

EDN: OLIKNJ
УДК 39: 930.85

Natural Disasters and the Changing Materiality of Indigenous Peoples of the Amur and Sakhalin

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Received 17.02.2024, received in revised form 29.02.2024, accepted 18.03.2024

Abstract. Natural disasters (earthquakes, fires, floods) have a transforming effect on human culture, causing not only its change, population and animal migrations, but also the development of new territories. In traditional culture, the indigenous peoples of the Amur-Sakhalin region were less dependent on the effects of natural disasters because they had no industry, urban infrastructure, roads and bridges, agricultural land, and power plants. In the second half of the 20th – first quarter of the 21st centuries, they borrowed many components of industrial civilisation, as a result of which they are no longer able to eliminate the destruction after disasters on their own.

It seems relevant, based on the concept of anthropology of catastrophes, to trace the most obvious examples of transformation of materiality, features of adaptation to negative natural and social events. In order to collect ethnographic materials on the aftermath of the flood in July 2023, field research was conducted in the city of Komsomolsk-on-Amur and in the villages of Belgo and Verkhnyaya Ekon in Khabarovsk region. The vast majority of Amur Nanais people affected by the floods did not break ties with their native culture, did not change their places of residence, and retained their crafts, household activities, subsistence technologies, arts and crafts, and musical folklore.

Synthesis of the collected materials showed that the impact of the natural disaster (floods in 2013) has both negative and positive sides. The changes affected not only the sphere of materiality, but also spiritual culture, historical memory in the form of a new ethnographic museum, new mechanisms and opportunities for people's real influence on various branches of government.

Keywords: indigenous peoples of Amur and Sakhalin, natural disasters, changing materiality.

This work was supported by grant from the Russian Science Foundation (Project No. 23–18–00637) “The Changing Materiality of the Arctic and Siberia: Technologies, Innovations, Infrastructure” (supervised by V.N. Davydov). Source of funding MAE RAS.

Research area: ethnography; history.

Citation: Bereznitsky S. V. Natural disasters and the changing materiality of indigenous peoples of the Amur and Sakhalin. In: *J. Sib. Fed. Univ. Humanit. soc. sci.*, 2024, 17(4), 792–800. EDN: OLIKNJ



Природные катастрофы и меняющаяся материальность коренных народов Амура и Сахалина

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Аннотация. Природные катастрофы (землетрясения, пожары, наводнения) оказывают трансформирующее воздействие на культуру людей, вызывая не только её изменение, миграции населения и животных, но и освоение новых территорий. В традиционной культуре коренные народы Амура–Сахалинского региона были менее зависимы от последствий природных катастроф, так как не имели промышленности, городской инфраструктуры, дорог и мостов, сельскохозяйственных угодий, энергетических установок. Во второй половине XX – первой четверти XXI вв. они заимствовали многие компоненты промышленной цивилизации, вследствие чего самостоятельно ликвидировать разрушения после катастроф они уже не в состоянии.

Представляется актуальным на основе концепции антропологии катастроф проследить самые очевидные примеры трансформации материальности, особенности адаптации к негативным природным и социальным событиям. Для сбора этнографических материалов о ликвидации последствий наводнения 2013 г. в июле 2023 г. проводились полевые исследования в г. Комсомольске-на-Амуре, в селах Бельго, Верхняя Эконь Хабаровского края. Подавляющее большинство амурских нанайцев, пострадавших от наводнения, не прервали связей с родной культурой, не изменили мест проживания, сохранили промыслы, домашние занятия, технологии жизнеобеспечения, декоративно-прикладное искусство, музыкальный фольклор.

Синтез собранных материалов показал, что воздействие природной катастрофы (наводнения 2013 г.) имеет как негативные, так и позитивные стороны. Изменения коснулись не только сферы материальности, но и духовной культуры, исторической памяти в виде нового этнографического музея, новых механизмов и возможностей реального воздействия людей на различные ветви власти.

Ключевые слова: коренные народы Амура и Сахалина, природные катастрофы, изменение материальности.

Работа выполнена за счет гранта Российского научного фонда (проект № 23–18–00637) «Меняющаяся материальность Арктики и Сибири: технологии, инновации, инфраструктура» (рук. В. Н. Давыдов). Источник финансирования МАЭ РАН.

Научная специальность: 5.6.4 – этнология, антропология и этнография.

Цитирование: Березницкий С. В. Природные катастрофы и меняющаяся материальность коренных народов Амура и Сахалина. *Журн. Сиб. федер. ун-та. Гуманитарные науки*, 2024, 17(4), 792–800.
EDN: OLIKNJ

Introduction

Materiality is understood as materiality, subject matter, which occupy an important place in the system of traditional and modern life support system of indigenous peoples of the southern Far East, in crafts, economy and technological activities. All these components of ethnic culture are constantly changing in evolutionary and transformational senses. Changes in food patterns, clothing, types of dwellings and transport are associated with the perception, introduction of new materials, technologies for their production and use.

The scientific novelty and relevance of the problem lies in the application of the methodology of anthropology of catastrophes to find out the ethno-cultural specifics of adaptation to natural and social cataclysms, to make practical decisions in the Far Eastern regions affected by floods, earthquakes, fires.

The scientific problem is also in the sphere of understanding the variability of materiality, which is not only characterised by a high rate of transformation after natural disasters, but is gradually acquiring a global character. The transformation of materiality entails changes in the world of things, rural infrastructure in the flooded area of Belgo, Bolon, and affects the qualitative characteristics of human activity, communication channels and social relations.

Theoretical framework

M. K. Mamardashvili's concept of anthropology of catastrophes was used as a methodological basis for the research (Mamardashvili, 2011: 7–8, 11–12, 36). According to this concept, it is believed that the environment constantly challenges people in the form of earthquakes, fires, volcanic eruptions, and floods. Society must choose the most effective mechanisms to eliminate the negative consequences of a natural disaster, which may differ in ethno-cultural, economic, political, social and other contexts. New living conditions begin to be realised in the local region, because full restoration of the former one is no longer possible

technologically, mentally, as a result of mass deaths of people and animals.

Ethnologists have developed concepts of adaptation of different communities to the transformation of the ecological and social environment after a natural disaster (Adaptation of Peoples, 2010). Adaptation is a complex mechanism of interaction between ethnosocial and natural systems in the framework of co-evolution and co-adaptation (Arutyunov, 2001: 10–17; 2011: 5–19; 1982: 8–21; Golovnyov, Belorussova, Kissler, 2020; Golovnyov, Kukanov, Perevalova, 2018; Davydov, 2023: 82–99; Koptseva, Pashova, 2022: 280–293). The complex system “nature-society”, develops, on the one hand, according to the laws of evolution, on the other hand, with obligatory consideration of ethno-cultural features of the region, ethnic traditions and contacts (Tishkov, 2010: 5; Bondarev, Bolkhovitinova, 2019: 21–29; Bereznitsky, 1998: 23–31). A natural disaster leads to economic, social, ethno-cultural damage, changes in the system of life support and environmental safety (Shalikhovskiy, 2004; Gavriliyeva et al., 2017: 93–113; We and the Amur floods, 2016). An important place in the research of the problems of transformation of the culture of indigenous peoples of the North, Siberia, changes in their ethnicity, ethnic processes in general, is occupied by the methods of cultural anthropology (Koptseva, 2010: 554–562; 2012: 89–104; Koptseva, Kirko, 2015: 217–224; Koptseva, Pimenova, 2020: 36–44; Koptseva, Nagaeva, 2023: 1222–1239).

Statement of the problem

A field study was conducted in 2023 to investigate the ethno-cultural features of the Amur Nanais people's adaptation to the global catastrophe in the places where they live. Its specific purpose was to study the consequences of the flooding on the Nanais people's livelihood system; to identify aspects of the transformation of rural infrastructure in the flooded territory of the villages of Belgo, Bolon; and to study the impact of the flooding

on the life support system of the Nanais people. Belgo, Bolon; in studying the facts of the emergence of new materiality and living conditions of the Belgo Nanais in the cottage settlement built on the artificial dam in 2014; in finding out the suitability for economic life of houses partially destroyed by flooding; in analysing the positive consequences of the global flooding in Belgo village: in identifying the mechanism of solidarity and assistance to the victims; in the study of the process of establishing a school ethnographic museum on the basis of new exhibits found and rescued from the flood; in the study of the process of helping the Nanais people of Verkhnyaya Ekon village, Komsomolsk-on-Amur to help their relatives who suffered from the flood. The study of the global flood as a peculiar impetus for the preservation and revival of traditional Nanais culture.

Methods

To solve the problem we used practical and theoretical methods of ethnography and ethnology, social and cultural anthropology. Practical methods are based on direct observation, recording and primary analysis of ethnographic materials collected during expeditionary research on the Amur River; analysis of local government documents, scientific papers and periodicals about global disasters in the Far East (tsunami in the Kurils in 1952, forest fire in Khabarovsk region in 1976, earthquake in Sakhalin in 1995).

The main theoretical methods used were: comparative-historical, which allowed us to identify ethno-cultural features of adaptation of indigenous peoples to natural disasters, strategies for eliminating the consequences of global flooding, the ratio of traditional and modern components of culture in the life support system. On the basis of anthropological hermeneutics, archetypes and cultural codes of mentality and worldview of people in critical situations were studied.

The methods of legal anthropology were used to study the problems of the Amur Nanais of Belgo and Bolon villages related to the allocation of plots of land for the construction of cottages in the new settlement; and amount

of compensation for flood-affected farm owners. Specialists in the field of legal and anthropological research emphasise that even at present the legal framework in the field of protection of the rights of indigenous peoples of the North, the correlation of the system of traditional law, taking into account ethnic and regional specifics, with the state branch of legislation is very insufficiently developed (Sushkova, 2017: 165–170; 2020: 33–47). The relevance of using the above methods is due to the need to introduce new materials and hypotheses into the scientific turnover.

Discussion

The Russian Far East is notorious for the most devastating natural disasters of the second half of the 20th – first third of the 21st centuries. For example, in November 1952, as a result of an underwater earthquake in the Pacific Ocean, huge waves over ten metres high arose, which destroyed the town of Severo-Kurilsk and several settlements (Onkotan, Okeanskoye, Utesnoye, Levashovo, Kamenisty, Galkino, Podgornyy, etc., various structures on the islands of Shumshu and Paramushir, in the traditional territories of the Ainu people). The tsunami reached Kamchatka and the coast of Primorsky region. Several thousand people died, but the exact details of the tragedy are still classified. Eyewitnesses recalled that a day before the catastrophe all nature in the Northern Kurils suddenly became quiet. Old-timers, who had spent their entire lives on the Kuril Islands, somehow inexplicably felt the tsunami and went to the tops of the hills, where they managed to escape the giant waves. Before the tsunami, people felt earth tremors to which they had long been accustomed and stayed in their homes. The more experienced, primarily fishermen, noticed a strong sea tide. This served as a signal to the men, who also escaped on the uplands. They spent several days in army dugouts, waiting for ships with help from Petropavlovsk-Kamchatsky and Vladivostok. Despite the general grief, there were some people (both civilian and military) who engaged in looting: they broke into safes and took money, took away food, alcohol, and belongings. The victims were taken to

Vladivostok, Kamchatka, and other regions, where they received monetary compensation, clothes and shoes.

There was no information about the tragedy in the Kuril Islands in the mass media due to a ban by the authorities. Only after these sad events was it decided to establish a tsunami warning service at seismic and meteorological stations in the Kuril Islands, Sakhalin and Kamchatka (Piip, 2005: 37–43; Nikonov, 2006: 48–58).

The south of the Russian Far East, covered with coniferous and deciduous forests, takes one of the first places in the country in the number of natural fires, which not only cause great harm to flora, fauna, people, but also become the cause of subsequent floods, as moisture from melting snow, rain is not retained in the mountains without plants and goes to the valleys, to settlements (Beloserkovich, 2016: 381–385).

In October 1976, a cyclone from Mongolia brought a sharp rise in temperature to Khabarovsk region. As a result of dry thunderstorms, the taiga caught fire, the fire began to spread at a speed of 130 kilometres per hour. The natural fire destroyed huge areas of taiga, completely eleven and partially nineteen settlements, affected military units, infrastructure, railways, highways and bridges. In particular, the villages of Toki and Duki were completely destroyed, and many residents of Vanino, Datta, and Zavety Ilyicha were left homeless. Among the indigenous peoples, the Nanais, Negidals, Orochis, Evenkis and others suffered from this disaster. The catastrophe was complicated by explosions of ammunition at military warehouses. In Vanino, people escaped in a bomb shelter built inside a cliff. Smoke from the fire covered the entire Tatar Strait, part of the Sea of Japan, Sakhalin, the Kurils, reached north-east China and even the coast of Alaska (Savchenko, 2006). The consequences of this fire, the most destructive in the Soviet Union in 1976, were dealt with by a government commission that included the highest civilian and military officials of the time. Overall, this global disaster changed the way of life of several generations of people in the Far East region.

Several thousand people died as a result of the earthquake in Neftegorsk in northern Sakhalin in May 1995. According to experts, it was the most powerful earthquake in the history of geophysical observations in the area since the early 20th century (Neftegorsk Earthquake, 1998). As in many other similar situations, many casualties could have been avoided if there had been a reliable system of seismic stations, and if officials and relevant services had started rescuing people immediately rather than half a day later. The houses for the oil workers were built in the 1960s with extremely poor quality materials and without regard for the seismicity of the region. The completely destroyed settlement was not rebuilt, but a memorial was created in its place in memory of the victims.

In 2013, the Amur River in Khabarovsk region experienced the largest flood in 100 years. The level of the Amur exceeded the norm by nine metres and the Nanai villages of Belgo and Bolon were completely flooded. The villages of Belgo and Bolon were completely flooded. In the Amur district of Khabarovsk region, Lake Bolon – the “Nanais Sea” – overflowed and flooded dozens of houses in the village of Achan. The village of Bolon became known as one of the heavily flood-affected settlements.

Local Nanais people (more than 900 people) resolutely refused to move to a new place of residence in the district centre of Amursk, Elban and Ommi settlements. People refused to move even though the settlement of Bolon was initially mistakenly built in a flooded place, in a low-lying area between the beds of two rivers. 80 per cent of the dwellings were flooded, the vast majority were deemed unfit for further habitation, and some were subject to major repairs. Only a small part of the flats were privatised, and many houses had no documents or owners. All this had a negative impact on the legal basis for the final decision on assistance to flood victims. All flood victims were paid 10,000 roubles each, and compensation for lost property was 100,000 roubles. People were afraid of the unknown, did not want to lose their usual jobs on the railway, did not believe the authorities, and succumbed to rumours and

gossip when discussing options to move the village two kilometres further along the Amur River bank (Ko, 2013; Residents of Bolon village, 2014).

A survey in Belgo village revealed that all of its residents were Nanais and also refused to move to another location (Author's field materials, 2023). The government decided to build a new settlement (98 cottages) on a rockfill dam. The people refused to leave the area developed by their ancestors hundreds of years ago, as the area is different in terms of fishing and culture. The Nanais people fish year-round in the Amur River and Belgo Lake, and collect food, medicinal and technical wild herbs in the taiga. Belgo is located fifteen minutes by motorboat from Komsomolsk-on-Amur, where the Nanais can buy all the things, equipment, machinery, clothes, shoes, books, gadgets necessary for fishing and everyday life, visit museums and theatres, beauty salons and stadiums.

The number of Nanais people in the village of Belgo. As of 1 January 2023, there were 222 people in Belgo village (out of a total of 421). However, only employees of the secondary school, village administration, private shop, medical and obstetric station, post office and the Rural House of Culture had permanent jobs. The rest of the Nanais seasonally worked on a rotational basis at mining enterprises, at various factories in Komsomolsk-on-Amur, and as fishermen in commercial fishing companies in the Amur Liman.

New cottages for flood-affected people are equipped in accordance with all modern requirements for a comfortable, full-fledged life: they have power plants, central electricity, mobile communications, individual heating systems, powerful pumps extracting clean drinking water from artesian wells, garden plots, outbuildings, cellars, greenhouses etc.

Human casualties were avoided because people were warned of the impending disaster in advance, and all structures of the Ministry of Emergency Situations and other relevant special services were activated in time. After the disaster, Nanais materiality and materiality as important components of ethnic culture changed and new meanings and possibilities

emerged. The functions of materiality acted as a modelling sign system for receiving, storing and transmitting information.

In particular, this was demonstrated by the exhibits of Nanais culture found in attics of houses when saving household belongings from impending water and, as a result, forming a new school ethnographic museum. This process of creating new material objects, valuable things containing historical memory, was a two-way process: it was people who constructed the things necessary for subsistence, but it was the essence and functions of things that had the strongest influence on ethnic culture, on the emergence of innovations. Changes in materiality, infrastructure, things, rural buildings, materials, technologies of their processing, tools, instruments, means of transport had an impact on the nature of social relations of the Amur Nanais, communications between people and animals fisheries.

Thus, the flood caused not only negative material losses, but became an impetus for positive social consequences, for strengthening social solidarity, for enhancing mobility, for intensifying processes of ethno-cultural adaptation, for improving various crisis management tools.

In the context of the ongoing and current consequences of the global flooding in the Komsomolsky district of Khabarovsk region, complex ethno-cultural, confessional, socio-cultural processes, the correlation between ethnicity, central and regional branches of government has been most clearly revealed. This aspect may become a relevant topic for further research, both in theoretical and empirical dimensions, including the dialogue between ethnic communities and state elites. The ethno-cultural potential of the Amur indigenous peoples was most effectively realised not only at the time of the natural disaster, but also during its elimination and restoration of their habitual way of life, trades, cultural traditions, everyday life and materiality. After the flood, the Amur Nanai's subsistence system acquired new components, often foreign cultural ones, which simultaneously transformed and evolved in food patterns, clothing, types of dwellings

and transport, and the Amur Nanai's materiality began to acquire a changing character.

Conclusion

The above-mentioned fires, earthquakes and tsunamis have caused numerous victims, so they are a priori considered tragedies. The 2013 Amur flood as a global natural catastrophe cannot be regarded with absolute certainty as evil or good. The Amur river system was naturally cleaned, lakes and swamps were filled with fresh water, biodiversity increased, new plants appeared on land and in water bodies as a food resource for fish, which is a reliable source of food for people.

The Nanais people of Belgo, Bolon, and Achan showed their best side in the process of overcoming negative natural factors, as their ethnic leaders became active, and public organisations and associations of small indigenous minorities of the North began to work. As a result, people were able to demand from regional officials that the consequences of the flooding be quickly eliminated, and from the central authorities money and equipment to overhaul the old logging road, which had turned into a reliable dirt highway. After learning about the flooding after a telethon on federal channels, a huge number of Russians responded and organised fundraising. The people themselves, who had lost their homes, furnishings, household appliances and objects with the status of spiritual values, united and remembered the best aspects of their ancient culture and ethnic identity.

The specific results of the field research in Belgo, Verkhnyaya Ekon, and Komsomolsk-

on-Amur villages can be classified into several main blocks: vivid memories of the Nanais people of Belgo village about the flood; changes in rural infrastructure and material conditions in the Belgo village; the emergence of a new school ethnographic museum as a positive consequence of the flood; and the peculiarities of the material and spiritual culture of the Nanais people of Verkhnyaya Ekon village. The flood as an impetus for more active revival and preservation of traditional culture by the Nanai people of Komsomolsk-on-Amur.

The study of the evolution and transformation of the Amur Nanais people's fishing activities, belongings, subsistence technologies, everyday life, and spiritual aspirations after the 2013 natural disaster showed that their society is undergoing complex processes of adaptation and changes in material culture. This can be traced, on the one hand, in the change in the location of the main settlement, in the transition of residents to new favourable cottages. On the other hand, the preservation and reconstruction of former dwellings that were in the flood zone, after their repair, as farm buildings for gardening, bases for storing boats, motors, nets and other equipment necessary for fishing is observed. People have not abandoned the hearths of their ancestors. The analysis of these trends and technologies made it possible to analyse not only changes in materiality, but also the ways in which Nanais people adapted to new things and technologies, and to consider the material component of anthropogenic impact on the surrounding landscape.

References

Adaptatsiya narodov i kul'tur k izmeneniyam prirodnoj sredy, social'nyim i tehnogennym transformatsiyam [Adaptation of peoples and Adaptation of peoples and cultures to changes in the natural environment, social and technogenic transformations] otv. red. A. P. Derevyanko, A. B. Kudelin, V. A. Tishkov. Moscow: Rossijskaya politicheskaya `enciklopediya, 2010. 544.

Arutyunov S. A. Processy i zakonomernosti vhozhdeniya innovatsij v kul'turu `etnosa [Processes and regularities of innovations in the culture of ethnos]. In: *Sovetskaya `etnografiya* [Soviet ethnography]. 1982, 1, 8–21.

Arutyunov S. A. Osnovnye pischevye modeli i ih lokal'nye varianty u narodov Rossii [Main food models and their local variants in the peoples of Russia. Russia]. *Traditsionnaya pischa kak vyrazhenie `etnicheskogo samosoznaniya*. Moscow: Nauka, 2001, 10–17.

Arutyunov S. A. Ot spokojnoj k uskol'zayuschej material'nosti: o problemah `etnograficheskogo izucheniya material'noj kul'tury (interv'yu N. V. Bogatyr') [From calm to elusive materiality: on the problems of ethnographic study of material culture (interview with N. V. Bogatyr)]. In: *Etnograficheskoe obozrenie* [Ethnographic Review]. 2011, 5, 5–19.

Beloserkovich A. V. Rol' lesnyh pozharov v izmenenii `ekosistem v regional'nom aspekte na primere Habarovskogo kraja [The role of forest fires in ecosystem change in the regional aspect on the example of Khabarovsk Krai]. In: *Molodoj uchenyj* [Young Scientist]. 2016, 3(107). 381–385.

Bereznitsky S. V. Putem vzaimovliyaniya. Promyslovye kul'ty amurskih narodov i ih `etnokul'turnye kontakty [By the Way of Mutual Influence. Fishing Cults of the Amur Peoples and their Ethnocultural Contacts]. In: *Rossia i ATR* [Russia and the ATR], 1998, 4, 23–31.

Bondarev V. P., Bolhovitinova Yu. A. Social'nye posledstviya katastroficheskikh navodnenij [Social consequences of catastrophic floods]. In: *Vestnik Moskovskogo universiteta. Ser. 5. Geografiya* [Bulletin of Moscow University]. 2019, 5, 21–29.

Davydov V. N. Issledovaniya mobil'nosti v Arktike: ot teorii k dejstviyu [Mobility studies in the Arctic: from theory to action]. In: *Etnografiya* [Ethnography]. 2023, 1(19), 82–99.

Gavril'eva T. N., `Ejkel'berger D. Ch., Kontar' E. E., Filippova V. V., Savinova A. N. Navodneniya v Arktike: vozdejstvie na zhizn' mestnyh obschin v Rossii i SShA [Floods in the Arctic: Impact on the life of local communities in Russia and the USA]. In: *Vserossijskij `ekologicheskij zhurnal* [All-Russian Ecological Journal]. 2017, 8, 93–113.

Golovnev A. V., Belorussova S. Yu., Kisser T. S. *Oчерки antropologii dvizheniya* [Sketches of anthropology of movement]. St-Petersburg: MA`E RAN, 2020. 336.

Golovnev A. V., Kukanov D. A., Perevalova E. V. *Arktika: atlas kochevyh tehnologij* [Arctic: atlas of nomadic technologies]. St-Petersburg: MA`E RAN, 2018. 352.

Ko V. Zhiteli postradavshego ot navodneniya habarovskogo poselka otkazalis' pereezhat' [Residents of the flood-hit Khabarovsk village refused to move]. In: *Rossiyskaya gazeta* [Rossiyskaya newspaper]. 26.11.2013. 267(6243).

Koptseva N. P. Indigennye narody Krasnoyarskogo kraja: k voprosu o metodologii kul'turnyh issledovaniy [Indigenous peoples of the Krasnoyarsk Territory: on the question of the methodology of cultural research]. In: *Zhurnal Sibirskogo federal'nogo universiteta. Gumanitarnye nauki* [Journal of the Siberian Federal University], 2010, 3(4), 554–562.

Koptseva N. P. Problema metodologii sovremennyh kul'turnyh issledovaniy: vozmozhnosti klassicheskoy britanskoj social'noj antropologii [The problem of the methodology of modern cultural research: the possibilities of classical British social anthropology]. In: *Gumanitarnye i social'nye nauki* [Humanities and social sciences], 2012, 4, 89–104.

Koptseva N. P., Pimenova N. N. Kul'turnye transformacii: vozmozhnosti izucheniya [Cultural transformations: opportunities for study]. In: *Sibirskij antropologicheskij zhurnal* [Siberian Anthropological Journal], 2020, 4(03), 36–44.

Koptseva N. P., Pashova E. V. Social'nye posledstviya izmeneniya klimata: mirovyje praktiki izucheniya i prognozirovaniya [Social consequences of climate change: world practices of studying and forecasting]. In: *Zhurnal Sibirskogo federal'nogo universiteta. Seriya: Gumanitarnye nauki* [Journal of Siberian Federal University. Series: Humanities]. 2022, 15(2), 280–293.

Koptseva N. P., Kirko V. I. The impact of global transformations on the processes of regional and ethnic identity of indigenous peoples Siberian Arctic. In: *Mediterranean Journal of Social Sciences*, 2015, 6(3), 217–224.

Koptseva N. P., Nagaeva O. S. Tradicionnoe hozyajstvo korenyh malochislennyh narodov Severa v Krasnoyarskom krae: problemy i perspektivy razvitiya [Traditional economy of small indigenous minorities of the North in Krasnoyarsk Krai: problems and prospects of development]. In: *Zhurnal Sibirskogo federal'nogo universiteta. Gumanitarnye nauki* [Journal of the Siberian Federal University], 2023, 16(7), 1222–1239.

Mamardashvili M. K. *Soznanie i civilizaciya* [Consciousness and civilisation]. St-Petersburg: Azbuka-Attikus, 2011. 288.

My i amurskie navodneniya: nevyuchennyj urok? [We and the Amur floods: an unlearned lesson?]. Pod red. A. V. Shalikovskogo. Moscow: Vsemirnyj fond dikoj prirody (WWF), 2016, 216.

Nikonov A. A. Kuril'skaya katastrofa Kuril'skaya katastrofa 1952 g., vyzvannaya cunami [Kuril catastrophe Kuril catastrophe of 1952 caused by tsunami]. In: *Izvestiya RAN Ser. Geograficheskaya* [Izvestiya RAN. Series Geographic], 2006, 2, 48–58.

Pijp B. I., Belousov A. B. Zasekrechennoe cunami [Secret tsunami]. In: *Priroda* [Nature]. 2005. Maj 5. 37–43.

Savchenko A. Gorelo vse: zemlya i vody [Everything was burning: land and water]. In: *Tihookeanskaya zvezda* [Pacific Star]. 02.11.2006.

Shalikovskij A. V. *Osnovy racional'nogo ispol'zovaniya pavodkovo-opasnyh territorij* [Fundamentals of rational use of flood-hazardous territories]. Avtoref. diss... d.g.n. Chita, 2004. 40.

Sushkova Yu. N. Metodologiya yuridicheskoy antropologii [Methodology of legal anthropology]. In: *Social'no-politicheskie nauki* [Socio-political sciences], 2017, 1, 165–170.

Sushkova Yu. N. Osobennosti yuridicheskoy prirody obychnogo prava [Features of the legal nature of customary law]. In: *Vestnik Moskovskogo universiteta. Seriya 11: Pravo* [Bulletin of Moscow University. Series 11: Law]. 2020, 3, 33–47.

Zemletryasenie v Neftegorske (28 maya 1995 g.) [Earthquake in Neftegorsk on 28 May 1995]. In: *Katastrofy konca XX veka*. Moscow: URSS, 1998. 400.

Zhiteli sela Bolon' ne dali snesti razrushennyj navodnieniem poselok [Residents of Bolon village did not allow to demolish the village destroyed by the flood]. In: *Komsomol'skaya Pravda* [Komsomolskaya Pravda]. Habarovsk. 28.01. 2014.