

'Future Arctic Societies: Scenarios, Innovations, Best Practices & Actors'

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

November 12-19, 2019

TN on Geopolitics and Security (UArctic) <u>https://arcticpolitics.com</u>

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About the Idea of the Calotte Academy

The Calotte Academy is an annual traveling symposium and international forum in Europe's North Calotte region, designed to promote interdisciplinary discourse and the interplay between senior and young researchers and to foster academic and policy-oriented dialogue among members of the research community and post-graduate students as well as a wide range of other northern stakeholders. It is a "school of dialogue" and participatory by nature with an idea to share knowledge and experiences with communities. On the other hand, it 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 to inspire international research projects as well as plans and applications.

The Calotte Academy is 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 2019 Calotte Academy.

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 will be structured so that each presentation will be allocated altogether 30-45 minutes out of which **15 minutes (maximum)** will be reserved for the presentation and the rest for questions and comments, and open discussion.

The 2019 Academy is 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 plan and possible applications for international research project(s): in the

Calotte Academy sessions themes and content of further Calotte Academies will be brainstormed, as well as those of other events of the TN on Geopolitics and Security.

After the Calotte Academy, a Final Report including the abstracts, and main findings, highlights and ideas for potential research questions and projects of the 2019 Academy's sessions will be produced (see Final Reports on previous Calotte Academies in address: https://calotte-academy.com). The Report will be written by the presenters/participants who will choose the themes and sessions which they want to report on during the Calotte Academy tour.

About the 2019 Calotte Academy

The theme of the 2019 Academy is "Future Arctic Societies: Scenarios, Innovations, Best Practices, Drivers & Actors". In this year the travelling symposium will discuss 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, industires, film-making, as well as telecommunications and digitalization. This will be 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 is inspired by the substantial, multidimensional and multitheoretical 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 <u>https://calotte-academy.com</u>). This will be 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. The Calotte Academy 2019 is organized by Faculty of Social Sciences at University of Lapland, Saami Education Institute, and Institute for Atmospheric and Earth Research (INAR) at University of Helsinki (Finland); Luzin Institute for Economic Studies of RAS at Kola Science Center, and Faculty of Geography at Lomonosov Moscow State University (Russia), in cooperation with International Center for Reindeer Herding Husbandry (EALAT) (Norway).

Information and Contact:

For more detailed information about the 2019 Calotte Academy, please contact with the cocoordinators: Researcher, PhD candidate Gerald Zojer (e-mail: <u>gerald.zojer@ulapland.fi</u>), or PhD candidate Salla Kalliojärvi (e-mail: <u>skallioj@gmail.com</u>) at 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: <u>lassi.heininen@helsinki.fi</u>), or Secretary General Hanna Lappalainen (e-mail: <u>hanna.k.lappalainen@helsinki.fi</u>), INAR at University of Helsinki; or Senior Researcher Ludmila Ivanova, Luzin Institute for Economic Studies of RAS (e-mail: <u>ludmila ivanova@mail.ru</u>).

https://calotte-academy.com

PROGRAM

Tuesday, November 12

Korundi/Arktikum, Rovaniemi

10:00-16:45 (optional)
"Rovaniemi Arctic Spirit 2019" conference
Venue: Korundi (Lapinkävijäntie 4, Rovaniemi)
For information on the conference & program please visit: <u>https://www.rovaniemiarcticspirit.fi/EN</u>

19:00-21:30 Reception for all conference participants and invited guests Venue: Arktikum (Pohjoisranta 4, Rovaniemi)

Celebration of the 30th anniversary of the Arctic Centre at the University Lapland and Get-together for Calotte Academy Participants For more information please visit: <u>https://www.rovaniemiarcticspirit.fi/EN</u>

Wednesday, November 13

Arktikum (Pohjoisranta 4), Rovaniemi

Please bring your luggage to the conference venue (there is a luggage room available), as we will depart to Inari directly from the conference venue!

09:00 – 11:00 (Aurora room, Arktikum)

"Climate – Security – Future Generations" session at "Rovaniemi Arctic Spirit 2019" conference. For more information please visit: <u>https://www.rovaniemiarcticspirit.fi/EN/Program/Second-Day-Program#Session4</u>

11:00 – 11:30 - Coffee Break

11:30 - 13:00

CA participants join conference sessions according to their interests

For information on the conference & program please visit: <u>https://www.rovaniemiarcticspirit.fi/EN</u>

13:00 – 14:00 - Lunch Break

Opening Session

(14:00 – 14:30): Thule meeting room, Arktikum

- 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"

(14:30 – 16:30): Thule meeting room, Arktikum

- 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

16:45 Departure for Inari

Bus departures upstairs, in front from main entrance of Arktikum building (Ounasjoentie)



Thursday, November 14

Inari and Ivalo

08:45 Departure for Jeera

Inari Welcoming Session: "Inari Perspectives" (09:00 – 09:30): Jeera

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

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

(09:30 – 11:00): Jeera

- 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

Lunch in Inari village (own cost)

Session 3: "Sámi Perspectives & Education"

(12:15 – 13:45): Jeera

- 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*

14:00 Departure for Ivalo

Excursion 1: "Visit to Car Testing Site in Ivalo: *Test World*" (15:00 – 18:00): Test World

• Janne Seurujärvi, Managing Director of Test World

20:00 – 22:00 Sauna (Vasatokka)

Friday, November 15

Kirkenes and Neiden

Departure for Kirkenes at 06:45

Session 4: "Media and Science Communication"

(09:00 – 12:15): Barents Institute

- Anne Figenschou, adviser, The Barents Institute *Welcoming words at Barents Institute*
- Thomas Nilsen & Atle Staalesen, editors, The Barents Observer *The Barents region from a media perspective*

*** Coffee Break ***

- 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.

13:45 Departure for Neiden

Excursion 2: "Visit to Skolt Sámi Museum"

(14:45 - 16:00)

Departure for Inari at 16:00

19:00 – 21:00 BBQ Dinner (tbc.) (Vasatokka)

21:00 – 23:00 Sauna (Vasatokka)

Saturday, November 16

Departure for Inari at 11:00

Lunch in Inari village (own cost)

Departure for Hetta at 12:30

Sunday, November 17

Kautokeino

Departure for Kautokeino at 09:30

Session 5: "Reindeer Herding and Indigenous People(s) Rights"

(10:00 – 16:30): International Centre for Reindeer Husbandry

- Anders Oskal, Secretary General, The International Centre for Reindeer Husbandry
- tba.
- Lassi Heininen New & emerging trends of Arctic Indigenous peoples (organizations)

Monday, November 18

Hetta

Departure for Hetta center at 08:40

Session 6: "Arctic Community Development"

(09:00 - 12:30): Townhall

- 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.

ca. 10:30 – Coffee Break

- 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?

Brainstorming Session & Concluding Remarks

(12:30 - 13:30)

Lassi Heininen
 Concluding words

Excursion 3: "Visit to Husky Farm"

(18:00 – 20:30): Hetta Huskies

• Pasi Ikonen, entrepreneur, owner of Hetta Huskies

Tuesday, November 19

11:00 Departure for Rovaniemi

Estimated arrival: Rovaniemi airport ca. 15:30 Estimated arrival: Rovaniemi center/railway station ca. 15:45

Abstracts

Lassi Heininen Research Director Institute for Atmospheric and Earth System Research (INAR), University of Helsinki lassi.heininen@ulapland.fi

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 Master student Moscow Institute of Architecture (State Academy) irod.polly@ya.ru

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 PhD Doctorate University of Graz, Austria <u>clemensjoebstl@gmx.at</u>

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 PhD Candidate University of Lapland salla.kalliojarvi@gmail.com

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 been 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, 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

PhD student

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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.

Hanna Lappalainen

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Arctic and Northern high latitudes research - Large scale research question

Pan-Eurasian Experiment (PEEX) Program (<u>www.atm.helsinki.fi/peex/</u>), 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.

Natalia Loukacheva Canada Research Chair in Aboriginal Governance and Law UNBC <u>Natalia.Loukacheva@unbc.ca</u>

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 nongovernmental 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.

Sonia Magalhaes MA Student University of Minho soniamag@gmail.com

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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Stephany Mazon PhD candidate INAR, University of Helsinki <u>stephany.mazon@helsinki.fi</u>

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 loosing 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.

Mirva Salminen

Researcher, PhD-Candidate

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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 responsibilise 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, socioeconomic 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.

Karolina Sikora

PhD Candidate/Junior Researcher Arctic Centre/University of Lapland karolina.sikora@ulapland.fi

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.

Gerald Zojer

Researcher, PhD-Candidate

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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.

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