

# FINAL REPORT



## ***‘Future Arctic Societies: Scenarios, Innovations, Best Practices & Actors’***

*in Rovaniemi, Inari, Ivalo, and Hetta (Finland);  
and Kirkenes, Neiden and Kautokeino (Norway)*

*November 12-19, 2019*

**(UArctic) TN on Geopolitics and Security**

Editor:

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## **About the Idea of the Calotte Academy<sup>1</sup>**

The Calotte Academy (CA) is on the one hand, an annual travelling symposium in Europe's Arctic, North Calotte region and an international, independent, academic forum in the Arctic. It is designed first, to promote interdisciplinary discourse and second, to foster academic and policy-oriented dialogue among members of the research community, as well as a wide range of other northern stakeholders, such as policy-makers, civil servants, community leaders and planners, business representatives, and members of academia. On the other hand, it is an international summer school (and in 2019 a winter school) for early-career scientists, particularly PhD candidates and post-docs with an aim to implement the interplay between senior and young researchers, and post-graduate students.

The CA is an independent, though not established, academic forum with tens of scientific presentations, lively discussions, and written reports. We also do interdisciplinary border studies by having several crossings of national borders (this year only the Finnish-Norwegian, while usually also Norwegian-Russian, Russian-Finnish, and sometimes Finnish-Swedish and Norwegian-Swedish), as well as crossing borders between Finland and the Sámi Area, Sápmi in Finland and Norway.

The Academy has been arranged annually since 1991 with an aim to bring together academics and other experts, policy-shapers and other stakeholders from different Arctic and European states, as well as students and scholars with different academic backgrounds and in different stages of their academic careers. The Academy has a participatory approach with sessions in several destinations with local audiences and expertise. Furthermore, it aims to contribute to discussions and debates over regional development through inviting local and regional stakeholders to participate in the sessions with the intention of sharing research results and insights, creating networks and fostering dialogue between the local and national actors and the international scientific community.

At the Calotte Academy we use to combine a few things, such as research / theory and practice / action; different studies / inter-disciplinarity and different knowledges (trans-disciplinarity); research, supervision and studying / teaching; presentation, participation, interactivity; brainstorming, planning, sharing ideas, having division of work; different scales from local to global; and final, synergy between international networks (e.g. Northern Research Forum, TN on Geopolitics and Security, Arctic Yearbook).

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<sup>1</sup> This is an updated version of the description of the Calotte Academy by Lassi Heininen in the final report of the 2016 Calotte Academy.

Following from this, in each session of the Academy the annual overarching theme is discussed holistically from many angles and disciplinary approaches, and from the perspectives of past(s), present(s) and future(s), as well as from global, Arctic and local context in the European Arctic. This principle has been implemented at the recent Calotte Academies, and will be implemented in the future events. In addition, the overarching themes of five of the previous Calotte Academies much related to resources:

- May 28 – June 4, 2012 in Kiruna and Abisko, Sweden, Tromsø, Norway and Inari, Finland under the theme “Water – globally and in North Calotte;”
- May 16-23, 2013 in Rovaniemi and Inari, Finland, Tromsø, Norway and Kiruna, Sweden under the theme “Resource Geopolitics – Energy Security;”
- June 1-8, 2014 in Rovaniemi and Inari, Finland, Kirkenes, Norway, and Murmansk and Apatity, Russia under the theme “Resource Geopolitics – Sovereignty;”
- May 31-June 7, 2015 in Rovaniemi, Salla and Inari, Finland, in Kirkenes, Norway, and in Murmansk and Apatity, Russia under the theme “Resources and Security in the Globalized Arctic;”
- May 30 - June 5, 2016 in Rovaniemi and Inari, Finland, in Kirkenes, Norway, and in Murmansk, Russia under the theme “Resilience related to Sustainable Development in Globalization.”

Then the most recent Academies started to bring in a new thematic phase emphasizing discourses, premises, paradigms and methods:

- June 1–12, 2017 in Inari, Finland, Kirkenes, Norway, Apatity, Russia, and Umea, Sweden under the theme “Perceptions of the Arctic: Rich or Scarce, Mass-scale or Traditional, Conflict or Cooperation?”
- and June 3–10, 2018 in Rovaniemi and Inari, Finland, Neiden and Kirkenes, Norway, and in Apatity and Kirovsk, Russia under the theme “Discourses on the Arctic – (inter)disciplinary theories and methods of Arctic research.”

This path was continued with the 2019 Academy under the theme “Future Arctic Societies: Scenarios, Innovations, Best Practices & Actors”. (For the final reports of previous Calotte Academies visit: <https://calotte-academy.com/final-reports>)

Correspondingly, the CA has a few rules and principles: First, and foremost, that there is always time for open discussion – usually this means about two times more time for open discussion than for a presentation. Second, that each participant, in addition of her / his presentation, is asked to write a report on one session for the final report of the Academy, and actively participate discussions. Final, each participant is asked to be flexible, as are the organizers, but keep the time frame and schedule in sessions and in travelling.

Thus, the Calotte Academy uses to implement the social relevance of science, or science diplomacy, by having the interplay between science and politics as one of the main aims. This has been there

since the first Calotte Academy, which took place in May 1991 in Inari, Finland; to notice that the Arctic Environmental Protection Strategy (AEPS) was signed at the first ministerial meeting between the eight Arctic states in June 1991 in Rovaniemi, Finland, and the Arctic Council was established in September 1996 in Ottawa, Canada. During its (more than) 25 first years the Academy has built partnerships between researchers and community members, and done community-based research as well as developed research models for communities.

As an international platform for policy-oriented dialogue and dissemination of research with an emphasis on both expertise and dialogue the Calotte Academy is a post-modern academic stage and workshop that fosters interdisciplinary, knowledge(s), and dialogue-building, and implements the interplay between science and politics. Since 2002 the Academy has served as a sub-forum for Open Assemblies of the Northern Research Forum. Since 2010 the CA has acted an annual doctoral summer school for PhD candidates and functioned as the main annual forum for the discussions and research planning of the Thematic Network (TN) on Geopolitics and Security. The TN is a joint international, academic network between the University of the Arctic and the Northern Research Forum (see, <https://arcticpolitics.com>). The Network also publishes The Arctic Yearbook - the 8<sup>th</sup> volume devoted to the “Redefining Arctic Security” was launched in November 2019 – via which a state of Arctic geopolitics and security is documented, analyzed and contributed to (see, <https://arcticyearbook.com>). Here the Arctic Yearbook is a major forum for dissemination of the main findings and highlights of the Calotte Academy, as well as further discussion on the themes.

To conclude, the Calotte Academy is an interdisciplinary brainstorming meeting to bring researchers and other experts from different fields, regions and countries together for to discover innovations and new methods, and produce international research projects as well as plans and applications. This kind of a “school of dialogue” with serious efforts and flexibility aims to create an open academic discussion, and participatory by nature with an idea to share knowledge and experiences with communities. Behind is a need for science and the scientific community to take seriously, and literally the social relevance of science, and that science is with values, and this means more than labs - science is about people(s), societies and the environment. Briefly saying to ‘take care’ - instead of having corrupted norms of double standards, or the current schizophrenic approach of neoliberalism supported by specific expertise and meritocracy - is possible to interpret as a new norm with values. In these turbulent times for Academia, as it is in many European countries due to several pressures and cuts in funding, this kind of academic forum is a much needed democratic and equal space for a dialogue and brainstorming.

## About the Procedures

The Calotte Academy is structured so that there are academic sessions with scientific presentations and brainstorming discussion in each location, as well as a public session, based on invitations, in one or two of the locations. Since dialogue and application of science are the most important goals of the Calotte Academy, it is recommended to remember and apply the open-ended nature of a dialogue and how to cross disciplines, sectors and other borders. A fundamental precondition for this is to have time enough for questions, comments and open discussion as well as enough patience for listening to others' argumentation. Following from these principles, the sessions are structured so that each presentation is allocated altogether 30-45 minutes out of which **15 minutes (maximum)** are reserved for the presentation and the rest for questions and comments, and open discussion.

The 2019 Academy was also an interdisciplinary brainstorming meeting for scholars and other experts from different fields and disciplines all over the circumpolar North to discover innovations and new methods and to make plans and possible applications for international research project(s): in the Calotte Academy sessions themes and content of further Calotte Academies were brainstormed, as well as those of other events of the TN on Geopolitics and Security.

## Theme of the 2019 Calotte Academy

The theme of the 2019 Academy was "Future Arctic Societies: Scenarios, Innovations, Best Practices, Drivers & Actors". In this year the travelling symposium discussed Arctic issues and discourses in the context of the regional and globalized Arctic theoretically and holistically from many scientific and knowledge angles and multi/inter-disciplinary approaches, from academic and policy-oriented ones, including exploitation, transportation, tourism, infrastructure and technologies, industries, film-making, as well as telecommunications and digitalisation. This was done from the perspectives of past(s), present(s) and in particular future(s), and from global, international, Arctic and local contexts in the European Arctic, as well as from points of view of different stakeholders from indigenous peoples to business. What are their ecological and socio-economic impacts, and what kind of 'new sustainable economies' would be needed/foreseen? Final,

who are the involved actors, and what are their interests, and how do they take into consideration ‘societal security’, and how do they help to develop pathways to plausible sustainable futures?

The focus of the 2019 Academy was inspired by the substantial, multidimensional and multi-theoretical discussions and debates on perceptions of, and discourses on, the Arctic and Arctic politics in the previous (e.g. 2017 and 2018) Academies’ sessions (see, Final Reports at <https://calotte-academy.com>). This was continued by having the main focus on ‘societal security’ and what kind of Arctic societies, as well as scenarios, innovations, best practices for them, there could/should be in the future.

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<https://calotte-academy.com>



## Program & Session Reports

### Tuesday, November 12

Korundi/Arktikum, Rovaniemi

Participation in “Rovaniemi Arctic Spirit 2019” conference

### Wednesday, November 13

Arktikum, Rovaniemi

Participation in “Rovaniemi Arctic Spirit 2019” conference

#### Opening Session

- Introduction of participants
- Opening words and introduction of the idea, methods and procedure of the Calotte Academy and Calotte Academy related activities by Lassi Heininen
- Introduction of the program and division of work in the 2019 Calotte Academy, by Gerald Zojer and Salla Kalliojärvi

#### Session 1: “Digitalisation as a Driver for Changes in the Arctic”

(Rapporteur: Clemens Jöbstl)

- Mirva Salminen  
*Digitalisation and cybersecurity in the European High North: A human security perspective*
- Gerald Zojer  
*Interconnection between software property regimes and digital security in the Arctic*
- Natalia Loukacheva  
*Communications Infrastructure in the Canadian Arctic and communities: closing the gap*

Mirva Salminen: *Digitalisation and cybersecurity in the European High North: A human security perspective.*

The discussion started about the role of Google in Cybersecurity, especially in Finland and the fact, that collecting personal data is not a crime as long as it does not concern sensitive information. Furthermore, the specific of Arctic digitalisation was substantiated as a combination of peripheric areas, often with indigenous inhabitants and, due to the vast distances, mostly bad infrastructure. Also the effects of the General Data Protection Regulation were taken into concern as a conversation starter for the public discourse about cybersecurity. Finally the audience engaged in learning the precise definition of the terms „security“ and „safety.“

Gerald Zojer: *Interconnection between software property regimes and digital security in the Arctic.*

Following Mr. Zojer's presentation, differences concerning security and user service between leading Copyright and Copyleft operation systems were discussed on. Mainly Free and open-source software and the role of democracy within the different involved companies were discussed about as much as different approaches to government structures in corporate software. Questions were raised about the development of specific apps for arctic purposes. The skills for programming these apps are thought in Sami Education Center.

Natalia Loukacheva: *Communications Infrastructure in the Canadian Arctic and communities: closing the gap.*

Asked about the relevance of infrastructure in the Arctic, Mrs. Loukacheva referred on the Sustainable Development Goal number 17, that calls modern communications a „matter of survival“. Further questions were discussed concerning the influence of these technologies on peripheric regions like the Arctic and its populations. The changing priorities related to development over the past decades, realizing the importance of communication was another conversation topic. Additional questions about the technological realisation via satellites or cable and its inherent pros and cons concluded the session.

## **Thursday, November 14**

Inari and Ivalo

### Inari Welcoming Session: “Inari Perspectives”

(Rapporteur: Polina Irodova)

- Toni K. Laine, mayor of Inari municipality  
*Welcoming words*

The session opened up with the greetings and presentation of Toni K. Laine, the mayor of Inari municipality. Toni made an introductory speech on Inari municipalities, depicting background information on population statistics, key regional destinations, tourism dynamics, challenges and potential for the municipality's development. The strengths of the regions include vast area, multicultural community and numerous exotic destinations. On the other side of the coin are the high costs of service production, harsh climate, dependency on air connections. The follow-up discussion revealed the contradictory role of the transport and logistical networks in the Inari region. On the one hand, new railroad infrastructure may benefit local societies by decreasing costs of goods delivery and bridging the area with the neighboring countries and Finland. On the other hand, the mayor outlined the potential harm which the railroad can bring to local communities like disturbing the nature and the local activities, e.g. reindeer herding.

## Session 2: "Global Change and Non-Governmental Actors"

(Rapporteur: Polina Irodova)

- Sonia Malghaes  
*NGOs and the Critical Geopolitics of Climate Change: Spatializing Practices of Power Through the Arctic*
- Salla Kalliojärvi  
*Climate change and private governance - Can transnational business organizations offer the solution to climate change?*
- Hanna Lappalainen & Stephany Mazon  
*Arctic and Northern high latitudes research - Large scale research question*

In her presentation, Sonia Malghaes raised the question of how has the Arctic been framed within the NGO's specializing politics of climate change, using the cases of Greenpeace and WWF. In her research, Sonia focused on textual and visual communication developed to address the issue of climate change which form geopolitical discourse in the Arctic region. The discussion shed more light on the issue of to which extent does this framing build upon global and local (environmental) governance centers of power.

Salla Kalliojärvi raised an issue of the role of transnational business organizations in climate governance and dedicated her presentation to the opportunities the companies have to influence climate policy and action. Salla outlines that at the moment over 7,000 companies with over 50% of global market capitalization disclosed environmental data through CDP. The discussion which followed the presentation brought about an important fundamental question of capabilities of the world community to solve climate change within the framework of capital economy primarily driven by these large corporations. During the session, it was outlined that with the worsening situation, the commercial potential to mitigate climate change also expand which highlight the unique role and capabilities of big companies to take useful actions and these actions could be even more profound than these of the many states. However, the participants agreed that it goes without

saying that the efforts should be joint and only the consolidation of efforts of companies, states, regions and cities can bring positive changes.

Stephany Mazon presented Pan-Eurasian Experiment (PEEX) Program as an international, multidisciplinary, multiscale bottom up initiative, established in autumn 2012 by five main scientific partners from Russia and China. Stephany outlined key study areas such as large-scale feedbacks and interactions between the land-atmosphere-ocean continuum in the North as well as transport and transformation of air pollution in China. The discussion was mostly focused on technical approaches and details of the Program like tracking technics to find out the transboundary movements of the polluting particles and feasibilities of geoengineering solutions.

### Session 3: “Sámi Perspectives & Education”

(Rapporteur: Karolina Sikora)

- Laura Olsén-Ljetoff, Secretary for International Affairs, The Sámi Parliament  
*The Sámi Parliament as an international actor*
- Marina Falevitch, Russian/International Coordinator, Sámi Education Institute  
*Experiences on developing indigenous tourism between Sápmi and Northwest Russia*
- Anzelika Krastina, International Coordinator/Senior Lecturer, Lapland University of Applied Sciences  
*Arctic Indigenous bachelor degree programme*

Laura Olsen-Ljetoff started her presentation by shedding a light on who are the Sami people. She indicated the basic facts about the Sami, for instance, the description of their livelihoods, used languages and inhabited territory. She explained the political status of the Sami people and the ways of exercising internal self-determination. In this context, she addressed the issue of self-governance through the special representative body of the Sami people - the Sami Parliament. Laura highlighted the legal basis on which the Sami Parliament operates and explained the Parliament's structure. She paid special attention to the international level cooperation, which has started in the 1950s, leading to the establishment of the Sami Council in 1956. In regards to the international strategy framework of the Sami Parliament, Laura specified that the Parliament is present on the regional level of Finnish Lapland, European Union's level and the United Nations' level, besides very close cooperation with the Finnish state. International strategy of the Sami Parliament prioritises Sami and regional cooperation, global indigenous peoples' cooperation, international human rights policy, international environmental policy, sustainable development and protection of cultural heritage.

The second speaker, Marina Falevitch presented the objectives and outcomes of two economic cooperation projects, directed towards developing 'indigenous' tourism infrastructure in Finland and Russia. The first project, titled 'ARGIS-NJAPOI-RAIDU Development of culture and nature-based tourism in Nenets Autonomous Okrug and Finnish Lapland (2006-2008)', was led by Sami Educational Institute. The project aimed at developing cooperation between the Nenets Region and Sami Region in Finnish Lapland. Activities concerned education in tourism business and

developing tourism products, especially in the Russian part. Particular emphasis was put on establishing transparent, safe and secure conditions for business entrepreneurs mainly through education. The second project: 'NEDA ORDYM Cultural Tourism Project of the Indigenous People of the North 2007-2013', concentrated on strengthening the identity of the Sami, Nenets and Komi people. The specific objective of the project was to provide training for entrepreneurs, both, already active in the labour market and start-ups. This aim encompassed also the involvement of public authorities and officials involved in tourism. The last presentation of the session, by Anzelika Krastina, concerned the project 'International Arctic bachelor for indigenous peoples'. The project is a part of Arctic Generation 2030 framework programme of the University of the Arctic. The partners of the project consist of Taymyr College (Russia), Norlisk State Industrial Institute (Russia) and Sami Education Institute (Finland). The model of the international bachelor for indigenous peoples of the Arctic consists of three phases. The first one aims at increasing the competences of the indigenous peoples in the Arctic. The second phase aims at obtaining secondary professional education in: reindeer herding, tourism, traditional handicraft, mass media and information technology. The last phase leads to obtaining a university degree, by integrating credits from secondary education.

#### Excursion 1: "Visit to Car Testing Site in Ivalo Test World"

- Janne Seurujärvi, Managing Director of Test World



*Illustration 1: Visit to Test World. (Photo by Test World)*

## Friday, November 15

Kirkenes and Neiden

### Session 4: “Media and Science Communication”

(Rapporteur: Adam Kočí)

- Sander Goes, researcher, The Barents Institute  
*Welcoming words at Barents Institute*
- Atle Staalesen & Thomas Nilsen, editors, The Barents Observer  
*The Barents region from a media perspective*
- Clemens Jöbstl  
*A Zapad 17 & Trident Juncture 18: Are we on the road to a new Cold War in the Arctic?  
Western European resonance of Zapad 17 and Trident Juncture 18 exercises.*
- Stephany Mazon  
*Science communication to build an inclusive future based on science.*

Our host for the session about Media and Science Communication was the Barents Institute in Norwegian coastal city Kirkenes located on the border with Russia. In the morning we arrived from Inari and were welcomed by words of the Sander Goes, a researcher at the Barents Institute, who introduced us to the work of the Institute and its responsibility. Mr Goes also appreciated the idea of Calotte Academy, which enables participants to get meaningful feedback.

Nearby the Barents Institute resides also the Independent Barents Observer (IBO), a journalist-owned online newspaper covering the Barents Region and the Arctic. Those owners are Thomas Nilsen and Atle Staalesen, who started his speech by describing the difficulties accompanying journalists in today's Russia. They are controlled by state agencies like Roskomnadzor (Federal Service for Supervision of Communications, Information Technology and Mass Media) and the freedom of speech is seriously endangered there. Every article of the IBO is translated also into the Russian language so its journalists have own experiences with the Russian censorship.

In January 2019, they published an article about a „homosexual Sámi man from northern Sweden, who lived through years of hardship and twice tried to kill himself, because of taboo and prejudices connected with his sexuality. He is now a happy man who works with mental health issues among young Swedish gays“ (Staalesen, 19. 2. 2019: Independent Barents Observer). Roskomnadzor found this article as a violation of Russian Federal Law when the story of the article should have propagated suicide. Journalists were not following the request to remove the article from their website and since then the IBO is blocked in Russia. Nowadays, half of the Observer editorial staff have banned access to Russia. On the other hand, Staalesen added that the attack on the IBO attracted the attention of newspapers across Scandinavia and Russia (Vedomosti, Novaya Gazeta or Interfax). Participants of the Academy were interested in the problematic of fake news in today's journalism. Thomas Nilsen, who participated in the Callote Academy in the 1990s, emphasised that



in IBO the verification process is very strict and they lose a lot of interesting article topics because of it. However, objectivity and independence are their main goals.

Afterwards, Nielsen described their work on the background of political development in the Barents region in the last 30 years. After the Cold War period, local people were quite optimistic due to developing regional cooperation. Unfortunately, the sanction against Russia after the annexation of Crimea harmed cross-border cooperation between Finnmark and Russia. Nowadays, there is a strong voice in Finnmark that claims to cancel the sanctions, but they need to follow the political regulations coming from Oslo. At the end of the presentation, journalists highlighted the 75th anniversary of the liberation of Finnmark by Soviet troops in October 1944, which took place in Kirkenes three weeks before (25th October). The celebration of anniversary was attended by foreign ministers of Russian Sergey Lavrov and his Norwegian counterpart Ine Eriksen Søreide. We also learned that during the Second World War Kirkenes was the second most bombed city in Europe (after Valletta in Malta).

Next speaker in this session was Clemens Jöbstl with his speech about two military exercises, which took place in Europe in 2017 and 2018. Firstly, Clemens explained the situation at the end of the Cold War era. He asks if the history repeats itself in connection to the recent rise of tensions between the West and Russia. Then he described both military exercises. Zapad 2017 was a joint strategic military exercise of the armed forces of the Russian Federation and Belarus. In mutual response, NATO initiated exercise Trident Juncture 2018 in Norway, North and Baltic Sea. Clemens investigated European press reaction (without Russian) on these exercises, which was very diverse. Exercise of NATO was perceived as an important step to European security. On the other hand, Zapad 17 was titled as a threat. Especially in the countries sharing borders with Russia, such as Baltic states, Finland or Poland (border with Kaliningrad Oblast). In the research, Clemens combined the historical approach – history of mentalities from Annales School with Google searches trends. He found out the considerable interested of people for searching these two exercises on the internet. Salla asked whether they were frightened or only curious. Clemens responded that in his research he focuses on people reaction, not real threats. At the end of the discussion, professor Heininen added that in general, we have to be very careful to distinguish between U. S. and NATO military activity. Also in the Arctic, we are victims of conflict of opinion, when states like Iceland or Canada hesitate to engage NATO into the region.

Stephany Mazon delivered us a speech about Communication of Science, which was followed by a keen roundtable discussion. As a member of INAR (Institute for Atmospheric and Earth System Research), Stephany wondered how to communicate science in her company. She brought us plenty of ideas, which very differ the way than science is usually communicated. We can mention art, social media, magazines, games, podcasts or workshops, where we can explain people the real impacts of climate change on our everyday life. Gerald thought about the idea, if games are a good way how to bring people closer to science, or we should go among them and talk to them instead. He opened the discussion on the question if social media contribute to the depersonalization of science. Sonia said that games and social media could be a good catalyst for how to attract people in the first stage. Thereafter it was discussed if the policymakers want to listen the scientists and implement their recommendations. Professor Heininen said that he has been cooperating with politicians for more than 30 years and it works well. He added that this is one of the most important

tasks of every scientist, especially those with the field of expertise in international politics. The whole discussion led us to reflect on how to talk about our research toward the public.

### Excursion 2: “Visit to Skolt Sámi Museum”



*Illustration 2: Visit to Skolt Sámi museum. (Photo by Adam Kočí)*

## **Saturday, November 16**

Travel from Inari to Hetta



## Sunday, November 17

Kautokeino

### Session 5: “Reindeer Herding and Indigenous People(s) Rights”

(Rapporteur: Sonia Magalhaes)

- Anders Oskal, Secretary General, The International Centre for Reindeer Husbandry
- Svein Mathiesen, UArctic Institute of Circumpolar Reindeer Husbandry (EALÁT)
- Lassi Heininen  
*New & emerging trends of Arctic Indigenous peoples (organizations)*

Session 5 was held on Sunday, November 17th, at the International Centre for Reindeer Husbandry, in Kautokeino, Norway, under the theme “Reindeer Herding and Indigenous People(s) Rights”. Anders Oskal and Svein Mathiesen’s presentation started by an outline of Kautokeino as a reindeer herding area and of reindeer husbandry as an indigenous way of life. Kautokeino is the largest reindeer area in the world - it used to be an area with only nomads - and one of the few municipalities where the Saami language is not only majority - 95% of the population speaks the Saami language - but also a language of instruction from the kindergarten to a PhD. It was noted the lack of understanding of reindeer husbandry in the governance system - with nomadism being placed in the marginal domain – and how the epistemic communities, based on a southern system of knowledge that privileges specialisation, overlook the similarities in the philosophy, the way it is organized and carried across the Arctic, as a nomadic way of life - a livelihood - that forms indigenous peoples culture and language.

Anders Oskal proceeded to introduce a reindeer herding-agriculture axis of understanding that emerges from the misleading assumption of reindeer herding as some kind of agriculture. Farming conducts an intense control of the animals, with food being brought to them. Reindeer herders, for their part, follow the herds, with no food being brought to the animals. The fundamental difference is the fact that reindeer herders made an agreement with nature, acknowledging that man can’t control it, which results in an understanding of reindeer herding as a human-coupled ecosystem. On the matter of climate change, the region experienced a 3.7 degrees Celsius warming and it was emphasized how a 2 degrees Celsius global warming represents a 7, 8,9 or even 10 degrees Celsius warming thereof. Following the swift integration of the Arctic in the global economy, Anders Oskal presented seven key drivers of change in the region: climate change, oil and gas, mining, shipping, main fisheries, tourism and governance. A narrative of green colonialism emerges from the lack of collaboration between the main actors in the above-mentioned drivers, with the Arctic being framed as a huge area for everyone and for everything – windmills and power plants, for instance - but where there are too many reindeers, a constraint not only to management and organization, but mainly for hidden purposes like resource extraction. For concluding, it was given an account of the

reindeer herding organizations that have been established - the Association of World Reindeer Herders, the International Centre for Reindeer Husbandry and the UArctic EALÁT Institute – followed by the presentation of the “Eallu”, a project that comprises indigenous youth, food knowledge and arctic change, with the aim of building bridges between generations and from which resulted the publication of the “Eallu Cookbook”, covering the knowledge about food and indigenous food systems.

The discussion carried out during and following the presentation had as its main focus the struggle that arises from the Norwegian state’s different views about reindeer herding, nomadism, agriculture and animal welfare. It was observed how the state’s understanding of food corresponds to an attempt to render reindeer herding as agriculture which, in turn, is conceptualized as fixed, thus not comprising nomadism. Therefore, this is a framing where the Saami do not fit in. In addition, it was also noted that the attempts to settle the Saami emerged from the fact that nomadism not only defies the state’s understanding of organization - the reindeer herding areas are viewed as in need of organization – but also nurtures its animosity towards the lack of control, revealing a limited grasp in what concerns equilibrium in its world’s flattening endeavours.

Professor Lassi Heininen introduced the issue of the Arctic Indigenous Peoples organizations’ role as international actors, presenting the research conducted on the policies and declarations developed by four of the six Arctic Council’s Permanent Participants and that integrates the forthcoming IIASA’s (International Institute for Applied System Analysis) scientific report “Arctic Policies and Strategies – Analysis, Synthesis and Trends”. As a starting point, Heininen provided an overview of the main factors that determined the granting of Permanent Participants status to Indigenous Peoples’ organizations in the Arctic Council, in 1996. The pressure exerted by both the Inuit and Saami Councils - already recognized by national states at the time – and the growing relevancy of the six Permanent Participants at the national (states) and international (Arctic Council) levels – given the fact that they cover all the Arctic region, representing indigenous peoples and their activities across borders, while also raising the issue of pollution - were pointed out as the determinants that paved the way for the assignment of the aforementioned status to the Indigenous Peoples’ organizations.

Through the analysis of five policy documents developed by four of the Permanent Participants – the Arctic Athabaskan Council’s “Arctic Policy” (2017), the Gwich’in Council’s “Impact Assessment in the Arctic: Emerging Practices of Indigenous-Led Review” (2018), the “Inuit Arctic Policy” (2010), and the Saami Council’s “Saami Tråante Declaration” (2017) and “Saami Arctic Strategy” (2019) – Heininen outlined the shared priorities disclosed in the documents, namely the assertion of indigenous rights as part of the human dimension of governance, children’s well-being, international cooperation and the impact of pollution on human health. It was also noted the absence of evident expression on issues such as climate change, as observed, for instance, in the “Saami Tråante Declaration” (2017). Furthermore, the presentation traced the new trends identified in the policy documents and that emerge amidst the Permanent Participants, for example, the resource to international organizations by Indigenous Peoples’ organizations in order to seek for support and contend the indigenous rights, the emphasis on self-government and the focus on science as means to reinforce the development of partnerships in order to advance adequate indigenous knowledge incorporation.

Both the presentation and the following discussion raised crucial issues regarding the Permanent Participants actorness in the international politics realm. The significance of the appointment of the Permanent Participants status within the Arctic Council's structure was underlined, given the fact that the ability to speak during the Ministerial meetings translates into influence. This same argument was brought up to the discussion regarding the distinction between the role played in the Arctic Council and in the United Nations. The Indigenous Peoples' organization contributions to the Arctic governance was also called into question while inquiring about the potential emergence of an Indigenous Peoples' Arctic Council. In this regard, it was noted how the development of these policy documents hatches from the launch of Arctic Strategies by non-Arctic states, representing a more sophisticated instrument to increase the Indigenous Peoples' organizations influence in the Arctic Council. A paradox between resource consumption and resource extraction – where the willingness to have resource extraction doesn't usually follow the increase of resource consumption - and a differentiated application of waste management regulation between reindeer herders and mining companies were also observed during the discussion.

### Excursion 3: “Visit to Juhls Silver Gallery”



*Illustration 3: Visit to Juhls Silver gallery (Photo by Clemens Jöbstl)*

# Monday, November 18

Hetta

## Session 6: “Arctic Community Development”

(Rapporteur: Stephany Mazon)

- Jari Rantapelkonen, mayor of Enontekiö municipality  
*Enontekiö - Values, politics and dialogue.*
- Karolina Sikora  
*A right to access and enjoy cultural heritage within the framework of international law. Indigenous peoples as a referent object.*
- Polina Irodova  
*Integration of industrial areas in the structure of the northern city (case of Murmansk)*
- Adam Kočí  
*Denmark relations to its self-governing territories Greenland and the Faroe Islands: Postcolonial authority or partner on the way to independence?*

Karolina Sikora, PhD student from the Arctic Centre/University of Lapland discussed the right to cultural heritage (CH) in international law in the case of indigenous peoples. 2011 saw the introduction to the right of CH; however, it was not legally binding. A challenge arises in how to define culture heritage? Tangible objects are more concrete to define, and they are considered CH by UNESCO. But for example defining who belongs to a certain a community may be more ambiguous. In academia cultural heritage is prevalently thought of as a ‘product’. We have a cultural value, and cultural heritage is like ‘putting a stamp’ on it. But this begs questions such as why do we choose to protect certain land areas and what results as a consequence of this label (ie. more tourism)? It ultimately should be related to human rights. The identification and certification process is carried out by specialists, such as historians. They identify a CH in the community, document it, and put it through the administrative process to accredit it as CH. However the communities themselves, like indigenous groups, with NGOs should be involved in identifying and labeling the CH they find as important. This could lessen the colonialization aspect of defining CH by outsiders.

Polina Irodova, Masters student in Moscow Institute of Architecture presented an urban plan for the integration of the port in Murmansk. Murmansk is now the main transportation and logistical port in the Russian Arctic. It is characterized by its ice-free port, and hosts the largest population of Arctic Circle. Its massive industrial activities will further expand under a 2025 Development Plan that wants to expand the port, including Coal and Oil production facilitates, through both investors and government money. The current plans however, would exacerbate soil and undersurface water pollution, noise pollution and traffic, as well as take over urban spaces. Irodova proposes an

alternative plan development: to move the facilities to the west coast of the Kola Peninsula and integrate and repurpose the old port to the city space. An exemplary case happened in Arhanisk, where the port was moved away from City out of the people's decision. Murmansk's harsh climate requires special building planning such as deepening streets, artificial hills and green fences to deal with cold winds. Introduce Climatrons settlements: closed, interconnected buildings that form independent climate themselves. Irodova proposes a two-stage functional renovation: 1) try out the potential of the region by constructing temporary objects, 2) then those that satisfy the needs are transformed to permanent fixtures. Buildings in Murmansk can be functionally constructed to deal with wind conditions, as well as make the most out of the 3 height-levels of the terrain that shapes the city. The deep waters between the east and west are unfavorable for bridges, but allow for shipping and water taxis could be reintroduced as public transport.

Adam Koci, PhD student from University of Ostrava, Czech Rep, introduced the relations of Denmark with its self-governing territories of Greenland and Faroe Islands. Denmark is considered an Arctic country thanks its two territories, which additionally make 97% of territory under the Kingdom of Denmark. As self-governing territories, Greenland and Faroe Is. have their own parliament and government, but DK is responsible for international relations and national security. Greenland obtained its autonomy only in 1979, while Faroe Islands in 1948. Unlike the Faroe Is. which had been participating in the Danish parliament since 1849, Greenland was a colony up until 1953. The marked difference between the two territories is Greenland ethnic population of 80% Inuit, while Faroe Is has Nordic, celtic origins. The race to 'conquering' the Arctic can include "Arctic orientalism" (from 'Orientalism' Edward Said 1978, seeing 'Arabs' as exotic, uncivilized), a contrast to our current idea of "Nordic exceptionalism". There is a strong desire within Greenland to seek independence, but it is not ready for fiscal independence yet (60% money comes from Denmark). This is juxtaposing the Greenlandic Inuit idea of nature vs. their desire to mine/extract oil for economic autonomy. If Greenland becomes independent, it will be first nation with a predominant indigenous population. This however, would mean they could not use 'minority' rights as a peoples. Currently there are 5 Nordic states and 3 autonomous regions: Faero Islands, Greenland and Aland islands. Nordic policy deals with domestic policies, not Foreign. This however makes it easier for non-state actors to be recognized.

#### Brainstorming Session & Concluding Remarks

- Lassi Heininen  
*Concluding words*

#### Excursion 4: "Visit to Husky Farm"

- Pasi Ikonen, entrepreneur, owner of Hetta Huskies

## Abstracts

**Lassi Heininen**

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### New & emerging trends of Arctic Indigenous peoples (organizations)

The policy documents of Arctic Indigenous peoples' organizations, as Permanent Participants of the Arctic Council, are rather fragmented. They do not cover all the indicator fields in full detail, as they come from different directions. There is a striking similarity that all policy documents explicitly address issues broadly surrounding Indigenous (individual and collective) rights, although in different contexts, and governance both broadly and in detail, as well as the importance of international cooperation. Unlike, environmental protection and climate change are not explicitly covered by all documents. Unsurprisingly, all the documents emphasize the rights of Arctic Indigenous peoples to use / utilize the resources of their homelands, as well as the importance of 'Traditional knowledge'. Among new and emerging trends of these Indigenous peoples' organizations are International treaties on Indigenous rights and Indigenous rights further to self-governing, as well as focus on science.



**Polina Irodova**

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## Integration of industrial areas in the structure of the northern city (case of Murmansk)

Growing socio-economical and strategic importance of the Arctic region highlights a greater role of northern cities with Murmansk being the largest one. The vast majority of all transport and industrial activities in the Russian Arctic are tied to Murmansk port and the infrastructure of the city. Modernization of the Murmansk transportation hub is now outlined as one of the key elements of Russian Arctic socio-economic development strategy for the period until 2025. The development plans proclaim Murmansk to keep on playing the most important role as a transport and logistics hub for ambitious resource and transportation projects.

Nevertheless, socio-economic development of Murmansk is hindered by the number of obstacles with underdevelopment infrastructure, lack of logistical connectivity and iconic public spaces, worn-out housing stock and many others. Ambitious Russian Arctic development plans can barely be accomplished under condition of continuous outflow of citizens. People who leave badly need comfortable living conditions which are especially vital for northern climate.

The number and quality of proper functioning public spaces is of great importance for a favorable social environment. The pool of literature shows that the comfort of the northern city and its architectural and artistic appearance are formed under the influence of special town-planning decisions, the peculiarities of the methods of planning and building. The present paper studies the formation of public spaces in the northern cities and identifies methods for efficient integration of industrial territories into the structure of a northern city based on the case of Murmansk. The research is based on comprehensive analysis of the natural complex, transport and functional connectivity, a historical and cultural complex of Murmansk which help reveal its peculiarities. Combined with the analysis of experience of foreign city planning and port cities renovation, the paper suggests solutions to integrate industrial territories into the changing landscape of Murmansk and present the project of port area renovation. All proposed transformations are designed to significantly improve the living standards of Murmansk citizens and may be useful for decision-making processes.

**Clemens Jöbstl**

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A Zapad 17 & Trident Juncture 18: Are we on the road to a new Cold War in the Arctic? Western European resonance of Zapad 17 and Trident Juncture 18 exercises.

Throughout the time of the 20th century, the Arctic region has been a place of divergent interests, pursued also by military force. A battlefield in the times of the Winter War and WW2, a deployment zone during the Cold War, polar areas were frontiers in the global conflicts of the last century. After a time of pacification, in recent years tensions between the involved powers are rising again. Are we on the road to a new Cold War in the Arctic?

After the end of the antagonism of the two powers of the 20th century, the Arctic region became less militarized. Since the annexation of the Crimean peninsula by the Russian Federation in March 2014, tensions have risen in the Arctic region too. In September 2017, the Russian Confederation and Belarus held, Zapad 17. In October and November 2018 the western alliance plus Sweden and Finland participated in Trident Juncture 18, an even larger multinational military exercise. How did the western European civil societies perceive these two events? How widespread was the reaction on them? What associations were evoked in different involved countries? Are they in relation with the size of the events?

The Annales School, found by Marc Bloch and Lucien Febvre introduced quantitative research into the science of history, giving it a broader base that reflected the thoughts of whole populations instead of a few powerful individuals.

One place where public discourse in the 21st century takes place and leaves traces to be researched is the internet. Therefore I will investigate these traces. As a first step, I will evaluate the actual reach of the two events, by comparing the relative quantity of national online references on the two exercises between different involved Countries. Quantified by different search engines, I will analyze which associations, represented by significant keywords combined with the names of the two events occur most frequently in public discourse. By the evaluation of the results I will try to determine how civil societies in the countries of NATO and its partners reacted on Zapad 17 compared to Trident Juncture 18.



**Salla Kalliojärvi**

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## Climate change and private governance - Can transnational business organizations offer the solution to climate change?

Climate change is an area of increasingly complex multi-level governance. Traditionally global issues such as climate change are seen to belong under global governance where the multilateral agreements negotiated by national governments have formed the central mechanism. With climate change, however, the governance mechanisms are taking on a variety of forms beyond multilateral agreements and the authority is being diffused across levels of social organization and types of actors. Sub-national authorities and private sector actors have become active players in the climate change policy arena. In many places private organizations are giving a substantial contribution to the implementation of adaptation and mitigation measures by providing significant expertise in technology and service delivery and committing to more ambitious greenhouse gas emission reductions than agreed by their governments. While private organizations lack the coercive power and resources available to governments, they are more free to act in regard of public support. This paper focuses on the role of transnational business organizations in climate governance and explores the possibilities they have in impacting on climate policy and action. With business responsible for the large majority of emissions, it is not to be seen only as a cause of the problem but a crucial part of the global solution too.

**Adam Kočí**

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## Denmark relations to its self-governing territories Greenland and the Faroe Islands: Postcolonial authority or partner on the way to independence?

The Kingdom of Denmark is the only Northern European country with long-term possession of overseas colonies and dependent territories. Denmark sold its tropical colonies until 1917 and its presence imprinted especially into the history of the countries in the North-East Atlantic. In 1944, Iceland acquired independence and created a model for possible independence of Greenland and the Faroe Islands. Nowadays, both countries are self-governing territories of the Danish realm. However, both have a completely different historical relationship with Denmark. The Faroe Islands have been formally equivalent part of Denmark since 1849 and have never been considered a colony. On the other hand, Greenland got rid of its colonial status in 1953. Still, throughout the (post)colonial history, Greenlands Inuits and Faroese were victims of many wrongdoings. However, the official apologize of the Danish representatives is still unspoken, the critical reflection of the colonial past is missing in the Danish society, and it is not even part of the educational curriculum. Even though clarified historical relationships, and self-confident populations with an indisputable national identity, can be the key to the future prosperity of the entire Arctic region. The used postcolonial approach seeks to reveal voices and opinions of an (ex)colonized society, which have been previously excluded from public debate. This paper compares the political, historical and socio-economic consequences of the Danish influence in Greenland and the Faroe Islands. It implies this topic into postcolonial theories and possible applications of the famous Said's Orientalism theory to the case of Greenland - "Arctic Orientalism". The paper then analyzes Greenlandic and Faroese way to autonomy. In conclusion, the paper answers whether we can expect their independence in the future. The paper concludes that the period of post-colonialism in Greenland is paradoxically identified with a growing Danish influence. Similarly, the Faroese political scene is still affected by the heritage of the Danish present. Despite the situation within the Kingdom is connected by these difficulties, it now seems that all parties can profit from the current relationship.

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**Arctic and Northern high latitudes research - Large scale research question**

Pan-Eurasian Experiment (PEEX) Program ([www.atm.helsinki.fi/peex/](http://www.atm.helsinki.fi/peex/)), initiated by the University of Helsinki INAR together with five main partners from Russia and China, is an international, multidisciplinary, multiscale bottom up initiative, established in autumn 2012. PEEX is build on four pillars: research agenda, research infrastructure, capacity building activities and societal impact making. The PEEX geographical focus is on the Northern High latitudes (Arctic, boreal) and on China and the new Silk Road Economic Belt region. PEEX framework is addressing the all scales research approach and integrative system understanding, which is needed for solving grand challenges like climate change and air quality, biodiversity loss (Kulmala et al. 2015). The PEEX Program scientific focus is on understanding of large-scale feedbacks and interactions between the land-atmosphere-ocean continuum under the changing climate of the Northern high latitudes (Kulmala et al. 2015, Lappalainen et al. 2016; 2018) and on the *transport and transformation of air pollution in China*. The Science Plan gives an insight of the large scale research questions and state of the art research of the Northern Eurasian regions.

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## Communications Infrastructure in the Canadian Arctic and communities: closing the gap

The growing importance of the Arctic in different infrastructure projects and continuous changes that take place at environmental, social, economic and legal levels, necessitate that further inquiry be made into the role of Arctic communities, including Indigenous peoples in addressing the many current and emerging issues relevant to all types of infrastructure developments that affect their livelihoods and homelands. Social and economic development in the Northwest Territories, Yukon and Nunavut is highly dependent on all types of infrastructure. Currently, further attention should be drawn to an infrastructure gap in the Canadian territorial North compared to the rest of the country. There are numerous infrastructure needs and challenges in the Canadian Arctic, which impede proper social and economic development of those regions. One particular challenge is inadequate communications infrastructure and broadband. This issue is topical across the Circumpolar North as broadband affects nearly each sector of Northerner's livelihood and has the potential to empower Arctic communities with new innovative and technological tools in meeting present and emerging challenges in health, education, economics, and delivery of other governmental and non-governmental services. Reliable communications are important to advance inter-connectivity and promote e-democracy, e-governance, e-medicine, e-economy, and community engagement in all matters that affect their lands and lives. Thus, by looking at the range of infrastructure issues in Canada's territorial North, this presentation specifically explores communications infrastructure and Arctic communities' concerns as reliable connectivity is a critical element of sustainable social and economic development, community wellness and future of the region. Can Arctic infrastructure development, including communications infrastructure, help communities become more sustainable and self-reliable? What are the key challenges and best practices in communication between businesses and Arctic communities (Indigenous Peoples) in decision-making processes when major Arctic infrastructure projects are concerned? It is argued that closing the infrastructure gap is crucial for communities' survival and self-reliance.

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## NGOs and the Critical Geopolitics of Climate Change: Spatializing Practices of Power Through the Arctic

In spite of the Non-Governmental Organizations' (NGOs) growing influence and increasingly prominent role in the global and local environmental agenda-setting and policy-making, the issue of the driving power underpinning their textual and visual communication developed to address the issue of climate change remains under-explored. This is particularly evident in the prevalence of the Arctic's iconography in the textual and visual NGOs' discourse on the issue of climate change, with clear consequences for policy making, including the dimensions of responsiveness, mitigation and adaptation to its effects.

Drawing on the theoretical contributes of Critical Geopolitics and resorting to a comparative case study of two NGOs, namely Greenpeace and the World Wide Fund for Nature (WWF), this dissertation aims to analyse the geopolitical discourse that emerges from the Arctic's framing in the NGO's textual and visual communication of climate change. Furthermore, it is intended to address a two-dimensional research gap that can be identified within the literature regarding the issue of NGOs' contribution to the development of the international discourses on climate change and the Arctic. Firstly, the relations of power that underlie the NGOs' role within global (environmental) governance and their influence in the shaping of the discourse on climate change, as well as the subjacent political spatializing practices on a global scale, remains an under-explored issue. Secondly, this framing into terms of power is also absent from the issue of how the Arctic is being depicted by NGOs on the matter of climate change, more precisely, the political driving power and interplay that determines the perspective – internal (local) or external - from which its representations emerge.

Since the focus of the analysis will be both on textual and visual content developed by Greenpeace and WWF, we will resort to discourse analysis as the prime method, while also relying on the theoretical contributions of John Berger's "Ways of Seeing" and, most significantly, on the Social Semiotics insights, specifically the multimodal approach developed by Theo van Leeuwen.

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## Science communication to build an inclusive future based on science.

The Arctic has acquired a global interest and importance, particularly in conversation of climate change. We read headlines related to melting glaciers, polar bear losing habitats, indigenous people fishing rights, and a blooming tourism in the Arctic. When discussing the science behind the effects observable in the Arctic environment, such as those pertaining the climate change or transported pollution, for example, it is necessary to put effort in the channels through which this information is being disseminated as this will have an effect on the audiences we reach, and hence, the actors that we include in the discussions.

In order to build an inclusive discussion, we need to present scientific data in a way that is discernible to multiple stakeholders – not only those possessing scientific literacy, namely a wider audience. For this reason, I would like to discuss projects that we have conducted in the Institute of Atmospheric and Earth System Research (INAR) at the University of Helsinki that have been aimed at the nonscientific community through participatory workshops, public speaking events, and social media.

The projects Story Data and Painting Science in Helsinki are two projects that use art as a way to communicate to science. Both projects aim to bring the discussion of climate science and climate change to the general public through a personal approach inviting citizens to use their personal histories (Story Data) to relate to climate change, and to approach scientists in the street (Painting Science in Helsinki) while engaging in urban art.

Alternative methods in engaging with the public will allow us to discuss science in a more open and inclusive manner.

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## Digitalisation and Cybersecurity in the European High North: A Human Security Perspective

“Enablement besides Constraints: Human Security and a Cyber Multi-disciplinary Framework in the European High North (ECoHuCy)” project has studied the effects of digitalisation in people’s everyday life in the northernmost areas of Finland, Sweden and Norway. The three-year project, funded by NordForsk and Economic and Social Research Council, is ending at the end of year 2019. This presentation goes through the main findings of five research articles that I have worked on (either as a single author or as a co-author) within the project framework. It has become evident that digitalisation is changing everyday life in these areas significantly. The changes cut across acquisition, service production and their use, social interaction, livelihoods, schooling and training, hobbies, cultural reproduction, identity formation, and so forth. Many of the changes are experienced as positive, because they ease everyday life, for example, by reducing the need for travel and opening up global market places. However, some of them are generating negative experiences, for instance, by increasing people’s dependency on the functioning of digitised infrastructures and excluding those, who lack the resources or skills to utilise information and communication technologies (ICTs). In particular, because digitalisation and cybersecurity agendas assume an undefined level of digital knowledge and skills that everyone has and, thus, possibly responsabilise individuals beyond their abilities to influence. Effects that digitalisation is creating in Nordic societies are not universal but context specific (e.g. to geography and climate, socio-economic positions, communities and cultures, other ongoing structural transformations), which the generalising national strategies and programmes tend to bypass. By so doing, the well-meaning endeavours may end up severing existing tensions and fears or creating new ones, which could be avoided by more nuanced approaches and improved cooperation across borders. Moreover, digitalisation and cybersecurity should not be discussed as two separate expert agendas, but in the context of those societal transformations that they facilitate, for instance, in health care. The voices of laymen as the users of ICTs and digital services ought to be better heard in these discussions; especially, because the realisation of human rights already depends on successful and trustworthy digital development.

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A right to access and enjoy cultural heritage within the framework of international law. Indigenous peoples as a referent object.

In a recent discourse in international law, human rights dimension to cultural heritage has gained significant importance. The link between protection of cultural heritage as an object with an assigned meaning and one's taking part in cultural life as a right led to the emergence of a human right - the so-called right to access and enjoy cultural heritage.

This paper examines whether the right to access and enjoy cultural heritage has been recognised in standards embodied in international law framework, with a special focus on human rights and UNESCO regime.

Additionally, since certain cultural rights cannot be effectively exercised by individuals only, and have a greater meaning while being enjoyed as a community, the paper discusses collective entitlement to the right to cultural heritage. This study brings the example of indigenous peoples, as a referent object, due to the special bond that they have to cultural heritage, which plays a significant role in the demonstration of indigenous identity.

The article focuses on three issues, which together present a narrow perspective of the broad topic. Due to the complexity of different aspects of the matter, I will not discuss all of the problems in a comprehensive way.

As the starting point of the article, I conceptualise cultural heritage, as understood for indigenous peoples. Following that, I present the fragmentation of international law relevant to cultural heritage. In this context, I discuss the recognition of the right to access and enjoy cultural heritage within the framework of international law. I claim that the right to cultural heritage forms a mutually-supporting correlation between two legal frameworks: UNESCO and human rights. I am going to analyse above-mentioned juridical systems in terms of offering effective protection. Since indigenous communities very often constitute a minority within a dominant society and are exposed to variety forms of discrimination and exclusion, I will discuss why the right to cultural heritage as a human right is especially relevant for indigenous peoples.



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## Interconnection between software property regimes and digital security in the Arctic

Digital technologies have become integral part of everyday life for most inhabitants of the Arctic, diffusing as deep into society that also traditional activities (such as reindeer herding, hunting, or fishing) have partly become digitized (e.g. GPS tracking/navigation, etc.). Acknowledging the importance of digitalisation, most states have established cyber security strategies, which, however, reproduce a state-centric traditional security approach (Dunn Cavelty, 2014; Salminen and Hossain, 2018). Yet, as digitalisation affects all spheres of human security (as defined in the UNHDR 1994), also cyber security needs to be redefined in a more comprehensive way to be inclusive to both, region specific implications of digitalisation as well as to allow the region's inhabitants to become securitising actors (Salminen, 2018; Zojer, 2019).

Building up on this comprehensive and human-centred digital security concept and combining it with approaches from sociology of technology studies (e.g. Bijker et al., 2012; Häußling, 2014; Rammert, 2016; Winner, 1980), the paper will discuss how mainstream digital technologies impact the socio-economic order in an Arctic specific context. Because technologies are not neutral, the paper will argue that the regional population not only needs to become stakeholders on defining technological needs, but to become empowered to become co-producers of the used technologies (e.g. Bijker, 2010; Hippel, 2005). The hypothesis the paper is following is that digital technologies are usually developed in urban settings south to the Arctic and predominantly target global markets, lacking interest in the small Arctic markets as well as knowledge on the regional particularities. Moreover, most of the code or algorithms in popular applications are proprietary and closed source, thus black-boxing the used digital solutions. While some regional digital agendas acknowledge the importance of increasing digital literacy by, for example, including coding into the education system, this paper goes further and suggests that by taking advantage of free and open source software, Arctic communities can regain ownership over the used technologies and reduce dependence on outside actors, such as by becoming holders of intellectual property rights of the used technologies.

## **About TN on Geopolitics and Security**

The Thematic Network (TN) on Geopolitics and Security, established and approved in 2009, is one of the academic & expert networks of the University of the Arctic. The main aim is to combine the two focus areas – Studies on Geopolitics, and Security Studies –, and based on that to draw up a holistic picture on Arctic geopolitics and Northern security, as well as to identify and analyze major changes of them. Another aim is to promote 'interdisciplinarity', to implement the interplay between research and teaching as well as the discussion between young and senior scholars, and to promote the interplay between science and politics, and that between scientific and traditional knowledge(s).

### **Research interests and themes**

In the context of the Thematic Network 'Geopolitics' include issues, such as "How geopolitics is present, and implemented today in the Arctic, in general and in strategies & policies of states and Indigenous peoples' organizations"; "Changes in the Arctic, and major forces / drivers behind them"; Indigenous point(s) of view of Geopolitics?"; "What is the importance and role of TNCs, and that of SOEs in the Arctic?"; "The globalized Arctic in world politics and the global economy?". Correspondingly, studies on 'Security' include issues, such as "Who are subjects of (Arctic) security?"; "Military strategies and defence policies in, and impacts of regional crises on, security of the Arctic"; "Environmental and Human Security in the Arctic"; "Resource extraction, the global economy, national interests, climate change and global governance – a new Arctic (security) nexus or Arctic Paradox".

### **Main goals**

For to implement the aims and long-term purposes, as well as to promote interdisciplinary discourse on the two focus areas, the TN on Geopolitics and Security (see TN's website: <https://arcticpolitics.com>): Firstly, publishes annually The Arctic Yearbook – the first volume was launched in November 2012 and the next one in October 2020 (see: <https://arcticyearbook.com>); Secondly, organizes panels on Arctic security and geopolitics at the annual Arctic Circle Assembly (in Reykjavik, Iceland); co-organizes the annual international travelling symposium and doctoral school, Calotte Academy; and organizes annually 2-3 its own workshops / brainstorming meetings

back-to-back to international conferences; Thirdly, makes initiatives for, as well as coordinates, supports and runs, international research and book projects on IR, Geopolitics and Security studies, such as “The Arctic – a region of strategies and policies. Avoiding a new Cold War” funded by the Valdai Discussion Club (see: Final Report at [www.valdaiclub.com](http://www.valdaiclub.com)); “The Global Arctic”, an international expert network and project producing for example, “The Handbook of the GlobalArctic” and the MOOC of the Global Arctic.

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## **About the Arctic Yearbook**

The Arctic Yearbook is intended to be the preeminent repository of critical analysis on the Arctic region, with a mandate to inform observers about the state of Arctic geopolitics and security. It is an international and interdisciplinary peer-reviewed publication, published online at <https://arcticyearbook.com> to ensure wide distribution and accessibility to a variety of stakeholders and observers.

### **Editors**

Prof. Lassi Heininen, University of Helsinki

Managing Editors:

Dr. Heather Exner-Pirot, University of Saskatchewan and

Justin Barnes, Fellow at Polar Research and Policy Initiative

### **Previous Editions**

Arctic Yearbook 2012: "Arctic Policies and Strategies"

Arctic Yearbook 2013: "The Arctic of the Regions vs. the Globalized Arctic"

Arctic Yearbook 2014: "Human Capital in the North"

Arctic Yearbook 2015: "Governance and Governing"

Arctic Yearbook 2016: "The Arctic Council: 20 Years of Regional Cooperation and Policyshaping"

Arctic Yearbook 2017: "Change and Innovation in the Arctic: Policy, Society and Environment"

Arctic Yearbook 2018: "Arctic Development in Theory and Practice"

Arctic Yearbook 2019: "Redefining Arctic Security"

**[www.arcticyearbook.com](https://arcticyearbook.com)**

## About the GlobalArctic Project

The *GlobalArctic* Project, launched at the Arctic Circle Assembly in 2014, is an international framework of institutions with interest and expertise on the globalized Arctic from the Nordic region and from outside the region. It also builds on a long history of activities, among them Calotte Academy, Northern Research Forum, TN on Geopolitics and Security, and Arctic Yearbook. The originality of this proposal is its global dimension whereby 40 organizations worldwide are actively involved in the project. Recently the Project teamed up with the Arctic Circle to jointly create a GlobalArctic Mission Council at Arctic Circle Assembly, which was launched in October 2019.

The *GlobalArctic* Project considers the Arctic region in the 2010s to have become part and parcel of global political, economic, technological and environmental, as well as societal, change. Correspondingly, what happens in the Arctic has significant implications worldwide - the region is seen here as a potentially interesting laboratory / workshop of the Anthropocene. Following from this, the context of an emerging research project, which is described in the Matrix at the website, is twofold: The 1st stage, the 'Global > Arctic', is to (re)define globalization and its multi-functional effects, as well as impacts of rapid climate change, as drivers of change in the Arctic. The second stage is the 'Arctic > Global' identifies and explores the global implications and drivers of the globalized Arctic affecting the rest of the globe, as well as the role the Arctic plays in world politics and the global economy. Since the 'Anthropocene' is already at play in the Arctic it is needed to find ways out of the old structures, implement resilience, and build new more sustainable policies and structures. The two main outcomes of the project so far were a) the publication of the "Handbook of the Global Arctic" by Springer (ISBN 978-3-319-91994-2), and b) to produce the MOOC of the Global Arctic (available online at [coursera.org](https://www.coursera.org/globalarctic)).

**[www.globalarctic.org](https://www.globalarctic.org)**

## **Tentative Call for Papers: Calotte Academy 2020**

**Theme: *'New and Emerging Trends of Arctic Governance, Geopolitics, Geoeconomics, and Science'***

**in Finland, Norway and Russia, May/June, 2020**

The Calotte Academy 2020 is planned to be organized in end of May/beginning of June 2020 in the European Arctic — Salla, Inari and Enontekiö, Finland; Kautokeino, Kirkenes, Neiden and Svanvik, Norway; and Apatity, Murmansk and Nikel, Russia (the exact date & route will be informed soon).

The theme of the 2020 Academy is "*New and emerging trends of Arctic governance, geopolitics, geoeconomics, and science*".

This travelling symposium will discuss Arctic issues and discourses in local, regional, pan-Arctic and global contexts, theoretically and holistically from many scientific and knowledge angles and multi/inter-disciplinary approaches, from academic and policy-oriented ones. This will be done from the perspectives of past(s), present(s) and in particular future(s), as well as from points of view of different stakeholders from indigenous peoples to business. Who are the involved actors, and to what extend are they involved in, and how do they help to develop pathways to plausible sustainable futures?

The focus of the 2020 Academy is inspired by the substantial, multidimensional and multi-theoretical discussions and debates on perceptions of, and discourses on, the Arctic and Arctic politics in the previous (e.g. 2017, 2018, 2019) Academies' sessions (see, Final Reports at <https://calotte-academy.com/final-reports>). This will be continued by exploring, analysing and brainstorming new and emerging trends of Arctic governance, such as environmental protection & resilience vis-a-vis economic activities, Arctic geopolitics, such as state sovereignty vis-a-vis internationalization, geoeconomics in the Arctic, such as tourism, as well as Arctic research for example on climate & climate change.

This is a call for papers for established researchers and early-career scientists (ECS), particularly PhD candidates and post-docs, with different academic and/or knowledge backgrounds to participate and present their work in the 2020 Calotte Academy.

For early-career scientists the organizers will cover the costs of bus travel during the Academy, as well as accommodation, based on applications. Applications, incl. freely formulated funding applications should be submitted Online at: <https://calotte-academy.com>.

The deadline for applications for funding — which should include an abstract (ca. 250-350 words) and a short letter of intent — for PhD candidates and post-docs is 15th of February 2020.

## **More Information and Contact**

The Calotte Academy 2020 is organized by the Institute for Atmospheric and Earth Research (INAR) at the University of Helsinki and the Saami Education Institute (Finland); Luzin Institute for Economic Studies of RAS at Kola Science Center (Russia); in cooperation with Faculty of Social Sciences at University of Lapland, as well as the International Center for Reindeer Herding Husbandry (Norway) (tbc).

For more detailed information about the 2020 Calotte Academy, please contact with the co-coordinators: PhD candidate Gerald Zojer (e-mail: [gerald.zojer@ulapland.fi](mailto:gerald.zojer@ulapland.fi)), or PhD candidate Salla Kalliojärvi (e-mail: [skallioj@gmail.com](mailto:skallioj@gmail.com)), Faculty of Social Sciences, University of Lapland.

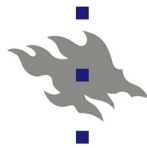
For more general information about the Calotte Academy, please contact the members of the Steering Group — Research director Lassi Heininen (e-mail: [lassi.heininen@helsinki.fi](mailto:lassi.heininen@helsinki.fi)), or Secretary General Hanna Lappalainen (e-mail: [hanna.k.lappalainen@helsinki.fi](mailto:hanna.k.lappalainen@helsinki.fi)), INAR at University of Helsinki; or Senior Researcher Ludmila Ivanova, Luzin Institute for Economic Studies of RAS (e-mail: [ludmila\\_ivanova@mail.ru](mailto:ludmila_ivanova@mail.ru)).

## **Organisers, Sponsors & Partners**

The Calotte Academy 2019 was organized by the Faculty of Social Sciences at the University of Lapland; Sámi Education Institute; Institute for Atmospheric and Earth Research (INAR) at the University of Helsinki (Finland); Lulin Institute for Economic Studies of RAS at Kola Science Center; Faculty of Geography at Lomonosov Moscow State University, in cooperation with the Rovaniemi Arctic Spirit conference, the International Centre for Reindeer Husbandry, the Barents Institute at the University of Tromsø – the Arctic University of Norway, the municipality of Enontekiö, Test World Oy, and Hetta Huskies.



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