autonomous Okrug, the details and peculiarities of the local sea-mammal hunting of the Eskimos and the Chukchi are not grasped;
- detailed study (incl. assessment of the scale) of the illegal, shadow actions and processes, incl. poaching; illegal nature use, description of existing marriage practices and conditions under which they can be legalized;
- issues of institutional dynamics maneuver ownership in local assets and critical elements of the development infrastructure. E.g., an assessment of a formally or informally existing institution of community ownership for natural resources and land and its evolution; examples of how to accelerate the development by transferring key assets from one property to another (e.g., departmental roads to regional ownership);
- what "surprises" of the past have radically changed the path of development of an area and when was it just because of purely material factors (e.g., a new deposit), and when was it caused by social and technical factors (e.g., the invention of a new technology or institute, accidental achievement, etc.)?

The second research priority is attention to conflicts and contradictions in the process of development, in local "large" and "small" nature management, and what conflict resolution mechanisms had been used in the past and are currently being used. In full accordance with the forgotten canons of dialectical materialism, we propose a special emphasis on the development,

inherited and/or arisen in the present and potentially possible future conflicts over the resources and spaces that already existed in the past. This is detailed in several areas:

- evaluation of partner and collaborative mechanisms and structures (formal and informal) of conflicts in the field of local nature management in the past, in the Soviet era (between regions, teams of reindeer herders, state farms, etc.) and to what extent they could be of use today;
- the same problem/limitation of development (if it existed), which was reproduced on the territory in all the latest "waves of development", resulting from the characteristics of landscapes, ethnic groups, general local widely understood genetics;
- what are the formal mechanisms for resolving conflicts in local nature use: e.g., in fishing, between fisheries and subsoil users, what is their inefficiency and what could be offered in return?
- detailed examples, when informal rules and regulations could be reached in disputed issues of local resource development and nature management. This was even more successful than the law and formal norms. What was the main secret of the success of such local contracts? What conclusions could be drawn for future?
- contemporary conflicts of actors, users of natural resources, contradictions of their interests: e.g., in combining commercial and amateur, life-supporting nature management in the municipal district;
- different "bottlenecks" in the local space or "constraints" in time, which require very fast decisions on the development or the window of opportunity could be quickly closed.

**The third research priority** is the evolution of the settlement system, which is associated with the development and the changing federal regulations for it. The theme is extremely important. It reveals the specifics of the spatial structure of the development of a territory. It involves answers for the following questions:

- what were the main "alterations" or transformations of the local settlement system in the past century (e.g., by stages)? To what extent did they, on the one hand, reflect the current models of the development, the impact of technology, depletion of natural resources, demographic, and other factors; on the other hand, themselves influenced the "large" and "small" nature management?
- how can we characterize the main local features of the resource resettlement system that has developed in this model and, more broadly, the entire local system of resettlement? Was the previous administrative-territorial division (ATD) tested for strength? what does not pass, and where the main conflicts/contradictions are outlined?
- how would it be advisable to rebuild the local space through the reconstruction of the ADT, so that it would be a catalyst, rather than a brake on the resource development?
   E.g., the liquidation of some stationary settlements and their transformation into temporary settlements; the formation of new storage terminals (factor stations), etc.
- where are the main boundaries/barriers in the local development space and in what way do they manifest themselves, hamper the dynamic of the resource development? What could be done to eliminate them?
- emphasis on local existing and long-standing "anomalies" of spatial organization and development (attention to paradoxes and anomalies is important for all research azimuths).

The fourth research priority is the peculiarity of the interaction between "large" and "small" forms of development in a particular area. This implies, among other things, clarification of the following issues:

- what are the structures of development that had a spiritual and value meaning for local development in the past, have in the present, and where could they be expected to appear in the future?
- are there positive externalities/flows of knowledge between large and small forms of development, large (megaprojects) and small nature use?
- is there a division of labor in the sphere of development of local innovations between large and small development structures?

Summing up: the glocality of new development means a clear understanding of the different patterns that operate at the global and local levels of the development of the North, the potential (limits) of the scalability of patterns from one level to another. Local systemic means the way communication between the main actors of the development takes place and it is of great importance for the efficiency of the developments.

New conditions have much stronger effect on megaprojects than before, in the industrial age. Uncertainties and constant changes in the factors of development mean the absolute inevitability of the initial pilot experiment. It is the innovative search for the best technological, organizational and engineering solutions is continued by replication and scaling of the approved practices and experience on new polygons. That is why special territories — experimental polygons, sites for development experiments, incl. the development of special project legislation and financing of a specific large megaproject — are extremely important as never before.

### Conclusion

The call for a new Russian development theory for resources and areas of the North and the Arctic has repeatedly emerged in recent decades. However, there have always been objective circumstances that have postponed this for the future. In the 1990s, the temptation to succumb to foreign ready-made solutions, Western concepts and theories, instead of building own ones was so high. On the other hand, the transition to the market in the North and the Arctic was too fast and hasty to be immediately ready for the development of the theory.

In the 2000s, it seemed that such a coherent theory was not necessary since there had been a series of megaprojects. One could confine oneself to the project approach to the development of the North and the Arctic. So, do we need an ideological system conceptualization of the phenomenon that we observe in our North and in the Arctic?

But now, 30 years after continuous reform of the Russian economy, the need for a holistic view of the new development and its laws, drivers, levels and institutions is obvious. We invite our colleagues to jointly participate in this intellectual project in the interests of the development of the Russian North and the Arctic.

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### References

- 1. Slavin S.V. *Promyshlennoe i transportnoe osvoenie Severa SSSR* [Industrial and transport development of the North of the USSR]. M., Ekonomizdat Publ., 1961, 302 p. (In Russ.)
- 2. Pokshishevskij V.V. Zaselenie Sibiri [The settlement of Siberia]. Irkutsk Publ., 1951, 209 p. (In Russ.)
- 3. Minc A.A. Soderzhanie i metody jekonomicheskoj ocenki estestvennyh resursov [The content and methods of economic valuation of natural resources], *Voprosy geografii*, 1968, part 78, pp. 16–39.
- 4. Bandman M.K. Podhod i osnovnye jetapy reshenija zadachi optimizacii formirovanija TPK [Approach and the main stages of solving the problem of optimizing the formation of the TPC]. *Modelirovanie formirovanija territorial'no-proizvodstvennyh kompleksov* [Modeling the formation of territorial production complexes]. Novosibirsk, Nauka Publ., 1971, pp. 8–114. (In Russ.)
- Vitjazeva V.A. Problemy kompleksnogo osvoenija novyh rajonov (na primere Evropejskogo Severo-Vostoka SSSR) [Problems of integrated development of new regions (by the example of the European North-East of the USSR)]. Aktual'nye voprosy sovetskoj geograficheskoj nauki [Actual questions of Soviet geographical science]. M., Nauka Publ., 1972, pp. 107–110. (In Russ.)
- Kosmachev K.P. Pionernoe osvoenie tajgi (jekonomiko-geograficheskie problemy) [Pioneering development of the taiga (economy-geographical problems)]. Novosibirsk, Nauka Publ., 1974. 144 p. (In Russ.)
- Zajcev I.F. Geograficheskie tipy osvoennosti territorii [Geographic types of territory development]. *Territorial'nye sistemy proizvoditel'nyh sil* [Territorial systems of productive forces]. M., Mysl' Publ., 1971, pp. 24–46. (In Russ.)
- 8. Dergachev V.A. Istoricheskie cikly hozjajstvennogo osvoenija territorii [Historical cycles of economic development of the territory]. *Vestnik MGU* [MSU Vestnik], 1976, no. 2, part. 5, pp. 82–86.
- 9. Mosunov V.P., Nikul'nikov Ju.S., Sysoev A.A. *Territorial'nye struktury rajonov novogo osvoenija* [Territorial structures of new development areas]. Novosibirsk, Nauka Publ., 1990, 153 p. (In Russ.)
- 10. Komar I.V. *Racional'noe ispol'zovanie prirodnyh resursov i resursnye cikly* [Rational use of natural resources and resource cycles]. M., Nauka Publ., 1975, 212 p. (In Russ.)
- Kosmachev K.P., Mosunov V.P., Nikul'nikov Ju.S., Sysoev A.A. O sisteme ishodnyh jelementov territorial'noj struktury hozjajstva [About the system of initial elements of the territorial structure of the economy]. *Geografija i prirodnye resursy* [Geography and Natural Resources], 1983, no. 3, pp. 84–92.
- 12. Strukturnaja politika (v jekonomicheskom i social'nom razvitii) na Severe Rossii v perehodnyj period k rynochnym otnoshenijam (Kol'skij region) [Structural policy (in economic and social development) in the North of Russia during the transition period to market relations (Kola region)]. Apatity, Institute for Economic Studies RAS Publ., 1994, 271 p. (In Russ.)
- 13. Luzin G.P., Pavlov K.V. Sootnoshenie rynochnyh i gosudarstvennyh metodov jekonomicheskogo regulirovanija v uslovijah perehodnogo perioda [The correlation of market and state methods of economic regulation in a transition period]. Apatity, 1993, 180 p. (In Russ.)
- 14. Piljasov A.N. Stanovlenie rynka truda v Magadanskoj oblasti [The formation of the labor market in the Magadan region]. *Kolyma*, 1994, no. 4, pp. 2–6; no. 5, pp. 2–6; no. 6, pp. 2–7.
- 15. Navasardov S.M. Demograficheskaja situacija i social'nye posledstvija ekonomicheskih reform v Magadanskoj oblasti [Demographic situation and social consequences of economic reforms in the Magadan Region]. *Sociologicheskie issledovanija* [Sociological Studies], 1994, no. 7, pp. 48–52.
- Piljasov A.N., Goldsmit S., Knapp G., Kreedzh D., Jadryshnikov G.N. Severnaja ekonomika i radikal'naja reforma (amerikanskij opyt i rossijskie realii) [The Northern Economy and the Radical Reform (American Experience and Russian Realities)]. Magadan, FEB RAS Publ., 1996, 180 p. (In Russ.)

- 17. Piljasov A.N., Harrison G., Makbet D., Morhaus T., Fisher V., Usachev E.V., Jadryshnikov G.N., Vedernikov I.L. *Rossijskij Sever i federalizm: poisk novoj modeli* [The Russian North and Federalism: the search for a new model]. Magadan, FEB RAS Publ., 1997, 179 p. (In Russ.)
- 18. Lonner D., Morhaus T., Piljasov A.N. *Ot paternalizma k partnjorstvu (stroitel'stvo novyh otnoshenij narodov Severa i gosudarstva)* [From paternalism to partnership (the construction of new relations between the peoples of the North and the state)]. Magadan, FEB RAS Publ., 1998, 199 p. (In Russ.)
- 19. Piljasov A.N. Zakonomernosti i osobennosti osvoenija Severo-Vostoka Rossii (retrospektiva i prognoz) [Regularities and features of the development of the North-East of Russia (a retrospective and forecast)]. Magadan, FEB RAS Publ., 1996, 145 p. (In Russ.)
- Krjukov V.A. Institucional'naja struktura neftegazovogo sektora: problemy i napravlenija transformacii [Institutional structure of oil and gas sector: problems and directions of transformation]. Ed. by V.V. Kuleshov. Novosibirsk, Institute of Economics and Industrial Engineering, Siberian Branch of the RAS Publ., 1998, 280 p. (In Russ.)
- 21. Billington R.A. *America's Frontier Heritage*. Albuquerque: University of New Mexico Press, 1991, 432 p.
- 22. Billington R.A. How the Frontier Shaped the American Character. *American Heritage*, 1958, vol. 9, issue 2.
- 23. Turner F.J. *The Significance of the Frontier in American History*. Annual Report of the American Historical Association for 1893, Washington, 1893.
- 24. Fujita M., Mori T. On the dynamics of frontier economies: Endogenous growth or the selforganization of a dissipative system? *Annals of the regional science*, 1998, no. 32, pp. 39–62.
- 25. Goldsmith O.S., Berman M., Huskey L. An interactive multiregional model of a frontier economy: Anchorage and the State of Alaska. *Regional Science Perspectives*, 1987, vol. 17 (1), pp. 55–76.
- 26. Huskey L. Cities and Frontier Resource Development: the particular case of Anchorage. *ICASS IX. Full* session programme with abstracts. Umeo, 2017.
- 27. Huskey L. Import Substitution. The Hidden Dynamic in the Growth of Frontier Regions. *Developing America's North Frontier.* Ed. by T. Lane. Anchorage, 1987.
- 28. Huskey L. The Development Linkage in Natural Resource Economies. *ICASS IX. Full session pro*gramme with abstracts. Umeo, 2017.
- 29. Huskey L. Alaska's Economy: The First World War, Frontier Fragility, and Jack London. Northern Review, 2017, no. 44, pp. 327–346.
- Huskey L. Challenges to Economic Development: Dimensions of «Remoteness» in the North. *Polar Geography*, 2005, vol. 29, no. 2, pp. 119–125.
- 31. Huskey L. Limits to growth: remote regions, remote institutions. *Annals of Regional Science*, 2006, vol. 40, pp. 147–155.
- 32. Huskey L. Alaska's Village Economies. *Journal of Land, Resources, & Environmental Law,* 2004, vol. 24, no. 3, pp. 435–465.
- 33. Nilsen T., Nylund I., Johannesson H. Multinationals Meet the Locals in the Arctic: Monitoring of Megaprojects in Northern-Norway and East-Iceland. *ICASS VIII. Full session programme with abstracts,* Prince George: UNBC, 2014.
- 34. Heleniak T. International Migration in the Arctic. *ICASS VIII. Full session programme with abstracts,* Prince George: UNBC, 2014.
- 35. Avard E. Greenhouses in Nunavik: A Growing Trend. *ICASS VIII. Full session programme with abstracts,* Prince George: UNBC, 2014.
- 36. Dorais L-J., Dranaeva I. Northern Universities as a Key to Arctic Sustainability. *ICASS VIII. Full session* programme with abstracts, Prince George: UNBC, 2014.
- 37. Johnson N. Mobilizing Inuit Knowledge in Global Science and Multi-Level Governance. *ICASS VIII. Full* session programme with abstracts, Prince George: UNBC, 2014.
- Pulsifer P., McCann H., McNeave C., Duerr R., Sheffield B., Wallace A., Gaut A. Linking Scientific and Documented Indigenous Knowledge Using Information and Communications Technology: Representation, Ethics and Mediation. *ICASS VIII. Full session programme with abstracts*, Prince George: UNBC, 2014.
- 39. *Adaptive Co-Management. Collaboration, Learning, and Multi-Level Governance.* Ed. by Derek Armitage, Fikret Berkes, and Nancy Doubleday. UBC Press, 2007.

- 40. Ostrom E., Dietgz T., Dolzak N., Stern P.C., Stonich S., Weber E.U. *The drama of the commons*. Washington, National Academy Press Publ., 2002, 322 p.
- 41. Zamjatina N.Ju., Piljasov A.N. *Rossija, kotoruju my obreli: issleduja prostranstvo na mikrourovne* [Russia, we found: exploring the space at the micro level]. M., Novyj Hronograf Publ., 2013, 548 p.
- 42. Zamjatina N.Ju., Piljasov A.N. Innovacionnyj poisk v monoprofil'nyh gorodah: blokirovki razvitija, novaja promyshlennaja politika i plan dejstvij [Innovative search in single-city cities: development blockages, a new industrial policy and action plan]. M., URSS Publ., 2015, 216 p. (in Russ.)
- 43. Zamjatina N.Ju., Piljasov A.N. *Regional'nyj konsalting: priglashenie k tvorchestvu. Opyt razrabotki dokumentov strategicheskogo planirovanija regional'nogo i municipal'nogo urovnja* [Regional consulting: an invitation to creativity. Experience in the development of strategic planning documents at the regional and municipal levels]. SPb, Mamatov Publ., 2017, 196 p. (in Russ.)
- 44. Huntington H.P. *Wildlife Management and Subsistence Hunting in Alaska Seattle*. University of Washington Press, 1992, 177 p.
- 45. Burch E.S. Jr. Subsistence Production in Kivalina, Alaska: A Twenty-Year Perspective. *Technical Paper No. 128. Division of Subsistence*. Juneau: Alaska Department of Fish and Game, 1985, 353 p.
- 46. Ostrom Je. *Upravljaja obshhim. Evoljucija institutov kollektivnoj dejatel'nosti* [Managing the general. Evolution of Collective Activity Institutions]. M., IRISJEN, Mysl' Publ., 2010, 415 p. (in Russ.)
- 47. Berkes F. Sacred Ecology: Traditional Ecological Knowledge and Resource Management. Taylor & Francis, 1999.
- 48. Berkes F. Cross-scale institutional linkages. Perspectives form the bottom up. *The drama of the commons*. Ed. by E. Ostrom, T. Dietz, N. Dolsac, P.C. Stern, S. Stonich, and E.U. Weber. Washington, National Academy Press Publ., 2001, pp. 293–322.

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# Establishing the Arctic Zone of the Russian Federation as a factor of the regional development: raising questions (the case of the Arkhangelsk region) \*

### © Igor V. KATORIN, research fellow

Tel.: +7-8182-21-89-39. E-mail: mediana.29@mail.ru Northern (Arctic) federal university named after M.V. Lomonosov, Arkhangelsk, Russia

Abstract. The article describes the impact of the Russian Arctic policy activation on the development of the Arkhangelsk region. In 2013, the formation of the Arctic zone of the Russian Federation (AZRF) as an object of state administration was launched. The Arkhangelsk region was partly included in the Russian Arctic. Now, we observe the establishment of the regulatory field and the organizational framework of the macroregion. The article analyzes the current stage of this process in the Russian Arctic. The author highlights the main opportunities and risks for the region associated with the activation of the Arctic policy of the country. The most serious opportunities are emerging in politics (the Arctic status, external relations and external image) and economy (infrastructure, investments, new enterprises and organizations, and tourism). These areas are experiencing some changes. The changes in the social space are hardly noticeable but, in this area, cardinal changes are possible. They are associated with the renewal of the regional image, strengthening the regional identity, changes in the social composition of the Arkhangelsk region into the Russian Arctic, the implementation of major investment projects and inefficient management.

**Keywords:** The Arctic Zone of Russia, social space, a factor of development, social risks, the regional identity, the Arkhangelsk region.

### Introduction

The influence of the federal policy on the situation in the regions is quite discussed in the Russian and foreign social science [1, Huskey L., pp. 140-155]. In addition to theoretical relevance, it has a serious practical aspect. Indeed, in modern Russia, the vector and the pace of the regional development largely depend on the coherence of regional policy with the federal agenda, on the ability of regions to "fit" to the federal trends [2, Mikheeva N.N., p. 157-159; 3, Zamyatina N.Yu., pp. 126-155].

Several regions, incl. the Arkhangelsk region, for some years has been working on a development strategy, largely based on the Arctic policy of the federal authorities [4, pp. 14-45]. In connection with these processes, we will discuss and answer some of the relevant questions in this article:

- "What is the specific of the Russian Arctic policy and may it change?";
- "What impact does/can the Arctic policy of the Russian state have on the Arkhangelsk region?";
- "How can it affect the development of individual municipalities, industries, spheres, spaces of the region?";

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 "What opportunities and risks does/can the Russian Arctic policy form for the Arkhangelsk region?".

### Specifics of the Russian Arctic zone establishment

Since the structure of the country's Arctic policy and the formation of the Arctic zone of the Russian Federation are in an active phase, the answers to these questions will be more of a staged or debatable nature. At the same time, it seems that the very formulation of these issues, especially the scenarios of the Arctic policy development, the opportunities and risks in connection with its implementation, as well as discussions on these topics are extremely important for the strategy and tactics of the region's management.

The issues of the structuring of the Arctic zone of Russia became the subject of scientific and management activities relatively recently, in the second half of the 2000s, [5, Ivanter V.V., pp. 8-20]. It was when the term "Arctic zone of Russia" (hereinafter — the Russian Arctic) was introduced into regulatory circulation, and the discussions on management and development of this territory began. Over the past 5 years, this process has intensified [6, Lukin Yu.F., pp. 174-179]. Thus, this was clearly illustrated by the formation of the microregion's regulatory field. Since 2013, several federal acts on the social and economic development of the Russian Arctic have been adopted or prepared (Fig. 1).



Fig. 1. Making the regulatory field of the Russian Arctic.

Currently, the land borders of the Russian Arctic are normatively fixed, projects for the development of this territorial formation are being worked out, a federal structure has been set up to coordinate activities in the Arctic, the content of the federal law draft is being discussed, and a new version of the state program for the development of the Arctic zone of the country has been adopted.

At the same time, the formation of the Arctic zone of Russia is far from being complete. The nature and direction of Russia's internal Arctic policy is rather weakly crystallized and can change under the influence of both external and internal factors [7, Sentsov A.]. Now, the formation of the Russian Arctic can be characterized by the following features:

- External conditionality of the RF Arctic zone establishment. The beginning of the Russian Arctic formation relates to the need to protect national interests in high latitudes. In the early 2000s, the Arctic became an object of geopolitical and geo-economic interests. The rise in energy prices attracted attention to the Arctic oil and gas deposits, and the warming of the climate stimulated interest in the Northern Sea Route as an alternative route between Asia and Europe;
- pronounced downward character of the formation of the Arctic zone of Russia, domination of the state. The main actor is the state represented by the federal and regional authorities and state corporations. Municipal authorities, private business and non-profit sector are excluded from the discussion and decision-making. A striking example of this is that the state Commission for the Development of the Arctic does not include representatives of the Russian Arctic municipalities; it contains very few representatives of private business and no representatives of influential public organizations;
- <u>technocratic approach</u>. The priority objectives of the Arctic territories development are the resource development and national security. The secondary importance of humanitarian and social issues is clearly manifested in the content of the state program and the agenda of the state Commission for the Development of the Arctic;
- <u>project approach</u>. It is expressed in the fact that, on the one hand, the expression "the Arctic is a megaproject of the country" has become quite common, and on the other hand, the regional part of the state program, the "main activities" section, consists of poorly interconnected projects, often;
- <u>irregularity of the AZRF development</u>. HIrregularity has territorial and substantial aspects. From the social and economic point of view, the macroregion is very heterogeneous. The West and East sectors of the Russian Arctic are markedly different. In the composition of the Russian Arctic, there are regions-donors and regions-recipients, which have unequal opportunities to different tasks. The informative aspect of the Arctic policy has a clear bias in the direction of the discussion and declarative events;
- priority of "coastal" criteria for the territories to be a part of the RF Arctic zone. The composition of the land territory of the Russian Arctic demonstrates that it is the access to the seas of the Arctic ocean basin that the developers of regulatory documents have put at the forefront in determining the composition of the Russian Arctic;
- <u>uncertainty of funding mechanisms for the Arctic zone of the Russian Federation, espe-</u> <u>cially for regional projects.</u> In the strategic documents of 2008 and 2013, the relevant state program was specified as the main mechanism for the development of the Russian Arctic. However, its first edition did not contain independent sources of funding, and the second was significantly cut. Recently, as a measure to stimulate the development of regions and municipalities of the Russian Arctic, the creation of support zones in these territories was started. This supposed to give impetus to the development of some regional economic projects. However, a clear understanding of the mechanisms of identi-

fication, support, sources of funding for projects does not exist in minds of many stakeholders;

 <u>strong inter-regional competition</u>, which is due to both the initial stage of the formation of the macroregion, and the indistinct position of the federal center on its territorial development. The most intense competition between the Arctic regions is for getting informal "Arctic" statuses (primarily through the organization of prestigious "Arctic" events) and support of the regional and interregional investment projects at the federal level [8, Katorin I.V., pp. 73-78].

## Features of the Arkhangelsk region's position in the AZRF

Before considering the impact of the establishment of AZRF on the development of the Arkhangelsk region, it is necessary to identify some features that characterize the starting position of our region as a part of the Arctic zone of the Russian Federation. These features include:

- the partial inclusion of the region in the composition of the Russian Arctic. Only 7 of the 21 municipalities of the Arkhangelsk region are recognized as Arctic (*the cities of Arkhangelsk, Severodvinsk and Novodvinsk, Primorsky, Mezensky and Onezhsky districts and Novaya Zemlya*). At the same time, for many demographic, economic, scientific and educational indicators, these municipalities have a significant share in the region;
- according to the physical and geographical and climatic criteria, our region cannot be classified as Arctic. Its territory is located to the south of the 66<sup>th</sup> parallel, the average temperatures in the Arkhangelsk region are much higher than required for inclusion in the Arctic climatic zone;
- rich history of the region related to the Arctic studies and exploration;
- developed transport, scientific and educational infrastructure of the Arctic part of the region;
- according to many social and economic indicators, the Arkhangelsk region is not among the leaders in the Russian Arctic.<sup>1</sup>

In general, these features form both positive and negative prerequisites for using the Arctic factor in the development strategy of the region. The "non-Arctic" physical, geographical and climatic features of the region are not left without attention from the authorities, business and scientific community of other regions. Their neutralization requires representatives of the Arkhangelsk region to explicitly or covertly demonstrate the validity of the inclusion of the region in the Russian Arctic.

## The influence of the formation of the Russian Arctic on various spheres of the Arkhangelsk region

In our opinion, the opportunities associated with the formation of the Arctic zone of Russia are most closely associated with the three spheres of life in the region:

- political ("Arctic" statuses, external connections and image);
- social space (regional identity, prestige of branches and professions, development or stagnation of territories);

<sup>&</sup>lt;sup>1</sup> Rejting regionov RF po kachestvu zhizni – 2016.[ Rating of Regions of the Russian Federation for Quality of Life - 2016] URL: http://vid1.rian.ru/ig/ratings/life\_2016.pdf (accessed: 13 May 2018) [In Russian]

 economic (infrastructure, investments, new corporations and organizations and tourism).

The greatest opportunities are currently concentrated in the political sphere. And this is natural. The Arctic zone of Russia is designated as an object of state administration primarily to protect national political and economic interests in high latitudes as a reaction to the increased activity of other Arctic countries in the second half of the 2000s. Therefore, it is political goals and methods that are, in fact, dominant at the initial stage of the AZRF formation. Not without a reason, the most animated "Arctic" activity was observed in the politics. According to many experts, for several years there has been a struggle between regions, between agencies for a place in the "Arctic" processes, which allow to count on additional funds from the federal budget. Since the end of the 2000s, the Arkhangelsk region has been actively involved in the struggle for the "Arctic status". Moreover, as the Arctic policy of Russia was activated, the Arctic claims of the region were modified. Currently, the Arkhangelsk region is actively claiming 3 status positions:

- center of the Arctic events and forums;
- scientific and educational center of the AZRF;
- transport and logistics center of the AZRF.

It is worth noting that the competition for Arctic statuses was carried out, as a rule, in several ways: working on the information field, holding large-scale profile events of different levels, attracting relevant state and non-state structures to the region.

The most successful, in our opinion, "status" direction is scientific and educational. Success is associated, with the activities of the Northern (Arctic) Federal University named after M.V. Lomonosov. The University has become the site of many Arctic activities, the initiator and the administrator of the National Arctic Science and Education Consortium (NANOC), a participant in many expert and advisory structures at the federal level<sup>2</sup>.

It is necessary to recognize the successful positioning of the region as the center of Arctic events. Over the past 3 years, the Arkhangelsk Region has hosted more than 30 major international and federal conferences, meetings, forums on Arctic topics. The most significant event was the International Forum "Arctic: Territory of Dialogue" with the participation of the Presidents of Russia, Finland and Iceland. The forum has become the most representative event in Russia on Arctic topics over the past 10 years. It, in our opinion, allowed to consolidate the position of the region as a center of the Arctic events and forums. Carrying out such events is not only a direct return from business tourism and renovation, it is a good opportunity to strengthen contacts with the decision-makers at the federal level for the promotion of projects and programs.

<sup>&</sup>lt;sup>2</sup> Elena Kudryashova: Arktiku nevozmozhno osvaivat' v odinochku [Elena Kudryashova: The Arctic cannot be explored alone]. URL: https://narfu.ru/life/news/media\_about\_us/internet/306425/ (accessed: 13 May 2018) [In Russian]

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Status	Events
Center for interna- tional Arctic dialog	<ul> <li>International meeting of the Arctic Council member states, the Arctic Council observer states and the scientific community (September 2015)</li> <li>Celebrating the 75th anniversary of the first convoy in Arkhangelsk (August, 2016)</li> <li>International conference "Arctic: Territory of Dialogue" (March, 2017)</li> <li>16th Ministerial Session of the Barents Euro-Arctic Council (BEAC) (October, 2017)</li> <li>International Arctic Film Festival "Arctic open" (December, 2017)</li> </ul>
Scientific and educa- tional center of the AZRF	<ul> <li>Session "Human Resources and Scientific Potential for Development of the Arctic Zone of the Russian Federation" at the International Forum "Arctic Projects - To-day and Tomorrow" (2014-2017)</li> <li>International scientific conference "State policy for the protection of national sovereignty and the controversial problems of international relations in the European North and the Arctic in the first quarter of the twentieth century: historical experience and lessons for the present" (2015)</li> <li>International Scientific Conference "Competitive Potential of Northern and Arctic Territories" (2015)</li> <li>International Conference "Problems of the Prevention and Elimination of Emergencies in the Arctic, Including the Issues of Training Professionals for Work in the Northern Conditions" (2015)</li> <li>All-Russian Conference with International Participation "Comprehensive Scientific Research and Cooperation in the Arctic: Interaction of Universities with Academic and Branch Scientific Organizations" (2015)</li> <li>International Scientific Conference "Natural Resources and Integrated Development of Coastal Areas of the Arctic Zone" (2015) - International Conference "Ensuring the Security and Sustainable Development of the Arctic Region, Conservation of Ecosystems and Traditional Lifestyle of Arctic Indigenous People" (2016)</li> <li>All-Russian scientific conference "Arctic — national megaproject: personnel and scientific support" (2016)</li> </ul>
Transport and logistics center of the AZRF	<ul> <li>Territory of Dialogue" (2017)</li> <li>International Forum "Arctic Projects — Today and Tomorrow" (2014, 2015, 2016, 2017)</li> <li>Joint meeting of the Maritime Board under the Government of the Russian Federation and the Presidium of the State Commission for the Development of the Arctic (2016)</li> <li>Meeting of the State Commission for the Development of the Arctic (2017)</li> <li>Session "Arctic: Territory of Transport Opportunities" of the international conference "Arctic: Territory of Dialogue" (2017)</li> </ul>

The economic sphere can feel the positive changes later than the political one. We will not dwell on the possible economic consequences of the inclusion of the region in the Russian Arctic, as representatives of the regional government often argue about this. We only note that, in our opinion, the success of economic changes depends on the effectiveness of lobbying regional projects at the federal level, on the interest of big business to the opportunities of the region, on the conjuncture in the national and international markets. The region already has certain successes, e.g., the company MRTS — terminal on the left bank of Arkhangelsk, improvement of the NArFU infrastructure before the international forum, the opening of the Novotel hotel etc. At the same time, the development of many projects, especially such ambitious ones as Belkomur and the deep-sea area of the commercial port, are still under question.

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The social space of the Arkhangelsk region is the most inert sphere. In recent years, negative trends, typical for the Russian North, have been observed there: demographic losses of the population, desertification of territories; crisis of social infrastructure; the destruction of the social and economic space; increasing disparities in the level and quality of life of the population; an increase in the proportion of young people leaving the North; a decline in the birth rate; deterioration of health; catastrophic mortality rate of the population; family breakdown; low level of official marriages, high divorce rate; the appearance of signs of an another "demographic hole" [9, Dregalo A.A., pp. 135-145]. At the same time, in the long term, the AZRF formation may have a significant impact on the changes in this area, especially on regional identity, social, professional and ethnic structure of the population, and spatial-territorial localization.

Regional identity is often defined as "the result of a cognitive, value, emotional process of awareness of belonging to a regional community, manifested in a certain type of identification behavior of subjects of a regional society" [10, Tumakova K.E., p. 49]. This component of individual and collective consciousness largely determines the cohesion of the regional community, the cognitive and emotional attractiveness of the territory, forms the migration settings of the population.

<b>Political sph</b>	iere
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 arctic statuses
 external connections and images
 lobby

International Forum "Arctic: Territory of Dialogue". More than 30 meetings, conferences, forums of federal level

> NANOK (NArFU administrator of the consortium)

Association "Arctic municipalities" (MF of the region - initiatorsя) Social space - regional identity - social and professional structure - attractiveness of the MF

Improving the awareness of the inclusion of the region in the AZRF Improving the interest to marine and technical professions

The awareness of the Arctic profile of the region Enhanced interaction of municipalities of Arkhangelsk, Severodvinsk and Novodvinsk Economic sphere - investments - tourism - new organizations

Forming the Arkhangelsk support zone project for the AZRF Project-searching works at the Pavlovskoe deposit

MRTS-Terminal Arctic search and resque center Federal Center for the complex Arctic studies of the RAS Novotel

Fig. 2. Priority "arctic opportunities" for the region and their premilitary evaluation

Recent years, social scientists record the increase in the number of people wishing to leave the region, reducing estimates of life satisfaction in the Arkhangelsk region, the attractiveness of the native region [11, Dregalo A.A., pp. 87-145]. In social networks and the media, more and more often one can read the arguments that "northern allowances and benefits" do not make the region attractive from an economic point of view, and the region is increasingly perceived as the Northern province, the periphery. This indicates a crisis of regional identity, which is one of the indicators of the region's development.

In this regard, the formation of the AZRF, accompanied by information activity at the federal and regional level, can "breathe" a new life into the regional identity of the Arkhangelsk region, give the regional image attractive features. It is worth noting that our colleagues from the Murmansk region believe that the Arctic discourse certainly strengthens the regional identity on the Kola Peninsula and it is favorable for the development of the region [12, Sharova E.N., p. 152].

At the same time, it should be noted that it is difficult to renew regional identity. An individual and collective image of the region, spontaneous and purposeful process of their formation make it complicated. In addition, the individual attitude to the region is formed in the mind under the influence of heterogeneous factors of both communication and content. Therefore, in our opinion, the change of attitude to the region depends on the coordination of communication actions of various actors (government, business and media), and the connection of virtual (claimed) and real (perceived) picture of changes in the region. In this regard, we can specify two possible undesirable results of this process. The first is the disappointment of the regional community in the Arctic status, which may occur in the case of hyperactive promotion of the Arctic theme in the absence of obvious changes in the social and economic situation of the region's residents. The second is the different attitude to the Arctic status of the region in different groups of the regional community, which contributes to the soft or hard social and cultural split of the region. The North - South split is most likely, since only the Northern municipalities are part of the AZRF, plus this part of the region is where organizations and enterprises are concentrated, and they are most closely related to the Arctic projects (NArFU, Sevmash, Zvezdochka, NSMU, Sea trade port and others).

At present, in our opinion, the initial phase of the renewed identity of the region is coming to an end. After the international forum "Arctic: Territory of dialogue", attended by the President of the Russian Federation Vladimir Putin, the primary awareness of the regional population of the Arctic status of Arkhangelsk and the region reached a possible maximum. At the same time, the understanding of the Arctic mission of the region is very limited, and the expectations of the regional community from the Arctic status are very cautious.

The social structure of the population of the Arkhangelsk region may also undergo changes. First, this applies to the professional and industry structure. There is a high probability of a certain revival of marine industries and related professions in the region. After all, the development of the Northern Sea Route (NSR) is a clear priority of the Russian strategy for the development of the Arctic. One of the first markers is the growth of the competition of students in AMU named after Voronin<sup>3</sup>. Also, higher demand for mining and logistic specialists is possible in connection with the implementation of several projects in the Arkhangelsk support zone. In the regional center and in the adjacent territories, the share of employed in the service sector is likely to increase because of the growth of business and cognitive tourism.

It is noteworthy that such a professional-sectoral bank sensitively caught the population. According to the telephone survey of residents of the northern urban settlements of the Arkhangelsk region, it is the marine and resource-producing industries and professions that, in their opinion, are heading the list of possible beneficiaries from the activation of Russia's Arctic policy.

Table 2

Open question, the answers of the respondents	% of respondents
Oil and gas industry employees	36.2
Marine transport, seamen, port	22.6
Shipbuilding and its employees	18.6
Extraction of solid minerals	14.3
Geology, geologists	12.7
Fishing, fishermen	11.5
Pulp and paper industry	9.5
Universities, science, scientists, lecturers	5.7
Working professions	5.6
Construction and its employees	4.5
Militaries and army	2.6
Officials, deputies, authorities	2.4
Tourism, travel companies	2.3
Education, teachers	2.2
Healthcare, medicine, physicians	1.9
Managers	1.7
Environmental protection, ecology	1.1

## What professions, industries, in your opinion, will benefit most from implementation of Arctic projects?<sup>4</sup> (N=907)

Certain changes in the national and ethnic composition of the north of the region are possible with the implementation of major investment projects, such as the construction of ODC at the Pavlovskoye deposit (Novaya Zemlya Island) and especially the construction of the deep sea port in the Primorsky region. In our opinion, it is very likely to attract migrants from the CIS to build economic efficiency of implementation. The experience of implementing similar projects in the Yamal-Nenets Autonomous District has similar examples. In this case, the regional community should be ready for a new quality of the ethnic environment in the north of the Arkhangelsk region.

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<sup>&</sup>lt;sup>3</sup> Direktor Arhangelskoj morekhodki: "Mne ochen legko prinimat resheniya" [The head of the Arkhangelsk Marine college: "I make decisions easily"]. URL: http://ami-voronina.ru/direktor-arhangelskoy-morehodki-mne-ochen-legkoprinimat-resheniya.html (accessed: 13 May 2018) [In Russian]

<sup>&</sup>lt;sup>4</sup> The telephone survey by the CATI method was conducted in October 25 – December 12, 2014 within the framework of the project "Status and Prospects of Social and Economic Development of Arctic Regions of Russia in the Representations of the Population of the European North", a sample in the Arkhangelsk Region – 907 people.

The features of spatial-territorial localization can also undergo changes in connection with the formation of the Russian Arctic. Introduction of additional benefits for residents of municipalities included in the Russian Arctic, or preferences for the business of this territory, intraregional migration to the north of the region, especially in the towns of Arkhangelsk-Severodvinsk-Novodvinsk agglomeration, can dramatically intensify. This trend may also occur if the residents of the Russian Arctic do not receive additional benefits and guarantees, while in the remaining MF, primarily located to the south, these benefits and guarantees will be fully or partially revoked.

#### **Conclusion**

Since the mid-2000s. Russia is stepping up its Arctic policy. Starting in 2013, the formation of the Arctic zone of the Russian Federation as an object of state administration was launched. Now, the normative field and the organizational framework of the macroregion are forming. In this process, several trends are clearly traced, such as external conditionality, state dominance, a technocratic and project approach, unevenness and priority of the "coastal" criterion for the development of the Russian Arctic, the uncertainty of financial mechanisms, and the severity of interregional and interagency competition. Inertial, modernization, innovative scenarios for the development of the Russian Arctic are possible.

The Arkhangelsk region occupies a special place in the Russian Arctic. Specific arctic features create both positive and negative prerequisites for using the Arctic factor in the development of the region.

In general, the formation of the Arctic zone of the Russian Federation opens for the Arkhangelsk region a whole cascade of opportunities for positive changes in a variety of areas. At the same time, this process can catalyze social risks, especially those related to the incomplete entry of the region into the Russian Arctic, and risks connected with the implementation of large investment projects.

The most serious opportunities are associated with the activation of the Arctic policy, appeared in the region in the political (arctic status, external relations and image) and economic (infrastructure, investment, new businesses and organizations, tourism) sectors. It is there but some changes are seen. The changes in the social space are still minimally visible. But this sphere has a great potential for development, related to the renewal of the regional image, the strengthening of regional identity, the changing social composition of the population, and the increase of the human and economic capital of municipalities. However, in certain scenarios, in the Arkhangelsk region of the Russian Arctic. Negative effects may be catalyzed. They are associated with the partial entry into the Russian Arctic region and the implementation of major investment projects.

Efficiency of using the opened opportunities and neutralization of possible risks largely depends on the coordinated work of different actors of the regional community, such as provincial and municipal governments, business, academia and the media community.

## References

- 1. Huskey L. Limits to growth: remote regions, remote institutions. *The Annals of Regional Science*, Western Regional Science Association, 2006, Vol. 40 (1). pp. 147–155.
- 2. Miheeva N.N. Faktory rosta rossijskih regionov: adaptacija k novym uslovijam [Factors of growth of russian regions: adaptation to new conditions]. *Region: jekonomika i sociologija* [Region: Economics and Sociology], 2017, no. 4, pp. 151–176.
- 3. Zamjatina N.Ju., Piljasov A.N. *Rossija, kotoruju my obreli: issleduja prostranstvo na mikrourovne* [Russia, which we found: exploring the space at the micro level], Moscow, Lomonosov Moscow State University Publ., 2013, 513 p. (in Russ.)
- 4. Regiony Severa i Arktiki Rossijskoj Federacii: sovremennye tendencii i perspektivy razvitija, monografija [Regions of the North and Arctic regions of the Russian Federation: current trends and prospects for development, monograph]. Ed. by T.P. Skuf'ina, N.A. Serova. Apatity, Kola science centre of the RAS Publ., 2017, 171 p. (in Russ.)
- 5. Ivanter V.V., Leksin V.N., Porfir'ev B.N. Arkticheskij mega-proekt v sisteme gosudarstvennyh interesov i gosudarstvennogo upravlenija [Arctic mega-project in the system of state's interests and public administration]. *Problemnyj analiz i gosudarstvenno-upravlencheskoe proektirovanie* [Problem Analysis and Public Administration Projection], 2014, no. 6, pp. 6–24.
- 6. Lukin Ju.F. Rossijskaja Arktika ili Arkticheskaja zona [Russian Arctic or the Arctic zone]. Arktika i Sever [Arctic and North], 2016, no. 23, pp. 173–185. DOI 10.17238/issn2221-2698.2016.23.171
- Sentsov A., Bolsunovskaya Y. and Melnikovich E. The Arctic zone: possibilities and risks of development. IOP Conf. Series: Earth and Environmental Science, 2016, no. 43. DOI 10.1088/1755-1315/43/1/012100
- Katorin I.V., Churakov A.A. Problemy i perspektivy razvitija arkticheskih regionov (po materialam jekspertnogo oprosa) [Arctic Regions' development problems and prospects (based on expert survey)]. Arktika i Sever [Arctic and North], 2015, no. 19, pp. 71–80. DOI 10.17238/issn2221-2698.2016.23.171
- 9. Dregalo A.A. *Sociokul'turnaja dinamika social'nogo prostranstva Severa, monografija* [Sociocultural dynamics of the social space of the North, monograph]. Ed. by V.I. Ul'janovskij, A.A. Dregalo. Arhangel'sk, NArFU Publ., 2017, 252 p. (in Russ.)
- 10. Tumakova K.E. Social'nye faktory formirovanija regional'noj identichnosti v uslovijah sovremennoj Rossii [Social factors of formation of regional identity in the conditions of modern Russia], dissertacija ... kandidata sociologicheskih nauk, Penza State University Publ., 219 p. (in Russ.)
- Dregalo A.A., Ul'janovskij V.I. Sociologija regional'nyh transformacij. T. 2. Regional'nyj socium 1999– 2008: ot razocharovanija k nadezhde [Sociology of regional transformations. Vol. 2. Regional Society 1999-2008: from disappointment to hope]. Arhangel'sk, NArFU Publ., 2010, 407 p. (in Russ.)
- 12. Sharova E.N. Rol' arkticheskogo diskursa v formirovanii identichnosti zhitelej Severnogo regiona [The role of arctic discourse in the construction of a northern regional identity]. *Region: jekonomika i sociologija* [Region: Economics and Sociology], 2016, no. 4, pp. 139–152.

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## Community social work as a condition for improving the quality of life of the population of the northern region<sup>\*</sup>

Carisa S. MALIK, Cand. Sci. (Ped.), Associate Professor
 E-mail: I.malik@narfu.ru
 Northern (Arctic) Federal University named after M.V. Lomonosov, Arkhangelsk, Russia
 Ciya A. MELKAYA, MS graduate
 Tel.: +7-952-308-83-89. E-mail: lia.melkaya@yandex.ru
 Northern (Arctic) Federal University named after M.V. Lomonosov, Arkhangelsk, Russia

Abstract. The article identifies the components and factors of the quality of life of the population of the northern region. The specifics of social work in the North are presented. The authors considered the rating of Northern regions of Russia on quality of life and noted the relationship between the quality of life with a form of social work. The potential of community social work in the North focused on activities in the local community and aimed at strengthening individuals, families and social groups is also discussed. The authors revealed priorities and individual areas of social work according to the territorial principle in the development of approaches to implementation of the Federal project "Strong family" of the party "Edinaya Rossi-ya" ("United Russia") in the Arkhangelsk region.

**Keywords:** Northern region, quality of life, community social work, local community, political party project "Strong family".

## Improving the quality of life of the population of the northern regions while organizing social work

The sustainable development of the northern regions of Russia is a condition for ensuring security since these territories have a special geopolitical significance and natural resource potential. Mission of the North is in the financial and economic support of the country's transition to an innovative stage of development.<sup>1</sup> At the same time, attention is focused on the need to improve the quality of life of the population of the northern regions by creating opportunities for full-value life.

The quality of life integrally combines the index of human development, the degree of satisfaction of the vital needs of the population, and the social and economic welfare of the region. One of the mechanisms for improving the quality of life of various categories of the population is social work aimed at adapting and self-realization of the individuals in a society, changing the social situation, developing public structures at all levels. At the same time, the quality of life is not a "standardized" category, it is a variable system of indicators that can be formed by considering the specifics of the territory and the nature of the needs of the population. In this regard, it seems

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<sup>&</sup>lt;sup>1</sup> Koncepciya dolgosrochnogo socialno-ehkonomicheskogo razvitiya Rossijskoj Federacii na period do 2020 goda: utv. Rasporyazheniem Pravitelstva RF ot 17.11.2008 g. № 1662-r. [The concept of long-term social and economic development of the Russian Federation for the period up to 2020: Order of the Government of the Russian Federation of 17.11.2008 № 1662-r.] URL: http://www.consultant.ru/document/cons\_doc\_LAW\_82134/28c7f9e359e8af09d7244d 8033c66928fa27e527/ (accessed: 13 November 2017). [In Russian]

possible to draw a parallel between the quality of life and the form of organization of social work in a particular region.

The basis for the construction of community models of social work in the constituent entities of the Russian Federation was the RF Government Resolution No. 117, March 1, 2004, which approved the "Procedure for the preparation, approval and adoption of agreements between federal executive bodies and executive authorities of the constituent entities of the Russian Federation, transfer the exercise of a part of their powers to each other ....»<sup>2</sup> ( the resolution has lost its force by now — *author's note*). At the same time, no complex long-range studies on the dynamics and comparison of the quality of life across the regions of Russia had been done. We can only operate the indicators of individual ratings, based mostly on statistical data.

The rating of the subjects of the Russian Federation on the quality of life - 2016, compiled on a comprehensive record of 72 indicators, including environmental and climatic conditions, demographic situation, level of economic development, degree of development of the territory and development of transport infrastructure, income level of the population, employment indicators, labor market, housing conditions and security of residence, provision of social infrastructure etc., demonstrates the low positions of most of the northern regions. So, the Arkhangelsk region ranks 71 out of 85.<sup>3</sup> In the conditions of the north, indicators of the quality of life are directly dependent on the so-called "northern factors", e.g., the high cost of reproduction of all types of capital, the economic costs of living, severe climatic conditions and man-made load [1, Skufina T.P.]. The situation is complicated by the increase in territorial disparity in the parallel from the center to the periphery and by the social and economic polarization of the population due to disproportion in income, which leads to an increase in social tensions.

At the same time, it is not necessary to associate low quality of life indicators with the status of the northern territory, since the experience of a number of regions where increased attention is paid to the organization of social work is indicative of the opposite. E.g., the Khanty-Mansiysk Autonomous Okrug (Yugra) is among the top ten leaders of the above-mentioned rating<sup>4</sup> and it has the lowest infant mortality rate in the country, and the Yamal-Nenets Autonomous Dis-

<sup>&</sup>lt;sup>2</sup> Postanovlenie Pravitelstva Rossijskoj Federacii ot 01.03.2014 g. № 117 "O poryadke podgotovki, soglasovaniya i utverzhdeniya soglashenij mezhdu federalnymi organami ispolnitelnoj vlasti i ispolnitelnymi organami gosudarstvennoj vlasti subektov Rossijskoj Federacii o peredache imi drug drugu osushchestvleniya chasti svoih polnomochij, a takzhe o vnesenii izmenenij v takie soglasheniya" (v red. ot 09.07.2004). [Decree of the Government of the Russian Federation No. 117, 01.03.2014 "On the Procedure for Preparing, Agreeing and Approving Agreements Between the Federal Executive Bodies and the Executive Bodies of State Power of the Subjects of the Russian Federation on Transferring Part of Their Powers to Each Other, and on Making changes in such agreements" (amended on 09.07.2004). ] URL: https://rg.ru/2004/03/11/polnomochiya-dok.html (accessed: 15 November 2017). [In Russian]

<sup>&</sup>lt;sup>3</sup> Rejting rossijskih regionov po kachestvu zhizni — 2016. RIA Rejting [Rating of Russian regions on the quality of life - 2016. RIA Rating] URL: https://ria.ru/infografika/20170220/1488209453.html (accessed: 11 November 2017). [In Russian]

<sup>&</sup>lt;sup>4</sup> Ibid.

trict ranks first in the ranking of regions by the standard of living of families<sup>5</sup> and it is a subject of Russia with a high degree of social stability by a generalized characteristic of the living standard of the population [2, Korchak E.A.]. In this regard, it is required to consider the issues of organizing social work in the northern region as a mechanism that contributes to the improving the quality of life of the population.

So, since 2008, according to the Resolution of the Government of the Khanty-Mansiysk Autonomous Okrug — Ugra No. 174-p<sup>6</sup>, social work in Ugra is organized according to the precinct principle, which implies maximum approximations of social work to the place where families live; ensuring the client's stay in the usual social and cultural environment; the prevention of family and social problems; development of interdepartmental interaction with the active non-profit sector involvement, public and volunteer initiatives. Each social site got the population standard introduced: in the municipal districts, it ranges 1,500–5,000 people; in the urban districts, 5,000– 7,000 residents. In the Yamal-Nenets Autonomous District, an intensive institutional establishment of the community social work is going on with a view to maximally approximate the population. More than eight years ago, the development of district social services was started. Now, their activities are focused on preventing family troubles and social deviations.

Considering the examples given above and the complexity of transferring the experience of traditional sectoral forms of social work from the subjects of central Russia, the need to form the community models of social work in the northern regions reveals.

### The potential of community social work in the northern regions

Community social work is the direction of social work with the local community, through which individuals, families and social groups are involved in the planned activities to solve urgent problems. The focus of community social work is the realization of vital human functions in the family, society and community. A key principle of community social work is the family-oriented approach, which involves working with the client within the usual social and cultural environment, the actualization of the family resources, the neighboring and local community. The term "community" means people living on the territory of the municipality and united by common interests in matters of local importance. The work "at the grassroots level" is built on the broad cooperation of the community with formal systems, which means internal social changes and a high level of community's responsibility [3].

<sup>&</sup>lt;sup>5</sup> Rejting regionov po blagosostoyaniyu rossijskih semej po itogam 2016 g.RIA Rejting. [Rating of regions on the welfare of Russian families by the end of 2016. RA Rating] URL: http://riarating.ru/regions/20170515/630062559.html (accessed: 11 November 2017). [In Russian]

<sup>&</sup>lt;sup>6</sup>Postanovlenie Pravitelstva Hanty-Mansijskogo avtonomnogo okruga — YUgry ot 20 avgusta 2008 g. No 174-p "Ob organizacii socialnoj raboty po uchastkovomu principu v Hanty-Mansijskom avtonomnom okruge — YUgre" (s izm. na 31.10.2014) [Decree of the Government of the Khanty-Mansiysk Autonomous Okrug - Ugra of August 20, 2008 No. 174-p "On the organization of social work by the precinct principle in the Khanty-Mansiysk Autonomous Okrug – Ugra" (amended on October 31, 2014)] URL: http://docs.cntd.ru/document/991021580 (accessed: 12 November 2017). [In Russian]

In other words, it is supposed to transfer social responsibility to the municipal level and delegate authority for the development of the social situation to the communities. It is proved that the ways of increasing the effectiveness of social work are based on the social involvement of the community and the increased participation of citizens, especially socially vulnerable groups, in the implementation of municipal social policy [4]. The basic structure of the community model of social work is the district social service, which is within a "step-by-step approach" and includes a multidisciplinary team of specialists (social and medical workers, teachers, psychologists and lawyers). The institution oversees the territory with a population of up to 2,000 residents and operates in an autonomous mode. As a rule, it has a dual administrative subordination and several sources of funding. In the Russian reality, such centers can be transformed into social assistance centers for families and children, the social protection department of the municipality, and integrated social service centers.

Community social work is a kind of a "buffer" mechanism that allows to implement constructively social policy at the level of municipalities. It originated in the last quarter of the 20<sup>th</sup> century in the UK and has proven itself to be an effective organizational form, in comparison with sectoral social work focused on solving identified problems and assisting based on a fact of belonging to a particular client category. Social technologies, aimed at working with microsocial formation, are well institutionalized in the Nordic countries, where the local community plays a decisive role in social development thanks to the presence of the population stable connection with the so-called phenomenon of "social rootedness" — local individual and collective identity [5 Ryabov L.A.].

In Russia, the community form of social work is presented fragmentarily. Its wide spread, according to researchers, is hampered by the paternalistic orientation of social policy and the passive position of the greater part of local communities [6, Volchenko S.Yu., pp. 125-126]. The need for territorial differentiation in accordance with the differences in the conditions of life, self-development of communities, providing management autonomy at the municipal level have been identified in 1992 in the concept of social and economic development of the North districts and they are the basic conditions for the re-running the model of sustainable development in the northern regions, based on the interests of an individual and the improvement of living conditions.<sup>7</sup>

However, at present, most residents of the northern regions are more likely recipients of state aid and support than active participants of social policy. Similar behavior has been developed since the times of the USSR when the social security system was based on a policy of protectionism and compensation and contributed to the consolidation of sustainable paternalistic attitudes. Some of the population developed "marginal" mechanisms of adaptation to the conditions of the

<sup>&</sup>lt;sup>7</sup>Koncepciya socialno-ehkonomicheskogo razvitiya rajonov Severa: utv. Rasporyazheniem Pravitelstva RF ot 18 yanvarya 1992 g. № 107-r. [The concept of social and economic development of the North: approved by the Order of the Government of the Russian Federation, January 18, 1992 No. 107-r].URL: http://docs.cntd.ru/document/901607038 (accessed: 12 November 2017). [In Russian]
North, which are manifested in the presence of dependent moods, the lack of motivation for labor, the spread of alcoholism, the growth of violence and aggression as a means of realizing their interests, which becomes the basis for broad determinism deviating and delinquent behavior [7, Konstantinova T.N., 8, Stepanova P.P., 9, Trubitsyn D.A.]. Researchers also observe trends in the devaluation of cultural and family values, the destruction of marriage and family relations, which leads to an increase in the scale of ill-treatment of minors and the growth of social orphanhood.

At the same time, the analysis of the life activity of the indigenous population, Pomor people, indigenous small-numbered peoples of the North demonstrate the high importance of the local community in the life of a person. The community played a huge role in the activities of the northerners and acted as an institution of control over observance and reproduction of customs, and traditions. It was the guarantor of full-fledged functioning and social security. Being a complex cultural, historical, social and economic system, it contributed to the folding of the basic stable archetypes, constructs of consciousness, regulating human behavior. E.g., among the northerners, the phenomenon of infanticide and social orphanhood was almost atypical, as the values of family, kinship, childhood, mutual respect dominated. The community supported families who had adopted orphans and they were called "their". A special type of family system in the North was the Pomor family — an extended, multi-generational, living, as a rule, in one big house and common ownership of a collective farm with a sex-age division of labor, rendering each other various kinds of support and mutual assistance [10, Butorina T.S., Smiliklikova E.A.]. The indigenous smallnumbered population also cooperated in small groups, collectives and unions based on mutual support and the principles of "moral economics" [11, Sokolova F.Kh., Troshina T.I., p. 57].

Historically, a peculiar social and cultural environment has been historically developed in the northern regions of Russia, the formation of which was due to the spatial and geographical landscape and the natural and climatic status of the territory, the specific social and economic activity, the widespread literacy, the diversity of folk culture, which constitutes potential prospects for the development of community social work at this time.

# The specifics of the organization of the community model of social work in the Arkhangelsk region

The largest entity in the North-West of Russia is the Arkhangelsk Region. The region's territory is characterized by a high degree of heterogeneity; living conditions are not the same in terms of climatic, social, economic and infrastructural indicators. The population density is less than 2 people per 1 km<sup>2</sup>. The ethnic composition is diverse: 108 ethnic groups. Representatives of the indigenous minorities of the North (Nenets, Veps, Khanty) live in the Mezensky, Leshukonsky, Pinegsky and Primorsky districts of the Arkhangelsk region, but officially only Nenets people are included in the category of recipients of additional benefits under the category of indigenous peoples.<sup>8</sup>

In the Arkhangelsk region, quite high poverty rates (14.7%) were recorded, exceeding the national average; migration outflow from the region is also high.<sup>9</sup> Social obligations are carried out in the conditions of deficiency of budgetary financing that hinders development of social sphere. The construction of a social work system in the North is directly dependent on a number of features. The most important of them are:

- sparsely populated territory, focal character of settlement;
- economic life-support costs with the prevalence of expenses of households to meet basic life needs;
- distance from the center, subsidized nature of financing the social sphere;
- underdeveloped transport, social, medical, educational and institutional infrastructure;
- complex natural and climatic conditions, weakening the adaptive capabilities of people.

In the urbanized areas, particularly in relatively large towns with a population of more than 20,000 people (Arkhangelsk, Severodvinsk, Kotlas, Novodvinsk, Koryazhma, Mirny, Velsk and Nyandoma), the system of social work is well-formed, the nature of the population's needs and the specifics of development considers urban agglomerations. There a network of standard social service centers with elements of innovative technologies is found. Models of social support are developing. However, in most remote and hard-to-reach areas of the region, the infrastructure of social institutions is poorly developed, and centralized management of jurisdictional territories is difficult due to their considerable "scatter".

Certain attempts to introduce a community model of social work can be noted in the framework of the program "Social Support for Citizens of the Arkhangelsk Region for 2013-2018"<sup>10</sup>: In some districts (Velsk, Kargopol, Nyandoma and Lensk) and cities (Arkhangelsk, Novodvinsk and Severodvinsk), state social services for family and children and complex social service centers tested the technology "Social District Service". Its purpose is to identify families in the early stages of ill-being and assistance in obtaining social support, preventing the lack of supervision and homelessness. However, this practice of social work has not been widely disseminated.

<sup>&</sup>lt;sup>8</sup> Postanovlenie Pravitelstva Rossijskoj Federacii ot 24.03.2000 g. № 255 "O Edinom perechne korennyh malochislennyh narodov Rossijskoj Federacii" (v red. ot 25.08.2015) [Decree of the Government of the Russian Federation No. 255 of 24.03.2000 "On the Unified List of Indigenous Small-numbered Peoples of the Russian Federation" (amended on August 25, 2015).] URL: http://docs.cntd.ru/document/901757631 (accessed: 15 November 2017). [In Russian]

<sup>&</sup>lt;sup>9</sup> Arhangelskaya oblast na pribornoj paneli statistiki. *Itogi i perspektivy Arhangelskoj oblasti*. [The Arkhangelsk Region is on the dashboard of statistics. *Results and prospects of the Arkhangelsk region*] 2017. pp. 50–52. [In Russian]

<sup>&</sup>lt;sup>10</sup> Postanovlenie Pravitelstva Arhangelskoj oblasti ot 12.10.2012 g. № 464-pp "Ob utverzhdenii gosudar-stvennoj programmy Arhangelskoj oblasti "Socialnaya podderzhka grazhdan v Arhangelskoj oblasti (2013–2020 gody)" (v red. ot 20.12.2016) [Decree of the Government of the Arkhangelsk region of 12.10.2012 No 464-pp "On approval of the state program of the Arkhangelsk region "Social support of citizens of the Arkhangelsk region (2013-2020)" (amended on December 20, 2016)]. URL: http://onegaoszn.ru/documents/npa/464-pp.html (accessed: 11 November 2017). [In Russian]

In this regard, the implementation of special programs and projects aimed at updating approaches to the organization of social work and considering the structural changes in the way of life is important.

# Approaches to the organization of community social work within the framework of project activities

Since May 30, 2017, in the Arkhangelsk region, the federal project "Strong Family" of the party "Edinaya Rossiya" ("United Russia") has been going on. The project is leading in the activity and degree of coverage: its geography is indicated by 72 regions of the country. The aim of the project is to draw attention to the problems of the family by working at the local level, consolidating state institutions, public and non-profit organizations, socially active citizens and solving the specific cases.<sup>11</sup> The range of activities is not limited to family, but includes the development of coordination and corrective work in the field of prevention of social deviations, improvement of legal, organizational and management mechanisms for interagency cooperation, the introduction of innovative technologies in the practice of institutions and social organizations, professional skills of accompanying specialists.

Among the priorities of the "Strong Family" project in the Arkhangelsk region are the following areas:

- support for social networks and self-organization at the local level, "neighbor communities", self-help groups and mutual assistance;
- assistance in the creation of volunteer and public organizations;
- carrying out mass socially significant events;
- educational work among the population;
- development of alternative adaptive capacities of the population through special educational programs.

Within the framework of the project, an experimental site — the Velsk District and its 22 municipalities — has been identified. This area has some advantages in comparison with other areas of the region: e.g., in 2015-2017 the Association "Healthy Cities, Districts and Settlements" successfully approved a program aimed at developing a healthy lifestyle of the population through increased activity of local self-government bodies; since 2017, the local Public Council, which includes representatives of various institutions and departments has been working.

The project "Strong Family" assumes the development of approaches for organization and technologies of the community social work, considering the needs and opportunities of every territory. The research component of the "Strong Family" project is to identify a system of indicators of the quality of life. Their assessment will allow monitoring changes in the needs, interests, social and psychological status of the population. All these aspects serve as indicators of the effective-ness of community social work. Since the category "quality of life" is not static, optimally selected indicators will allow to form an objective picture of the social situation and to predict the variants

<sup>&</sup>lt;sup>11</sup>Krepkaya semya. Edinaya Rossiya. Partijnye proekty v regione. [A strong family. United Russia. Party projects in the region]. URL: http://arkhangelsk.er.ru/projects/krepkaya-semya/ (accessed: 14 November 2017). [In Russian]

of its development and correcting the content of social work. The developed scientifically based organizational and management approaches will provide the potential for "transferring" community models of social work to other areas of the region, considering the opportunities and needs of the territory.

## Conclusion

The implementation of social work in the form of community models can be a condition for improving the quality of life of the population since they are based on the broad involvement of local communities in the development of the social sphere; objectively consider the specificity and infrastructure of specific territories; optimally involve the resources of social partners and business not limited to the scope of budget financing. On the one hand, social work serves as a mechanism for improving the quality of life; on the other hand, the quality of life is a conceptual platform for the formation of community models of social work since it gives the opportunity – through a variable system of indicators — to reflect the dynamics of social situations and build a system of social support, considering changes in the needs of the population.

The special potential of community social work in the northern region is formed by historically established forms of social self-organization, built on the principle of collectivity, since survival in extreme natural and climatic conditions outside the support of the community was virtually impossible. Community social work, which relies on improving the quality of life, will make it possible to equalize the starting opportunities, parity interests of different social groups, ensure the preservation of the traditional way of life of the indigenous small-numbered peoples of the North by implementing a range of additional guarantees and benefits. In a complex, this will positively affect the preservation of cultural identity, ethnic and ecological norms of the northern civilization, which is the main condition for the sustainable development of the North [12, Snisarenko S.O.].

The party project "Strong Family" in the Arkhangelsk region is focused on developing campaigns for the implementation of community social work based on the representation of various strata of the population and the independence of the social and economic activities of specific municipal entities in territorial public self-government. Considering the size, heterogeneity of the region and the specifics of the districts, the introduction of community models of social work can resolve conflicts between the need to build a unified network of social services and provide social support to the population on the territory of their residence in the usual social and cultural environment.

Thus, the construction of community social work in the northern region will achieve maximum social efficiency with minimal economic costs and come to a consensus between the mechanism for implementing the policy of sustainable development of the North and improving the quality of life through the focus on strengthening human potential, satisfaction of real needs and welfare of the population.

# References

- 1. Skuf'ina T.P. Specifika sovremennogo Severa [Specificity of modern North]. *Ekonomika i upravlenie*, 2009, no. 9 (58), pp. 182–184.
- 2. Korchak E.A. Uroven jizni naseleniya regionov Severa i Arktiki Rossiiskoi Federacii [The standard of living of the population of the North and the Arctic regions of the Russian Federation]. *Fundamentalnie issledovaniya* [Fundamental research], 2015, no. 7, ch.3. pp. 605–609.
- 3. Wessells M.G. Bottom-up approaches to strengthening child protection systems: Placing children, families, and communities at the center. *Child abuse & neglect*, 2015, vol. 43. pp. 8–21.
- Moors M. Community work the missing link of municipal social policy. 3rd International Interdisciplinary Scientific SOCIETI HAELTH WELFARE, 1st Congress of Rehabilitation Doctors of Latvia. 11–12 NOV, 2010, 2012, vol.2. DOI 10.1051/shsconf/20120200023
- Ryabova L.A. Mestnye soobshchestva planetarnogo Severa: trendy i factory social'nogo razvitiya [Local ommunities of the planetary North: trends and social development factors]. Sever I rynok: formirovanie ehkonomicheskogo poryadka [The North and the Market: Forming the Economic Order], 2011, no. 2 (28), pp. 102–106.
- Volchenko S.Yu. Social'noe kartirovanie kak tekhnologiya social'noj raboty po semejnomu neblagopoluchiyu na territorii [Social mapping technology as a social work on the territory of family trouble]. Sociokul'turnoe razvitie bol'shogo Urala: trendy, problemy, perspektivy: materialy yubilejnoj Vserossijskoj nauchno-prakticheskoj konferencii XX Ural'skie sociologicheskie chteniya (Ekaterinburg, 27–28 fevralya 2015 g.). Ed. by Yu.R. Vishnevskiy. Ekaterinburg, 2015, pp. 125–130. (In Russ.)
- 7. Konstantinova T.N. Izmenenie form sem'i na Severe: regional'noe izmerenie [Change in family forms in the North: a regional dimension]. *Teoriya i praktika obshchestvennogo* razvitiya [Theory and Practice of Social Development], 2014, no. 7, pp. 27–31.
- 8. Stepanova P.P. Social'naya samoorganizaciya i gosudarstvennaya politika na Severe [Social selforganization and public policy in the North]. *Regional'naya ehkonomika: teoriya i praktika* [Regional Economics: Theory and Pactice], 2009, no. 32 (125), pp. 145–148.
- Trubicyn D.A. Social'noe izhdivenchestvo v sisteme determinant prestupnosti (na primere prestupnosti korennyh malochislennyh narodov Krajnego Severa Yamalo-Neneckogo avtonomnogo okruga) [Social dependency in the system of the determinants of crime (on the example of the criminality of the indigenous minorities of the Far North of the Yamalo-Nenets Autonomous District)]. *Yuridicheskaya nauka*, 2015, no. 4, pp. 121–128.
- 10. ButorinaT.S., Smyaglikova E.A. O prizrenii i vospitanii detej-sirot na Arhangel'skom Severe v XVIII–XIX vv. [On the contempt and education of orphaned children in the Arkhangelsk North in the XVIII–XX centuries.], *Mir obrazovaniya obrazovanie v mire*, 2009, no. 2. pp. 17–22.
- 11. Sokolova F.H., Troshina T.I. Ehkologicheskoe izmerenie kul'tury korennyh malochislennyh narodov Rossijskoj Arktiki [Ecological capacity of the culture of indigenous minorities of the Russian Arctic], *Ehkologiya cheloveka* [Human Ecology], 2015, no. 11, pp. 56–64.
- 12. Snisarenko S.O. Social'naya rabota v mestnom soobshchestve kak sociologicheskij fenomen [Social work in the local community as a sociological phenomenon]. *Izvestiya Rossijskogo gosudarstvennogo pedagogicheskogo universiteta im. A.I. Gercena* [Herzen University Journal of Humanities & Science], 2007, vol. 22, no. 53, pp. 219–222.

# MODERN ARCTIC: ISSUES OF INTERNATIONAL COOPERATION, POLITICS, ECONOMICS AND SECURITY

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# Human capital — a key factor of the Arctic economic development<sup>\*</sup>

© Natalia V. GOVOROVA, Cand. Sci. (Econ.), leading researcher, Associate Professor Tel.: +7-916-374-85-28. E-mail: n\_govorova@mail.ru The Institute of Europe of RAS, Moscow, Russia Moscow Technological Institute, Moscow, Russia

**Abstract.** The article deals with the demographic, social and economic situation in the Arctic zone of the Russian Federation. Its demographic trends, main indicators of the economic and social development, the situation in the labor market, as well as providing the population with the necessary training and healthcare are studied. The central role in solving the complex problems of the Russian Arctic revival belongs to the workforce as it is the main factor of the current economic growth.

**Keywords:** Arctic zone of the Russian Federation, demography, social and economic development, human resources, workforce, education, health.

# Introduction

In August 2017, the Government of the Russian Federation approved the new draft of the state program "Social and Economic development of the Arctic Zone of the Russian Federation " $(AZRF)^1$  — the key document for the home arctic policy making that outlined its aims, purposes and strategic priorities. It is not possible to reach all the goals without the preservation and development of the main resource of the modern economy – people, whose social and economic aspects and problems of life are particularly clearly manifested in the Arctic provinces. It is not for the first time, but on a new turn in the development of technologies and organizational decisions. The intensification of economic activity in the region is the most important state aim, which can be optimally solved by the application of the latest technology,<sup>2</sup> and here it is necessary to coordinate efforts at the federal and regional levels, incl. the state programs of the Russian Arctic territories. In view of the above, the analysis and objective assessment of the human potential of the region seem necessary and relevant. According to the modern development paradigm, investments in human capital bring higher dividends than other factors of production [1, Becker G.S.].

The purpose of the state program is to increase the level of social and economic development of the Russian Arctic, and the quality of life and protection of the population against the

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<sup>&</sup>lt;sup>1</sup> Postanovlenie Pravitelstva RF ot 21 aprelya 2014 g. № 366 (v redaktsii ot 31 avgusta 2017 g. № 1064) [Russian Government resolution No. 366 of April 21, 2014 (as amended on August 31, 2017 No. 1064].

<sup>&</sup>lt;sup>2</sup> Federal budget allocations for the State Program in 2018-2025 will amount to more than 190 billion rubles. It is also planned to attract private investors.

background of significant differences within and between the polar regions, as well as between the indigenous and non-indigenous population, incl. demography.

# Demographic profile

Demographic potential is the basis of human capital, characterizing the reproduction of the population and it is determined by the indicators of the natural and migratory movement of the population, the average life expectancy and their dynamics. Since 2015, the Russian Arctic has been identified as an independent object of statistical observation, the Federal Statistical Work Plan includes a section called "Indicators of the Socio-Economic Development of the Arctic Zone of the Russian Federation and Ensuring National Security"<sup>3</sup>. Judging by the available data, in recent years, there are multidirectional trends and vectors of demographic development in the area. According to Rosstat, in 2016<sup>4</sup> the population of the Russian Arctic decreased by 6,579 thousand people.<sup>5</sup> (in 2015, it was 13,4 thousand people) (table1). This happened in most of the studied territories, most of all in the Murmansk (-4.552 thousand people) and the Arkhangelsk regions (-2.112 thousand people). The Yamal-Nenets Autonomous District (YaNAO) demonstrated the most significant growth in the population (+1.945 thousand people). The decrease in the total number of residents was mainly due to a negative migration increase throughout the Russian Arctic (table 2). Especially serious was the decline in the Murmansk and the Arkhangelsk regions, the Krasnoyarsk region and the Yamal-Nenets Autonomous District. In this respect, the least affected were the Republic of Sakha (Yakutia), the Chukotka Autonomous District (ChAO) and the Nenets Autonomous District (NAO).

Table 1

Territories	2016	2017	Territories	2016	2017
Russian Arctic	2 378 234	2 371 655 The city district "Novaya Zem- lya"		3 024	2 934
The Komi Republic	81 442	80 061	The city district "Novodvinsk"	38906	38 735
The city district "Vorkuta"	81 442	80 061	The city district "Severodvinsk"	186 138	185 042
The Republic of Sakha (Yakutia)	26 107	26 190	The Mezensky municipal dis- trict	9 241	9 049
The Allaikhovsky Munici- pal District	2 682	2 718	The Onega municipal district	31 456	30 762
The Anabar National (Dolgan-Evenki) Munici- pal District	3 431	3 500	The Primorsky Municipal Dis- trict	25 787	25 639

The number of the permanent population of the land territories of the Russian Arctic, January 1 (people)

<sup>&</sup>lt;sup>3</sup> Statisticheskaya informatsiya o sotsialno-ekonomicheskom razvitii Arkticheskoj zony Rossijskoj Federatsii. [Statistical information on the social and economic development of the Arctic zone of the Russian Federation] URL: http://www.gks.ru/free\_doc/new\_site/region\_stat/calendar2.htm (accessed: 16 May 2018). [In Russian]

<sup>&</sup>lt;sup>4</sup> Hereindafter, if no other source indicated, statistics are given from: *Regioni Rossii. Sotsialno-ekonomicheskie poka*zateli. [Regions of Russia. Socio-economic indicators] 2017. Rosstat. M., 2017. [In Russian]

<sup>&</sup>lt;sup>5</sup> Without municipalities the Belomorsky Municipal District, the Loukhsky Municipal District and the Kemsky Municipal District (the Republic of Karelia), the territory is included in the list of the land areas of the Arctic zone of Russia in accordance with Presidential Decree No. 287, June 27, 2017 "On Amending the Decree of the President of the Russian Federation of May 2, 2014 No. 296 "On the Land Areas of the Arctic zone of the Russian Federation".

The Bulunsky Municipal District	8 366	8 404	The Murmansk region	762 173	757 621
The Nizhnekolymsky municipal district	4 386	4 366	NAO	43 838	43 937
The Ustyansky Municipal District	7 242	7 202	ChAO	50 157	49 822
The Krasnoyarsk region	227 546	227 220	YaNAO	534 104	536 049
City district "Norilsk city"	178 106	178 654	The Republic of Karelia <sup>6</sup>	27809	27267
Taimyr Dolgan-Nenets Municipal District	32 871	32 290	Belomorsky municipal district	17 034	16 663
Turukhansk municipal district	16 569	16 276	Loukhi municipal district	12 056	11 771
The Arkhangelsk region without NAO	652 867	650 755	Kemsky Municipal District	15 753	15 496
The city district "Arkhangelsk"	358 315	358 594			

Source: Rosstat data.

In most of the Russian Arctic, the birth rate exceeded the mortality rate in 2016 (table 2), while the Nenets Autonomous District, the Republic of Sakha (Yakutia) and Yamal-Nenets Autonomous District occupied the 3<sup>rd</sup>, 8<sup>th</sup> and 11<sup>th</sup> places respectively in the Russian Federation in terms of birth rate. The demographic load factor in the regions of the Russian Arctic did not exceed the average Russian level of 764 people at the age of 0-15 and 60 and more per 1000 people of working age except for the Arkhangelsk region without NAO.

Table 2

Demographic indicators of the Russian Arctic in 2016					
Territories	Natural popu- lation growth rate **	Migration growth rate **	Demographic load fac- tor ***	Migration growth, people.	
The Russian Arctic	3.1	-5.9		-14 021	
The Komi Republic*	0.9	-18.0	725	-1 451	
The Republic of Sakha (Yakutia)	7.0	-3.8	701	-99	
The Krasnoyarsk region	7.3	-8.8	726	-1 990	
The Arkhangelsk region without NAO	-0.5	-2.8	812	-1 811	
The Murmansk region	-0.3	-5.7	674	-4 343	
NAO	9.6	-7.3	736	-320	
ChAO	3.6	-1.0	582	-516	
YaNAO	10.1	-69.8	536	-3 491	
The Republic of Karelia	-2.8	-16.0	811		

\* Data is provided for the subjects of the Russian Federation due to the absence of data by districts and districts.

\*\* per 1000 people of the average annual population.

<sup>&</sup>lt;sup>6</sup> Municipal formations of the Republic of Karelia were included in the list of land territories of the Russian Arctic according to the Presidential Decree No. 287, June 27, 2017 "On Amendments to Presidential Decree No. 296 of May 2, 2014 "On Land Areas of the Arctic zone of the Russian Federation". Statistical data on these areas of the Russian Arctic has not yet been collected by Rosstat and, therefore, hereinafter, the data is presented for the subject in general, not for its entities.

\*\*\* per 1,000 people of working age... no data available.Source: Rosstat data.

In the Russian Arctic, the life expectancy at birth in recent years has grown along with the nationwide positive trend, and in 2016 it was 71.36 years, but less than the average Russian indicator (71.87 years). This level was exceeded only in the Yamal-Nenets Autonomous District (72.13 years), close to that of the NAO (71.08), and the largest gap, as in the previous period (2014-2015), was demonstrated by the ChAO (64, 42 years), occupying the second place from the end among the subjects of the Russian Federation after the Republic of Tyva. This index is also low in the Republic of Karelia (69.78 years). The average age of the residents of the Russian Arctic is lower than in Russia (40.7 years), except for the ChAO (41.5 years), while the share of children and persons of working age is higher (except for the Arkhangelsk region in the latter case).

Low life expectancy and depopulation in the Russian North, marked in recent decades, reduces the demographic security of the region [2, Sinitsa A.L., pp. 14-23]. They are associated not only with very severe natural and climatic conditions that cause high morbidity and mortality, but also with a low quality of life due to inadequate development of the health care system, incl. the access to quality health services.

# Level and quality of life

The level of life means the primarily income; the quality of life includes also the concepts of longevity and educational level as they are generalized characteristics of the health, objective indicators of the medical and educational services' quality, and the implementation of national programs in the relevant areas [3, Lukin Yu.F., pp.77-95; 4, Sukneva S.A., pp. 97-98].

The gross regional product (GRP) is the most important indicator of social and economic development; GRP per capita is above the national average in all the territories of the Russian Arctic, except for the Arkhangelsk region without NAO. Leaders are NAO, YaNAO and ChAO, where this indicator is more than the average for the constituent entities of the Russian Federation at 11.2; 7.6 and 2.9 times respectively. The share of GRP produced in the Russian Arctic in the total GRP of the subjects of the Russian Federation is steadily growing: in 2014–2016, it increased by from 0.3% to 5.3%. The share of the added value of high-tech and science-intensive industries in the GRP of the Russian Arctic reached by 7.1%, while the share of science-intensive innovative goods and services declined in the same period. The per capita income of the population, due to the regional coefficients and surcharges to wages for work in the regions of the Far North, is higher than the average for Russia, except for the Krasnoyarsk region. In this area, in the sectoral structure of gross added value, the processing industries predominate, and not the extraction of minerals (table 3). At the same time, the share of the population with incomes below the subsistence level, established in the subject of the Russian Federation, exceeds the average Russian indicator (13.4%) in the Komi Republic (16.7%), the Arkhangelsk region without NAO (14.3%), the

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Krasnoyarsk region (18.4%) and the Republic of Sakha (Yakutia) (19.8%). Problems of low-security of the northerners threaten the complex tasks of the state arctic policy [5, Gontmakher E., pp. 15-24]. Gini coefficient<sup>7</sup> exceeds the national average (0.412) in the Nenets and Yamal-Nenets autonomous districts. Overall unemployment is noticeably lower than the average Russian level in the Yamal-Nenets Autonomous District and the Chukotka Autonomous District. They are among the leaders in terms of labor force participation and employment in the country.

Table 3

	The output of skilled workers and employees / specialists of middle / sen- ior level, thousand people.	Morbidity, pers. per 1,000 people	Average per capita monetary income per month.	Employment level, %	Unemployment rate, %
RF	198.6 / 469.1 / 1161.1	785,3	30 744	65.7	5.5
The Komi Repub- lic*	1,9/ 2.9 / 4,8	1121.2	31 527	64.6	8.7
The Arkhangelsk region without NAO*	2.6 / 3.5 / 5.8	1002.2	31 043	61.7	7.1
NAO	0,1 / 0,2 /	1380.7	69 956	67.1	8.5
The Murmansk region	1.0/ 2.4 / 3.2	875.8	36 115	68.8	7.7
YaNAO	0.8/ 1.6 / 0.2	1180.4	67 521	75.1	2.6
The Krasnoyarsk region*	4.2/ 9.5 / 18.9	783.1	28 030	64.3	6.1
The Republic of Sakha (Yakutia)*	2.4/ 4.1 / 4.7	1043.8	38 933	64.5	7.2
ChAO	- / 0.1 / 0,1	1289.4	63 909	79.6	3.5
The Republic of Karelia*	1.0 / 2.2 / 3.0	1126.2	25 744	62.2	9.2

# Social and economic indicators of the Russian Arctic, 2016

\* Data is provided for the subjects of the Russian Federation due to the absence of data by districts and districts.

\*\* per 1000 people of the average annual population.

\*\*\* per 1,000 people of working age.

.. no data available.

Source: Rosstat data.

The real sector of the Russian Arctic economy is mainly represented by the defenseindustrial complex, the mining industry, enterprises connected with the transport infrastructure and ensuring the activities of the Northern Sea Route. In the sectoral structure of gross added value, the extraction of minerals is on the first place everywhere, except for the Krasnoyarsk region; the share of processing industries is high except in the Komi Republic, the Arkhangelsk and the Murmansk regions [6, Govorova N.V., pp. 63-64].

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<sup>&</sup>lt;sup>7</sup>Statistical indicator of the social stratification degree of the country or area that describes the differentiation of the monetary incomes of the population.

New development of the Russian Arctic requires a system of secondary, higher and additional education for adults and it plays a central role in the formation of human capital, enabling future specialists to master working professions at an intermediate stage of training. However, in the region, corresponding to the all-Russian trend, the output of specialists with higher education predominates (table 3). The composition of the employed population in the Arctic in terms of the level of vocational education in 2016 looked as follows: the highest proportion of the employed population with higher education is in the Yamal-Nenets Autonomous District (41.2% vs. 33.5% of the Russian Federation average) the lowest one is in the Komi Republic (25.8%). The leader in secondary vocational education of the workforce is the Arkhangelsk region without NAO (56.3%), NAO (54.8%), followed by ChAO (36.0%), which is almost 10% less than the national average (45.1%). The highest percentage of unemployed with university education is in the Yamal-Nenets Autonomous District (26.0% vs. 20.5% of the Russian Federation average), the lowest — in the NAO (4.3%).

In order to create a modern educational, scientific and innovative infrastructure [7, Vedeneeva V., pp. 68-80], to strengthen regional educational institutions and their links with the economy and the social sphere, to keep the competitive personnel potential corresponding to the tasks of renewing the economic activity in the Russian Arctic in the sphere of higher education, federal universities we established: the Siberian Federal University (Krasnoyarsk), the Northern (Arctic) Federal University named after M.V. Lomonosov (Arkhangelsk), the Far-East Federal University (Vladivostok) and North-East Federal University named after M.K. Ammosov (Yakutsk). In April 2017, the Murmansk Arctic State University, the largest higher educational institution in this area, became one of the regional core universities. Its mission is the accumulation of regional, home and foreign scientific and educational potential for the effective personnel and scientific development of the Russian Arctic. The main universities have a total of about 20 branches of studies, they include institutes and colleges, providing not only continuous education, but also education access to residents of different categories of settlements.

In the Arctic universities, the admission of students to budget places is increasing, while the most of them are in engineering specialties, in general, more than the national average. However, about 20% of graduates are employed outside the Russian Arctic, and today the expanding the interaction of universities and enterprises in the field of training and subsequent employment of graduates is urgent. The largest companies-employers of the region need qualified operators of machinery with programmatic control, turners, milling machines, electric welders, etc. Also, there is an objective need for training specialists in the fields of shipbuilding, machinery and instrumentation, economics and management of shipbuilding production and training within the framework of the targeted recruitment (in the specialities and training areas, indicated by the state or the leading employers of the region). All these together with additional professional education and professional development can solve the most acute personnel problems in the Arctic. The most painful problem of human capital development in the Russian Arctic is health. The health indicators of the population in the Arctic are inferior to all-Russian: the life expectancy in the region is lower (according to some expert estimates, it is 53 years<sup>8</sup>), and the level of morbidity, especially parasitic and cancerous diseases, is significantly higher (except for the Krasno-yarsk region). It indicates the need to train medical personnel for the Arctic, considering this specific. There is a pressing need for the development of pharmacological controls of the thermal state, which could increase survival under the influence of low rates, as well as the development of vaccines against infections that existed tens of thousands of years ago, against the background of thawing permafrost.

In 2016, in accordance with the order of the Ministry of Health of the Russian Federation to improve the quality of the medical personnel training for the polar territories, the Arctic health care scientific and educational cluster was created. It includes the North-West State University named after I.I. Mechnikov (St. Petersburg) and the Northern State Medical University (Arkhangelsk). The specialization of the Northern cluster is the Arctic medicine, and the main task is to improve the quality of training and efficiency of universities, as well as the development of research activities. It is also planned to increase the mobility of students and teachers.

To improve the health conditions, it is required to accelerate the development of the departure-governmental forms of work, providing care through mobile/satellite communications, expansion of sanitary helicopters and upgrading of medical infrastructure. These measures, along with the improvement of disease prevention and a healthy lifestyle of the population can significantly improve the health of the northerners.

#### Conclusion

Today, Russia is a world leader in the development of Arctic projects: infrastructure (Northern Sea Route, auto, air and railway lines), oil and gas extraction and mining (gas pipeline "Bovanenkovo-Ukhta-Torzhok", etc.), industrial (ship and engineering) and informational. The territory of the Russian Arctic will continue to grow: the authorities of Karelia justified the inclusion of two territorial units in the Russian Arctic (the Segezha district and the town of Kostomukshi). Russia's revenues from the use of the Arctic resources are also gradually increasing: in the first quarter of 2018 compared to the same period in 2017, LNG exports is doubled in real terms and almost 2.5 times in value, and a significant part of these indicators falls on the Yamal (Yamal LNG) plants. There, on Yamal (and in Greenland also) scientists from the RAS Ural Branch together with the French Academy of Sciences will carry out a project to study the impact of climate change on the Arctic fauna to preserve biodiversity in the Arctic.

Given the harsh meteorological and geophysical conditions, the difficult environmental situation in the high-latitude areas, as well as the impact of Western sanctions, the implementation

<sup>&</sup>lt;sup>8</sup> Ekspert: Prodolzhitelnost zhizni v Arktike pochti na 20 let nizhe srednej po Rossii [Expert: Life expectancy in the Arctic is almost 20 years lower than the average for Russia]. URL: http://sakhaday.ru/news/ekspert-prodolzhitelnostzhizni-v-arktike-pochti-na-20-let-nizhe-srednej-po-rossii/ (accessed: 16 May 2018) [In Russian]

of economic and infrastructure projects in the Arctic at the new stage of its development will be determined by the potential of home science and industry, their ability to create competitive products. In turn, the implementation of these opportunities is closely related to the quantity and quality of human potential, the development index of which is lower than the average Russian human potential in most regions of the Russian Arctic by the method of the UN Development Program [8, Human Development Report in the Russian Federation 2011, pp. 306-307]. The use of all other development resources depends on human capital [9, Schultz T.W.; 10, Becker G.S.]; without a healthy, educated and decent worker in the Arctic, it would be impossible to carry out the development of the real sectors of the economy [11, Govorova N.V., pp. 37-45]. This means that you need to take measures to stabilize the demographic situation and to increase the attractiveness of the region as a place of permanent residence [12, Dushkova D., Krasovskaya T., Evseev A., pp. 3-11], to creation of social innovative technologies, incl. medical and educational.

The results of the data analysis on human development in the Arctic indicate heterogeneous processes: one of the main trends is the increased level of population and, as a result, the reduction in the number of residents of many areas against the background of higher natural population growth in comparison with the Russian Federation as a whole. The data on social and economic development show a mixed picture: on the one hand, there are high nominal monetary incomes, their relatively uniform distribution and high level of employment of the population with low unemployment; on the other hand, there is a lack of specialists at different levels of professional training for the economy and social sphere of the region. Given the above, we can conclude about the likelihood of fracture of the negative trends of social and demographic development on the background of complex natural-climatic conditions and considerable territorial differences is possible only under condition of well-being and high quality of life, environmental health, promoting the development of indigenous economic activities, and the optimal conditions for personal and professional fulfillment of the northerners.

#### References

- Becker G.S. Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy*, vol. 70, no. 5, part 2, 1962, pp. 9–49. DOI 10.1086/258724
- Sinitsa A.L. Rozhdaemost' na Evropeyskom Severe Rossii v 1990–2015 gg. [Fertility in the European part of the Russian North in 1990–2015]. *Arktika i Sever* [Arctic and North], 2017, no. 27, pp. 14–23. DOI: 10.17238/issn2221-2698.2017.27.5
- 3. Lukin Yu.F. *Mnogomernost' prostranstva Arktiki* [Multidimensional space of the Arctic]. Ed. by Yu.F. Lukin. Arhangel'sk: NArFU Publ., 2017, 251 p. (In Russ.)
- Sukneva S.A., Narodonaselenie i etnodemograficheskie protsessy v Rossiyskoy Arktike [Population and ethno-demographic processes in the Russian Arctic]. *Etnonatsional'nye protsessy v Arktike: tendentsii, problemy i perspektivy: monografiya* [Ethnonational processes in the Arctic: trends, problems and prospects]. Ed. by N.K. Kharlamp'eva. Arkhangel'sk: NArFU Publ., 2017, pp. 97–98. (In Russ.)
- 5. Gontmaher E. Rossiyskiy chelovecheskiy kapital: sostoyanie i tendentsii [Russian human capital: current status and trends]. *Mirovaya ehkonomika i mezhdunarodnye otnosheniya* [World Economy and International Relations], 2017, no. 3, vol. 61, pp. 15–24. DOI: 10.20542/0131-2227-2017-61-3-15-24.

- 6. Govorova N.V. Chelovecheskiy i konkurentnyy potentsial Arktiki [Human and competitive potential of the Arctic]. *Sovremennaya Evropa* [Contemporary Europe], 2012, no. 4, pp. 62–70.
- Vedeneeva V. Rol' obrazovaniya v kontseptsii innovatsionnogo razvitiya ekonomiki [Role of education in the concept of innovative economic development]. *Mirovaya ekonomika i mezhdunarodnye otnosheniya* [World Economy and International Relations], 2015, no. 4, pp. 68–80.
- 8. Doklad o razvitii chelovecheskogo potenciala v Rossijskoj Federacii 2011. Modernizaciya i razvitie chelovecheskogo potenciala [Human Development Report in the Russian Federation 2011. Modernization and Human Development]. Moscow, 2011, pp. 306–307.
- 9. Schultz T.W. Investment in human capital: the role of education and research. New York, 1971.
- 10. Becker G.S. *Human Capital: A Theoretical and Empirical Analysis. 2d ed.* New York, Columbia University Press for the NBER Publ., 1975.
- Govorova N.V. Arkticheskie derzhavy: razvitie chelovecheskogo potentsiala (sravnitel'nye kharakteristiki) [Arctic powers: development of human potential (comporative characteristics)]. Sovremennaya Evropa [Contemporary Europe], 2013, no. 4, pp. 37–45.
- 12. Dushkova D., Krasovskaya T. & Evseev A. Environmental & Human Impact of the Northern Sea Route & Industrial Development in Russia's Arctic Zone. *Arctic Yearbook,* 2017, pp. 3–11.

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# The Arctic as a constantly evolving multidimensional space<sup>\*</sup>

© Valery P. ZHURAVEL, Cand. Sci. (Ped.), Associate Professor, leading researcher E-mail: zhvalery@mail.ru The Institute of Europe of RAS, Moscow, Russia

Abstract. The author analyzes the main approaches to the multidimensionality of the Arctic and the factors that enhance the role of the Arctic in modern conditions. Special attention is paid to the research made by NArFU (Yu.F. Lukin) and the Institute of Europe of RAS (N.M. Antyushina). In conclusion the author underlines the need for systematic work on the Arctic consciousness and involvement of the Russian citizens in the Arctic affairs. Along with the analysis of the growing role of Russia and the European countries in the Arctic, the article is concerned with cooperation between Russia and China. It is revealed that Beijing's current foreign policy in the Arctic is productive, businesslike, benevolent and long-term for Russia. The emerging problems and difficulties are resolving through negotiations on a mutually beneficial basis. It is also concluded that the presence of large Asian states in the Arctic Council leads to a deescalate tensions due to disagreements between Russia and the West over the situation in Syria and Ukraine. The author tried to determine the level of militarization in the Arctic and its impact on the possibility of conflicts in the region. It is concluded that in modern conditions a long-term Arctic megaproject could become a powerful Arctic consolidation factor. In the article, the author uses methods of political science and humanities: comparative analysis, historical approach, institutional and prognostic methods, incl. the analysis of possible scenarios for the further development of the Arctic Council by Yu.F. Lukin.

Keywords: Natalia Antyushina, Arctic, Yuriy Lukin, Russia, the Arctic Council, China, NArFU.

#### Introduction

The Arctic as an object and subject of research is studied by many scientific disciplines. In the humanities, the problem of the multidimensionality of the Arctic, in our opinion, is the most fruitfully studied by the doctor of historical sciences, professor Yuriy Fedorovich Lukin [1, 2, 3, Lukin Yu.F.]. One should agree with the thesis of the scientist that "the Arctic as a single conjugate and interpenetrating object of research conceptually requires the integration of existing branches of scientific knowledge based on an interdisciplinary approach, and in practice, it requires the co-operation of the available resources of Arctic societies, states and business, [2, Lukin, Yu.F., p. 3].

On March 30, 2017 in Arkhangelsk at the IV International Arctic Forum "Arctic: Territory of Dialogue"<sup>1</sup>, President of Russia V.V. Putin said: "Our goal is to ensure sustainable development of the Arctic, and this is the creation of modern infrastructure, development of resources, development of industrial base, improving the quality of life of the indigenous peoples of the North, pre-

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<sup>&</sup>lt;sup>1</sup> The International Arctic Forum "Arctic: Territory of Dialogue" has become one of the most representative events dedicated to the Arctic issues held in Russia in recent years. The program of the event included a plenary session, as well as 13 thematic sessions. Almost 2,500 participants from 31 countries took part in the events of the forum. Among them: 3 presidents of the Arctic states: Russia, Finland and Iceland, the Vice Premiers of the Russian Government and the State Council of the PRC, 5 foreign ministers, 11 heads of ministries and departments of the Russian Federation, governors of all regions of the Arctic zone of the Russian Federation, deputies of the State Duma of the Russian Federation and members of the Council of Federation, more than 50 representatives of the Arctic municipalities, and about 450 representatives of the media.

serving their distinctive culture, their traditions"<sup>2</sup>. This speech of the President covers all aspects of the Arctic development, allows us to imagine its full-fledged activity model and to take a comprehensive look at the present and future of the Arctic region. This conceptual approach was the basis for an extended round table "Modern Arctic: Issues of International Cooperation, Politics, Economy and Security" at the RAS Institute of Europe [4, Govorova N.V., Zhuravel V.P., Samylovskaya E.A.].

In the book "The Multidimensionality of the Arctic Space", Lukin Yu.F. considers seven basic dimensions of the multidimensional Arctic space: geographical natural objects and discoveries; Arctic biota, environmental protection; internal administrative and territorial structure; Arctic society; geocultural space; economy of the Arctic region; and geopolitics [2, Lukin Yu.F., p. 3]. The author also gives their detailed description.

Moreover, in our opinion, in addition to known indicators and characteristics that are extremely important, it is necessary to update the new knowledge and trends in the development of the multidimensionality of the Arctic space, to systematize them due to the current problems of the global Arctic community.

In this regard, it is important to investigate recent studies by the RAS scientists, representatives of higher education institutions of the Ministry of Education and Science of the Russian Federation, as well as materials of conferences on Arctic issues.

## General characteristics of the Arctic

The territory of the Arctic is limited to 8-member states of the Arctic Council (the USA, Canada, Norway, Sweden, Finland, Denmark, Iceland and Russia), it covers an area of 40.3 million km<sup>2</sup>, and it is home to 532 million people. The Arctic territories are home to 4.6 million people.

The Arctic states are 5 countries: the USA, Canada, Norway, Denmark and Russia. The Arctic territories of Russia make up 44% of the total area of the Arctic, Canada — 21%, Denmark — 14%, Norway — 13%, the United States — 8%. The Arctic region of the United States includes the northern territories of Alaska; in Canada it is Nunavut, the Northwest Territories and the Yukon, and Nunavik in the province of Quebec in the north above the 55<sup>th</sup> parallel because over 90% of it is made up of indigenous Inuit and Eskimos. In Denmark, this is Greenland and the Faroe Islands; in Norway — the provinces Nordland, Troms and Finnmark, the Spitsbergen archipelago and the island of Jan Mayen; in Finland — the northernmost and largest region of the country Lapland (Lappi). In Sweden, the Arctic territories include Norrbotten, the largest area of the country, about 22% of its area. The length of the Arctic coast of all countries is 38.7 thousand km [2, Lukin Yu.F., pp. 63, 65-66].

<sup>&</sup>lt;sup>2</sup> Vystuplenie Prezidenta Rossijskoj Federacii Vladimira Putina na plenarnom zasedanii IV Mezhdunarodnogo arkticheskogo foruma "Arktika — territoriya dialoga" 30 marta 2017 g. v Arhangelske. [Speech by President of the Russian Federation Vladimir Putin at the plenary session of the IV International Arctic Forum "Arctic: Territory of Dialogue" on March 30, 2017 in Arkhangelsk.] URL: https://www.arctic.gov.ru/FilePreview/6bf7cc0d-2c6d-e711-80d2-00155d006 312?nodeld=4370391e-a84c-e511-825f- 10604b797c23 (accessed: 11 January 2018). [In Russian]

If the Arctic is limited to the South only by the conventional line of the Arctic Circle (66° 33'44"NL), then its area is 21 million km<sup>2</sup>. If the southern boundary of the Arctic coincides with the southern boundary of the tundra zone, then its area is about 27 million km<sup>2</sup>, which is 3 times more than the Europe [2, Lukin Yu.F., pp. 42, 77, 78].

In 2015, the GDP of the Arctic G20<sup>3</sup> amounted to 64.8% of the total GDP of all countries of the Earth. The most Arctic states are living in debt. Public debt as a percentage of GDP for 2016 was 98.8% (16<sup>th</sup> place) in Canada; the USA — 73.8% (39<sup>th</sup> place); Finland — 64.9% (52<sup>nd</sup> place); Ice-land — 56.6% (72<sup>nd</sup> place); Sweden — 41.4% (114<sup>th</sup> place); Denmark — 39.6% (119<sup>th</sup> place); Norway — 32.2% (140<sup>th</sup> place); China — 20.1% (163<sup>rd</sup> place), and Russia — 13.7% (169<sup>th</sup> place)<sup>4</sup>. According to this indicator, Russia and China have the best indicators among 180 countries of the world. The United States have the world's largest public debt of \$ 20 trillion [2, Lukin Yu.F., pp. 126, 128].

The Arctic is the circumpolar region of the Earth, located around the North Pole. These are the coastal territories of the three continents of North America, Northern Europe, the North of Eurasia and the eight Arctic states; the Arctic deep-water basin is in the central part of the Arctic ocean directly around the North Pole; 10 seas: Greenland, Norwegian, Barents, White, Kara, Laptev, East Siberian, Chukchi, Beaufort, Baffin, and Fox-Basin Bay; numerous straits and gulfs of the Canadian Arctic Archipelago; northern parts of the Pacific and Atlantic Oceans. The Arctic islands and archipelagos: Vaigach, Wrangel, Greenland, Dixon, Franz Josef Land, Canadian Arctic Archipelago, Queen Elizabeth, Novaya Zemlya, Novosibirsk, Nordenskiöld, Severnaya Zemlya, Spitsbergen, etc. [2, Lukin Yu.F., p. 18].

In the Arctic we have up to 25 000-26 000 species or about 1.5% of the described species of modern biota of the Earth, but the total Arctic biota itself is only 0.6-0.7% of the world [2, Lukin Yu.F., p. 46].

The water areas of the Arctic Ocean hide three important transport marine communications of global significance: The Northern Sea Route (NSR), the Northwest Passage, the Central Circumpolar Way, that could play a significant role in the global economy, especially in the development of the world trade soon.

The significance of the Arctic does not diminish with time, but grows, acquiring even an essentially non-economically-pragmatic entity, but some completely different metaphysical, sacral value. The Arctic region is perceived as a reserve ecological space of the world. In the Arctic, people see a global reservoir of clean air, fresh water (a third of the world's freshwater reserves), and it also appears as the cleanest territory. Speaking about the last factor, we should pay attention to clearing the territory of garbage left by previous economic activities, including the problem of radioactive objects flooded in the Arctic waters of the USSR/Russia [5, Tagilova O.A., Kirilov A.G.].

<sup>&</sup>lt;sup>3</sup> Switzerland became the Arctic Council observer-state in May 2017.

<sup>&</sup>lt;sup>4</sup> Gosudarstvennyj dolg stran za 2016 god [The public debt of the countries for 2016]. URL: http://total-rating.ru/1906 -gosudarstvennyy-dolgstranza-2016-god.html (accessed: 16 January 2017). [In Russian]

It is not ruled out that this could be the reason for speculation and attacks on the part of Western countries about Russia's inability to ensure the environmental safety of the Arctic. In modern complex political conditions, they systematically use environmental problems as a pretext for creating reputational problems and difficulties for Russia, like doping problems in sport.

The ethnic composition of the Arctic is diverse. The number of indigenous people in Greenland is almost 82% of the total population; Canada's Arctic territories — 50.8%; Alaska — 14.9%; Norway — 8.6% to 12.9%; Sweden — 7.9% to 9.9%; Finland — 3.7%. [6, Sokolova F.Kh.] It should be remembered that in the places of their settlement, indigenous peoples are first settlers, and this imposes additional moral obligations on the Arctic states.

As of 01.01.2016, there were more than 13,000 specially protected natural areas of federal, regional and local significance in the Russian Federation with a total area of 207.5 million hectares (including the sea area) or 12.1% of the territory of Russia [2, Lukin Yu.F., p. 57].

The basis of the geocultural space in the Arctic was formed by three major civilizations: Western European (Denmark, Iceland, Norway, Sweden and Finland); Russian (Slavic, Russian, Soviet and Eurasian) and North American in the US and Canada [2, Lukin Yu.F., p. 95].

For the Arctic population, the predominant Christian religion is Catholicism, Protestantism, Orthodoxy and common Christian values [2, Lukin Yu.F., pp. 101-105]. It should be noted that Islam is becoming the second most important religion because of large-scale migration processes in several European countries, [7, Zaikov K.S., Kotlova E.S., Zhuravel V.P.].

The complex natural conditions of the Arctic (permafrost, low atmospheric temperatures, polar night, short summer and long winter) exert a strong influence on the quality of the social sphere, human health and work; complicate the work of transport, the efficiency and safety of mining and maritime transportation; exploitation of the Arctic infrastructure; accessibility of marine bioresources; development of fisheries, reindeer herding, and traditional indigenous economy.

The above information should be explained and disseminated among the citizens of the United States, Canada, Norway, Denmark and Russia, so that everywhere not only residents of the Arctic regions, but the entire population feel and realize that their state is the Arctic.

## Causes of increased interest in the Arctic space

First, it is the resource potential of the Arctic, huge reserves of hydrocarbon fuels - oil and natural gas. But it should be noted that the actual availability of these resources has been confirmed only by 2-3%. In this case, there are enormous difficulties in their extraction from the bowels of the Arctic shelf.

Secondly, this is the transport value of the NSR for transporting goods from Asia to Europe and back and the development of subsoil use in the Arctic zone of Russia [8, Ivanov G.V.; 9, Todorov A.A.]. There are many advantages here, so the NSR shortens the route from Hamburg to Shanghai, which saves fuel costs for each ship, and avoids the risks of pirate attacks. But at the same time, it should be kept in mind that for today the volume of cargo transportation via the NSR is low. In 2017, it reached a record of 10.8 million tons<sup>5</sup> and it is only one tenth of a percent of the volumes transported through the Suez Channel.

Third, the unfinished design of the demarcation of the international northern maritime areas and the Arctic shelf. The legal basis for the borders of the exclusive rights of certain states in the Arctic is the 1982 United Nations Convention on the Law of the Sea, which, in fact, is the only international legal basis for resolving legal disputes in the Arctic Ocean [10, Vylegzhanin A.N., Dudykina I.P.].

Fourthly, it is melting ice, changing weather and warming. In 2006, open water expanded to the North Pole in August. In 2016, the ice area was 4.14 million km<sup>2</sup> and an average was 2.56 million km<sup>2</sup> less than in 1979–2000. Many experts suggest that in the second half of the 21<sup>st</sup> century, most of the Arctic water area in the summer will be completely free of ice. This opens prospects for the carriage of goods via the Arctic seas.

It should also be noted that warming in the Arctic affects the rise in sea level and changes in weather conditions, provokes emissions of methane from the soil due to the melting of permafrost, affects the circulation of the ocean due to the influx of warm fresh water, which can cause the melting of the ice shelf of Greenland.

Climatic changes have a negative impact on the ecosystems of the region: there is a shift in the zones of traditional spread of plant and animal habitats. Changes in the landscape and habitat of animals are more likely to affect indigenous people, who consider the traditional way of life to be the most vulnerable in terms of environmental impacts.

Thus, a rise in temperature in the Arctic region may lead to the spread of infections and pollutants. The number of insects and mites that transmit infectious diseases increases. Thus, e.g., dengue fever, Lyme disease and malaria may become widely spread. There is also a risk of spread-ing water and foodborne infections, as warming will create favorable conditions for the multiplication of pathogen microorganisms<sup>6</sup>.

Fifth, the growing role of Russia and the countries of Europe in the Arctic<sup>7</sup> [11, Antiushina N.M.; 12, Govorova N.V.; 13, Danilov D.A.]. 6 of the 8 countries of the Arctic Council are European (Russia, Norway, Sweden, Finland, Denmark and Iceland); 7 of the 13 countries of the Arctic Council observers are also European countries (Britain, Germany, France, Spain, Netherlands, Italy, Poland and Switzerland). It is important to note that the five AC countries are members of NATO

<sup>&</sup>lt;sup>5</sup> The index for the NSR cargo shipments in 2017 from the report at the roundtable discussion "Development of the Arctic Mining: Innovation and Logistics" at the National Research Technological University "MISiS" January 30, 2018, made by the acting president of FGKU "Administration of the Northern Sea Route" N.A. Monko.

<sup>&</sup>lt;sup>6</sup> Yngvar Thomassen provyol v SAFU otkrytuyu lekciyu o vliyanii izmeneniya klimata na zdorove cheloveka. [Yngvar Thomassen held an open lecture in SAFU on the impact of climate change on human health] URL: https://narfu.ru/ life/news/university/307899/ (accessed: 26 February 2018). [In Russian]

<sup>&</sup>lt;sup>7</sup> Aleksandrov O.V. Interesy i prioritety arkticheskoj strategii Evrosoyuza. [Alexandrov O.V. Interests and priorities of the Arctic strategy of the European Union]. URL: http://www.vestnik.mgimo.ru/razdely/mezhdunarodnye-otnoshe niya/ interesy-i-prioritety-arkticheskoy-strategii-evrosoyuza (accessed: 30 May 2016). [In Russian]

[14]. In December 2015 Sweden and Finland stated that they are ready to join the ranks of the alliance by 2020 [15, Gromyko A.L., Plevako N.S.].

To understand the spatial nature of the Arctic, it is necessary to analyze the policies and Arctic strategies of the European countries of the Arctic Council: Norway, Denmark, Iceland, Sweden and Finland.

For Norway, the policy in the Arctic is perhaps more important than for the other countries in the Northern Europe. In 2003, the country adopted the document "To the North! Exploring Opportunities in the Arctic Region". In 2006, Norway published the Government Strategy in the Northern Regions, in 2009 supplemented with the report "New Structural Elements in the North" that clarified the main activities for the long term. In 2011, a new strategic document "The Far North — Vision and Strategy", was approved. The Far North and the Arctic were declared the country's top priorities. The main provisions of the Norwegian policy are leadership in scientific research of the North, the development of mineral and biological resources, the development of sea transport routes, the recognition of the principles of international maritime law, the creation of a full system of cooperation with the Arctic and northern European countries, and the economic development of the northern part of Norway. It should be noted that in the Arctic Norway focuses on research and the training of qualified personnel, which makes it possible to effectively use the resources of the North. These areas are given strategic importance in ensuring further economic and social development of the country [11, Antiushina N.M., pp. 25-35; 2, Lukin Yu.F., pp. 199-202].

For the first time, the postulates of the Danish Arctic policy were formulated in 2008 in the doctrine "Arctic in the Transitional Period: proposals for a strategy for active action in the Arctic region". In August 2011, the "Strategy of the Kingdom of Denmark in the Arctic for the period 2011-2020" was adopted. Denmark enters the Arctic region through its self-governing territories - Greenland and the Faroe Islands. The priorities of the Danish-Greenland policy in the Arctic are energy and mining, trade and tourism, shipping, education and science, preservation of the environment [11, Antiushina N.M., pp. 13-16; 2, Lukin Yu.F., pp. 204-205].

In May 2008, Iceland adopted the strategy "The Arctic at a tipping point. Proposals for strategic actions in the Arctic region"; a year later, the report "Iceland in the Far North" (April 2009) was prepared. On March 28, 2011, the Alting resolution on the Arctic strategy of Iceland was adopted, in which the key provisions (principles) of the Arctic policy of the country were formulated. Five months later, in August, the "Strategy of the Kingdom of Denmark for the Arctic for the period 2011-2020" was approved. A special feature of the Icelandic strategy is the emphasis on bilateral and multilateral cooperation in the Arctic. The country does not pretend to expand its sovereignty in the Arctic, it intends to rely on the Arctic Council, NATO and the EU to address all the major issues arising in the Arctic. Its priorities are expanding the use of renewable energy resources and considering the interests of fishing, developing cooperation in the field of education and scientific and technical research. Iceland connects the prospects for the development of transport in the Arctic not only with shipping, but also with air transport. Iceland opposes the militarization of the Arctic beyond the limits of national jurisdiction [11, Antiushina N.M., pp. 16-20; 2, Lukin Yu.F., pp. 205-206].

The first time Finland published its strategy in the Arctic region on December 2, 2010. It was developed in four main areas: the environment and climate; economic activity and know-how; transport and infrastructure, and indigenous peoples of the North. It stresses the importance of preserving the stability and peaceful character of the region; recognizes the existence of threats to the vulnerable natural environment of the Arctic; priority is given to the development of maritime navigation and related infrastructure; the participation of indigenous peoples in international cooperation is supported [11, Antushina N.M., pp. 54-61]. It should be noted that after the first Soviet-Finnish war, in 1920-1944 Finland had the access to the Arctic Ocean through the area of Pechenga (Petsamo). After the occupation of this area by the Red Army, it was included in the Murmansk region of the RSFSR. The transition of Petsamo to the USSR was confirmed by Art. 2 of the Peace Treaty between the USSR and Finland on February 10, 1947.<sup>8</sup> Since May 2017 Finland presides in the Arctic Council [16, Zhuravel V.P.].

In Sweden, the document "Arctic: National Strategy of Sweden" was adopted in May 2011. The priorities of the state in the Arctic are: study of climate change, environmental policy orientation, sustainable use of Arctic natural resources, humanitarian dimension, consideration of the interests of indigenous peoples, development of positive cooperation between countries participants of the Arctic Council, observance of international law, first, the UN Convention on the Law of the Sea [11, Antiushina N.M., pp. 61-64; 2, Lukin Yu.F., p. 204].

Sixthly, a special role in the development of the Arctic belongs to the cooperation of Russia and China on the Arctic track. Currently, cooperation between our countries on the Arctic track is considered as an integral part of the interface between the initiative for the formation of the Great Eurasian Partnership and the Chinese initiative "One Latitude — One Way". According to Chinese experts, the PRC looks at the NSR as a potential branch of its "Silk Road" [17, Li Jingyu, Zhang Chengyao; 18, Sun Xiuwen].

An unconditional driver here is Yamal LNG. In December 2017 the first technological line to produce liquefied natural gas (LNG) was started at the Yamal LNG plant on the Ob Bay in the port of Sabetta. Its capacity is 5.5 million tons of LNG per year, and the total planned capacity of the entire plant (three lines) is 16.5 million tons per year. In addition to LNG, the plant will annually produce up to 1.1 million tons of condensate. On December 5, gas liquefaction began in the production mode. The Yamal LNG plant is the second in Russia (the first operating since 2009 in the South of Sakhalin) and the second in the world built in the Arctic (the first one has been operating since 2007 on the Norwegian island of Melkoya in the Barents Sea). However, the Yamal LNG plant

<sup>&</sup>lt;sup>8</sup> Mirnyj dogovor s Finlyandiej (10 fevralya 1947 goda) // SSSR — Finlyandiya / Okrestnosti Peterburga. [The Peace Treaty with Finland (February 10, 1947) // USSR - Finland / Neighborhoods of Petersburg] URL: http://www.arou ndspb.ru/finnish/docs/peace1947.php (accessed: 06 December 2017).

is 1.5 times as powerful as Sakhalin and almost 4 times as Norwegian. In addition, it ranks first in the world in terms of latitude - 65 km north of the Norwegian LNG plant, 90 km north of the Bovanenkovo gas field, 101 km north of the Endicott oilfield in Alaska and 225 km north of the Prirazlomnaya platform, which produces prey oil in the Pechora Sea. The construction of the plant began in 2014 and was organized by the rotational method. In 2017 more than 30 thousand people were brought in to work daily, delivered to Sabetta by air transport to a specially constructed airport of international class [19, Bogoyavlensky V.I.].

The largest Chinese company CNPC owns 20% in this project; another 9.9% are invested by the Silk Road Fund. Sending the first gas carrier of the Yamal-LNG company from the port of Sabetta on December 8, 2017, during a meeting with Chinese representatives, the President of Russia V.V. Putin said: "The silk road reached the North. We will unite it with the Northern Sea Route, and there will be what is needed, and the Northern Sea Route will be made by Silk"<sup>9</sup>. According to Chinese forecasts, by 2020 the NSR will account for up to 15% of the Chinese foreign trade cargo, mainly container shipments, which corresponds to approximately 800 billion euros [20, Grinyaev S.N.].

In January 2018, the Press Office of the State Council of the People's Republic of China published the White Paper on the Arctic, where China was called a "near-Arctic state". China understands that participation in the development of the Arctic, the development of the NSR is possible only with the interaction with Russia, therefore, within the framework of its Arctic doctrine, it stated that they would play by the already existing rules, in accordance with the requirements of international law. In addition, both countries appear to be natural allies in conditions of fierce competition and the complication of the international situation caused by the negative impact of US and European Union sanctions against Russia. As A.V. Zagorski, the contradictions between the Russian Federation and the PRC in matters of the legal status of the NSR and the rules of navigation are not deep-seated and can be resolved based on the rights and legitimate interests of all countries, including non-Arctic ones [21, Zagorski A.V.].

Modern foreign policy of Beijing on the Arctic track is positive in relation to Russia, mostly benevolent and long-term. The emerging problems and difficulties are solved through negotiations on a mutually beneficial basis. China, in our opinion, is currently an important ally of Russia in the development of the Arctic; it should be borne in mind that the Arctic is an important, but not a priority of China's foreign policy [22, Zhuravel V.P.].

Seventh, it is important to determine the level of militarization that has gripped the Arctic space and its influence on the possibility of conflicts in the region between states.

<sup>&</sup>lt;sup>9</sup> Putin poobeshchal sdelat shyolkovym severnyj morskoj put. 08.12.2017. [Putin promised to make the Silk Road the Silk Road. 12/08/2017.] URL: https://riafan.ru/1005193-putin-poobeshal-sdelat-shelkovym-severnyi-morskoi-put (ace-ssed: 26 February 2018).

It is important to assess the military potential of Russia [23, Zhuravel V.P., Sinchuk Yu.V.] and foreign states [14, Sinchuk Yu.V., Zhuravel V.P.; 24, Zhuravel V.P.; 25, Zagorski A.V.] on the Arctic territories.

The northern border has an extremely important military-strategic importance for ensuring national security. According to a number of experts [2, Lukin Yu.F., pp. 185-198; 26, Gornova A.M.; 27, Kravchuk A.A.; 28, Petrenko I.Ya.], possible threats to Russia's national security in the Arctic region are: strengthening the military presence in the Arctic of the Arctic states and other NATO countries; the growth of the combat capabilities of the coalition and national armed forces (primarily the Navy) of the United States and NATO; development of sea-based missile defense and early warning systems; the increase in the activity of special services of foreign states in conducting reconnaissance activity in the Arctic and on the border territory of the Russian Federation; conducting multinational military exercises and shifting combat training areas to the Arctic zone; an increase in the US military satellite group aimed at the Arctic; the desire of the Norwegian leadership to change the status of the Spitsbergen archipelago as a demilitarized zone, to reduce and in the long term completely push out Russia from the archipelago; counteraction to fishing activities in the Norwegian economic zone by tightening the requirements for fishing vessels in fishing areas and illegal actions against them by the Norwegian authorities; the desire of a number of foreign states (the United States, Norway, Japan, China and Canada) to give the Northern Sea Route the status of an international transport route.

NATO can deploy a full-scale group of armed forces in the Arctic against Russia within a month. Since 1995, about 200 exercises of national and joint armed forces of the countries participating in the North Atlantic Alliance have been held on the territory and coastal waters of Norway [29, Skulakov R.M., Fadeyev V.M.]

The actions of the Arctic and other states to increase their economic and military presence in the Arctic objectively require Russia to take adequate measures aimed at maintaining parity and creating favorable conditions for the protection of national interests in this important region.

Based on the Northern fleet, a new military structure — the United strategic command "North" — was created and has been operating since December 1, 2014. Since 2012, the long-range trips of surface ships of the Northern fleet to the Arctic ocean have resumed. Since 2015, the Northern fleet has been conducting exercises in its waters almost every month. In total, 13 airfields, one ground-based aviation ground, as well as 10 radar departments and air guidance points are planned to be built in the Arctic, which will allow to complete the creation of the Arctic group of troops.

It should be noted that the level of militarization of the Arctic does not go beyond reasonable sufficiency. Despite the sharp deterioration of relations between Russia and the West, the overall situation in the Arctic remains stable. Regional cooperation has not been sacrificed to the current deterioration of Russia's relations with the US and other Western countries. However, in the medium and long term, international risks in the region may increase if political tensions between Russia and the West continue to persist and intensify. The impetus for these processes may be carried out by the US and European countries provocations and false reports.

We note that only the measures taken by Russia are currently helping to maintain the balance of power in the region and maintain the state of the Arctic as an area of peace.

#### Conclusion

In modern conditions, in our opinion, there is a preparation for reformatting the belonging of the Arctic. Calls for the internationalization of the Northern Sea Route and the North-West Passage are increasingly being made, and it is proposed to extend the Antarctic Treaty to the Arctic. The Arctic region is not an isolated enclave of international life, living under different rules, not like the rest of the world.

According to Yuri F. Lukin, there are three possible ways of its transformation in the short, medium and long term:

- Preservation of the previous model of the Arctic Council: to leave everything as it is, without fundamental changes, without stopping the activities of the Arctic Council in the traditional format, without touching on still topical political issues of military security, geopolitics, economy;
- Modernization of the Arctic Council in the medium term, considering the growing role and influence of observer States, the activities of the Arctic economic Council, the expansion of the range of issues discussed;
- Transformation of the Arctic Council into a standard international organization of a regional nature with the right to adopt legal acts that are sources of international public law. [2, Lukin Yu.F., pp. 213-214].

In our view, changing the functionality of the Arctic Council is connected both with objective trends within the organization itself and with the processes taking place directly in the Arctic region and around it.

On the part of the observer countries of the AC: China, Japan, South Korea, Singapore and India, as well as major European States, we hear statements that not only countries with their Arctic territories, but also states that have the appropriate industrial, technological and financial potential to work effectively in this region should be directly related to the Arctic. China's White paper emphasizes that the current situation in the Arctic goes beyond the Arctic States or the Arctic region as such. It is noted that non-regional states do not have territorial sovereignty in the Arctic, but have rights to research, navigate, overflight, fish and lay of underwater cables and pipelines in the high seas and other relevant marine areas in the Arctic ocean, the right to exploration and exploitation of resources in the region in accordance with the international law.

The sanctions have hit hard on cooperation in the Arctic and the development of the Arctic region. [30, Voronkov L.S.; 31, Zagashvili V.S.]. The US and the European Union sanctions affected 90% of Russian oil companies and almost the entire gas sector. European companies have been banned from providing drilling, well testing and geophysical research services in Russia in deepwater and shale fields, as well as in the Arctic. In our view, the US and European countries are not

interested in strengthening our country's position in the Arctic region. They are and will be conducting a policy of systemic pressure on Russia, even if their companies get losses and come out of profitable Russian Arctic projects. The targeted nature of the sanctions is aimed at countering our country's efforts to develop the Arctic. Under these conditions, "sanctions against Russia give it a reason to partly rethink its own policy, namely to pay more attention to home economic development" [32, Gromyko A.A., Fedorov V.P.]. Our needs when working on the shelf were more than 90% satisfied by imported equipment. The attraction of modern Western technologies can and should be combined with the innovative development of the national production and scientific base. The economic complex concentrated in the Arctic region of Russia should not be vulnerable to external pressure and discriminatory actions.

In our view, the presence of the major Asian States in the Arctic Council may lead to a decrease in the overall degree of tension in connection with the consequences of disagreements between Russia and the West over the situation in Syria and Ukraine. These countries have not joined the sanctions against Russia, but we must also see that they are quickly trying, sometimes aggressively, to occupy a niche that has been freed from the US and the European Union. Building relations with the Arctic Asian countries, we should consider that none of them will be able to independently ensure the implementation of their economic interests in the Arctic. It is also important for us to realize that the developing the Russian Arctic territories to consolidate their status, developing infrastructure and extracting natural resources requires attracting large-scale investments, incl. foreign ones. But here we should not cross the red line, preserving and respecting national interests.

It is important to improve the activities of states in the vast territory of the Arctic. All the AC countries have relevant structures that implement state policy in the Arctic. In Russia, in February 2015, the state Commission for the development of the Arctic was established. It's been 3 years. In our view, the Commission has achieved the main goal: it has figured out what not to do in the Arctic, what to do and what to do firs. [33, Antiushina N.M., Zhuravel V.P.; 34, Zhuravel V.P.; 35, Fedorov V.P.]. Also, 8 support zones for the development of the Arctic have been identified, which will allow to implement large infrastructure projects in the Russian polar zone, to intensify navigation along the Northern sea route, to modernize transport and other infrastructure, to create facilities for security and communication in ports. All this will have a positive impact on the so-cio-economic development of these areas.

There are many unsolved problems in the Russian Arctic. The region is characterized by an outflow of population, a high degree of depreciation of fixed assets, underdeveloped infrastructure. The problems of energy, information and transport security of remote settlements are being slowly solved. Icebreaking and river fleet largely obsolete. The issues of legal provision of guarantees and compensation for persons working in the Arctic region have not been resolved. The forms of support for entrepreneurship are not fully clear. It is necessary to strengthen the monitoring of climate change and the state of permafrost [33, Antiushina N.M., Zhuravel V.P.]. It should also be considered that the Arctic territories of the Russian Federation are developed differently, each region has its own challenges, problems, tasks and priorities [36]. It is necessary to integrate the Arctic regions into a single transport system and the common economic space of the country.

To solve these problems on behalf of the state, a commission of the Ministry of Economic Development of Russia has formed a list of priority projects for the development of the Russian Arctic: 145 projects with total funding of 4.8 trillion rubles, 3.75 trillion of them — from extrabudgetary sources [33, Antiushina N.M., Zhuravel V.P.].

In the article "Arctic transformations" [35, p. 13] RAS Corresponding member Fedorov V. P., a man who gave a lot in his life and work to the development of the Republic of Sakha (Yakutia), rightly raises the question of a more attentive, promising and patriotic attitude of the state and the population to the Arctic. He notes: "it seems that in modern conditions, a powerful factor in the consolidation of Russia can serve its own mega-project. Let's call it "Development of the Arctic" (in common parlance — "Give the Arctic!")".

With these wonderful words aimed at the future, I would like to conclude this article. There is no doubt that the measures taken by the country's leadership will gradually solve the accumulated problems, because it is understood that the Arctic is an important and promising territory of our state. It is necessary to work systematically on the formation of the Arctic consciousness and involvement in the Arctic affairs among the citizens of Russia.

## References

- 1. Lukin Yu.F. *Velikiy peredel Arktiki* [Great redistribution of the Arctic]. Arkhangel'sk, NArFU Publ., 2010, 400 p. (In Russ.)
- 2. Lukin Yu.F. *Mnogomernost' prostranstva Arktiki* [Multidimensional space of the Arctic]. Arkhangel'sk, NArFU Publ., 2017, 250 p. (In Russ.)
- 3. Lukin Yu.F. *Rossiyskaya Arktika v izmenyayushchemsya mire: monografiya* [The Russian Arctic in a changing world]. Arkhangel'sk, NArFU Publ., 2013, 281 p. (In Russ.)
- Govorova N.V., Zhuravel' V.P., Samylovskaya E.A. Rossiyskaya Arktika: problemy mezhdunarodnogo sotrudnichestva, bezopasnosti, ekonomiki, ekologii i chelovecheskogo razvitiya [The Russian Arctic: problems of international cooperation, security, economics, ecology and human development]. *Sov*remennaya Evropa [Contemporary Europe], 2018, no. 1, pp. 156–159.
- Tagilova O.A., Kirilov A.G. Likvidatsiya proshlogo ekologicheskogo ushcherba v Arkticheskoy zone Rossiyskoy Federatsii [Elimination of past environmental damage in the Arctic zone of the Russian Federation]. *Ekologicheskiy vestnik Rossii*, 2016, no. 7, pp. 34–37.
- Sokolova F.Kh. Korennye malochislennye narody Arktiki: kontsept, sovremennoe sostoyanie kul'tury [Indigenous people of the Arctic: concept, the current status of culture]. *Arktika i Sever* [Arctic and North], 2013, no. 12, pp. 51–69.
- Zaykov K.S., Kotlova E.S., Zhuravel' V.P. Etnonatsional'naya politika Severnykh stran Evropy i Islandii [Ethnonational policy of the Nordic countries of Europe and Iceland]. *Etnonatsional'nye protsessy v Arktike: tendentsii, problemy i perspektivy* [Ethno-national processes in the Arctic: trends, problems and perspectives]. Ed by N.K. Kharlamp'eva. Arkhangel'sk, NArFU Publ., 2016, pp. 279–298. (In Russ.)
- 8. Ivanov G.V. Severnyy morskoy put' v global'noy geopolitike Arktiki [The Northern Sea Route in the Global Geopolitics of the Arctic]. *Geopolitika i bezopasnost'*, 2017, no. 3, pp. 35–38.

- Todorov A.A. Mezhdunarodnyy tranzitnyy potentsial Severnogo morskogo puti: ekonomicheskiy i pravovoy aspekty [International transit potential of the Northern Sea Route: economic and legal aspects]. Problemy natsional'noy strategii [National Strategy Issues], 2017, no. 3, pp. 149–170.
- Vylegzhanin A.N., Dudykina I.P. Konventsiya OON po morskomu pravu i pravovoy rezhim Arkticheskogo shel'fa [The UN convention on the law of the sea and the legal regime of the Arctic shelf]. *Vestnik Voronezhskogo gosudarstvennogo universiteta. Seriya: Pravo* [Proceedings of VSU. Series: Law], 2017, no. 1, pp. 284–302.
- 11. Antyushina N.M. Arktika: novyy format mezhdunarodnogo sotrudnichestva. Moscow, IE RAS Publ., 2014, 138 p. (In Russ.)
- 12. Govorova N.V. Kompleksnaya Arkticheskaya politika ES [Integrated Arctic Policy of the EU]. *Evropeyskaya analitika 2017*. Ed. by. K.N. Gusev, IE RAS. M.; SPb., Nestor-Istoriya Publ., 2017, pp. 80–87. (In Russ.)
- 13. Danilov D.A. Arkticheskaya politika Evropeyskogo soyuza: osnovy i evolyutsiya [Arctic policy of the European Union: the fundamentals and evolution]. *Obozrevatel'-Observer*, 2017, no. 11, pp. 16–32.
- 14. Sinchuk Yu.V., Zhuravel' V.P. Arktika: NATO contra Rossiya [The Arctic: NATO contra Russia]. *Geopolitika i bezopasnost'*, 2017, no. 3, pp. 113–120.
- 15. Gromyko Al.A., Plevako N.S. O vozmozhnom vstuplenii Shvetsii i Finlyandii v NATO [On the Sweden's and Finland's optional membership in NATO]. *Sovremennaya Evropa* [Contemporary Europe], 2016, no. 2, pp. 13–16. DOI: 10.15211/soveurope220161316
- 16. Zhuravel' V.P. Arkticheskiy sovet: perekhod predsedatel'stva ot SShA k Finlyandii, dal'neyshee ukreplenie rossiysko-finlyandskogo sotrudnichestva [The Arctic Council: transition of chairmanship from the US to Finland, further strengthening of Russian-Finnish cooperation]. Arktika i Sever [Arctic and North], 2017, no. 28, pp. 24–35. DOI: 10.17238/issn2221-2698.2017.28.24
- 17. Li Ts., Chzhan Ch. O strategii sotrudnichestva Kitaya i Rossii na severnom marshrute Morskogo Shelkovogo puti XXI veka [Strategy of Cooperation between China and Russia on the Northern Route of the Maritime Silk Road]. *Problemy Dal'nego Vostoka* [Far Eastern Affairs], 2016, no. 1, pp. 64–72.
- 18. Syuven' S. Problemy i perspektivy osvoeniya Severnogo morskogo puti v kontekste realizatsii initsiativy «Poyas i Put'» [Problems and Prospects of Developing the Northern Sea Route in the Context of the "Belt and Road"]. *Problemy Dal'nego Vostoka* [Far Eastern Affairs], 2017, no. 6, pp. 5–15.
- 19. Bogoyavlenskiy V.I. «YaMAL SPG»: realizovan unikal'nyy mezhdunarodnyy proekt v Rossiyskoy Arktike ["YaMAL LNG": a unique international project in the Russian Arctic]. *Arkticheskie vedomosti* [The Arctic Herald], 2018, no. 1, pp. 24–29.
- Grinyaev S.N. Ekonomicheskoe, tekhnologicheskoe i morskoe sotrudnichestvo v Arktike [Economic, technological and marine cooperation in the Arctic]. *Pravo i investitsii* [Real Estate and Investments. Legal Regulation], 2015, no. 1–2, pp. 76–78.
- Zagorski A.V. Rossiya i Kitay v Arktike: raznoglasiya real'nye ili mnimye? [Russia and China in the Arctic: Real or Alleged Disagreements?]. *Mirovaya ekonomika i mezhdunarodnye otnosheniya* [World Economy and International Relations], 2016, vol. 60, no. 2, pp. 63–71.
- 22. Zhuravel' V.P. Kitay, Respublika Koreya, Yaponiya v Arktike: politika, ekonomika, bezopasnost' [China, Republic of Korea and Japan in the Arctic: politics, economy, security]. *Arktika i Sever* [Arctic and North], 2016, no. 24, pp. 112–144. DOI: 10.17238/issn2221-2698.2016.24.112
- 23. Zhuravel' V.P., Sinchuk Yu.V. Silovye struktury Rossii v Arktike: sostoyanie i perspektivy razvitiya [Russia's uniformed service in the Arctic: the state and prospects for development]. Upravlenie innovatsionnym razvitiem Arkticheskoy zony Rossiyskoy Federatsii: sbornik izbrannykh trudov po materialam Vserossiyskoy nauchno-prakticheskoy konferentsii s mezhdunarodnym uchastiem [Management of innovative development of the Arctic zone of the Russian Federation]. Ed. by E.N. Bogdanova, I.D. Nefedova. Arkhangel'sk: NArFU, KIRA Publ., 2017, pp. 37–41. (In Russ.)
- 24. Zhuravel' V.P. Sotrudnichestvo stran Severnoy Evropy v voennoy sfere i tendentsii ego razvitiya [Cooperation of the Nordic countries in the military sphere and trends in its development]. Zarubezhnoe voennoe obozrenie, 2017, no. 4, pp. 23–29.
- 25. Zagorski A.V. *Nestrategicheskie voprosy bezopasnosti i sotrudnichestva v Arktike* [Conventional security and cooperation in the Arctic]. M., IMEMO RAN Publ., 2016, 104 p. (In Russ.) DOI: 10/20542/978-5-9535-0492-8

- 26. Gornova A.M. O sostoyanii rybolovstva v arkticheskikh akvatoriyakh [Review of fishing in Arctic waters], *Arktika i Sever* [Arctic and North], 2016, no. 25, pp. 196–210. DOI: 10.17238/issn2221-2698.2016.25.196
- 27. Kravchuk A.A. Militarizatsiya Arktiki: narashchivanie voennogo potentsiala klyuchevymi igrokami regiona [Militarization of Arctic: key regional actors to increase their military potential]. *Strategicheskaya stabil'nost'*, 2015, no. 4, pp. 43–53.
- 28. Petrenko I.Ya. O sostoyanii voennoy bezopasnosti Rossiyskoy Federatsii v Arktike [On the state of military security of the Russian Federation in the Arctic]. *Analiticheskiy vestnik*, 2016, no. 5, pp. 36–37.
- 29. Skulakov R.M., Fadeev V.N. Ob otdel'nykh aspektakh opredeleniya mezhdunarodno-pravovogo statusa Arktiki kak osnovy obespecheniya bezopasnosti Rossiyskoy Federatsii v regione [Some aspects of determination of the Arctic's international and legal status as a basis of safety of the Russian Federation in the region]. *Natsional'nye interesy: prioritety i bezopasnost'* [National interests: priorities and security], 2015, part 4, pp. 58–59.
- Voronkov L.S. Vliyanie antirossiyskikh sanktsiy na arkticheskuyu politiku Rossii [The impact of anti-Russian sanctions on Russia's Arctic policy]. *Transport i logistika v Arktike. Severnyy morskoy put': kurs — Dal'niy Vostok:* al'manakh [Transport and logistics in the Arctic. NSR: Course — Far East]. Ed. by S.V. Novikov. M., ITA Publ., 2016, part 2, pp. 25–30.
- Zagashvili V.S. Zapadnye sanktsii i rossiyskaya ekonomika [Western Sanctions and Russian Economy]. Mirovaya ekonomika i mezhdunarodnye otnosheniya [World Economy and International Relations], 2015, no. 11, pp. 66–77.
- 32. Gromyko Al.A., Fedorov V.P. Antirossiyskie sanktsii [Anti-Russia sanctions], *Sovremennaya Evropa* [Contemporary Europe], 2016, no. 2, pp. 22–28. DOI: 10.15211/soveurope220162227
- Antyushina N.M., Zhuravel' V.P. Arkticheskie problemy [Arctic problems]. Evropa XXI veka: novye vyzovy i riski: monografiya [Europe of the 21st century: new challenges and risks]. M., IE RAN. Ves' Mir Publ., 2017, 584 p. (In Russ.)
- 34. Zhuravel' V.P. Gosudarstvennaya komissiya po voprosam razvitiya Arktiki: itogi raboty pervykh dvukh let [The state commission on the Arctic development: the results of first 2 years]. *Gosudarstvennyy audit. Pravo. Ekonomika*, 2017, no. 1, pp. 30–36.
- 35. Fedorov V.P. Arkticheskie preobrazovaniya [Arctic conversions]. *Sovremennaya Evropa* [Contemporary Europe], 2018, no. 1, pp. 5–14. DOI: org/10.15211/soveurope120180514
- 36. Etnokul'turnye i sotsial'nye protsessy v Arkhangel'skoy oblasti i Nenetskom avtonomnom okruge: monografiya [Ethnic, cultural and social processes in the Arkhangelsk region and Nenets Autonomous Okrug]. Ed. by I.F. Vereshchagin. Arkhangel'sk, NArFU Publ., 2018.

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# The Arctic defense postures in the context of the Russia-West confrontation<sup>\*</sup>

# © Andrei V. ZAGORSKI, Cand. Sci. (Hist.)

E-mail: zagorskiandrei@gmail.com

Primakov National Research Institute of World Economy and International Relations (IMEMO), Russian Academy of Sciences, Moscow, Russia

Abstract. In 2015–2017, in most Arctic countries, a planned review of defense policy was carried out. It coincided with the Ukrainian crisis, the aggravation of relations between Russia and the West and the active phase of the implementation of a large-scale program of military construction in the Russian Arctic. An analysis of the decisions made during this period allows us to judge to what extent the confrontation between Russia and the West has affected the military and political situation in the region and how it can affect it in the foreseeable future. For this purpose, the documents of the strategic military-political planning of the Arctic countries adopted in recent years are compared with their earlier plans for military construction in the Arctic. The analysis allows to conclude with a high degree of certainty that in the short term the military and political situation in the region will remain stable and predictable. The Arctic countries have not reconsidered their previous calm assessments of military threats and modest military development programs in the region. The main attention of the Arctic states-members of NATO is concentrated on the Arctic not that much as it is for the development of the military-political situation in the Baltic and in the North Atlantic. However, the longer the current crisis in the relations between Russia and the West goes on, the more likely that in the medium and long-term perspective, the military and political situation in the Arctic will change for the worse.

Keywords: Arctic, Russia, Arctic states, security, military-political landscape, defense posture.

## Introduction

In 2015-2017, in most Arctic countries, a review of defense and security policy was made and the issues of military construction in the Arctic were also discussed. The review was done both in a planned manner (in Canada — due to the change of the Government after the elections 2015; in Denmark — due to the expiration of the inter-party agreement on defense policy in 2017), and in connection with changes in the military and political situation (Norway). In the United States, the Arctic strategies of the Ministry of Defense and the Navy (Navy) issued in 2013 and 2014 have not yet been revised. In December 2016, the Ministry of Defense submitted a report to Congress assessing the needs for safeguarding national security interests in the Arctic, but the current US administration will make decisions on adjusting the country's policy in the region.

Over time, the review of the defense policy of the Arctic countries coincided with the aggravation of relations between Russia and the West against the backdrop of the Ukrainian crisis and the discussion about the threat of the Arctic militarization in the West [1, Regehr E., p. 1], a new phase of which unfolded against the backdrop of the Russian military construction program

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— the largest in the region, according to Minister of Defense S. Shoigu<sup>1</sup>. The analysis of the last Arctic defense policy review results allows us to draw conclusions about the extent of the current aggravation of Russia's relations with the West, its effect on the military and political situation in the region and how it may affect it in the foreseeable future.

The author first looks at the general political context against which the review of the defense policy of the Arctic countries took place, as well as its change under the influence of the current crisis. The strategic planning documents 2015-2017 on the Arctic Ocean (AO) issued by the coastal countries (Canada, Denmark, Norway and the USA) are going to be consistently analyzed. The decisions taken in this period are compared with the coastal countries' earlier plans for the military construction in the region. In conclusion, the results of the analysis are summarized, conclusions are drawn regarding the impact of the crisis in Russia-West relations on the military and political situation in the Arctic in the short and medium term.

The article deals only with plans for non-strategic (conventional) military construction in the Arctic. The military and strategic activities of Russia and the US in the region are a part of a broader equation of strategic stability and mutual nuclear deterrence. The strategic systems deployed by them in the Arctic have nothing to do with the hypothetical scenarios of a limited armed conflict in the region. They are covered by the current Russian-American treaty on measures to further reduce and limit strategic offensive weapons or are considered in it and are the subject of independent analysis [2, Arbatov A.G., Dvorkin V.Z.; 3, Arbatov A.G., Dvorkin V.Z.; 4, Zagorski A.V., p. 9; 5, Depledge D., pp. 61-62].

#### Political context

At the end of the last decade, most coastal countries approved programs for the modernization of their non-strategic forces. In Canada, Denmark and Norway, the Arctic direction got special attention. Their plans for military construction did not come from the possibility of an interstate conflict in the region, but from the need to resolve non-military security tasks such as border security, ensuring the safety of shipping, prompt response to emergencies, search and rescue operations, etc. [6, Le Mière Ch., Mazo J., pp. 94, 110-116; 7, Byers M., pp. 269-279].

Considering the forecasts of the coastal countries' economic activity intensification in the Arctic seas, an understanding has been formed that the saturation of the region with the appropriate forces and assets will increase in the foreseeable future. Although the majority of the tasks listed above are designed primarily to deal with non-military structures – Coast Guard (CG), law enforcement agencies — the armed forces are also responsible for responding to non-military risks: air and surface monitoring, aviation and maritime search and rescue, safety of navigation, rendering assistance to civil authorities in liquidation of oil spills and other emergency situations, etc.

<sup>&</sup>lt;sup>1</sup> Shojgu soobshchil o samom masshtabnom voennom stroitel'stve v Arktike sredi stran mira. [Shoigu reported on the largest military construction in the Arctic among the countries of the world] Interfax, 26 February 2018 URL: http://www.interfax.ru/russia/601479 (accessed: 01 March 2018).

Assessing their needs in the marine Arctic (the main criterion for such assessments were the forecasts of intensification of shipping<sup>2</sup>), coastal countries have opted for a different mix of military and non-military forces and assets. So, in Denmark, which does not have CG<sup>3</sup>, the corresponding tasks in the Arctic are assigned to the Armed Forces (AF). In Canada, the choice was made in favor of expanding the presence of naval forces in the Arctic waters. In the USA, on the contrary, the presence in the Arctic was entrusted to the CG.

The plans of the coastal countries to build Arctic forces were modest. And it's not just that there are no serious reasons for an armed conflict [8, Dynkin A.A., pp. 407-408]. Severe natural and climatic conditions, remoteness of the region, long distances make it more difficult and expensive to conduct conventional military activities, to build and maintain coastal infrastructure, to ensure the operational stability of the army and the fleet [9, Khramchikhin A.A., p. 327; 10, Bowes M.D., pp. 30-39; 11, Christensen K.D.]. These conditions, according to military departments, are unlikely to be more favorable in the foreseeable future<sup>4</sup>.

All this, like other circumstances, predetermines the low operational capacity of the region and its peripheral nature for the conventional military activities of coastal countries. For this reason, even modest programs for the construction of armed forces in the Arctic often lose their competition to the non-Arctic directions of military construction. These programs were underfunded, and their implementation was repeatedly postponed. While approving plans for military construction, in the coastal countries, they realized that unilateral deployment of even small military forces in the region could provoke an arms race. For this reason, most countries refused to invest significant funds in military infrastructure, and the main emphasis was placed on the development of bilateral and regional cooperation.

Due to special circumstances and the limited opportunities for free access to the World Ocean, the naval strategic nuclear deterrent forces are basing on the Kola Peninsula and as well as the Northern Fleet. Russia is the only country that has permanently deployed substantial combat forces in the Arctic. Denmark, Canada, Norway and the US have more favorable opportunities to enter the World Ocean and, accordingly, there is no need to base their fleet in the north. This largely explains the incomparable scale of military activities in Russia and other countries in the Arctic, the objective superiority of Russia's non-strategic forces stationed there on a permanent basis [4, Zagorski A.V., p. 29; 12, Khramchikhin A.A., p. 98].

<sup>&</sup>lt;sup>2</sup> Rapport: Forsvarsministeriets fremtidige opgaveløsning i Arktis. København: Forsvarsministeriet, 2016, p. 15; The United States Navy Arctic Roadmap for 2014 to 2030. Washington: Chief of Naval Operations, 2014, pp. 12-13, 16, 18.

<sup>&</sup>lt;sup>3</sup> The tasks that other countries are carrying out by CG are distributed among different departments in Denmark. Thus, the prevention of marine pollution from ships and ensuring the safety of navigation in the exclusive economic zone of the country are referred to the jurisdiction of the Maritime Administration of Denmark. The maritime unit of the volunteer "militia" solves the tasks of sea patrolling, search and rescue exclusively within the territorial sea of the country. Under agreements with the Faroe Islands and Greenland, the tasks of the CG in their waters are decided by the Danish Armed Forces. For this reason, in the Arctic Forum of CG, the country is represented by its Arctic Command.

<sup>&</sup>lt;sup>4</sup> Rapport: Forsvarsministeriets fremtidige opgaveløsning i Arktis, p. 15; Report to Congress on Strategy to Protect United States National Security Interests in the Arctic Region. Washington, D.C.: Department of Defense, 2016, p. 12; The United States Navy Arctic Roadmap for 2014 to 2030, pp. 11–13.

Before the Ukrainian crisis, this superiority and Russian military construction in the region were perceived as fully understandable measures designed to protect the long shoreline, air, surface and underwater areas, operational stability of strategic deterrent forces, and response to natural and man-made disasters. Other points of view were expressed in the Arctic countries, but they were rarely provoked by social and political resonance, such as the installation of the Russian flag at the bottom of the Arctic Ocean near the North Pole in 2007 or the US Geological Survey report on undiscovered hydrocarbon reserves in the Arctic shelf in 2008. Until the beginning of the Ukrainian crisis, home and foreign research indicated the absence of an arms race in the Arctic [13, Zagorski A.V., pp. 106-108); 14, O. Oznobishchev; 15, Haftendorn H.; 16, Melvin N., Bergh K., p. 1; 6, Le Mière Ch., Mazo J., p. 94; 17, Wezeman S.T.].

The establishment of a balance of military forces in Russia and Western countries in the Arctic was not discussed. Moreover, Russian non-strategic forces and assets exceed the corresponding potential of the other northern countries taken together and were perceived as a potential contribution to the solution of common security tasks in the Arctic. It gave Russia a corresponding contribution to its weight in regional cooperation. Attitudes toward Russian military programs have changed against the backdrop of the Ukrainian crisis. So, Russia got the image of the state with a policy that is difficult to predict, a state prepared for achieving its strategic goals and to ignore the possible political and economic costs of unilateral, incl. forceful, actions [18, Zagorski A.V., p. 45; 19, Käpylä J., Mikkola H., pp. 12-13].

This change in the general political context influenced the review of the defense policy of the Arctic countries. Although, as a result of the review, the assessment of the Russian military development in the Arctic has not fundamentally changed: it is still seen as not threatening one in the short term<sup>5</sup>. The documents adopted in recent years in the Arctic countries reflects their growing concern about the situation in the region. The analysis of the programs of Russian military construction is increasingly shifting from an assessment of intentions towards assessing the actual capabilities of Russia.

#### Canada

In 2006-2008 Canada's plans for military construction in the Arctic had been seen as a program of radical modernization of the armed forces and military infrastructure of the country. [20, Konyshev V.N., Sergunin A.A., p. 288]. Perhaps, this is explained by the rhetoric of the S. Harper's conservative government, which preceded and accompanied the adoption of appropriate decisions [21, Lackenbauer P.W., Dean R., pp. 8-36]. In fact, this program was more than modest against the background of the broader tasks of the Armed Forces of the country and the program of non-military activities in the Arctic (sustainable development of the northern territories, adap-

<sup>&</sup>lt;sup>5</sup> Intelligence Risk Assessment 2017. An assessment of developments abroad impacting on Danish security. Copenhagen: Danish Defense Intelligence Service, 2017, pp. 43–44; Norway's Arctic Strategy — between geopolitics and social development. Oslo: Norwegian Ministries, 2017, p. 18; Report on Arctic Policy. US Department of State International Security Advisory Board. 21 September 2016, pp. 24–25

tation to the climate change, scientific research, hydrography and cartography, safety of navigation, prevention of marine pollution and others).

The Canadian program provided of 6-8 guard frigates with ice reinforcements for the country's navy for the construction<sup>6</sup>. The construction of a deep-water port for the logistics of naval vessels, the creation of an army training center in the north, and the increase in the number of Canadian rangers - local volunteers patrolling low-altitude land areas of the Canadian North were also a part of the plan [22, Dean R., Lackenbauer P.W., Lajeunesse A., pp. 46-47; 17, Wezeman S.T., p. 5]. The most disputes in the country were caused by the decision to build guard frigates. The consequence was the reduction of earlier plans to replace the aging CG icebreakers from three to one, while the use of patrol vessels that can patrol in the Arctic waters for not more than three months a year is considered less effective than the use of the CG icebreakers, which are conducted here up to nine months [4, Zagorski A.V., p. 87].

Even under the Harper's government, the plans lagged behind the schedule and experienced chronic underfunding. The procurement program for military equipment was sold in small quantities. The plans themselves were revised downwards. So, for the sake of budgetary economy, the number of guard frigates for the Arctic was reduced to five or six. The first frigate was laid in 2016. Although it was to enter the Navy's combat staff a year earlier. The timing of the program has shifted to 2018-2022. The plans to build a deep-water port in the north have been revised. Now we are not talking about the logistics center for Navy ships, but about the point of refueling, which will be available only during the navigation season. Its construction was moved from 2015 to 2018. The construction of a new icebreaker for the Canadian CG is postponed. Its development was suspended in 2013, and the corresponding funds were used to build "non-Arctic" supply vessels for the country's Navy. Judging by the latest reports, the new icebreaker for the CG of Canada will not appear until 2022-2023. [23, Forget P., p. 20; 1, Regehr E., pp. 6, 27-28; 24, Wezeman S.T., pp. 3, 7].

In 2016, a liberal government led by J. Trudeau began a review of Canada's defense policy. The issue of determining the optimal scale and forms of the presence of the Armed Forces in the North, considering the severe natural and climatic conditions and high cost of military construction, was discussed<sup>7</sup>. The results of the survey were announced in 2017. The final document confirmed the plans for the construction of Arctic forces cut by the previous government. The focus was on upgrading the air attack warning systems, monitoring the air and surface situation in cooperation with the United States, Denmark and Norway, upgrading the radar network of the North American Air and Space Defense Command (NORAD) [25, Regehr E.] and extending the zone of responsibility for the air defense systems of the country<sup>8</sup>.

<sup>&</sup>lt;sup>6</sup> The ships of the Canadian Navy do not have ice reinforcements, and the possibilities of their application in the Arctic latitudes are extremely limited.

<sup>&</sup>lt;sup>7</sup> Defense Policy Review. Public Consultation Document 2016. [Ottawa]: National Defense — Canadian Armed Forces, 2016, p. 10.

<sup>&</sup>lt;sup>8</sup> Strong, secure, engaged. Canada's defense policy. Ottawa: National Defense, 2017, pp. 79–80; 90, 102–113.

The current government of Canada decided to purchase fifteen patrol ships for the country's Navy. However, they are not intended for use in the Arctic. Like the entire Canadian fleet, they will be based in the south of the country and will not have ice reinforcements.

The former government of the country also approved a program for replacing old F-18 fighters (with a reduction in their total number). The choice in favor of the fifth generation F-35 fighter was questioned even before a new cabinet, which finally abandoned this option and leans in favor of a more "budgetary" F-18/E. The range of fighters based in the south of the country allows them to occasionally patrol the airspace of the northern Canada under the condition of refueling in the air. Their main task is to intercept Russian strategic bombers that have resumed their flights in the Arctic in the past ten years. For the purposes of this study, it is important to note that no decisions were taken (and discussed) that go beyond the long-planned modernization of the multipurpose fighter fleet.

Although the Canadian defense policy review documents have theses about reviving the rivalry of the great powers and returning to the containment policy, but the corresponding passages do not belong to the Arctic region. The main concern of the new government is the need to protect NATO's maritime communications in the North Atlantic<sup>9</sup>. This makes the Arctic region even more peripheral for Ottawa from a military point of view. Despite the fact that the need to respond to Russian military construction in the Arctic is becoming more acute in the political debate and especially in the Senate, the new Canadian military doctrine, the tasks of the Armed Forces in the region are formulated not in the context of hypothetical military threats, but in terms of the need to assist civilian authorities in responding to non-military security risks [26, Regehr E.].

#### Denmark

The arctic field of military activities in Denmark hardly deserves the attention that the media gave it some time ago. An inter-party agreement on Denmark's defense for 2010-2014: it was envisaged that the commands for Greenland and the Faroe Islands would be combined into a common command structure<sup>10</sup>. As a result, in 2012 in Nuuk (Greenland), a compact united Arctic command was created, whose tasks include coordinating the activities of the country's armed forces in the zone of its responsibility. If necessary, it can be transferred to the forces and means from the armed forces of Denmark. In Greenland itself, there are no substantial military forces stationed on a permanent basis, except for a small "sleigh patrol" and a detachment of scuba divers.

The Arctic activities of the Armed Forces of Denmark are limited to patrolling the waters and airspace of Greenland and the Faroe Islands. Their tasks include monitoring the situation, aviation and marine search and rescue, elimination of the consequences of marine pollution, fish protection activities, assistance in eliminating the consequences of emergencies. Patrolling the waters of Greenland and the Faroe Islands on a rotational basis is carried out by one patrol frigate

<sup>&</sup>lt;sup>9</sup> Ibid., pp. 50; 79–80.

<sup>&</sup>lt;sup>10</sup> Danish Defense Agreement 2010–2014. Copenhagen: [Danish Ministry of Defense], 2009. p. 12.

of the Tethys class built in the late 1980s and early 1990s. Modernization of the country's arctic forces essentially reduced to replacing the ones built for Greenland in the 1970s: three "Agdlek" class warships with new ships of the "Knud Rasmussen" class<sup>11</sup> [24, Wezeman S.T., p. 9] and seven "Lynx" naval aviation helicopters with nine "Sikhok" helicopters<sup>12</sup>. Air patrols in the maritime zone of Denmark, incl. the Baltic Sea, are carried out by three CL-604 airliners "Challenger" [17, Wezeman S.T., p. 6].

In the inter-party agreement on defense 2010-2014, the formation of heterogeneous Arctic response forces was also envisaged<sup>13</sup>. But it did not mean the formation of new units and their deployment in the north, but the training of servicemen of regular units for possible use in the Arctic, if necessary, increasing the forces and assets of the unified Arctic command [24, Wezeman S.T., p. 8].

Inter-party agreement 2013-2017 is an analysis of the long-term tasks and needs of the Armed Forces of the country in the Arctic. The corresponding report of the Ministry of Defense was presented in June 2016 in the conditions of aggravation of relations between Russia and the West. The main conclusion of the report, based on forecasts of the development of shipping in the waters of Greenland and the Faroe Islands, was that the existing forces and means, as well as measures for their modernization, scheduled in 2012, were sufficient to solve the tasks of the Armed Forces in the Arctic in the forthcoming period<sup>14</sup>.

The report offered a slight increase in spending on strengthening monitoring of the operational situation from space and from the air, development of communication systems and control of the forces and weapons of the Armed Forces. The only measure envisaging a partial strengthening of the naval presence of Denmark in the Arctic region is the periodic deployment of the waters of Greenland by one of the three ice-free fortifications of the "Iver Hutfeldt" frigates<sup>15</sup> in summer. In December 2016, these proposals were approved in a special inter-party agreement on the tasks of defense in the Arctic <sup>16</sup>.

Preparation of a broader interparty agreement for 2018-2023 took more time. This agreement was completed in January 2018.<sup>17</sup> It provides for an increase in defense spending by 20% within six years — from 1.2 to 1.3% of the country's GDP. The additional funds are mainly intended to ensure Denmark's participation in the rotation of NATO forces deployed since 2017 in the Baltic countries and Poland; the formation of a battalion of light infantry as a contribution of the country to the joint high-level operational group created in the alliance in 2015; the formation of a

<sup>&</sup>lt;sup>11</sup> According to their characteristics, these ships are comparable to the newly created Russian border patrol ship "Polar Star", created specifically for use in the Arctic.

<sup>&</sup>lt;sup>12</sup> Rapport: Forsvarsministeriets fremtidige opgaveløsning i Arktis, p. 15.

<sup>&</sup>lt;sup>13</sup> Danish Defense Agreement 2010–2014. p. 12.

<sup>&</sup>lt;sup>14</sup> Rapport: Forsvarsministeriets fremtidige opgaveløsning i Arktis, p. 15.

<sup>&</sup>lt;sup>15</sup> Ibid., pp. 17–18.

<sup>&</sup>lt;sup>16</sup> Agreement on the future missions of the Danish Ministry of Defense (MoD) in the Arctic, 8 December 2016. Copenhagen: Danish Foreign Ministry, 2016. URL: http://www.fmn.dk/eng/allabout/Documents/Agreement-on-the-future-missions-and-tasks-in-the-Arctic.pdf (accessed: 21 March 2018).

<sup>&</sup>lt;sup>17</sup> Defense Agreement 2018–2023. Copenhagen: Danish Ministry of Defense, 2018.

new brigade to participate in the larger defensive operations of NATO. Priority directions of military construction are the equipping of frigates with anti-submarine defense equipment, the modernization of air defense facilities, and, in the future, the creation of a defense system for the territory of Denmark from short-range ballistic missiles. The old plans to replace F-16 multipurpose fighters with modern F-35s are confirmed. All this should ensure the participation of the Danish Armed Forces in the activities of NATO, not only in the Baltic. The strengthening of anti-submarine defense is the country's contribution to the revival of the antisubmarine line Greenland-Iceland-Great Britain, designed to ensure the security of trans-Atlantic maritime communications [27, Lorenz W., p. 1].

In 2018, it was also decided to increase funding for the Armed Forces in the Arctic, in addition to what was agreed at the end of 2016. It is expected to attract additional funds to reclaim the territory of former US military facilities in Greenland; purchase of marine pollution prevention equipment; training the population in emergency situations; the expansion of vocational guidance programs targeted at secondary schools in Denmark; cartographic works<sup>18</sup>. Recent changes in the construction of the Danish armed forces reflect a new assessment of the changing military and political situation on the eastern flank of NATO (in the Baltic) and in the North Atlantic, but not in the Arctic. Given the limited resources, these changes rather exclude the expansion of the country's military activities in this region.

#### Norway

In the last two decades, the Armed Forces of Norway have undergone a planned modernization. The country has modern navy. In 2011, the replacement of old frigates with five new "Fridtjof Nansen" class was completed. True, Norwegian warships do not have ice reinforcements since the main areas of their operational deployment are in the unfrozen waters of the Norwegian and Barents Seas. In 2014, it was decided to replace six Ula-class submarines built in the early 1990s. [14, Oznobishchev S.K., p. 143; 7, Byers M., pp. 250, 273; 6, Le Mière Ch., Mazo J., p. 88; 17, Wezeman S.T., pp. 7-8; 24, Wezeman S.T., pp. 12-13].

After the reorganization of the land forces of Norway in 2009, their basis is the mechanized brigade "North", which includes two mechanized battalions (one located in the north of the country, the other in the south) and a battalion of light infantry. The team performs mainly educational tasks. Only a battalion of light infantry is in a state of combat readiness. In 2011, the General Staff of the Armed Forces of the country recommended reducing the number of mechanized battalions to one, but a year later it was decided to maintain the previous structure of the brigade<sup>19</sup> [24, Wezeman S.T., pp. 12–13].

In 2015, the planned replacement of 60 F-16 fighters with 52 modern F-35s was scheduled for the period until 2024 [7, Byers M., p. 250; 6, Le Mière Ch., Mazo J., p. 88; 17, Wezeman S.T.,

<sup>&</sup>lt;sup>18</sup> Ibid, pp. 10–11.

<sup>&</sup>lt;sup>19</sup> Hramchihin A.A. Strana boevyh ledokolov. [Country of combat icebreakers] *Voenno-promyshlennyj kur'er* 2016. No 31. URL: http://vpk-news.ru/articles/31866 (accessed: 05 April17).
pp. 6-7; 24, Wezeman S.T., p. 11]. The basis of the Air Force, which can be used in the Arctic, are six anti-submarine aircrafts P-3 Orion built in the late 1970s and 12 anti-submarine helicopters. By 2024, it was planned to replace P-3 with satellite submarine detection systems, unmanned aerial vehicles and new anti-submarine aircraft [24, Wezeman S.T., p. 7].

After the Ukrainian crisis, Norway, more sharply than the other Arctic countries, reacted to possible changes in the military-political situation in the Arctic. Norway is the only Arctic country of NATO, which has a land border with Russia, not so long. In Oslo, it was stressed that at present Russia's military activities in the Arctic were not directed against Norway<sup>20</sup>, but the possibility of the conflict with Russia could be possible in case of escalation in the Baltic <sup>21</sup>.

In this regard, in recent years, various options for the construction of armed forces for the medium and long term have been discussed in Norway. In 2015, some proposals for the development of the Armed Forces of the country were heard. They gave preference to the option of significantly increasing combat power and strengthening the defense in the north of the country. It was proposed, to increase the capabilities of anti-submarine defense, incl. by purchasing modern anti-submarine aircraft; since 2025 to increase the number of submarines; increase the level of combat readiness of the ground forces, concentrate them in the north of the country and form a second brigade; to acquire new helicopters for the army and to increase the opportunities for the use of precision weapons<sup>22</sup>.

In 2016, after acute discussions, a new long-term plan for the construction of the country's armed forces was approved. The ambitious proposals of the General Staff were not supported. Instead of increasing the submarine fleet, the plan provides for the replacement of six old submarines with four new ones at the end of the next decade. Instead of expanding the fleet of anti-submarine aircraft — replacing the old P-3 "Orion". The plan provides for building up air defense capabilities, investing in early warning systems for attack, and the formation of rangers as part of the ground forces. The issue of a second brigade of ground forces is still not decided. Financing of the approved program should be ensured by saving resources (11 military bases and facilities are planned to be closed)<sup>23</sup> and by increasing the defense budget<sup>24</sup>.

The long-term plan for the construction of the Norwegian Armed Forces in 2016 does not contain provisions that would not have been envisaged by previous programs for replacing exhausted submarines and anti-submarine aircraft. In some ways, it is even more modest than before. At the same time, the Norwegian government has placed a stake, on the one hand, on building up early warning capabilities, and on the other, on the development of a reinforcement infra-

<sup>&</sup>lt;sup>20</sup> Norway's Arctic Strategy — between geopolitics and social development, p. 18.

<sup>&</sup>lt;sup>21</sup> Norwegian Armed Forces in transition. Strategic defense review by the Norwegian Chief of Defense. Abridged version. [Oslo], Norwegian Armed Forces, 2015, p. 5.

<sup>&</sup>lt;sup>22</sup> Norwegian Armed Forces in transition, p. 19.

<sup>&</sup>lt;sup>23</sup> Capable and Sustainable. Long Term Defense Plan. [Oslo]: Norwegian Ministry of Defense, 2016, p. 12, 15.

<sup>&</sup>lt;sup>24</sup> Norwegian Government Follows Up Long Term Defense Plan with Significant Budget Increase. Norwegian Government. Press release6 2016. 11 October. URL: https://www.regjeringen.no/en/aktuelt/norwegian-government-follows-up-long-term-defense-plan-with-significant-budget-increase/id2514775/ (accessed: 28 March 2018).

structure for the deployment of NATO forces into the country during an alarming period<sup>25</sup>. In the coming years, the training of operational strengthening skills will be at the heart of the military exercises of the country. At the same time, understanding the risks of mutual misinterpretation of unplanned military activities, Oslo attaches special importance to maintaining communication between the Norwegian General Staff and the Russian Northern Fleet and General Staff, developing cooperation with Russia in the Arctic<sup>26</sup>.

#### The USA

In the US, the Arctic is seen as a peripheral region of conventional military activity <sup>27</sup>. There are no US military bases, no non-strategic forces deployed on a permanent basis. Located in Alaska, in the subarctic latitudes, the Us military forces are a part of the Pacific Command. Although, the US multipurpose nuclear submarines regularly patrol in the Arctic waters from bases on the west coast of the country. The Navy has no surface ships with ice reinforcements and icebreakers that could be deployed in the Arctic<sup>28</sup>.

In 2009, the US Armed Forces were tasked to study the needs of their presence in the marine Arctic, considering the assessment of military threats and the effects of climate change. In the United States in 2013-2014, the Arctic strategies of the Ministry of Defense and the country's navy estimated military threats in the region as relatively low<sup>29</sup>. In view of this assessment, the Navy studies [10, Bowes M.D.] had shown that it was not advisable to deploy the Navy's surface forces in the region. It would require significant investments in the construction of special ships with ice reinforcements, icebreakers and coastal infrastructure, and would divert resources from more important areas of naval activities. The general conclusion was that the necessary level of presence in the marine Arctic could be provided by the CG forces and it would not require additional deployment of the Navy's forces<sup>30</sup>.

This is further evidence that the Arctic direction is important for the US only as much as it is important for the solution of the more important tasks for Washington: to maintain strategic stability in relations with Russia, the non-proliferation of weapons of mass destruction, the suppression of international terrorist activities; as well as for the tasks of the armed US forces in Northeast Asia and the North Atlantic, but not as an independent direction of non-strategic military activity. Not surprisingly, the US nonstrategic arctic programs were funded under a "residual" principle and

<sup>&</sup>lt;sup>25</sup> Norway's Arctic Strategy – between geopolitics and social development, p. 18.

<sup>&</sup>lt;sup>26</sup> Ibid., pp. 18, 21.

<sup>&</sup>lt;sup>27</sup> Report to Congress on Arctic Operations and the Northwest Passage. Washington: Department of Defense, 2011, p.
12.

<sup>&</sup>lt;sup>28</sup> lbid., pp. 3, 15, 17.

<sup>&</sup>lt;sup>29</sup> Arctic Strategy. Washington: U.S. Department of Defense, 2013, pp. 2, 4; The United States Navy Arctic Roadmap for 2014 to 2030, p. 6.

<sup>&</sup>lt;sup>30</sup> Report to Congress on Arctic Operations and the Northwest Passage, pp. 3, 15, 22, 25, 27; The United States Navy Arctic Roadmap for 2014 to 203, p. 4.

that the only result was the decision taken after many years of discussions — to build a new icebreaker for the US  $CG^{31}$ . It will replace the icebreaker "Healy" that operates in the Arctic today<sup>32</sup>.

Against the backdrop of the Ukrainian crisis and the discussion of measures to "contain" Russia in the United States, a discussion arose, incl. the Arctic policy issues. A significant role in this discussion belongs to the Congress <sup>33</sup>. In 2015 the Congress rejected the proposal of the Ministry of Defense to reduce the number of personnel deployed in Alaska airborne brigade, requiring first to assess the forces and means necessary to protect the US interests in the Arctic, considering the strengthening of Russia's military capabilities in the region [24, Wezeman S.T., p. 19].

In December 2016, the Ministry of Defense submitted a report to the Congress, assessing the need to ensure the interests of national security in the Arctic<sup>34</sup>. Although the tone of the report changed somewhat, it did not contain any fundamental changes in the assessment of the Armed Forces needs in the region. Despite the need for investment in coastal infrastructure (constructing a deepwater port in the US Arctic has been discussed for a long time) and the possibility of expeditionary naval activities (but not the permanent deployment of naval forces), the report repeatedly repeats the thesis that any decisions on military construction in the Arctic should be made with allowance for the limited resources needed in other areas of naval activities. Discussions about the expansion of the marine presence in the Arctic, as a rule, do not go beyond the establishment of the need to build new icebreakers for the US CG [28, p. 4].

The absence of significant conventional military threats in the Arctic still does not abolish some of the US concerns, primarily caused by the danger of being dragged into a conflict with Russia in case of the conflict between Russia and Norway<sup>35</sup>. The subject of really serious concern is the possibility of confrontation with Russia in the North Atlantic. This is indicated by the decisions taken on the anti-submarine aircraft, based in Keflavik (Iceland). The US has not used it since 2006. There is also the issue of the modernization of the runway at the base in Tula (Greenland), which remained only the radar of the US missile warning system<sup>36</sup>. The expediency of these decisions is justified by the resumption of Russian submarine hikes to the North Atlantic.

The report 2016 became a sort of "interim" document. It did not aim to revise the Arctic strategies of the US Department of Defense and the US Navy 2013 and 2014. Any decisions regarding possible changes in strategic planning will be made by the current US administration. In its first documents on military planning, the Arctic region got no attention. So, in the Strategy of National

<sup>&</sup>lt;sup>31</sup> 2015 Year in Review. Progress Report on the Implementation of the National Strategy for the Arctic Region Prepared by the Arctic Executive Steering Committee. Washington: White House, 2016, p. 8.

<sup>&</sup>lt;sup>32</sup> In the US CG, there are currently two icebreakers left. The service life of the average icebreaker "Healy" operating in the Arctic is ending in 2030. The heavy icebreaker "Polar Star", which was completed in 2010-2013, works exclusively in the Antarctic. Its service life ends in 2020.

<sup>&</sup>lt;sup>33</sup> Grønning A.R. Updated US Arctic defense strategy addresses new security environment. High North News, 10 February 2017. URL: http://www.highnorthnews.com/updated-us-arctic-defense-strategy-addresses-new-security-enviro nment/ (accessed: 27 March 2018).

<sup>&</sup>lt;sup>34</sup> Report to Congress on Strategy to Protect United States National Security Interests in the Arctic Region.

<sup>&</sup>lt;sup>35</sup> Report on Arctic Policy, p. 25.

<sup>&</sup>lt;sup>36</sup> Report to Congress on Strategy to Protect United States National Security Interests in the Arctic Region, p. 11.

Security of the USA approved in 2017, the Arctic is mentioned only once in the most general context<sup>37</sup>, and in the National Defense Strategy adopted in 2018 (an analogue of the four-year review of defense policy) is not mentioned<sup>38</sup>.

#### Conclusion

An analysis of the decisions taken by the Arctic states during the latest review of their defense policy allows us to conclude that in the short term the military-political situation in the Arctic will remain stable and predictable. Earlier calm assessments of military threats in the Arctic and the statement of the low probability of an armed conflict have not changed. Despite the sharpness of the discussion about Russian military construction in the Arctic and calls for action, the Western states do not dramatize the situation in the region. In the decisions 2015-2017, they stated the sufficiency of their available forces and means to respond to predominantly non-military threats to security in the region and did not begin to revise the previously adopted plans for military development.

The decisions taken in recent years in the field of military construction are different. The attention of the Arctic NATO member countries is not much focused on the Arctic as it is for the Baltic region. This is evidenced by the military doctrine of the non-NATO Sweden, updated in 2016, which provides for a permanent military presence on the island of Gotland — a strategic position in the Baltic Sea.

In addition to the alliance plan adopted in 2014-2016 and decisions to ensure the security of its eastern flank, we were also talking about the restoration of the anti-submarine line Greenland-Iceland-Great Britain in the interests of ensuring the security of transatlantic sea communications in case of resumed cruises of Russian submarines to the North Atlantic. This is also evidenced by the ongoing restoration of NATO's North Atlantic Command, disbanded in 2002 [29, Regehr E.].

In the short term, these decisions did not draw much attention to the military construction in the Arctic. The US and other NATO countries demonstratively display military restraint here, but the longer the current crisis in Russia's relations with the West drags on, the more likely the military and political situation in the region may change for the worse. In the Arctic NATO countries, there was a broad opposition to the policy of military restraint in the Arctic. It exists both in the American Congress and in the Canadian Senate [26, Regehr E., p. 2]. Decisions about restraining Russia in the Baltic Sea or reviving the anti-submarine line in the North Atlantic are very reminiscent of the Cold War decisions. As, strictly speaking, the decisions taken several years ago to resume patrolling Russian submarines in the North Atlantic. The fate of the Arctic during the Cold War was unenviable. Even if the arms race does not begin there in the foreseeable future, the region may again be closed to wide international cooperation.

 <sup>&</sup>lt;sup>37</sup> National Security Strategy of the United States of America. Washington: The White House, December 2017, p. 40.
 <sup>38</sup> Summary of the National Defense Strategy. Sharpening the American Military's Competitive Edge. Washington: Department of Defense, 2018.

#### References

- 1. Regehr E. *Circumpolar military facilities of the Arctic Five updated: September 2017.* Vancouver: The Simons Foundation, 2017, 94 p.
- 2. Arbatov A.G., Dvorkin V.Z. Voenno-strategicheskaya deyatel'nost' Rossii i SShA [Military-strategic activity of Russia and the USA]. *Rossiya v politsentrichnom mire* [Russia in a polycentric world]. Ed. by A.A. Duynkin, N.I. Ivanova. Moscow, Ves Mir Publ., 2011, pp. 473–480. (In Russ.)
- Arbatov A.G., Dvorkin V.Z., Voenno-strategicheskaya deyatel'nost' [Military-strategic activity]. *Mezhdunarodno-politicheskie usloviya razvitiya Arkticheskoy zony Rossiyskoy Federatsii* [International political conditions for the development of the Arctic zone of the Russian Federation]. Ed. by A.V. Zagorski. IMEMO RAN. M.: Magistr Publ., 2015, pp. 163–177. (In Russ.)
- 4. Zagorski A.V. *Nestrategicheskie voprosy bezopasnosti i sotrudnichestva v Arktike* [Conventional security and cooperation in the Arctic]. Moscow, IMEMO Publ., 2016, 104 p. (In Russ.)
- 5. Depledge D. Hard security developments. *Arctic security matters.* Ed. by Jokela J. Paris: EU ISS Publ., 2015, pp. 59–67.
- 6. Le Mière Ch., Mazo J. *Arctic opening: insecurity and opportunity*. Abingdon; New York: Routledge Publ., 2013, 180 p.
- 7. Byers M. *International Law and the Arctic*. Cambridge: Cambridge University Press Publ., 2013, 322 p.
- 8. Dynkin A.A. Mezhdunarodnoe sotrudnichestvo v Arktike: riski i vozmozhnosti [International Cooperation in the Arctic: Risks and Opportunities]. *Vestnik Rossiyskoy akademii nauk* [Herald of the Russian Academy of Sciences], 2015, Vol. 85, no. 3, pp. 404–411.
- Khramchikhin A.A. Voenno-politicheskaya situatsiya v Arktike i stsenarii vozmozhnykh konfliktov [Military-political situation in the Arctic and scenarios of possible conflicts]. Arkticheskiy region: Problemy mexhdunarodnogo sotrudnichestva: Khrestomatiya v 3 tomakh [Arctic region: Problems of international cooperation: Reader in 3 volumes]. Ed. by I.S. Ivanov. Vol. 1. M.: Aspekt Press Publ., 2013, pp. 327–343. (In Russ.)
- 10. Bowes M.D. *Impact of Climate Change on Naval Operations in the Arctic.* CNA, Alexandria (VA): CAN Publ., 2009, 48 p.
- 11. Christensen K.D. *The Arctic. The Physical Environment*. DRDC: Centre for Operational Research and Analysis (CORA) Publ., 2010, 128 p.
- Khramchikhin A.A. Vliyanie ukrainskogo krizisa na voenno-politicheskuyu obstanovku v Arktike [The impact of the Ukrainian crisis on the military-political situation in the Arctic]. Severnyy morskoy put': Razvitie arkticheskikh kommunikatsiy v global'noy ekonomike «Arktika-2015»: materialy konferentsii [Northern Sea Route: Development of Arctic Communications in the Global Economy "Arctic-2015": conference materials]. Murmansk: Murmansk State Technical University Publ., 2015, pp. 96–98. (In Russ.)
- Zagorskii A.V. Mezhdunarodnoe sotrudnichestvo v Arktike [International Cooperation in the Arctic]. Mirovaya ekonomika i mezhdunarodnye otnosheniya [World Economy and International Relations], 2016, vol. 60, no. 7, pp. 104–112. DOI: 10.20542/0131-2227-2016-60-7-104-112.
- 14. Oznobishchev S.K. Nestrategicheskaya voennaya deyatel'nost' [Non-strategic military activities]. Mezhdunarodno-politicheskie usloviya razvitiya Arkticheskoy Zony Rossijskoj Federacii [International political conditions for the development of the Arctic Zone of the Russian Federation]. Ed. by Zagorski A.V. Moscow: Magistr Publ., 2015, pp. 139–150. (In Russ.)
- 15. Haftendorn H. Wettrüsten im Ewigen Eis Eine Gefahr für die internationale Stabilität? *Zeitschrift für Außen- und Sicherheitspolitik*, 2016, vol. 9, no. 1, pp. 101–120.
- 16. Melvin N., Bergh K. *Introduction.* Ed. by Melvin N., Jakobson L. The New Arctic Governance. Oxford: Oxford University Press Publ., 2016, pp. 1–12.
- 17. Wezeman S.T. *Military capabilities in the Arctic.* Stockholm: SIPRI Publ., 2012, 16 p.
- 18. Zagorski A. Bezopasnost' v Arktike [Security in the Arctic]. *Sovremennaya Evropa* [Contemporary Europe], 2017, no. 4, pp. 40–49.
- 19. Käpylä J., Mikkola H. On Arctic Exceptionalism. Critical reflections in the light of the Arctic Sunrise case and the crisis in Ukraine. Helsinki: FIIA, 2015, 22 p.

- Konyshev V.N., Sergunin A.A. Remilitarizatsiya Arktiki i bezopasnost' Rossii []. Arkticheskiy region: Problemy mezhdunarodnogo sotrudnichestva: khrestomatiya v 3 tomakh [Arctic region: Problems of international cooperation: Reader in 3 volumes]. Ed. by I.S. Ivanov. Vol. 1. M.: Aspekt Press Publ., 2013, pp. 284–302. (In Russ.)
- 21. Lackenbauer P.W., Dean R. Canada's Northern Strategy under the Harper Conservatives: Key Speeches and Documents on Sovereignty, Security, and Governance, 2006-15. Calgary: University of Calgary Publ., 2016, 421 p.
- 22. Dean R., Lackenbauer P.W., Lajeunesse A. Canadian Arctic Defence Policy. A Synthesis of Key Documents, 1970–2013. Calgary: University of Calgary Publ., 2014, 82 p.
- 23. Forget P. Bridging the Gap: The Limitations of Pre-AOPS Operations in Arctic Waters. *Canadian Na-val Review*, 2012, vol. 7, no. 4, pp. 6–20.
- 24. Wezeman S.T. *Military capabilities in the Arctic: A new cold war in the High North?* Stockholm: SIPRI Publ., 2016, 24 p.
- 25. Regehr E. Replacing the North Warning System: Strategic competition or Arctic confidence building? *Arctic Security Briefing Paper*, 2018, March 1. Vancouver: The Simons Foundation Publ., 2018, 6 p.
- 26. Regehr E. Arctic Security and the Canadian Defence Policy Statement of 2017. *Disarming Arctic Security Briefing Paper*, 2017, August 31. Vancouver: The Simons Foundation Publ., 2017, 11 p.
- 27. Lorenz W. Denmark Increases Its Contribution to the Deterrence of Russia. *PISM Bulletin*, 2018, no. 25, 2 p.
- 28. Arctic Imperatives: Reinforcing U.S. Strategy on America's Fourth Coast. Washington: Council on Foreign Relations Publ., 2017, 85 p.
- 29. Regehr E. Shielding the Arctic from NATO's return to Territorial Defence. Arctic Security Briefing Paper, 2017, December 6. Vancouver: The Simons Foundation Publ., 2018, 8 p.

## **REVIEWS AND REPORTS**

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#### A multidimensional Arctic: horizons of development<sup>\*</sup>

**© Natalia V. GOVOROVA**, Cand. Sci. (Econ.), leading researcher, Associate Professor Tel.: +7-916-374-85-28. E-mail: n\_govorova@mail.ru The Institute of Europe of RAS, Moscow, Russia Moscow Technological Institute, Moscow, Russia
 **© Valery P. ZHURAVEL**, Cand. Sci. (Ped.), Associate Professor, leading researcher E-mail: zhvalery@mail.ru The Institute of Europe of RAS, Moscow, Russia

Abstract. The article presents an overview of events and presentations at the round table "Modern Arctic: Issues of International Cooperation, Politics, Economy and Security" held in Moscow in November 2017 by the Institute of Europe of RAS and devoted to various aspects and prospects of the development of the Arctic. The main goal of the event was to analyze risks and opportunities in key areas of cooperation and management in the Arctic: international cooperation, security, economy, ecology and social sphere. And, the formation of the Arctic consciousness and involvement in the Arctic issues with the help of mass media that covered the event widely, electronic and printed scientific publications based on its results.

**Keywords:** the Arctic, Arctic zone of the Russian Federation, international cooperation, security, economy, ecology, human capital.

On November 22, 2017, Institute of Europe of the Russian Academy of Science held a round table devoted to the current situation, risks and prospects of development of the Arctic region in the current difficult geopolitical and macroeconomic conditions — "Modern Arctic: Issues of International Cooperation, Politics, Economy and Security". First Deputy Chairman of the Federation Council Committee of the Federal Assembly of the Russian Federation on Social Policy Kononova L.P. sent an appeal to the participants of the event, which emphasized that "the exploration and development of the Arctic is impossible without a deep study of the processes that occur in the multidimensional space of the Arctic region. It is noteworthy that the scientists of the RAS Institute of Europe in cooperation with their colleagues from the academic structures and educational institutions of Russia and a number of European countries make their contribution to this noble and necessary cause". Director of the International Union of Economists, member of the Presidium of the Free Economic Society of Russia, academician of the International Academy of Management Krasilnikov A.V. addressed the participants of the round table with a welcoming speech and a wish of successful work.

Fedorov V.P. — the moderator of the event, Deputy Director for research and the RAS corresponding member — outlined the strategic importance and value of the Northern circumpolar space for all mankind, which is rapidly involved in the international turnover. He noted that: "... in our era of the universal values proclamation, it is not an easy task to write a page in the history of

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the equitable distribution of untold resource wealth, which is the ice region-territory, oil, gas, metals, biological resources, transport capabilities, including transpolar aerospace routes".

The forum was opened by the leading researcher of the Department of Country Studies of IE RAS, member of the Scientific Expert Council of the state Commission on Arctic development Zhuravel V.P. with the introductory report "The Arctic as a multidimensional space". He noted that the Arctic as an object and subject of research was studied by many scientific disciplines, which allowed to obtain a complete system of knowledge, a full-fledged model of practical activity, a comprehensive look at the present and future of the Arctic region. At the same time, it is important to generate new relevant knowledge, to reveal the causes and trends of the development of the multidimensional Arctic space, to systematize them and use this to determine the current directions of the Arctic regional development. Along with the analysis of the increasing role of Russia and Europe in the Arctic, the speech addressed the issues of cooperation between Russia and China on the Arctic track. He noted that the current foreign policy of Beijing on the Arctic track towards Russia was positive, business-like, mostly friendly and long-term, and the problems and difficulties were solved through negotiations on a mutually beneficial basis. It was also concluded that the presence of major Asian States in the Arctic Council could lead to a decrease in the overall degree of tension in connection with the consequences of disagreements between Russia and the West over the situation in Syria and Ukraine.

The problems of international cooperation in the circumpolar area and the future of its social and economic, environmental, infrastructure and innovative development had become the subject of comprehensive analysis and subsequent discussion of the roundtable participants. The complex and multifaceted subject of regional security in its various aspects aroused great interest of the audience.

Belov V.B., Deputy Director for Scientific Work of the Russian Academy of Sciences, devoted his report to cooperation in the Arctic within the European space. He noted that in the last decade, Germany's activity in the Arctic region had increased significantly. Berlin is primarily focused on its long-term economic and political priorities. Its aim is getting the access of its business to the Arctic resources, ensuring national raw material security. Germany actively participates in the work of the Arctic Council as an observer country and supports cooperation with Russia.

The strategy and policy of Greenland on the Arctic track was covered by the leading researcher of the Department of Country Studies of IE RAS Khodov L.G. According to Professor Sindeev A.A., Chief researcher of the European Security Department of the Russian Academy of Sciences, Russia could initiate a comprehensive cooperation, the essence of which he presented in his speech. This interaction would strengthen the leadership of our country in the Arctic region. "The presence of complex cooperation, from the point of view of the Russian Federation, should testify", — Sindeev A.A. said, — "is not only the development of modern trends and a positive characteristic of what has been done, but first the answer to the question: "Will Russia be able to implement what it has planned in the Arctic in the medium and long term?" The presentation of the Head of the Department of the International Security, Center of the National Research, IMEMO named after E.M. Primakov RAS, Professor of MGIMO of Russia Zagorski A.V., who reported on non-strategic military activities monitoring of the countries. According to the speaker: our partners' balanced assessments of the military and political situation in the region prevailed; analyzing the goals of Russia's military development in the Arctic, they did not see any threats to their national security in the short term.

On geopolitical trends and the development of institutions of international cooperation in the Arctic had focused the attention of the audience after reports by the Director the Arctic Center for Strategic studies of NArFU named after M.V. Lomonosov (Arkhangelsk, Russia), the Head of the "Arctic Floating University" Zaikov K.S. and Associate Professor of the Institute of Law and National Security, RANEPA, Medvedev D.A. According to the speakers, the aggravation of the international situation, the situation with the Arctic cooperation and competition could become a rivalry and even cause a crisis of a global scale; there were also indications that the Arctic Council would eventually take the shape of a supranational governing body for the region.

In the context of the integrated Arctic policy of the European Union, the Head of the Department of European security of the IE RAS, Professor of MGIMO of Russia Danilov D.A. analyzed the Arctic security. Professor of the Department of Political Science of the Moscow State Linguistic University Sinchuk Yu.V. drew the audience's attention to Russia's desire to implement a global project to preserve peace in the Arctic. Danilov A.I., assistant Director of the State Scientific Center "Arctic and Antarctic research Institute" of Roshydromet, presented the problems of hydrometeorological safety in the Arctic under the changing climate conditions. "The Arctic is likely to be warmer this century than the planet on average, so the climate change factor should be considered in the social and economic development of the Arctic zone. The Arctic is one of the most vulnerable to climate change regions of the Earth and ensuring hydrometeorological safety of the population and activities there is an integral part of adaptation to changes", – he said. Alexander Ivanovich devoted more than 30 years of his scientific activity to the study of the Arctic climate. Deputy Head, Hero of the Russian Federation, honored rescuer of Russia A. N. Zvyagintsev spoke in detail about the activities of the FBI "Rosmorrechflot Marine Service" in the context of international cooperation in the field of reducing the risks of pollution of the Arctic marine environment.

The attention of several experts was focused on the issues of stimulation and implementation of Russian innovative projects in the Arctic. These issues were found in the speech of the Head of the Department "World Ocean and the Arctic", Deputy Chairman of the Council for the Study of Productive Forces, Russian Academy of Foreign Trade, Lipina S.A., Deputy Chairman of the State Duma Committee on transport and construction Fedyaeva P.M. and Deputy Chairman of the State Duma Committee on Regional Policy and Problems of North and Far East Pushkarev V.A. It should be noted that prior to his election to the state Duma, Vladimir Pushkarev successfully managed the Russian Arctic Development Center for several years and made a significant contribution to the organization of scientific works on the study of Arctic territories, incl. the Beliy island. The Director General of the NGO "STREAM" Glukhov A.V. presented a detailed consideration to the vital environmental aspects of the applicating the innovative home technologies at the Northern Sea Route port facilities. The Head of the Department of Strategic Development and Innovation of the Ministry of Economic Development of the Russian Federation Major S. V. with colleagues from RANEPA Vorotnikov A.M. and Balabanov A.E. presented a collective report on the potential of the support zones for the development of the Russian Arctic through the construction and development of transport and logistics infrastructure.

Standards that form transparent rules and principles of ecological interaction of already operating and newly created enterprises with the environment and indigenous population in the Arctic territory will allow to take advantage of the opportunities for economic development without harming nature and human. This is the key idea of the national public standard "environmental safety of the Arctic", developed by the Public Commission on "Ecology" of the Interregional public organization "Association of Polar Explorers" (ASPOL), which is headed by the legendary polar explorer A. Chilingarov. Masloboev V.A., Deputy Chairman of the Kola Scientific Center of the Russian Academy of Sciences (Apatity, the Murmansk Oblast), justified the necessity and timeliness of the adoption of such a standard in his speech. Associate of Chilingarov A.N., Vice-President of ASPOL Zaitsev K.A., who 25 years ago landed during a high-latitude parachute expedition to the North Pole and installed the flag of Russia there, informed his colleagues about the activities and plans of the organization for the following years.

Status, problems and future of energy in the Arctic as well as Russian and foreign experience in the production and transportation of hydrocarbons were analyzed by the General Director of information-analytical company "Geckos" (Saint-Petersburg), Academician of RANS, Member of the Scientific Council under the Security Council of the Russian Federation Grigoriev M.N. and Chief Researcher, Economic Research Department, IE RAS Khaitun A.D. Associate Professor of the Department "Public-private Partnership", Financial University under the Government of the Russian Federation Malitskaya E.A. noted the irresponsible approach of the majority of Russian companies that mainly focus on the commercial results of their activities in the Northern latitudes, the assessment of social and environmental effects of doing business, and also she outlined some areas of solving this problem.

The coordinator of the project "Maritime policy" of the Center for Strategic Assessments and Forecasts Gornova A.M. justified the need for priority development of sea ports in the Russian Arctic, the ones located in the mouths of large rivers, as logistics points for the docking of sea and river transport and the connection of the sea and river transport in the single arteries of transportation to the mainland. In the opinion of the expert, this is necessary to maximize the economic benefits from the Arctic areas.

Social issues and problems of human development were central for the Cand Sci (Ped.) Rukavitsyn I.M. and Leading researcher of the Department of Economic Research of IE RAS Govorova N.B., who stated that sustainable spatial development of the Arctic territories directly depended on the quality of human capital, determined by the financing of health care. Capital investments are needed for the maintenance and further development of social and transport infrastructure, housing and communal services, and the provision of social guarantees to the population. The negative trends in demographic and social development are aggravated by large territorial and climatic differences, low diversification of the economy, high depreciation of fixed assets. However, in the Russian Arctic there is a possibility of a change in the negative trends, provided the welfare and quality of life of the northerners against the background of environmental improvement, creating optimal conditions for professional self-realization of residents. To implement these plans, measures should be taken to create specific social innovation technologies, incl. the ones in medicine and education, and to promote the development of traditional activities, especially for indigenous people. Istomin V.S., Advisor to the President of the Association of Indigenous Peoples of the North, Siberia and the Far East of the Russian Federation, analyzed the legislative problems of ensuring the rights of indigenous peoples and prospects for their solution.

Representatives of the Higher School of Social Sciences of the Humanities Institute of St. Petersburg Polytechnic University (SPbPU) named after Peter the Great Professor Kulik S.V. and Associate Professor Samylovskaya E.A. spoke on the Arctic. They noted that more than a century of research and development of shipbuilders-polytechnics were the scientific and technical basis for the solution of a wide range of economic tasks for the development of the Arctic and the Northern Sea Route. The University is an organizer and a traditional platform for international scientific events dedicated to the Arctic theme. Since 2016, the International Scientific Conference "The Arctic: history and modernity" has been held here on a regularly. The aim of the conference is to be an interdisciplinary platform for discussing and solving a wide range of issues related to the Arctic region and to form an objective understanding of the Russian Arctic policy.

In total, representatives of the expert community of the three committees of the state Duma, 19 scientific, educational institutions and public organizations took part in the scientific discussions, widely covered in the media.

The Head of Roshydromet Yakovenko M.E. helped a lot in preparations for the scientific forum and the exhibition of the Russian State Museum of Arctic and Antarctic (St. Petersburg) called "On drifting ice of the Arctic", opened in the foyer of the Russian Academy of Sciences on November 20-23, 2017. At the exhibition was dedicated to the anniversary of the drifting stations and their 80-year history, briefly told in chronological order. Research and work on drifting stations and high-latitude expeditions are among the most significant in duration, diversity of scientific material, the number and importance of discoveries, the fundamental nature of the scientific approach, the abundance of solved problems, an incredible combination of mass courage, deliberate risk and resistance in the hardest conditions on the drifting ice of the Central Arctic and can rightly be considered the most outstanding expedition program of the last century. The exhibition presents dozens of photos illustrating the work, life and leisure of drift participants. Explanations on the materials of the exhibition were given by the Director of the Museum Maria Dukalskaya. In Moscow, the exhibition was for the first time and was of a great interest among scientists.

At the end of the round table, some experts were awarded letters of gratitude from the Special Representative of the President of the Russian Federation for international cooperation in the Arctic and Antarctic Arthur Chilingarov, deputies of the state Duma Grigory Ledkov and Vladimir Pushkarev for their active civil position, professionalism, long-term and active work on the study of the Arctic Council, problems of exploration and development of the Russian Arctic.

The next event on Arctic issues — the 3<sup>rd</sup> International Scientific Conference "The Arctic: history and modernity" — was held in St. Petersburg on 18-19 April 2018. It was organized by St. Petersburg Polytechnic University named after Peter the Great, The Institute of Europe of the Russian Academy of Sciences and a number of other organizations

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## A new scientific publication on the economic and socio-cultural development of the Russian Arctic<sup>\*</sup>

© Anton M. MAXIMOV, senior researcher

E-mail: amm15nov@yandex.ru

The RAS Federal center for integrated Arctic research named after N.P. Laverov, Arkhangelsk, Russia

**Abstract.** The article represents a review of the book by N.U. Zamyatina and A.N. Pilyasov "The Russian Arctic: towards new understanding of the development processes" and provides the reader with a new scientific publication on the Arctic topic. The book is very diverse in its subject matter. It focuses on the location and economy of the Arctic towns, the cycles of the development of the Arctic territories, the specifics and prospects of the Arctic business, the regularities of human capital dynamics and the opportunities for technological innovation in the Russian Arctic. The book contains a large amount of statistical data and it is wellillustrated with diagrams and maps. The book by N.U. Zamyatina and A.N. Pilyasov will be of interest not only to specialists in the economic geography, but also to researchers of social sciences and humanities. **Keywords:** *Russian Arctic, frontier, innovative search, the Arctic entrepreneurship, towns-bases.* 

This year, the publishing group URSS has released a new fundamental work on the book market. The book is on the modern development of the Russian Arctic by well-known Russian researchers, experts in economic and cognitive geography A.N. Pilyasov and N.Yu. Zamyatina [1]. It was issued under the tittle "Russkaya Arktika: k novomu ponimaniu processov osvoeniya" ("The Russian Arctic: a new understanding of the development"). The monograph is originally thought to be a landmark on the development of the Arctic territories of Russia. It is divided into two parts and consists of eleven chapters. Their topics range from spatial descriptions of the Russian Arctic to management issues and institutional development in the Arctic. At the same time, the whole palette of topics is held together by a common leitmotif: "the Arctic is a unique "motor" of innovative search and development, naturally embedded in the economy of Russia".

The first chapter introduces the theme of the book, revealing the self-existence of the Arctic macroregion and its special role in the historical dynamics of the Russian state. To conceptualize the phenomenon of the Russian Arctic, the authors refer to the category of the frontier — a mobile border of developed, "indigenous" and promising areas. At the same time N.Yu. Zamyatina and A.N. Pilyasov stressed that the Central European and the Arctic parts of Russia had no "centerperiphery", relationship. Also, it is impossible the use of the concepts of "metropolis" and "colony". And, we can only metaphorically speak about the periphery status of the Arctic. According to the authors, the essence of the Arctic "is that it suddenly became the center..., the front line, the front of the breakthrough efforts of the nation... Therefore this space of non-stationary settlements and young cities of the Arctic is organized by the microdistrict principle, not the "centeroutskirts" principle".

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#### Figure. 1. The book cover

Geographical location, economy and infrastructure of the Arctic towns and villages are discussed in the second chapter. The authors systematized an impressive array of data, comprehensively reflecting the social and economic life of settlements in the Russian Arctic. The relatively high level of urbanization of the Arctic territories of the Russian Federation is emphasized: "in comparison with the foreign Arctic, Russia has a very powerful polar cities, with extensive industrial zones, which fit not to compare with the polar towns of other countries, but with the Ruhr, Wales, Silesia, and other industrial cities in the old industrial areas of the world".

In the third Chapter, the authors clearly show the cyclical nature of the Arctic territories' development: the "pioneer" phase — the emergence of pioneers' network — is distinguished; it is replaced by the phase of super organizations (such as "Dal-Stroy" in the past or "Gazprom" now), which, in the next phase, are transformed and geographically shifted as the depletion of natural resources in the place of previous development. The first part of the book ends with a chapter on the Russian Arctic in the context of international relations on the development of the Arctic resources.

The second part of the book by N.Yu. Zamyatina and A.N. Pilyasov is a discussion of individual aspects of the life in the Arctic. It has a characteristic subtitle: "From Geology to Ideology". We will highlight the most interesting, in our opinion, topics disputed by the authors in this part of the book.

The chapter on the Arctic entrepreneurship deserves serious attention. The theme was interpreted quite widely: from the owner of a small business to the manager-modernizer or scientist-innovator. In fact, in some relatively new works, thematically related to the industrial development of the Arctic territories of Russia, the emphasis is either on the activities of large Russian corporations or on traditional economy of indigenous peoples, as well as on searching the ways of their constructive cooperation [2, Tishkov V.A., Kolomiets O.P., etc.; 3, Novikova N.I., Funk D.A.]. N.Yu. Zamyatina and A.N. Pilyasov also focused on the need to explore the possibilities of the Arctic territories as landfills for high-tech business projects.

In the next chapter, the authors advocate the realism of innovation projects, pointing to the prospects of "germination" of technological innovations on the "soil" of traditional forms of economic activity of the leading industrial companies. The complexities of large-scale projects to develop the subsoil of the Arctic territories and the shelf of the Northern seas require the introduction of new technological solutions, otherwise Russian companies risk losing their competitiveness and their share of the world market. At the same time, they are not obliged to take on all the tasks in the field of innovation: outsourcing and venture investment of medium-sized businesses, aimed at developing advanced technologies, could be quite successful. An example of such a scenario: the authors point to the experience of Canada. Thus, they expressed non-trivial opinion that contradistinction between the "commodity" and the high-tech economy was fundamentally incorrect for Russia.

It is also necessary to point out that N.Yu. Zamyatina and A.N. Pilyasov paid attention to the specific dynamics of human capital in the Arctic areas of the Russian Federation, showing the relationship between demographic processes, migration, development of labor resources, the culture and mentality of the population of the Northern territories.

In conclusion, we should point out that the book is rich in statistical material, generalized in illustrations: diagrams and maps. The book is written in a lively and accessible language.

The work of N.Yu. Zamyatina and A.N. Pilyasov is certainly one of the most interesting among the recent scientific literature on the social, economic and humanitarian problems of the Arctic development. It will be of interest not only for geographers and economists, but also for social scientists.

#### References

- 1. Zamyatina N.Ju., Pilyasov A.N. *Rossijskaja Arktika: k novomu ponimaniju processov osvoenija* [The Russian Arctic: towards a new understanding of the development' processes]. Moscow, URSS Publ., 2018, 400 p. (In Russ.)
- Rossijskaja Arktika: korennye narody i promyshlennoe osvoenie [The Russian Arctic: indigenous peoples and industrial development]. Ed. by V.A. Tishkov. Moscow; Saint Petersburg, Nestor-Istorija Publ., 2016, 272 p. (In Russ.)
- Sever i severjane. Sovremennoe polozhenie korennyh malochislennyh narodov Severa, Sibiri i Dal'nego Vostoka Rossii [North and northerners. The current situation of indigenous small-numbered peoples of the North, Siberia and the Far East of Russia]. / Ed. by N.I. Novikova, D.A. Funk. Moscow, IEA RAN Publ., 2012, 288 p. (In Russ.)

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### A great scientific tour in the North of Russia<sup>\*</sup>

© Jens P. NIELSEN, Professor
 E-mail: jens.petter.nielsen@uit.no
 University of Tromsø — The Arctic University of Norway, Tromsø, Norway
 © Victoria V. TEVLINA, Dr. Sci. (Hist.), Professor
 E-mail: vtevlina@mail.ru
 Northern (Arctic) Federal University named after M.V. Lomonosov, Arkhangelsk, Russia;
 University of Tromsø — The Arctic University of Norway, Tromsø, Norway

**Abstract.** The coverage of various issues related to the Russian-Norwegian relations has always been important for the residents of both countries. Opportunities to present new documents and materials, to discuss the importance of centuries-old good neighborly relations between Russia and Norway, especially in the North, are not provided often. At the end of April 2018, large-scale scholarly events, devoted specifically to this topic, took place in Nikel and Murmansk. So, a scientific-practical seminar "Russia, Norway and the North. Historical relations" was held in Nikel on April 25 and on the next day in Murmansk the international conference "Neighbors in the Far North: historical ties between Russia and Norway" took place. One of the reasons for these measures was the presentation of the collective monograph "Getting closer: Russia and Norway 1814–1917". The book was written jointly by Norwegian and Russian historians within the framework of a long-lasting historical megaproject (2008–2015) (led by J.P. Nielsen, AHR, UIT-The Arctic University of Norway). In November 2017 the book was published in Russian in Moscow by the "Ves' Mir" publishing house after three years of preparation. It is the translation of a monograph, richly illustrated, about the history of Russian-Norwegian relations in the nineteenth and early twentieth centuries, originally published in Norwegian by the Pax Forlag AS, Oslo under the title "Russland kommer nærmere" in 2014.

**Keywords:** Russian-Norwegian relations, North of Russia and Norway, cooperation in history, goodneighborly relations, international seminar and conference in Nikel and Murmansk, tourism, borderland, Russian emigration.

For 3 days, from 25 to 28 April 2018, the staff of the institutes of the Faculty of Humanities, Social Science and Education of the University of Tromsø — the Arctic University of Norway and NArFU took part in important scientific events in the North of Russia. The main reason for this was the presentation of the collective scientific monograph "Rapprochement: Russia and Norway in 1814-1917", translated for 3 years and then published in Moscow by the "Ves' Mir" publishing house at the end of 2017. The first version of this colorful monograph, which contains a variety of materials on the history of Russian-Norwegian relations, collected in one book for the first time, appeared in Norwegian under the title "Russland kommer nærmere" (Oslo: Pax Forlag AS, 2014). The book was written jointly by Norwegian and Russian scientists within a scientific mega-project in the field of history "Neighbourly Asymmetry. Norway and Russia. 1814–2015". The first presentation of the book took place immediately after its publication, at the end of 2017 in Moscow in RSUH, at "Globus" bookstores and the Norwegian Embassy.

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April 25, 2018 at the History Museum of the Pechenga district of the Murmansk region, in the border town of Nickel, with a full audience at the international scientific seminar "Russia, Norway and their North. Historical relations", Professor Jens Petter Nielsen, honorary doctor of the Northern (Arctic) Federal University named after M. V. Lomonosov and the leader of the project, told in detail about it, and presented it as the scientific editor of the book. But the workshop in Nikel was devoted not only to a presentation of a new 700 pages book. It also had a more extended theme: the audience was impressed by an interesting performance of Petya Mankova, a researcher at the University of Tromsø — the Arctic University of Norway, who was an editor of illustrations for the book "Rapprochement: Russia and Norway in 1814-1917". She talked about the social role of paintings, photos and drawings in the coverage of centuries-old Russian-Norwegian relations.

Then the Doctor of History, NArFU Professor V.V. Tevlina made a report on Russian emigrants and their life in Norway before and after 1917, as well as in the post-Soviet period up to the present time. She reported on the number of emigrants, how they had become active in cultural and economic life in their new country after a short period of adaptation, and preservation of traditions. In Nikel, the presentation of scientific materials on the development of Russian and Norwegian towns in the North in the Soviet period, collected during an international research project on economic history, was made by the Professor of the Institute of Tourism and Northern Studies, University of Tromsø — the Arctic University of Norway Urban Wråkberg.

Local researchers also participated in the seminar. So, an interesting presentation was made by Marina Sorokina, a chief librarian of the Central library of the Pechenga district of the Murmansk region, who told about her 15-year-old collection of materials about Norwegians on the Murman coast in  $11^{th} - 20^{th}$  centuries. At the end of the seminar, the report of the consultant on cross-border cooperation of the Pechenga district administration of the Murmansk region Tatyana Bazanova was presented. She told about the results of her research on the perception of residents of the Russian-Norwegian border region of the changing political situation in the world, held in 2014-2017.

It is symbolic that the seminar was opened in Nikel, addressing the historical parallels and important milestones of Russian-Norwegian relations. It resulted were summed up by not only the Director of the Local History Museum of the Pechenga District Elena Popova, who hosted guests in the new exhibition hall for the first time, but also the Head of the Pechenga district Alexander Morozov and the Consul General of the Russian Federation in Kirkenes Sergey Shatunovsky-Byurno.

It is important to note that the seminar in the town of Nickel was dedicated to the 25<sup>th</sup> anniversary of the Treaty of friendship and cooperation between the University of Tromsø — the Arctic University of Norway, and the Pomor state University named after M. V. Lomonosov (since 2011 — the Northern (Arctic) Federal University). This agreement was largely initiated by historians and physicians. Moreover, the scientific seminar in Nikel was dedicated to the 50<sup>th</sup> anniversary of the University of Tromsø — the Arctic University of Norway. After the seminar, a special copy of the book "Rapprochement: Russia and Norway in 1814-1917" was given to the Museum of Nikel. All the participants of the meeting agreed to hold a series of scientific lectures on various aspects of Russian-Norwegian relations for teachers, librarians, museum workers and everyone living in the border area.

On the other day, April 26, the international scientific conference "Neighbors in the Far North: historical ties of Russia and Norway" was held on the same interesting and more extended topic. It was held in Murmansk, at the Murmansk Arctic State University, a partner of the University of Tromsø — the Arctic University of Norway. It is symbolic that the conference was officially and very warmly welcomed not only by the rector of the Murmansk Arctic State University, Professor Andrey Sergeev, but also by two consuls representing different sides of the Russian-Norwegian border: Consul General of the Russian Federation in Kirkenes Sergey Shatunovsky-Byurno and Consul General of the Kingdom of Norway in Murmansk Eric Svedahl. Moreover, Radina Trengereid, Advisor for education, science and technology of the Embassy of the Kingdom of Norway in Moscow, made a speech on the importance of cultural, educational and scientific relations at the conference.

At the conference in Murmansk, the collective monograph "Rapprochement: Russia and Norway in 1814-1917" was presented for students, teachers and guests of the University. The whole day, other issues related to Russian-Norwegian relations for several centuries were discussed. So, there were also those scientists from the University of Tromsø — the Arctic University of Norway and NArFU, who had already performed in Nikel. However, they have presented some other topics in their reports. Professor J.P. Nielsen analyzed the importance of the Great Russian Revolution and its consequences for Norway. Understanding the role of people and their value in maintaining good-neighborly relations between Russia and Norway in  $20^{th} - 21^{st}$  centuries was represented by Professor V.V. Tevlina; the importance of natural and cultural heritage for tourism in the Arctic in case of Svalbard was discussed by Professor W. Bromberg.

Especially, I would like to note the performances of participants from Moscow. E.g., Alexey Komarov, Head of the Center for Northern Europe and the Baltic States, a leading researcher of IVI RAS and Professor at the University of Tromsø — the Arctic University of Norway. Involvement of new scientific materials led to the speech about the place of Norway in Soviet publications. By the way, A. A. Komarov was a co-organizer of the scientific conference in Murmansk together with his colleagues M. B. Ilyicheva, J.P. Nielsen and V.V. Tevlina. Oleg Zimarin, Director of the large Moscow publishing house "Ves Mir" that publishes scientific literature mostly, gave an assessment of the situation in the book publishing on Norway in the modern Russia.

Among the Murmansk colleagues, who participated in the conference by presenting their research as co-authors of the monograph "Rapprochement: Russia and Norway in 1814-1917", extremely interesting presentations were made by: Vladimir Karelin, associate Professor of the Murmansk Institute of Economics ("The Dynamics of Russian-Norwegian relations before and during the First World War"); Katerina Orekhova, Deputy Head of the Department of history of the

Murmansk Regional Museum ("Colonies of the Murmansk shore — close and distant neighbors"); Alexander Porzel, associate Professor of MSTU ("Spitsbergen: a gleam in the "iron curtain" during the cold war"). In conclusion, Maria Ilyicheva, associate Professor of MAGU, spoke about the educational potential of the monograph "Rapprochement: Russia and Norway in 1814-1917" in teaching courses on the history of the Northern Europe in Murmansk.

The two-day scientific meetings of researchers-humanitarians of the two countries resulted not only in the presentation of new documents and materials, but also in the discussion of significant past and present centuries-old good-neighborly relations between Russia and Norway, especially in the North. As a sign of gratitude, the newly appeared monograph was presented on behalf of the group of authors not only to the staff of the Murmansk Arctic State University, but also to the consuls of both states who participated in the conference.

A kind of a completion of such a significant scientific tour for both sides was the participation of scientists from Norway and different cities of Russia in the opening of a new exhibition "Norway and Russia: the force of attraction — the Arctic" on April 27, 2018 in the Murmansk Regional Museum. The exhibition was assembled from collections of photographs and paintings, as well as materials stored in the "FRAM" Museum in Oslo.



Fig. 1. Professor J.P. Nielsen and A.A. Komarov is talking to students during the international scientific conference "Neighbors in the Far North: historical ties between Russia and Norway" at the Murmansk Arctic State University on April 26, 2018.



Fig. 2. Cover of the collective scientific monograph "Rapprochement: Russia and Norway in 1814-1917" (M.: "Ves Mir", 2017).



Fig. 3. Speakers and residents of the towns of Nikel and Zapolyarny at the international scientific seminar "Russia, Norway and their North. Historical Relations" at the Historical and Local History Museum of the Pechenga District of the Murmansk Region, the border town of Nikel, April 25, 2018.



Fig. 4. Participants of the international scientific seminar "Russia, Norway and their North. Historical Relations" at the Historical and Local History Museum of the Pechenga District of the Murmansk Region, the border town of Nikel, April 25, 2018.

#### **SUMMARY**

## Авторы, названия, аннотации, ключевые слова Authors, titles, abstracts, and keywords

## ЭКОНОМИКА, ПОЛИТИКА, СОЦИУМ И КУЛЬТУРА ECONOMICS AND POLITICAL SCIENCE, SOCIETY AND CULTURE

ЗАМЯТИНА Н.Ю., ПИЛЯСОВ А.Н. Новая теория освоения (пространства) Арктики и Севера: полимасштабный междисциплинарный синтез

ZAMYATINA N.Yu., PILYASOV A.N. The new theory of the Arctic and Northern development: multi-scale interdisciplinary synthesis

Аннотация. После ярких достижений советской освоенческой школы в последние 30 лет возникла длительная пауза: доминируют частные работы по отдельным, в том числе новым, направлениям. Между тем потребность в широком научном обобщении практических усилий по развёртыванию в Арктике и на Севере крупных и малых хозяйственных проектов — огромная. Авторы ставят перед собой задачу по разработке новой комплексной теории освоения Севера и Арктики, которая бы представляла собой синтез лучших достижений советской школы, зарубежных работ по фронтиру и современных исследований региональной науки в области инновационного развития. На их взгляд, её ключевой особенностью является упор на локальное, местное развитие, эндогенные факторы освоения, которым ранее не придавалось должного значения. Конструктивный синтез внешних и внутренних факторов освоения должен теперь формироваться «снизу», от самой территории, а не из федерального центра. Обозначаются и подробно характеризуются четыре новых исследовательских приоритета в изучении процесса освоения Севера и Арктики: анализ местного институционального капитала; особое внимание к конфликтам и противоречиям в процессе освоения природных ресурсов территории; внимание к эволюции системы расселения; своеобразие взаимодействия больших и малых форм освоения данной территории. Новую идеологию изучения освоения предполагается апробировать в процессе полевых и экспедиционных исследований в районах Севера и Арктики.

Ключевые слова: освоение Севера и Арктики, природопользование, глокальность, большие и малые формы освоения, многоуровневый процесс. Abstract. After the bright achievements of the Soviet development school in the past 30 years, there was a long pause. Meanwhile, the need for a broad scientific generalization of practical efforts to deploy large and small economic projects in the Arctic and the North is enormous. The authors set the task of developing a new complex theory of the North and the Arctic development, which would be a synthesis of the best achievements of the Soviet school, foreign frontier studies and the modern regional science studies of the innovative development. In the authors' view, its key feature is the emphasis on local development and the endogenous factors of the development, which had no attention before. Constructive synthesis of external and internal factors of colonization should be formed "from below", from the territory itself, not from the federal center. Four new research priorities in the new study of the North and the Arctic development are identified and described in detail with a focus on: the analysis of local institutional capital; conflicts and contradictions of the natural resource development; the evolution of the settlement system; and the interaction of large and small forms of development of the territory. The new ideology of studying the Northern and Arctic development is supposed to be tested during the field and expeditionary study in the North and the Arctic regions.

**Keywords:** the North and the Arctic development, resource management, glocality, large and small forms of development, a multi-scale process.

**КАТОРИН И.В.** Формирование Арктической зоны РФ как фактор развития региона: постановка вопросов (на примере Архангельской области) **KATORIN I.V.** Establishing the Arctic Zone of the Russian Federation as a factor of the regional development: raising questions (the case of the Arkhangelsk region)

Аннотация. В статье рассмотрены особенности влияния активизации арктической политики России на развитие Архангельской области. С 2013 г. запущен процесс формирования Арктической зоны России (АЗРФ) как объекта государственного управления. Архангельская область частично вошла в состав АЗРФ. В настоящий момент идёт формирование нормативного поля и организационного каркаса макрорегиона. В статье дан анализ современного этапа формирования АЗРФ. Автор выделяет основные возможности и риски для региона, связанные с активизацией арктической политики страны. Наиболее серьёзные возможности появляются в политической (арктические статусы, внешние связи и внешний имидж) и экономической (инфраструктура, инвестиции, новые предприятия и организации, туризм) сферах. В них уже наблюдаются определённые изменения. Изменения в социальном пространстве малозаметны, но именно в этой сфере возможны кардинальные перемены, связанные с обновлением образа региона, усилением региональной идентичности, изменением социального состава населения, потенциала муниципальных образований. Вместе с тем в социальном пространстве существуют риски, связанные с неполным вхождением Архангельской области в состав АЗРФ, с реализацией крупных инвестиционных проектов и неэффективным управлением.

Ключевые слова: Арктическая зона России, социальное пространство, фактор развития, социальные риски, региональная идентичность, Архангельская область. Abstract. The article describes the impact of the Russian Arctic policy activation on the development of the Arkhangelsk region. In 2013, the formation of the Arctic zone of the Russian Federation (AZRF) as an object of state administration was launched. The Arkhangelsk region was partly included in the Russian Arctic. Now, we observe the establishment of the regulatory field and the organizational framework of the macroregion. The article analyzes the current stage of this process in the Russian Arctic. The author highlights the main opportunities and risks for the region associated with the activation of the Arctic policy of the country. The most serious opportunities are emerging in politics (the Arctic status, external relations and external image) and economy (infrastructure, investments, new enterprises and organizations, and tourism). These areas are experiencing some changes. The changes in the social space are hardly noticeable but, in this area, cardinal changes are possible. They are associated with the renewal of the regional image, strengthening the regional identity, changes in the social composition of the population and the potential of municipalities. At the same time, risks associated with incomplete entry of the Arkhangelsk region into the Russian Arctic, the implementation of major investment projects and inefficient management.

**Keywords:** The Arctic Zone of Russia, social space, a factor of development, social risks, the regional identity, the Arkhangelsk region.

МАЛИК Л.С., МЕЛКАЯ Л.А. Территориальная социальная работа как условие повышения качества жизни населения северного региона

MALIK L.S., MELKAYA L.A. Community social work as a condition for improving the quality of life of the population of the northern region

Аннотация. В статье обозначены компоненты и факторы качества жизни населения северного региона. Показана специфика реализации социальной работы на севере. Рассмотрен рейтинг северных регионов России по качеству жизни, отмечена взаимосвязь качества жизни с формой организации социальной работы. Представлен потенциал территориальной социальной работы на Севере, сфокусированной на деятельности в местном сообществе и направленной на активизацию индивидов, семей, социальных групп. Раскрыты приоритетные задачи и отдельные направления социальной работы по Abstract. The article identifies the components and factors of the quality of life of the population of the northern region. The specifics of social work in the North are presented. The authors considered the rating of Northern regions of Russia on quality of life and noted the relationship between the quality of life with a form of social work. The potential of community social work in the North focused on activities in the local community and aimed at strengthening individuals, families and social groups is also discussed. The authors revealed priorities and individual areas of social work according to the territorial principle in the develтерриториальному принципу в рамках разработки подходов к реализации федерального проекта «Крепкая семья» партии «Единая Россия» в Архангельской области.

Ключевые слова: северный регион, качество жизни, территориальная социальная работа, местное сообщество, партийный проект «Крепкая семья».

opment of approaches to implementation of the Federal project "Strong family" of the party "Edinaya Rossiya" ("United Russia") in the Arkhangelsk region.

Keywords: Northern region, quality of life, community social work, local community, political party project "Strong family".

# СОВРЕМЕННАЯ АРКТИКА: ВОПРОСЫ МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА, ПОЛИТИКИ, ЭКОНОМИКИ И БЕЗОПАСНОСТИ **MODERN ARCTIC: ISSUES OF INTERNATIONAL COOPERATION,** POLITICS, ECONOMICS AND SECURITY

ГОВОРОВА Н.В. Человеческий капитал — ключевой актив хозяйственного освоения арктических территорий

GOVOROVA N.V. Human capital — a key factor of the Arctic economic development

Аннотация. Статья посвящена анализу демографической и социально-экономической ситуации в Арктической зоне Российской Федерации. Исследованы преобладающие демографические тенденции, основные показатели развития экономики и социальной сферы, ситуация на рынке труда субъектов Арктической зоны РФ, проблемы обеспечения региона кадрами необходимой квалификации, а также отдельные параметры состояния здоровья населения. Сделаны выводы о разнонаправленных векторах демографического развития отечественных северных территорий, преобладании отрицательных миграционных процессов, а также о необходимости сохранения и дальнейшего развития человеческого капитала, величина и качество которого определяется размерами инвестиций в образование и здравоохранение. По результатам проведённого анализа можно констатировать, что для решения разнообразных и сложнейших проблем возрождения российской Арктики необходимо сохранение и дальнейшее развитие человеческого капитала региона как главного фактора инновационного экономического и социального прогресса.

Ключевые слова: Арктическая зона Российской Федерации, демография, социальноэкономическое развитие, человеческий капитал, трудовые ресурсы, образование, здравоохранение.

Abstract. The article deals with the demographic, social and economic situation in the Arctic zone of the Russian Federation. Its demographic trends, main indicators of the economic and social development, the situation in the labor market, as well as providing the population with the necessary training and healthcare are studied. The central role in solving the complex problems of the Russian Arctic revival belongs to the workforce as it is the main factor of the current economic growth.

Keywords: Arctic zone of the Russian Federation, demography, social and economic development, human resources, workforce, education, health.

ЖУРАВЕЛЬ В.П. Арктика как постоянно развивающееся многомерное пространство ZHURAVEL V.P. The Arctic as a constantly evolving multidimensional space

Аннотация. В статье анализируются основные Abstract. The author analyzes the main approaches подходы к проблемам многомерности простран- to the multidimensionality of the Arctic and the facства Арктики и факторам повышения роли Аркти- tors that enhance the role of the Arctic in modern

ческого региона в современных условиях. Особо уделяется внимание анализу исследований учёных САФУ имени М.В. Ломоносова (Ю.Ф. Лукин) и Института Европы РАН (Н.М. Антюшина). Делается вывод о необходимости системной работы по формированию арктического сознания и причастности к арктическим делам у граждан России. Наряду с анализом возрастания роли России и стран Европы в Арктике в статье детально рассматриваются актуальные вопросы сотрудничества России и Китая на арктическом треке. Констатируется, что современная внешняя политика Пекина на арктическом треке в отношении России носит позитивный, деловой, в основном доброжелательный и долгосрочный характер, а возникающие проблемы и трудности решаются путём переговоров на взаимовыгодной основе. Также делается вывод, что нахождение в Арктическом совете крупных азиатских государств может привести к снижению общего градуса напряжённости в связи с последствиями разногласий между Россией и Западом по поводу ситуации в Сирии и на Украине. Предпринимается попытка определить уровень милитаризации на пространстве Арктики и её влияние на возможность возникновения конфликтов в регионе между государствами. Поддерживается предположение о том, что в современных условиях мощным фактором консолидации России может послужить собственный арктический мегапроект, рассчитанный на длительную перспективу. В статье автор использует общенаучные методы исследования, применяемые в современной политологии и гуманитарных науках: сравнительный анализ, исторический подход, институциональный и прогностические метод, в том числе и в рамках анализа возможных сценариев дальнейшего развития Арктического совета, разработанных Ю.Ф. Лукиным.

Ключевые слова: Наталья Антюшина, Арктика, Юрий Лукин, Россия, Арктический совет, Китай, САФУ. conditions. Special attention is paid to the research made by NArFU (Yu.F. Lukin) and the Institute of Europe of RAS (N.M. Antyushina). In conclusion the author underlines the need for systematic work on the Arctic consciousness and involvement of the Russian citizens in the Arctic affairs. Along with the analysis of the growing role of Russia and the European countries in the Arctic, the article is concerned with cooperation between Russia and China. It is revealed that Beijing's current foreign policy in the Arctic is productive, businesslike, benevolent and long-term for Russia. The emerging problems and difficulties are resolving through negotiations on a mutually beneficial basis. It is also concluded that the presence of large Asian states in the Arctic Council leads to a deescalate tensions due to disagreements between Russia and the West over the situation in Syria and Ukraine. The author tried to determine the level of militarization in the Arctic and its impact on the possibility of conflicts in the region. It is concluded that in modern conditions a long-term Arctic megaproject could become a powerful Arctic consolidation factor. In the article, the author uses methods of political science and humanities: comparative analysis, historical approach, institutional and prognostic methods, incl. the analysis of possible scenarios for the further development of the Arctic Council by Yu.F. Lukin.

**Keywords**: Natalia Antyushina, Arctic, Yuriy Lukin, Russia, the Arctic Council, China, NArFU.

ЗАГОРСКИЙ А.В. Военное строительство в Арктике в условиях конфронтации России и Запада ZAGORSKI A.V. The Arctic defense postures in the context of the Russia-West confrontation

Аннотация. В 2015–2017 гг. в большинстве арктических стран проводился плановый обзор оборонной политики. По времени он совпал с украинским кризисом, обострением отношений между Россией и Западом и активной фазой реализации масштабной программы военного строительства в российской Арктике. Анализ принятых в этот период решений позволяет судить о том, в

Abstract. In 2015–2017, in most Arctic countries, a planned review of defense policy was carried out. It coincided with the Ukrainian crisis, the aggravation of relations between Russia and the West and the active phase of the implementation of a large-scale program of military construction in the Russian Arctic. An analysis of the decisions made during this period allows us to judge to what extent the con-

какой степени конфронтация между Россией и Западом повлияла на военно-политическую обстановку в регионе и как может сказаться на ней в обозримом будущем. С этой целью принятые в последние годы документы стратегического военно-политического планирования арктических стран сопоставляются с их более ранними планами военного строительства в Арктике. Проведённый анализ позволяет с высокой степенью определённости сделать вывод о том, что в краткосрочной перспективе военно-политическая обстановка в регионе останется стабильной и предсказуемой. На данном этапе арктические страны не стали пересматривать свои прежние спокойные оценки военных угроз и скромные программы военного строительства в регионе. Основное внимание арктических стран-членов НАТО сосредоточено сегодня не столько на Арктике, сколько на развитии военно-политической обстановки на Балтике и в Северной Атлантике. Однако чем дольше затягивается современный кризис в отношениях России и Запада, тем больше вероятность того, что в среднесрочной и долгосрочной перспективе военно-политическая обстановка в Арктике может измениться в худшую сторону.

Ключевые слова: Арктика, Россия, арктические страны, безопасность, военно-политическая обстановка, военное строительство. frontation between Russia and the West has affected the military and political situation in the region and how it can affect it in the foreseeable future. For this purpose, the documents of the strategic military-political planning of the Arctic countries adopted in recent years are compared with their earlier plans for military construction in the Arctic. The analysis allows to conclude with a high degree of certainty that in the short term the military and political situation in the region will remain stable and predictable. The Arctic countries have not reconsidered their previous calm assessments of military threats and modest military development programs in the region. The main attention of the Arctic states-members of NATO is concentrated on the Arctic not that much as it is for the development of the military-political situation in the Baltic and in the North Atlantic. However, the longer the current crisis in the relations between Russia and the West goes on, the more likely that in the medium and long-term perspective, the military and political situation in the Arctic will change for the worse.

**Keywords**: Arctic, Russia, Arctic states, security, military-political landscape, defense posture.

## ОБЗОРЫ И СООБЩЕНИЯ REVIEWS AND REPORTS

**ГОВОРОВА Н.В., ЖУРАВЕЛЬ В.П.** Многоликая Арктика: горизонты развития **GOVOROVA N.V., ZHURAVEL V.P.** A multidimensional Arctic: horizons of development

Аннотация. В статье представлен обзор событий и докладов представителей научного и экспертного сообщества, государственной власти, общественности и бизнеса в рамках проведённого в Москве Институтом Европы Российской академии наук в ноябре 2017 г. круглого стола «Современная Арктика: вопросы международного сотрудничества, политики, экономики и безопасности», посвящённого различным аспектам и перспективам освоения арктического региона. Основная цель мероприятия — проведение анализа рисков и возможностей в ключевых областях взаимодействия и хозяйствования в Арктике: международное сотрудничество, безопасность, экономика, экология и социальная сфера. А также формирование у широких слоёв населения арктического сознания и причастности к Арктике с помощью СМИ, широко освещавших мероприятие, и электронных и печатных научных изданий

Abstract. The article presents an overview of events and presentations at the round table "Modern Arctic: Issues of International Cooperation, Politics, Economy and Security" held in Moscow in November 2017 by the Institute of Europe of RAS and devoted to various aspects and prospects of the development of the Arctic. The main goal of the event was to analyze risks and opportunities in key areas of cooperation and management in the Arctic: international cooperation, security, economy, ecology and social sphere. And, the formation of the Arctic consciousness and involvement in the Arctic issues with the help of mass media that covered the event widely, electronic and printed scientific publications based on its results.

#### по его результатам.

Ключевые слова: Арктика, Арктическая зона Российской Федерации, международное сотрудничество, безопасность, экономика, экология, человеческий капитал. **Keywords:** the Arctic, Arctic zone of the Russian Federation, international cooperation, security, economy, ecology, human capital.

МАКСИМОВ А.М. Вышел в свет новый научный труд о хозяйственном и социокультурном освоении российской Арктики

MAXIMOV A.M. A new scientific work on the economic and socio-cultural development of the Russian Arctic

Аннотация. Обзор на книгу Н.Ю. Замятиной и А.Н. Пилясова «Российская Арктика: к новому пониманию процессов освоения» знакомит читателя с новой научной работой по арктической тематике. Предлагаемая вниманию книга разнообразна: в ней уделено внимание территориальному размещению и экономике арктических городов, циклам освоения арктических территорий, специфике и перспективам арктического предпринимательства, закономерностям динамики человеческого капитала и возможностям технологических инноваций в российской Арктике. Книга содержит большой объем статистических данных, богато иллюстрирована диаграммами и картами. Книга Н.Ю. Замятиной и А.Н. Пилясова будет интересна не только специалистам в сфере экономической географии, но и представителям социальных и гуманитарных наук.

Ключевые слова: российская Арктика, фронтир, инновационный поиск, арктическое предпринимательство, города-базы. Abstract. Review on the book by N.U. Zamyatina and A.N. Pilyasov "The Russian Arctic: Towards a new understanding of the development' processes" introduces the reader to a new scientific work on the Arctic theme. The book is very diverse in its subject matter. It focuses on the territorial location and economy of Arctic towns, the cycles of the Arctic territories' development, the specifics and prospects of Arctic business, the regularities of human capital dynamics and the opportunities for technological innovation in the Russian Arctic. The book contains a large amount of statistical data and is wellillustrated with diagrams and maps. The book by N.U. Zamyatina and A.N. Pilyasov will be of interest not only to specialists in the field of economic geography, but also to researchers of social sciences and liberal arts.

**Keywords:** *Russian Arctic, frontier, innovative search, arctic entrepreneurship, town-bases.* 

# **НИЛЬСЕН Й.П., ТЕВЛИНА В.В.** Большое научное турне на Севере России **NIELSEN J.P., TEVLINA V.V.** A great scientific tour in the North of Russia

Аннотация. Освещение различных вопросов, связанных с российско-норвежскими отношениями, традиционно является важным для жителей обоих государств. Возможности представить новые документы и материалы, обсудить значимость многовековых добрососедских связей между Россией и Норвегией, особенно на Севере, предоставляются нечасто. И вот в конце апреля 2018 г. состоялись масштабные научные мероприятия в Никеле и в Мурманске, посвящённые именно этой теме. Так, в течение 3 дней в Никеле проходил научно-практический семинар «Россия, Норвегия и их Севера. Исторические взаимоотношения», а затем в Мурманске — международная конференция «Соседи на Крайнем Севере: исторические связи России и Норвегии». Одним из поводов проведения научных дискуссий стало представлеAbstract. The coverage of various issues related to the Russian-Norwegian relations has always been important for the residents of both countries. Opportunities to present new documents and materials, to discuss the importance of centuries-old good neighborly relations between Russia and Norway, especially in the North, are not provided often. At the end of April 2018, large-scale scholarly events, devoted specifically to this topic, took place in Nikel and Murmansk. So, a scientific-practical seminar "Russia, Norway and the North. Historical relations" was held in Nikel on April 25 and on the next day in Murmansk the international conference "Neighbors in the Far North: historical ties between Russia and Norway" took place. One of the reasons for these measures was the presentation of the collective monograph "Getting closer: Russia and Norway

ние впервые написанной совместно норвежскими и российскими учёными в результате многолетнего мега-проекта в области истории (2008–2016) коллективной монографии «Сближение: Россия и Норвегия в 1814–1917 годах» (ред. Й.П. Нильсен). Книга была издана на русском языке в Москве в ноябре 2017 г. после трёхлетней работы над ней. Она стала переводом монографии, дополненной документами и фотоматериалами, об истории российско-норвежских отношений в XIX — начале XX в., которая первоначально вышла на норвежском языке в Осло (Pax Forlag AS) под названием «Russland kommer nærmere» в 2014 г.

Ключевые слова: российско-норвежские отношения, Север России и Норвегии, сотрудничество в исторической науке, добрососедские связи, международный семинар и конференция в Никеле и Мурманске, туризм, пограничье, русская эмиграция. 1814–1917". The book was written jointly by Norwegian and Russian historians within the framework of a long-lasting historical megaproject (2008–2015) (led by J.P. Nielsen, AHR, UIT-The Arctic University of Norway). In November 2017 the book was published in Russian in Moscow by the "Ves' Mir" publishing house after three years of preparation. It is the translation of a monograph, richly illustrated, about the history of Russian-Norwegian relations in the nineteenth and early twentieth centuries, originally published in Norwegian by the Pax Forlag AS, Oslo under the title "Russland kommer nærmere" in 2014.

**Keywords:** Russian-Norwegian relations, North of Russia and Norway, cooperation in history, goodneighborly relations, international seminar and conference in Nikel and Murmansk, tourism, borderland, Russian emigration.

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**Pavel V. Fedorov**, Doctor of Historical Sciences, Professor, Chief researcher at the Presidential Library named after Boris Yeltsin (St. Petersburg, Russia).

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Editor-in-chief — Kudryashova E.V. Executive secretary — Shepelev E.A. E-mail: e.shepelev@narfu.ru Editor — Grosheva T.E. E-mail: t.grosheva@narfu.ru Art editor (English version) — Kotlova E.S. E-mail: e.kotlova@narfu.ru Placement on the webpage by E.A. Shepelev.

Registration certificate El № FS77-42809 from November 26, 2010 Founder —Northern (Arctic) Federal University named after M.V. Lomonosov Address of the founder: 17, Northern Dvina Embankment, Arkhangelsk, Russia, 163002 Address for letters and other correspondence: "Arctic and North" journal, 17, Northern Dvina Embankment, Arkhangelsk, Russia, 163002 E-mail address of the editorial office: e.shepelev@narfu.ru

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