



SIDE-MEETING TO SVALBARD SCIENCE CONFERENCE 2021

INTERDISCIPLINARY WORKSHOP SSSI,
NERSC AND PARTNERS

REPORT

4 NOVEMBER 2021

CITATION:

IVERSEN, L. 2021. REPORT- INTERDISCIPLINARY WORKSHOP SSSI,
NERSC AND PARTNERS
NOVEMBER 4 2021; RELATIONSHIPS WITH ICE, SNOW, AND
PERMAFROST UNDER CHANGE: CATALYZING INTERDISCIPLINARY
PERSPECTIVES

AFFILIATION:

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LAYOUT: OPHEIM, F. RGJ HOLDING

FUNDED BY SVALBARD SCIENCE FORUM THROUGH THE SVALBARD
STRATEGIC GRANT 2021, UNDER THE COORDINATION AND SUPPORT
ACTIVITY SUPPORT FOR NETWORK-RELATED ACTIVITIES.

BACKGROUND

Svalbard Social Science Initiative, NERSC and other institutions and projects have over time established dialogue and collaboration to bridge the gap between social and natural science on Svalbard, to better identify the need for more data, scientific and local knowledge to support sustainable decision making, and urban planning and development. This also includes the wellbeing of people living on Svalbard. A series of workshops and networking activities with local stakeholders, various institutions and projects, have been made possible due to support and funding of the Norwegian Research Council and the Svalbard Strategic Grant, and with support from NERSC, Bergen, Norway. A workshop and side-meeting to Svalbard Science Conference in Oslo, 4 Nov 2019, revealed the need to continue the collaboration and work both with the development of SSSI, as well as to get funding for more cross-over and long term collaboration between social and natural science. Based on the outcome of the Oslo workshop, and a SSSI workshop in Longyearbyen in October 2021, "Svalbard in local and global perspective: an interdisciplinary workshop organised by the Svalbard Social Science Initiative" (contract 311275, funded by SSG in 2019), a new application for an Interdisciplinary workshop was sent to Svalbard Strategic Grant in 2021:

Relationships with ice, snow, and permafrost under change: catalyzing interdisciplinary perspectives

The responsible institution for this workshop application and project is the Nansen Environmental and Remote Sensing Center, NERSC, Bergen, Norway. NERSC is affiliated to Svalbard's permanent research facility "Forskningsparken" in Longyearbyen.

The project owner is Nersc and the Project manager is Lisbeth Iversen, NERSC



The following are partners in the project:

Laura Ferguson

Queen's University Belfast,
United Kingdom

Siri Veland

Senior Researcher,
NORCE Norwegian Research Center

Jelmer Jeuring

Researcher Development
Centre for Weather Forecasting,
Norwegian Meteorological Institute,
Bergen, Norway

Andrian Vlakov

National Research,
University Higher School of Economics,
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Eva Kotaskova

Ph.D. candidate, Department of Sociology,
Faculty of Social Studies | Masaryk University,
Czech Republic

Tarje I. Wanvik

Research Director,
Norwegian Research Center (NORCE)

Julia Olsen

Senior Researcher,
Nordland Research Institute,
Bodø, Norway

Jasmine Zhang

Postdoc researcher,
Swedish University of Agricultural Sciences,
Uppsala, Sweden

Vibeke Vandrup Martens

NIKU - Norwegian Institute for
Cultural Heritage Research

Cecilie Gro Vindal Ødegaard

Department of Social Anthropology,
University of Bergen, Norway

THE PROJECT

The goal is to develop interdisciplinary collaboration between social science, natural science and the local communities in Svalbard. The severe changes in climate and environment in Svalbard (the socio-ecological system) are challenging natural sciences as well as social sciences and the living conditions in Arctic communities. This calls for more interdisciplinary research collaboration and involvement of local community actors.

The main activity in the project has been to organise a workshop connected to the Svalbard Science Conference in November 2021. The follow-up activities will be to host a series of seminars and develop a proposal to Horizon Europe with an overall objective to improve sustainability of Arctic communities.

The project is building on and expanding Svalbard Social Science Initiative (SSSI), established in 2018, first workshop in 2019. For the workshop of this project initiative, we have invited Svalbard related researchers (both from natural science and social science) and representatives from the local communities in Longyearbyen, Ny-Ålesund, Barentsburg and Hornsund. Not all could be represented, but there were participants from a number of research projects working in different locations on Svalbard, national and international research projects as well as representatives from industries and local municipalities. The project intends to respond to the need for national and international collaboration, coordination and cooperation in data gathering between natural sciences (cryosphere, biosphere) and social sciences (health, economy, community planning, etc.). Data collection in the Svalbard region is growing as a result of more research projects in the Arctic.

Most of the data collected are in the natural sciences (climate and ecosystem research), but social science data have started to become more important because of the research needs to serve the societal needs and improve the living conditions for people living and working in the Arctic. The project will provide outreach activities, including publications to continue coaboration based on the outcome of this worskop and side-meeting, 4 November 2021.



OBJECTIVES OF THE PROJECT

The primary objective has been to catalyze collaboration between social and natural science on Svalbard and develop relationship with the local communities through a workshop and follow-up digital seminars.

Secondary objectives has been to organise this workshop back-to-back with the Svalbard Science Conferences, November 2021, in order to increase the collaboration between social science and natural science, including researchers in Longyearbyen, Ny-Ålesund, Barentsburg and Hornsund. In addition we will:

1. Establish new interdisciplinary projects in collaboration with researchers and local communities in Svalbard, with focus on preparing a proposal to Horizon Europe
2. Strengthen the international dimension of Svalbard research through the participation of the Svalbard Social Science Initiative (SSSI group)

The Interdisciplinary Workshop of SSSI, NERSC and partners took place as a workshop/side-meeting to the Svalbard Science Conference 2021 on 4 November 2021 at Scandic Fornebu, Oslo.

Interdisciplinary Workshop SSSI, NERSC and partners

The event started with registration and coffee and a "Meet and Greet" session enabling people to connect and get to know each other and the ongoing research and projects the participants were working on. This was a valuable time spent, as it provided an arena for networking and discussions on possible collaboration, before the more formal side-meeting started.





Pictures by Lisbeth Iversen, NERSC, AHO, SSSI.

The side meeting started with the Chair's welcome by SSF representative Karoline Bælum, the SSSI Board members, Zdenka Sokolíčková, Alexandra Meyer, Dina Brode-Roger and the project leader from NERSC and SSSI, Lisbeth Iversen.

Karoline Bælum from SSF welcomed all the participants and informed about funding possibilities through the Norwegian research Council and Svalbard Strategic Grant. She said that the field grant had a deadline on 24 November and that there will be also calls with deadlines in February 2022.



Karoline Bælum from SSF. Pictures by Lisbeth Iversen, NERSC, AHO, SSSI.



The representatives from the SSSI board talked about the growth of the network, that has become an established organisation. The network and organisation has about 30 members by the end of 2021. It is time both to further strengthen and develop this organisation, and to open it up towards other institutions and possible future project collaboration.

Presentations of people and projects

Before the presentations of the projects, the participants presented themselves and their affiliation and a little bit on their ongoing work. These were the participants of the Side-meeting:

Julia Olsen, Senior Researcher, Nordland Research Institute, Bodø, Norway and SSSI

Cecilie Gro Vindal Ødegaard, Cecilie Gro Vindal Ødegaard Department of Social Anthropology, University of Bergen, Norway. SSSI.

Leticia Antunes Nogueira, Nordland Research Institute, representing Siri Veland. Leticia is working on the Tipping + project with Siri Veland who could not attend this seminar and workshop. She is working with economics and qualitative perspectives. She has been for five years in Norway working with Julia Olsen on sustainability and energy at Nordland research institution.

Lisbeth Iversen, NERSC, Public Sector PhD Candidate at AHO and the project leader of the side-meeting and workshop, and SSSI.

Stein Sandven, NERSC, leading the INTAROS and CAPARDUS projects.

Jasmine Zhang, Postdoc researcher, Swedish University of Agricultural Sciences, Uppsala, Sweden. SSSI.

Ulrich Schilberg, Ph.D candidate at Ruhr-Universität Bochum, Geographisches Institut (Institute of Geography), Germany: *The development of company towns – Longyearbyen in comparison with company towns in other mining regions*. The project is part of a PhD-work at the Institute of Geography at the Ruhr-Universität Bochum. SSSI.

Jelmer Jeuring, Researcher, Development Centre for Weather Forecasting, Norwegian Meteorological Institute, Bergen, Norway. SSSI.

René Van Der Wal, Swedish University of Agricultural Sciences (SLU), the SVALUR project. SSSI.

Hilde Fålund Strøm, Hearts in the Ice, is working as a citizen scientists. She presented more from her work later in the session.

Simon Jungblut: University of Bremen and the FACE-IT project.

Vibeke Vandrup Martens: NIKU- Norwegian Institute for Cultural Heritage Research ,is an archaeologist. They are by nature interdisciplinary in their work. On Svalbard, she is working on the CULTCOAST project that she will present later. The project has sites both on Svalbard and on Andøya, and they look at changes in cultural heritage in at changing climate in coastal areas.

Cecilie Flyen: SINTEF, works as a trained archaeologist. She has been working on research projects for 20 years on climate change and adaptation for the built environment. She is a PhD candidate working in the CuLTCOAST project looking at joint impact on climate and tourism.

Joanna Hambly: University St Andrews/ SCAPE Trustz, is from Scotland. She is an archaeologist and has been doing research on coastal areas and on the processes and changes connected to cultural heritage and the built environment. They have been developing working methods, tools and ethics to be able to work with the public.

Grete Hovelsrud, Nordland Research Institute, and she presented later in the session.

Zdenka Sokolíčková, Department of Social Anthropology, University of Oslo, Norway, working on the project: *boREALIFE: Overheating in the High Arctic – qualitative anthropological analysis*. SSSI.

Dina Brode-Roger: Ph.D candidate at the Department for Cultural Studies, KU Leuven, Belgium, and SSSI.

Eva Kotaskova: Ph.D. candidate, Department of Sociology, Faculty of Social Studies, Masaryk University, Czech Republic, and SSSI.

Alexandra Meyer: Ph.D candidate at the Department of Social and Cultural Anthropology, University of Vienna, Austria. The PhD project is funded through EU Horizon 2020, BG-2017-1, through the project NUNATARYUK. SSSI.

Mathias Albert Bielefeldt: Faculty of Sociology, University of Bielefeld, Germany. Currently working on two projects in early project design phase with relation to Svalbard. SSSI, leading the Imaginaries group.

Roger Norum: Biodiverse Anthropocenes, OULU Finland, is originally from New York. His field is cultural anthropology. He is co-directing a new transdisciplinary project on South East Asia, Finland and the Polar region.

Astrid Elisabeth Ogilvie: Primary affiliations are the Institute of Arctic and Alpine Research (INSTAAR) at the University of Colorado, Boulder, USA and the Stefansson Arctic Institute in Akureyri, Iceland. Working on Understanding Resilience and Long-Term Ecosystem Change in the High Arctic: Narrative-Based Analyses from Svalbard, in the SVALUR project. SSSI.

Michael Køie Poulsen: Nordeco, has been working as a socio- ecologist and biologist for 30 years working on community based monitoring programs. This has to do with how people are able to monitor their own natural resources. In Svalbard he has been collaborating in the INTAROS project with Lisbeth Iversen and tourist cruise operators using different citizen science programs or technology to collect data.

Maria Jensen: UNIS, works with sediments past and present, and also coastal dynamics. Longyearbyen is a mining town where the coal records/ layers in the mines are used to trace the past climate etc.

Inger Jennings: Logistics, SIOS, Svalbard. Ilkka Matero, SIOS KC, Svalbard, data manager.

Morgan Alexander: IP, AHO, PhD Candidate and work at AHO at the Institute of Urbanism and Landscape. He has been working on ethnography of landscapes in the North.

Dmitry (Dima) Arzyutov: KTH/Oulu Finland, work on the Svalbard Seed Bank agricultures. He is an anthropologist with a PhD from Stockholm on environmental archives and environmental concepts, mainly in the Soviet region. He also works at all Oulu University in Finland.

Stein-Ove Johannessen: Longyearbyen Local Council. Leder Miljø- og Næringsutvalget, Longyearbyen Lokalstyre.

Thomas Birchall: UNIS, is a geologist and Post Doc working with permafrost and gas emissions.

Robert Schlegel: Sorbonne University, currently working as a data scientist for the FACE-IT project.

Trym Aleksander Eiterjord: Research Associate at The Arctic Institute. He is a contributing writer to the Institute's flagship weekly publication, The Arctic This Week (TATW). His working location is Berlin, Germany. SSSI.

Karoline Bælum: The Norwegian Research Council. Participated in the morning.

Picture by Vibeke Vandrup Martens,
NIKU



Stein-Ove Johannessen,
Longyearbyen Local Council.
Picture by Lisbeth Iversen, NERSC, AHO,
SSSI.



Michael Køie Poulsen, NORDECO.
Picture by Lisbeth Iversen, NERSC,
AHO, SSSI.



Picture by Lisbeth Iversen, NERSC, AHO, SSSI.

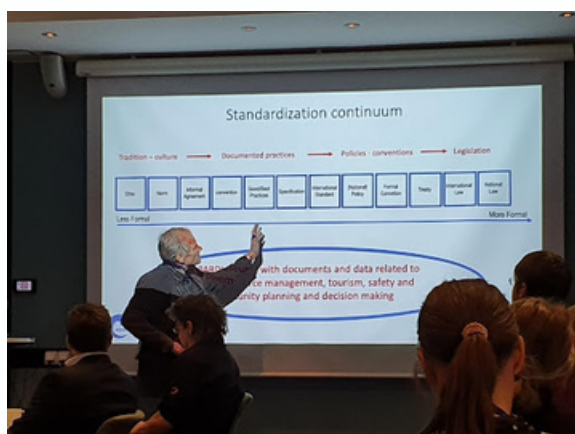
Short presentations from project representatives started the formal part of the side-meeting and workshop

CAPARDUS

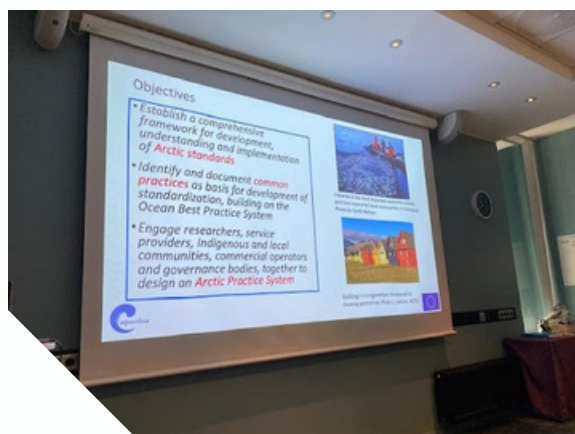
Stein Sandven, NERSC, presented the CAPARDUS project, Capacity building in Arctic standardisation development. This project works on standards and standardisation processes, is looking at Arctic Standards, common practices and how people work and do things in practice, building on Ocean Best Practices amongst other. A key issue in CAPARDUS, : <https://capardus.nersc.no/>, is to define how an Arctic Practice System should be developed to serve various actors, and how we should actually collaborate with local communities, business and public administration to anchor and develop methods and systems for good governance. Cultural heritage actors can be an important group that we should involve in the design of such an APS system.



Stein Sandven to the front, far left, Lisbeth Iversen, leading the Side-meeting and workshop, to the front, far right. Picture by Vibeke Vandrup Martens NIKU.



Stein Sandven presenting Standardization continuum, CAPARDUS. Picture by Vibeke Vandrup Martens, NIKU.



The CULTCOAST project is led by the Norwegian Institute for Cultural Heritage Research (NIKU) and the project leader is Vibeke Vandrup Martens. They work with international partners and with local guides from Basecamp and AECOs expedition cruises and their guides and guests, amongst other. Tom Dawson from Scotland has a long time experience with collaboration with citizen scientists and local stakeholders. CULTCOAST is addressing cultural monuments, cultural environments and cultural landscapes in Arctic coastal areas. The goal is to find the best methods for monitoring, managing and preserving these environmental benefits that are exposed to threats in the form of climate change and development pressure. More information can be found at <https://www.niku.no/prosjekter/cultcoast/>



Vibeke Vandrup Martens, NIKU presenting the CULTCOAST project.
Picture by Lisbeth Iversen, NERSC, AHO, SSSI.

SVALUR

SVALUR is a long-term environmental and monitoring research project on Svalbard, where both local knowledge and environmental knowledge and rich memories of environmental change on Svalbard are some of the main research topics. René is leading this project, in order to provide holistic insights into long-term environmental change whilst at the same time pinpointing how current monitoring programmes can become more sensitive to people's lived experiences and optimize their relevance to people living in and visiting Svalbard. Through teamwork with others, SVALUR hopefully will be instrumental in providing Svalbard with an 'environmental memory', for those who live, work or visit the archipelago, to be inspired by, fall back on and work from.

For more information on the SVALUR project: <https://www.slu.se/svalur>



René Van Der Wal presented the Svalur project.
Picture by Lisbeth Iversen, NERSC, AHO, SSSI.



Picture by Vibeke Vandrup Martens, NIKU.

Sustainable Tourism in Svalbard- a Balancing Act

Julia Olsen presented the Sustainable Tourism in Svalbard–a Balancing Act project where they are addressing sustainable tourism. The project is studying how the tourism industry on Svalbard can create new and sustainable development opportunities that respond to the various transformative changes that both society and nature on Svalbard undergo, while maintaining a viable community and protecting nature. The project will contribute knowledge to the discussion about the future development of Svalbard policy and the national discourse on trade-offs between environmental and climate considerations and local tourism-based value creation. The project has a clear co-production approach to knowledge and will arrange a summer course for PhD students in Svalbard. The project is a collaboration between the Svalbard-based tourism actors AECO and Visit Svalbard, and researchers from Nordland Research, West Norway Research, Unis, NINA and Brown University. <https://www.nordlandsforskning.no/nb/balancingact>

The project description was written before the COVID-19 so there has been some changes in the project. Grete Hovelsrud is leading this transdisciplinary projects on the tourism industry with a co-production approach, involving Visit Svalbard, AECO amongst other. The project started in 2020 with a research on the inconsistency of the Svalbard policy documents.

Through a scenario workshop, they are looking at environmental targets for the tourism industry and the new master plan of Svalbard that is being developed, trying to narrow down what will be the consequences for tourism on Svalbard, and if a more sustainable tourism with less tourists, but longer stays and quality products, can be developed.

Julia Olsen presenting. Picture by
Vibeke Vandrup Martens, NIKU.



Face-It

Julia presented the Face-it project which is a social science project. The project is looking at ecosystem changes in the field systems of Greenland, Disco Bay, Svalbard et cetera. They are looking at climate an ecosystem changes on Svalbard and in the Arctic with impact on tourism. Sustainability, resilience and adaptation to climate change are other important topics in the project.



Julia Olsen presenting FACE-IT.
Picture by Lisbeth Iversen,
NERSC, AHO,SSSI.

Tipping+

Leticia Antunes Nogueira presented the Tipping+ project. The aim of TIPPING+ project is to generate a unique transdisciplinary social science analytical framework to respond to the following intertwined questions. The project is looking at social-ecological tipping points both negative and positive, connected to climate change. TIPPING+ will produce a step-wise advance in the scientific understanding of the critical concept of Social-Ecological Tipping Points (SETPs) to show how a much more robust and empirically-grounded theory of SETPs can be applied to support successful clean-energy transitions in CCIRs.

They have about 20 cases looking at Lofoten and Senja in a scenario with no oil production. The Svalbard case is looking at how the future development can be without mining, and they will have interviews on changes in environment, economy etc. Siri Veland is leading this project. They look at both challenges and possibilities in these scenarios, and data collection connected to these topics. Siri is working on people's stories on Svalbard and how different people have experienced change in the past 30 years, and the driving forces they reveal, and what can emerge from these stories. More information: <https://www.nordlandsforskning.no/nb/project/tipping>



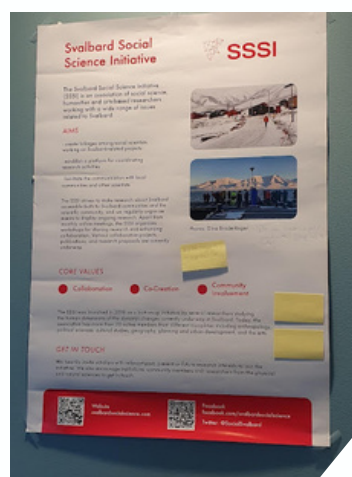
Leticia Antunes Nogueira, Nordland Research Institute
presenting Tipping+. Picture by Lisbeth Iversen, NERSC,
AHO, SSSI.

SSSI Presentation

Dina, Zdenka and Alexadra presented the Svalbard Social Science Initiative that was launched in 2018. SSSI is since 24 February 2020 an association of social science, humanities and arts-based researchers working with a wide range of issues on Svalbard. The core values of are collaboration, co-creation and community involvement.

Through the establishment of a platform for coordinating research activities and facilitation of the communication with local communities and other scientists, the aim of the organization is to create linkages among social scientists working with issues related to Svalbard. SSSI has grown substantially, and has currently 27 members.

SSSI has engaged in collaborative projects in Longyearbyen, hearings, poster exhibition, presentations and sessions, like; "Science for society" at the SSC2021 to ensure more visibility and integration to Svalbard research, Panel at ICASS (online), presentations at ASWW2021 and the Royal Geographical Society (with Institute of British Geographers) Annual Conference. They encouraged other social scientists with relevant past, present or future research interests to get in touch and join the initiative, and through a series of workshops together with NERSC and other partners, hopefully new research projects and proposals can be developed to build a bridge between social and natural science on Svalbard. Here you can read more about SSSI and get in contact <https://svalbardsocialscience.com/>



Dina, Zdenka and Alexadra presenting the SSSI. Picture by Lisbeth Iversen, NERSC, AHO, SSSI.

PRISMAS, FOCUS and ACF

PRISMAS is led by Tromsø University addressing past and present change in the maritime activities around Svalbard. PRISMAS is an interdisciplinary research project funded through the Fram Centre (2020-2022) in which social and natural scientists work on delivering policy-relevant knowledge about past and projected change, risk and safety of maritime activities around Svalbard. New and remote areas are becoming accessible due to climate change, leading to increased maritime traffic in polar regions. Even though we have the Polar Code, with information and guidelines for these activities, there are challenges connected to them. The project is interdisciplinary with researchers from the University of Tromsø - the Arctic University of Norway, the Norwegian Meteorological Institute and the University Centre of Svalbard (UNIS). They will study the dynamics of maritime activities around Svalbard with the aim to deliver policy-relevant knowledge and will bring forward updated knowledge on this topic. The results will provide guidance for mitigating risk and enhancing safe navigation.

For more information;

<https://en.uit.no/project/prismas/about>

FOCUS is accounting for forecast uncertainties in communicating sea-ice and weather information in the Arctic. Due to the Arctic's extreme environmental conditions and remoteness maritime operators are strongly demanding user-specified weather and sea-ice predictions. <https://focus-arctic.com/project.html>

- In order to allow for advanced probabilistic weather forecasting, the operational weather prediction system of MET Norway will be enhanced by coupling to a 1D ocean turbulence model allowing a physically consistent error propagation and operationally feasible coupling strategy. The ocean sea-ice prediction system, as part of the Copernicus Marine Environmental Monitoring Service will also be enhanced using better knowledge of atmospheric forecast uncertainties. Novel ensemble based forecast products will be analysed, designed and refined in a co-production process.

The Arctic Climate Forum, ACT, is a Pan Arctic Forum connected to ArcRCC-N: Arctic Regional Climate Centre Network. World Meteorological Organization (WMO) Regional Climate Centres (RCCs) are centres of excellence that operationally generate regional climate products including climate monitoring and prediction in support of regional and national climate activities and thereby strengthen the capacity of WMO members in a given region to deliver better climate services to national users. There is collaboration with the Sami Council. A similar forum or collaboration for Svalbard would be useful. Read more: <https://www.arctic-rcc.org/>



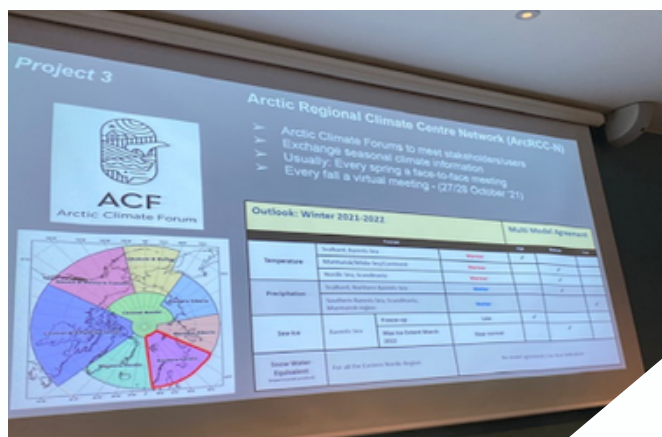
Jelmer Presented the project PRISMAS, FOCUS and ACF, Arctic Climate Forum. Picture by Lisbeth Iversen, NERSC, AHO, SSSI.



Picture by Vibeke Vandrup Martens, NIKU.



Picture by Vibeke Vandrup Martens, NIKU.



Picture by Lisbeth Iversen, NERSC, AHO, SSSI.

Biodiverse Anthropocenes

Roger presented the Biodiverse Anthropocenes project. This is Research Programme of the University of Oulu supported by the Academy of Finland PROFI6 funding (2021-2026).

Scholars from across the social and natural work together collaboratively to investigate the biodiversity loss currently threatening multi-species well-being and planetary sustainability, and to generate future-oriented solutions both in the Arctic and around the planet.

The project is an innovative and transdisciplinary research initiative, involving multiple disciplines such as Biology, Geography, History, Anthropology, Archaeology and Education.

They center the research around four core themes, which are also the focus of their Research Hubs:

- Transformations and adaptations (ANT 1)
- Multispecies worlds (ANT 2)
- Innovating approaches and methodologies (ANT 3)
- and Envisioning sustainability (ANT 4).

They organize a range of academic and public activities, such as seminars, lectures, workshops and conferences; establish thematic research hubs and study groups; engage with societal institutions through citizen science activities; establish an international visiting scholar programme; and recruit a number of new tenure-track professors and postdocs to the University.



Roger Norum presenting. Picture by Lisbeth Iversen, NERSC, AHO, SSSI.

The Arctic Encounter Book Series

Roger presented The Palgrave book series Arctic Encounters that is expected to bring together cutting-edge scholarship across the social sciences and humanities focusing on the vast and critically important Polar regions. The series particularly encourages critical work that is transdisciplinary – in theory, method and approach. It aims to stimulate both creative, collaborative research between social, human and natural scientists, as well as writing that is co-generated by Indigenous knowledge holders and Arctic scholars, activists and policymakers. The series seeks to publish both monographs and edited collections across disciplines including (but not limited to) anthropology, archaeology, geography, history, law, media and cultural studies. In SSSI there is established groups to work on possible collections of articles. The most active group is the Imaginaries Group in SSSI, formed after the Digital SSSI seminar in December 2020. The group has started to search for possible contributions after this workshop in Oslo, and had the possibility to discuss their work with Roger during the seminar and workshop.

Svalbard Global Seed Vault

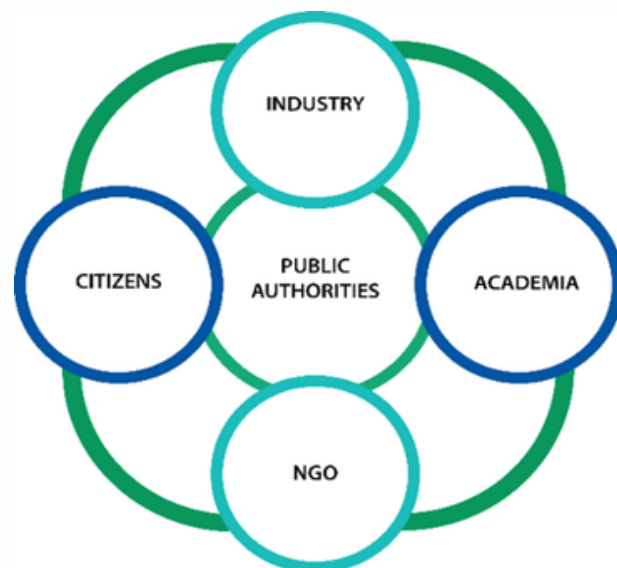
Dmitry Arzyutov presented the Svalbard Global Seed Vault. 300 kilometers beyond the Arctic Circle, is the world's largest secure seed storage, opened by the Norwegian Government in February 2008. From all across the globe, crates of seeds are sent here for safe and secure long-term storage in cold and dry rock vaults. The vault now holds seeds of more than 4000 plant species. Seeds remain depositors' property. The Svalbard Global Seed Vault was established and is fully funded by the Norwegian government, with the responsibility for operations assigned to The Ministry of Agriculture and Food. The Ministry coordinates daily operation with the Nordic Gene Resource Centre and the Global Crop Diversity Trust, and receives guidance from a dedicated international council established to advise the Seed Vault. Based on the FAO Commission on Genetic Resources and the FAO International Treaty on Plant Genetic Resources, the UN Food and Agriculture Organization (FAO) provides important international backing. The Seed Vault offers its services to all types of gene banks seeking security storage for unique seed samples. Seed samples in the Vault remain the property of the gene banks that deposit them. These regional gene banks ensure that seed samples are available to farmers, researchers and processors in accordance with international regulations.

Invited Speakers part 1

Eugene Guribye

The project presentations and discussions were followed up with presentations from invited speakers.

Eugene Guribye, PhD Research professor, NORCE gave a digital Keynote on Co-creation in research, Challenges and opportunities. He presented changes related to the role of municipalities over the last decades. He especially pointed to the high ambitions for increased voluntary work from national authorities by presenting some of the policy documents within the welfare area. Today's welfare state model is not robust enough, and care will be a matter-of-factly part of a living and pulsating community and characterize interpersonal relationships in the family, local community, organizations and institutions. There is an increase in welfare ambitions on behalf of the voluntary sector, and there are both pitfalls and possibilities connected to this ongoing co-creation mobilisation.

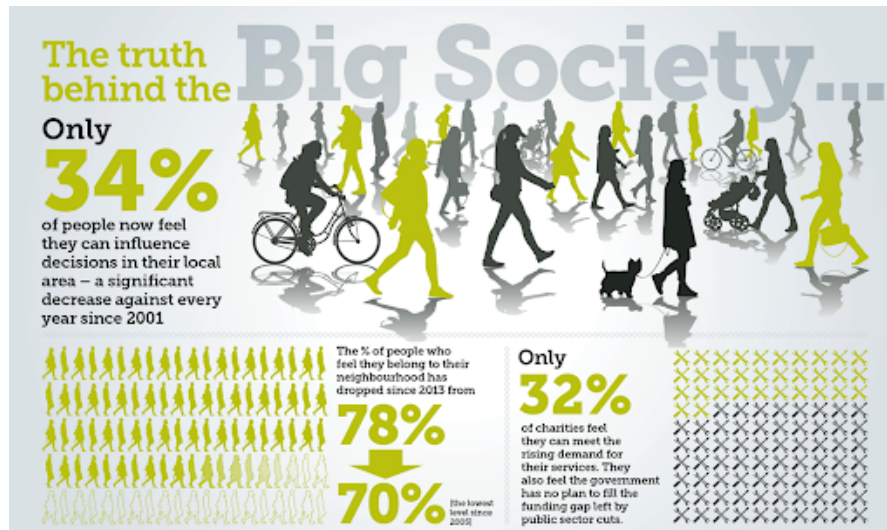


Co-creation relates to many different concepts like; collaboration, co-production, impact hub, clusters, social capital, collective impact, network, Municipality 3.0, Big Society, triple helix, New Public Governance, public value

Co-productin is borrowed from the business sector where exchange of products and services between customers and firms which is built on a platform of simultaneous production and consumption. The joint production of value for both customers and firms alike develop through an interactive process.

Co-creation of Welfare emerged around 2011 in the public sector with several initiatives and approaches:

- Welfare solutions with citizens
- Actors across sectors exchange different kinds of knowledge, resources, competences, and ideas that enhance the production of public value in an attempt to solve a shared problem or challenge
- Collaborative forms of governance. New public governance.
- Co-creation and co-production often used interchangeably



Chathoth, P., Altinay, L., Harrington, R. J., Okumus, F. & Chan, E. S. W. (2013). Co-production versus co-creation: A process based continuum in the hotel service context, *International Journal of Hospitality Management*, Volume 32, March 2013, 11-20

In England the initiative Big Society was launched, based on a neo-liberal reform agenda in public sector. Later evaluation revealed that this was too much of a top-down process, and the inhabitants did not feel more empowered or included in decisions and development of their local society.

Municipality 3.0

The concept of Municipality 3.0 has drawn considerable attention in the Nordic countries in recent years, and may be linked to the terms co-creation and what they refer to in Denmark as 'the new welfare alliance'. In the municipality of Skanderborg, where the term was coined, Municipality 1.0 is described as an antique way of government based on authority, rule and regulations, and in which the citizens were primarily considered to be minions without much influence on public affairs. Moving forward to Municipality 2.0, the public sector, characterized by New Public Management, has primarily become a service provider, with local politicians who determine goals and financial frameworks in dialogue with professionals and customers, i.e. citizens. In the proposed Municipality 3.0, reflecting the so-called 'Third Way' described above, active and engaged citizens are supposed to team up with civil servants to take on the responsibility for their communities. The role of politicians will be to stimulate activity in the community, while municipal civil servants are expected to be concerned with identifying local resources within the community, create networks and facilitate co-creation.

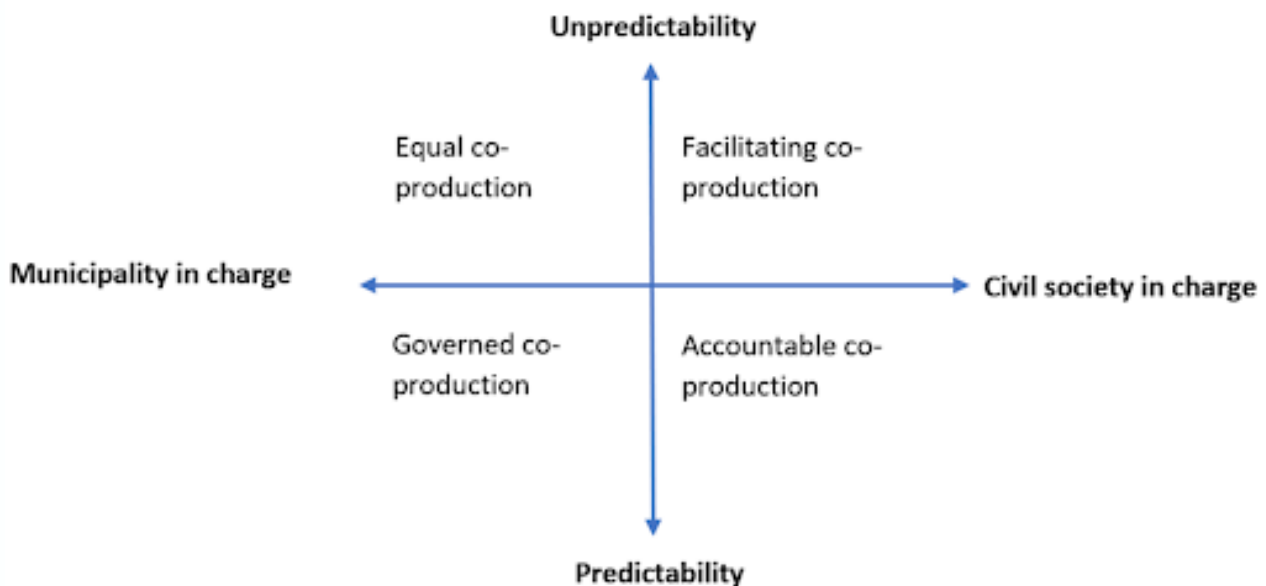


In Skanderborg Municipality in Denmark, the concept Municipality 3.0 was launched



Eugene Guribye (2017): Co-creation of Linking Social Capital in Municipality 3.0. Journal of Civil Society

There are various forms of co-creation:



Ulrich, J. (2016). Samskabelse – en typologi. Clou Skriftserie. Art 2016-001. VIA University College

Co-creation in the public sector is...

- Nostalgic: «back to the communities that our grandparents grew up with»
- Normative: idealized ideas about (even more) active citizenship
- Ideological: neoliberalism, downsizing the public sector, financial gains
- Uncertain: evaluations focus on process not outcomes
- Self adulative: co-production has become a goal in itself

Guribye argued there should be a warning connected to the co-creation approach also:

- Top down strategy needs anchoring among target groups
- Nordic volunteerism is already record high – how much more is realistic?
- Nordic voluntary work focuses on sports and leisure activities. 10% care.
- What about taxes and statutory services?
- Political prioritizations of the welfare area?
- Accountability?
- Does Municipality 3.0 work?

There has been a change towards a more bottom-up approach connected to co-creation initiatives, especially through resource based approaches, ASSET Based Community Development, Mapping complementary resources, linking these resources and facilitating initiatives in the local community.

There are different approaches towards co-creation and collaboration. «Needs paths» is representing: Focus on needs, lacks, problems as well as a „Clientification», and a focus on external expertise, competition about needs and a spiral of dependence

The Resource path has a different approach, starting with capacities and resources in the local community, identifying and link resources, making use of external resources when necessary, and contributing to Empowerment of citizens.

«Welfare is not just something we get, but also something we give».

One example is Beach cleanups as co-production of welfare, included public health benefits, environmentalism, social inclusion, preventing loneliness, belonging – local and global, Green care and meaning for people involved.

The private sector is also important in the co-creation initiatives. One example is Voss Activity Park, Vestland. This project represents co-production between the municipality, citizens and local businesses, where local businesses as the driving force. It has become a meeting place across generations, also involving public health initiatives, as well as supporting the travel industry and destination development

One example of a platform for co-creation is With a Heart for Arendal, that has developed into network or Hub of NGOs, business council, the municipality and active citizens, addressing and facilitating co-creation based on servant leadership principles, increasing bridging and linking social capital, and increasing local participation, sense of togetherness and engagement. This network is led by Lisbeth Iversen.

Co-creation in short is a concept borrowed from the private sector and launched as a major reform agenda for the public sector, with collaboration across sectors. It is unclear and untested, and unlikely to work as a comprehensive reform. Still it is seen as having a high potential, regarded as a new form of service provided by municipalities to facilitate bottom-up activism and social engagement across sectors in local communities.

Hilde Fåln Strøm

Hearts in the Ice, is established by Hilde Fåln Strøm (Norway) and Sunniva Sorby (Canada). This is a platform for social engagement that creates a connection between students, researchers, producers, environmental organizations and everyone who cares about the health of our planet, in the conversation about climate change. Through 2 periods of overwintering at Bamsebu 2019-2021

They lived in the 20 square meter hunting lodge «Bamsebu», which is 78 degrees north. They collected data and samples for several research projects. Hilde explained how they received training from the project partners before they left to stay at Bamsebu, to make sure they could provide reliable data for the research projects. This way they contribute with local data and knowledge, and help building bridges between science, local observation and citizen science. Through their work and platform, Hilde and Sunniva promotes global dialogue about the changes they are experiencing in the polar regions, why these changes are important for the rest of the world and what we can do to protect the natural world. They have given digital lessons for many school classes around the world. She encouraged the present researchers to actively work with and include citizen science in their proposals and work.



Hilde Fåln Strøm, from Hearts in the ice gave a presentation on Citizen science building bridges between research and society. Pictures by Lisbeth Iversen, NERSC, AHO, SSSI.



The presentation session was followed by a networking lunch, before we started Roundtable discussion of project overlaps, data sharing, and coordination of activities

Invited Speakers part 2

Grete K. Hovelsrud

Before the coffee break, invited speaker Grete K. Hovelsrud, Research Professor, Nordland Research Institute gave a presentation on Co-producing knowledge for a sustainable Svalbard: Pitfalls and Surprises. Grete talked about co-production of knowledge, what is to be co-produced, where and by whom. Her presentation was based on the Svalbard context, where she is looking at the actors involved in this region.

In her research, she is addressing Svalbard key policies, the Paris agreement and the UN SDGs, various operators and organizations. There is an inconsistency in the various policy documents, and this complex policy landscape is creating pitfalls in the development and collaboration on Svalbard. Through interaction between actors and addressing the variety of policy documents bring forward many surprises along the road of collaboration.

There are two main approaches to co-production of knowledge; a Descriptive approach, and a Prescriptive or normative approach. The Descriptive approach is dealing with how knowledge is generated and sustained within power relations and social order. It is investigating how science, technology and society interact. Key scholars working with this approach are Jasanoff, Latour and Wynne.



Grete K. Hovelsrud presenting her projects. Pictures by Lisbeth Iversen, NERSC, AHO, SSSI.

The Prescriptive or normative approach is addressing deliberate collaboration between different knowledge systems and stakeholders. A common goal to generate salient and legitimate knowledge relevant for, and usable in policy making is important, as well as transdisciplinarity. This last approach is the focus of the project she is leading, Sustainable Tourism in Svalbard-a Balancing Act as well as the FACE-IT project (2020-2024).

In the two projects they co-produce knowledge to understand the internal inconsistencies, conflicting demands and unforeseen consequences within and between Svalbard governance policies, and frameworks in relation to the tourism industry. They also want to examine whether and how these represent sustainable opportunities and/or challenges for tourism organisations.

Norwegian National Svalbard Policy:

Three key policy dimensions:

- Transforming Svalbard's economic foundation from coal to tourism, research and education.
- Maintaining sovereignty under the Treaty and according to the Svalbard Act, and
- Preserve the unique environment as the best managed wilderness in the world through the policy and management goals stipulated by the Svalbard Environmental Protection Act.

There are two unyielding dimensions:

- Maintain Norwegian settlements on the Archipelago
- Environment concerns will always trump economic interests in case of conflict

What is to be Co-produced?

- Knowledge on how to handle dilemmas and conflicting demands found in the "national goals of increasing tourism" while strict environmental regulations restrict tourism activities
- Operators sell the very wilderness that the Environmental protection Act is to protect. Even stricter regulations are imminent with the new hearing.
- Development of innovative sustainable tourism products

In the light of CC, protecting the environment, and ensuring that the tourism understand the impact of the changes and their role in global challenges

Co-production pitfalls?

- Policies create competing demands
- Compliance with one set may compromise adherence to another
- Who's sustainability are we talking about, and what are to be sustained?
(Economy-environment-social)
- Who's voices count when assessing sustainability?

-

Surprises?

- Conflicting perspectives on behalf of tourism operators on sustainability and climate change
- Lack of trust between tourism operators
- The blatant mismatch between local and national perspectives?
- Underlying national policy agenda for Svalbard is unclear if not hidden

At the end of her presentation Grete talked about the IASSA, International Arctic Social Sciences Association, Presidency and Secretariats in Bodø 2021-2024 and encouraged people to join them.

Workshop and Roundtable discussion

Background for the round table discussions:

Objectives from the proposal to SSG 2021

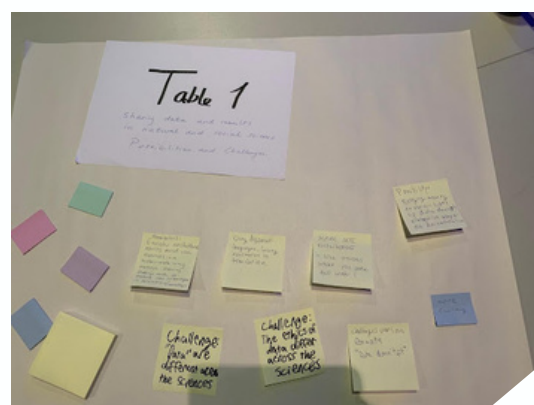
The workshop will address the following goals of SSF:

- a) Develop existing, or establish new, scientific cooperation projects on Svalbard. The SSSI network activities will be extended to include both social and natural sciences by connecting to other ongoing projects and initiating concrete proposals and projects.
- b) Develop the existing four Ny-Ålesund flagship programs. Researchers from New-Ålesund will be invited to the workshop and contribute to the interdisciplinary networking activities.
- c) Increase mobility between research localities in Svalbard (Longyearbyen, Ny-Ålesund, Barentsburg and Hornsund. Researchers from Barentsburg and Hornsund will also be invited to the workshop and be included in the networking activities.
- d) Workshops to be held back-to-back to the Svalbard Science Conference, 2-3 November 2021. The workshop will be on 4 November 2021.
- e) Put Svalbard research in a larger pan-Arctic and global perspective. The project leaders and the project team together with invited participants are representing international institutions and projects, that will contribute to strengthen Svalbard and Svalbard research, challenges and possibilities.
- i) an international and pan-Arctic context.
- f) Findable, Accessible, Interoperable, and Reusable (FAIR) data management compliant with Svalbard Integrated Arctic Earth Observing System (SIOS). The workshop will discuss how to best connect socio-economic data with natural science data in SIOS in agreement with the FAIR principles.
- g) Develop sustainable cooperation under the auspices of SIOS. The workshop will discuss how to build long-term collaboration with natural scientists organized under SIOS.

Round Tables: Table 1

Sharing data and results in natural and social science-Possibilities and challenges.

- Addressing amongst other: Findable, Accessible, Interoperable, and Reusable (FAIR) data management compliant with Svalbard Integrated Arctic Earth Observing System (SIOS). The workshop will discuss how to best connect socioeconomic data and results with natural science data in SIOS in agreement with the FAIR principles.
- Develop sustainable cooperation under the auspices of SIOS. The workshop will discuss how social scientists can build long-term collaboration with natural scientists organized under SIOS. Jasmine was the host of this table.



Possibilities:

Enrich each others results and use resources in a sustainable way through sharing findings and co-produce new knowledge in discussions and workshops.

Share site knowledge;

-Tell others where you work and when!

Bringing meaning to various types of data through attractive ways of documentation

Challenges:

Using different languages, losing information in translation

GDPR challenge

Data are «different» in various sciences.

The ethics of data differs across the sciences

Various formats: Data «does not fit»

Round Tables:

Table 2 (Alexandra Meyer and Dina Brode-Roger were hosts at this table)

Future of Svalbard Social Science Initiative, SSSI.

- Dialogue and input on what, how, were...for whom....Introduction based on the SSSI presentation and poster activity at SSC with input from people asked questions at the SSC venue.
- How can natural and social science work together?

Summary from Table 2: Input on possible Working Groups and participants interested:

Knowledge Production & Collaboration

- Zdenka
- Cecilie
- Alexandra

Heritage

- Dina
- Cecilie
- Alexandra
- Ulrich
- Eva K.
- Maria Jensen
- Cecilie Flyen
- Vibeke Vandrup Martens



Discussion: (from center)

- stability and sustainability of the SSSI as an association
- crucial: distribute and organise the workload
- 5 people for the Board?
- formalisation and distribution of tasks in the Board
- continuity?
- outsource: website? (finance through overheads)
- when new tasks emerge, send out to the members (not all has to be done by Board)
- for example the presentation to NSF - any VOLUNTEERS?
- also, organisation of workshops and project proposals (as with the side workshop)
- establish ad how working groups

Q: Does SSSI (need to) take a position regarding the future of Svalbard? e.g. how do we contribute to a sustainable future, through critical studies/approach & 'activism' (not a nice word)?

Q: Overview over BA, MA student projects? is it possible? how?

Give a presentation to the Board of research Council of Norway (NFR) to pitch SSSI and argue for SS&H in polar research.

Q: establish more working groups (like the Imaginaries Group)?

Administrative Groups:

- note taking group
- workshop group
- annual report group

Climate Change Group?

Heritage? (see above)

Knowledge Production & Collaboration (see above)



Round Tables: Table 3

Develop existing, or establish new, scientific cooperation projects on Svalbard.

- The SSSI network activities will be extended to include both social and natural sciences by connecting to other ongoing projects and initiating concrete proposals and projects.
- Introduction based on former workshop and meetings in the SSSI: We have identified knowledge gap and areas for new research. Zdenka was the host at this table.

Summary from Table 3: Developing existing or establishing new scientific cooperation projects on Svalbard

- IASSA (Grete the president): Promote what we already do and suggest a session for ICASS XI in 2024
- Is it actually possible to collaborate once a project is running, the funding allocated and WPs defined?
- Architecture - Urban Design - Landscape Architecture - Community Engagement / Futuring - Community/Collective Imaginaries
- Project on cabin books - cultures of «friluftsliv», human-environment relations / environmental monitoring, long-term datasets of environmental change / cultural heritage
- Marine development - Julia, Jelmer, Siri, Grete
- Coastal research - cultural heritage, geology, geography / next step? Greenland? Scotland? Expedition cruise monitoring of cultural heritage sites
- Polheim - new initiative to be launched by Hilde F. S. soon in Longyearbyen - space that SSSI could use in the future.
- Applied project: How to connect and change the mindset? Knowledge forum? Aims: raise awareness among Lyb residents, train guides to perform citizen science monitoring so that they can inform tourists, educational work (not only what the teachers expect), local empowerment through knowledge
- Cross-cutting: "co-production of knowledge" and "encounters" - How to do that? What is it? Initiate co-production process in Svalbard? - not necessarily academic but also practical - a common workshop in Longyearbyen?

Round Tables:

Table 4 (Morgan was the host of this table)

Mapping existing collaborations between the different locations on Svalbard and search for new possibilities.

Summary from table 4:

Existing Networks

- SIOS-Network of institutions focus on earth systems science; these networks are across ALL settlements, and we can work with SIOS to encourage interdisciplinary projects involving the social sciences
- AHO researchers and teachers have worked with architecture and design studios in Longyearbyen and Bjørnøya, and aim to continue doing so on an ad hoc basis
- The Stanisław Siedlecki Polish Polar Station in Hornsund
- CULTCOAST sites: Russeheie and Hiorthhamn (+monitoring)
- SVALUR plans to reach out to the Russian-speaking communities (maptionnaire available in Russia) but contact is not easy.
- CAPARDUS and INTAROS.
- UNIS Arctic Technology on building stability and renewables.
- Cold Climate Housing Research Center, Fairbanks, Alaska.
- SINTEF
- Store Norske
- Riksantikvaren
- UNIS
- NTNU
- NIKU
- Sport exchange between Longyearbyen and Barentsburg may open possibilities for contact.
- Norwegian safety and security as a social link between communities and a shared understanding of belonging to Svalbard.
- UNIS student body may be interested in working with social scientists outside of their own research endeavours.
- Cultural heritage preservation in Ny Ålesund and Longyearbyen.
- Consider earth systems not located specifically in communities o

Challenges

Ny-Ålesund – restrictions on social science, but can be done indirectly.

Hornsund – requires permission from the Governor and the Institute of Geophysics of the Polish Academy of Sciences, Warsaw; costly and requires considerable logistics.

Round Tables:

- **Table 5 (Lisbeth and Julia were hosts at this table)**

Put Svalbard research in a larger pan-Arctic and global perspective

- The project leaders and the project team together with invited participants are representing international institutions and projects, that will contribute to strengthen Svalbard and Svalbard research, challenges and possibilities. Dialogue on how, what and when?
- **An international and pan-Arctic context.** What and how?
- Looking for collaboration and networking activities and possibilities, and funding options. (NFR, Horizon Europe...and others)

Summary from table 5

Collaborations and funding possibilities:

- INTERACT
- Funding at one of the research Stations for collaboration with SSSI?
- IPCCH
- Heritage Lottery Fund Scotland
- Horizon Europe:
- Find business partners
- Research partners
- Local Communities
- Politicians
- Long start up
- RFF and SSF
- Networking workshop Arctic 2031
- ERA Net Russland+++
- 800 K
- 2 EU partners + Russia
- RCN Environmental Research Programme
- SSHRC
- Social Sciences and Humanities Research Council

<https://www.sshrc-crsh.gc.ca/home-accueil-eng.aspx>



-
- Connect Grants
 - INTC COCCAD Funds???
 - Norway Research Council
 - RCN Svalbard Programme 2023

Develop an Action Plan

- What to expect of each other?
- Create a timeline-Do activities together:
- Polar Night Seminar?
- Grete Hovelsrud: Results of mapping presented as soon as possible to local actors in Longyearbyen/ on Svalbard
- Svalbard Seminaret UNIS January
- ASSW workshop March 27 2022
- June: CAPARDUS workshop with other partners and stakeholders in Longyearbyen
- Fall: Nor University Grete Hovelsrud Seminar/Workshop

Action towards:

- Knowledge for the industry
- Communication Projects
- Deliver knowledge from ongoing Projects to local decisionmakers and local community
- Svalbard as a case
- Svalbard as a starting point

Collaboration and possible fundings:

- Collaborative Projects for Polar Research
- Should be social Science led
- SINTEF has expressed interest to collaborate(Alexandra Meyer)
- NFR, February, might be too soon.
- SESS Report and SIOS Annual report: Help us make it more relevant for society, Communities and policymakers
- Connect with International Arctic Science Committee IASC
- Connect with Association of Polar Early Career Scientists
- APECS
- UNESCO
- National Ski Areas Association USA, <https://www.nsaa.org/>
- The Arctic Inspiration Prize. <https://arcticinspirationprize.ca/>
Annually 1million CAD. Indigenous people.

The input to the various tables, was created by a circulation of the participants in the workshop. For each new group coming to the tables, the hosts explained a little bit about what had been discussed before. This was based on a world-cafe model, where the final outcome is created across many actors and fields.



Closing part

Lisbeth Iversen closed the meeting and workshop with a short review of what we have been co-creating in this meeting, and explained what could be expected outcomes and the next steps in this collaboration.

Outcomes and impacts of this project

Based on previous SSSI-NERSC workshops, and presentations and workshop in this meeting, this workshop report will be sent out to all participants before Easter 2022. We will continue our work in some digital meetings, and through the work of SSSI, to be more specific on the outcomes and where to move from here. In the proposal to Svalbard Strategic Grant we have decided to develop:

a) An overview of ongoing and planned social science research on Svalbard and its connection to natural science research in the region. This will necessarily take some time and be a task for SSSI to follow up.

b) Improved coordination of data gathering and data sharing efforts by the researchers involved in SSSI.

CAPARDUS, CULTCOAST, and others have started to approach this. CAPARDUS is planning a workshop in Longyearbyen in June 2022. Participants in this meeting/workshop will be invited. Collaboration with SIOS will be important here.

c) The outline of a research proposal that draws on collaboration between social and natural scientists involved in SSSI.

This will be followed up in a digital meeting. Discussions on a possible workshop proposal for the writing of a proposal have started with NERSC, SSSI, CULTCOAST, and others.

d) Overview of research efforts supporting the needs of the local community. This is a task that will be addressed in a separate digital meeting based on the outcomes of the former, end this workshop

This workshop report and recommendations from the follow-up digital seminars will provide documentation of the results through 2022. In addition, the plan is to work on articles and publications, like the SSSI Imaginaries Initiative for the Palgrave Edition, public outreach activities in Longyearbyen in June and in the Fall of 2022, and a new project proposal is planned, combining natural science and social science in Svalbard.

Planned dissemination of project results:

Dissemination of project results and information about the workshop and follow-up seminars will be published on the web pages of SSSI (<https://svalbardsocialscience.com/>) and the partner institutions' websites. Information will also be sent to other research projects on Svalbard, including SIOS and other relevant Arctic networks.

The results will be disseminated to other research groups and to stakeholders in Svalbard including local communities, industries and governance.

Results from the workshop are presented in this workshop report, and the final project report to SSG will be published on the SSSI website.

The results will be presented at other workshops and meetings of relevance for research in Svalbard as well as for a wider international scientific community.

Workshop and Roundtable discussion

The further process based on this SSG funded project:

Main activities and milestones in the project period (year and quarter) Milestones throughout the project, from Quarter to Quarter

- 1 Planning of workshop 2021 Quater 3 -2021 Finished Quater 4. Status: Delivered.
- 2 Implementation of workshop 2021 Quater 4 -2021 Finished Quater 4. Status: Delivered.
- 3 Prepare workshop report 2021 Quater 4 -2022 Finished Quater 2. Status: The Workshop report was delivered in early February 2022. The Final project report is finished by the end of the project.
- 4 Follow-up online seminars, prepare EU proposal 2022 Quater 1 -2022 Finished Quater 3
- 5 Final project meeting and report 2022 Quater 3 2022 Finished Quater 4

15 February 2022

Project leader side meeting/workshop:

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