

Climate Futures Workshop

Nov 13 2019

09.00-17.00

Uppsala University

Dálkke: Urfolksperspektiv på klimat

Dálkke: Indigenous Climate Change Studies

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Climate Futures Workshop by Dálkke: Indigenous Climate Change Studies

Wednesday November 13, 2019

09.00-17.00 plus post seminar and dinner

Uppsala University, Thunbergsvägen 3C, Engelska Parken

Welcome to Climate Futures Workshop by Dálkke: Indigenous Climate Change Studies.

The purposes of the workshop are to:

- Present the ongoing work for discussion. What results do we have so far? How to proceed?
- Prepare for further applications to expand the research project and activities.
- Expand collaboration to interested, for future research projects and activities.

The workshop is open to all interested free of charge. Lunch and dinner is at own cost for participants. Please register latest by November 4 at: <https://forms.gle/Dq1onbtHdMnT4aMz7>
Please note that the number of participants is limited, the registration will be closed down if we have reached the maximum earlier than Nov. 4.

Organised by the research project Dálkke: Indigenous Climate Change Studies, FORMAS Dnr 2017-01923, led by Dr May-Britt Öhman, Uppsala University, within the Swedish National research programme on climate. <https://cemfor.uu.se/Research/research-projects/dalke--indigenous-climate-change-studies/>

Languages: We will present and talk in English, as we have a project participant from Australia. We will help each other with translation to and from Swedish, and if needed/possible also from other languages.

Programme

09.00 – **Káffabádda Coffee**

09.30 **Introduction** to Dálkke: Indigenous Climate Change Studies project and this workshop.
May-Britt Öhman, Dálkke project leader, Uppsala Univ., CEMFOR.

09.45-10.30 **Indigenous IT innovations for environmental protection:**

The journey from Tannak's birth 17 years ago and today with respect to its heritage within indigenous communities Björn Lindgren, Susanne Spik and Karin Kuoljok, Tannak International AB.

10.30-11.15 **Plants as innovators: On Oassje as a model for energy harvesting of flow-induced vibrations** Ida Jansson, Luleå University of Technology, Fluid and Experimental Mechanics

11.15-13.00 **Lunch** Matikum, Kajutan, Engelska parken.

13.00 -14.30 **Wind power in Sámi territories - fossil free, green and environmentally friendly?**

Eva Charlotta Helsdotter, Uppsala Univ., CEMFOR

13.45- 14.30 **Knowledge from the Sámi past for a sustainable future - archeological and historical studies of Forest Sámi on the Swedish side of Sápmi**, Gunilla Larsson, Uppsala University, CEMFOR

14.30-15.15 **Káffabádda Coffee**

15.15-17.00 Seminar organized by CEMFOR, Centre for Multidisciplinary Studies on Racism, Uppsala University

"How do I tell an academic organisation that the land is a research participant?": Reflections from an ongoing project on climate change and Indigenous perspectives

Frances Wyld, Doctor of communication, researcher, Australia

17-19 **Post seminar**

19.00 **Dinner at restaurant in Uppsala** (participants at own cost)

Abstracts and bios

Introduction Dálkke: Indigenous Climate Change Studies project and this workshop.
May-Britt Öhman, project leader, CEMFOR, Uppsala University.

Abstract

May-Britt will provide a introduction to the aims of the workshop as well as the ongoing work within Dálkke, which started in 2018 and will run until 2021. **Dálkke** means "weather" in Lule Sámi. Based within Indigenous- and gender perspectives, Indigenous methodologies/theories and racism studies, and within a cross-disciplinary research environment with humanities, sciences, technology, social sciences, under the lead of researchers who themselves are Indigenous, we perform our research and also develop technological, social and socio-technical innovations and solutions in regard to the challenges related to climate change and fossil fuel dependencies. The geographical focus is on Sábme – Sámi territories – on the Swedish side. Comparisons and collaborations are made over the nation states that are crisscrossing Sámi territories as well as other Indigenous peoples' territories. Within the project we work for the establishment of the research field *Indigenous Climate Change Studies*.

About

May-Britt Öhman has her PhD in History of Technology, 2007, regarding hydropower constructions in East Africa. She is Lule/Forest Sámi from Lule River/Julevädno and has roots in Torne River Valley. Her research focus is on large technical systems, hydropower, water resources, energy production/consumption, mines, environment, risk and safety, decolonisation and healing from colonial traumas, Feminist Technoscience and Indigenous Methodologies/Theories. Geographical focus is on Sábme and comparative studies with other Indigenous territories around the world. She has wide geographical research experience.

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Indigenous IT innovations for environmental protection: The journey from Tannak's birth 17 years ago and today with respect to its heritage within indigenous communities

Björn Lindgren, Susanne Spik and Karin Kuoljok, Tannak International AB, Dálkke: Indigenous climate change studies project participants.

Abstract

Tannak (www.tannak.se/en/) was formed based on requirements and ideas from two innovative Sámi women and reindeer herders on the Swedish side of Sápmi; Susanne Spik and Karin Kuoljok. The need of tracking reindeer resulted in a solution designed for rough environments, i.e. no power, no network and extreme temperatures with the ability to show current and historical geolocation of the "object" - the reindeer. Based on the history of the company, the presentation will discuss how the innovative technology may be used to demonstrate and predict impacts from external factors affecting the reindeer and cattle herds as well as gather data sources. We will also discuss how the developed technological innovation may support collaboration between external factors/stakeholders and indigenous communities in their daily life, in Sápmi as well as in South America and Africa, referring to the work by the United Nations Mechanism on the Rights of Indigenous Peoples.

Questions discussed:

- Is it possible to use the technology to identify a pattern of external impacts based on known data?
- Can the technology used to identify patterns be used to support sustainability and strengthen Indigenous people cultural heritage and livelihood?
- How can we work with ethics in regard to Indigenous peoples rights while developing this technology, and thereby become a role model for "best practice" in regard to indigenous technological innovations?

About

Björn Lindgren has been working in the Information Technology (IT) sector for the past 30 years. During the last years, with global companies like Intel Corporation and Hitachi Vantara, he has focused on how Internet of Things (IoT) technology can support the world to be a healthier, safer and more sustainable place to live. He is currently acting Managing Director for Tannak International AB

Susanne Spik grew up in a reindeer herding family and has been active also as an adult. She is member of Sirges Sámi village, Jokkmokk, Norrbotten county, and has been a member of the board. Over the years she has combined reindeer herding with university education - in leadership and pedagogy and as a preschool teacher - and employments. Spik has been member of board of the Swedish National Sámi Association, SSR, which focuses mainly on reindeer herding issues. She was a member of the Swedish committee for the International Polar year 2007-2008. Spik started the company Tannak together with Karin Kuoljok.

Karin Kuoljok is reindeer herder, member of Sirges Sámi village, Jokkmokk, founder of Tannak (International) AB together with Susanne Spik.

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Plants as innovators: On Oassje as a model for energy harvesting of flow-induced vibrations

Ida Jansson, Luleå University of Technology, Fluid and Experimental Mechanics, Department of Engineering Sciences and Mathematics, Dálkke: Indigenous climate change studies project participant

Abstract

Oassje - Lule Sámi for Water Horsetail - is a plant that grows in wetlands and lakes. In slowly moving water, the circular stems of the plant exhibit vortex-induced vibration. The aim of my current research work within Dálkke is to put forward this interplay and present as guidance in design of energy harvesters. Fluttering leaves, aeolian tones and potentially destructive vibrations of structures are examples of flow-induced vibrations we may experience in our every-day life. Flow-induced vibrations may be a threat as well as a means of transforming power depending on the choice of technology. Today, there is a growing attention on power devices that use flow-induced vibrations to harvest energy. How can those technologies contribute to the transition of energy systems and mitigation of climate change? What lessons can be learned from the interplay of Oassje about both technical design and relations with nature?

About

Ida Jansson lives in Jokkmokk and works at Luleå University of Technology since 2019. Her research interests are fluid-structure interactions and biomimics. Previously she has worked as a teacher during 3 years at Lapplands Gymnasium Jokkmokk. Ida dissertated in 2013 at the Division of Fluid Mechanics and Experimental Mechanics with the thesis "[Swirling Water of Vibrant Bodies](#)" on Fluid-Structure Interactions applied to Hydropower machinery.

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Wind power in Sámi territories - fossil free, green and environmentally friendly?

Eva Charlotta Helsdotter, Centre for Multidisciplinary Studies on Racism, CEMFOR, Uppsala University, Dálkke: Indigenous climate change studies project participant

Abstract

Wind power industrial areas are currently under construction in indigenous Sámi territories. Wind power is by the Swedish government and from the industry as well as many environmental NGOs and climate activists promoted as fossil free, green and environmentally friendly. In this presentation I will discuss if it is really true and how this can be evaluated-

The large wind power parks in reindeer herding areas have massive consequences for the surrounding environment; for Sámi reindeer herders, for water, surrounding nature and society. When the energy efficiency of wind power is evaluated, the energy not easily calculated is often underestimated or omitted. The full "energy cost" of the mining, production, construction, dismantling phases and the restoration of the land is often not known. Furthermore neither the "energy cost" of reindeer fodder and transportation, nor moving municipalities or reimbursing drinking water is included. I argue that to correctly evaluate the energy efficiency of wind power the

emanated consequences should be deferred to the wind power project instead of burdening individuals or society.

About

Eva Charlotta Helsdotter has a PhD in Land and Water Resources Management and is an Associate Professor in Water Security. She has been an international research leader in land and water related research, e.g. in Bolivia, Nicaragua, Kenya and Tanzania and in national environmental and sustainability projects. She has investigated drinking water supplies and designed protection needed to ensure good water quality. The last ten years she has been involved in research projects in Sápmi.

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Knowledge from the Sámi past for a sustainable future - archeological and historical studies of Forest Sámi on the Swedish side of Sápmi

Gunilla Larsson, Centre for Multidisciplinary Studies on Racism, CEMFOR, Uppsala University, project participant of Dálkke: Indigenous Climate Change Studies

Abstract

Based on indigenous knowledge from the past, building on archeological and historical research in Forest Sámi areas on the Swedish side of Sápmi, I will provide Indigenous Sámi perspectives on how relations between humans and environment can be restored and improved. The Forest Sámi society was a sustainable society, leaving few traces and having minimal environmental impact. No withdrawal was made that exceeded the environmental limits. Land was allotted in areas sufficient to sustain two to three families. A varied economy ensured that the resources were not depleted. Planned fires promoted reindeer fodder growth and also prevented wildfires. Colonization has been devastating to the relations between humans and environment, forcing Sámi into a mono-economy based solely on reindeer herding, at the same time as the pasture lands are destroyed by industrial forestry practices and by climate change.

About

Gunilla Larsson PhD, is a marine archaeologist and a world leading expert on ship building, ships and seafaring in the Baltic Sea area during the Prehistoric periods and Middle Ages. In her thesis *Ship and Society. Maritime Ideology in Late Iron Age Sweden* (2007) she identified and defined the different boat building traditions represented in the area. She has also shown that the specific Sámi sewing technique used in Sámi traditional boat building, appears in a Viking Age boat burial boat in Tuna, Badelunda Parish, Västmanland, which shows Sámi presence in Central Sweden during this period.

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How do I tell an academic organisation that the land is a research participant: Reflections from an ongoing project on climate change and Indigenous perspectives

Frances Wyld, Doctor of communication, researcher, Australia, Dálkke: Indigenous climate change studies project participant

Abstract

In this presentation I reflect on the methodology and ethical considerations of an Australian sub-project, part of Dálkke: Indigenous Climate Change Studies.

The Australian sub-project documents stories and opinions about climate change, caring for country and the use of Indigenous knowledges in design and innovation to better care for the environment.

The work is ongoing during 2019 and the results will be presented at conferences and in articles during 2020. The methodology is a blend of western and Indigenous knowledges characterised by the logos and mythos of information gathering. The logos is the academic pursuit of knowledge on the subject undertaken through literature review and the interviewing of Indigenous academics. The mythos represents Storywork and the stories collected from Indigenous communities and people alongside the needs of this diverse land. But how do you give the land a voice in academia beyond what can be known within science? How do we tell an academic organisation that the land is a research participant? Ethical considerations involved in working with Indigenous communities are important, protocols in academia in Australia were put in place for this. Yet something has been lost in translation; a colonising voice had taken command yet again, leaving the land without a voice and the researcher disconnected from a fundamental participant in research - the environment itself.

About

Frances Wyld is a Martu woman (Aboriginal people of the Pilbara region of Australia) and Doctor of Communication. She has taught in the areas of Indigenous Knowledges, education, cultural studies and has worked extensively within curriculum development. Her doctorate title 'In the time of Lorikeets' uses autoethnography, storytelling and mythography to centre Indigenous Knowledges within an academic environment to establish an Indigenous worldview for ethical research and teaching. She takes great pride in her ongoing collaboration with Sámi academics and community persons. Her publications include both scholarly and creative writing elements. She lives in Adelaide, Australia with her son.