ARCTIC – GLOBALLY CONNECTED Perspectives from anthropology REXSAC

Hannu I. Heikkinen

ARCTIC RESOURCES & COMMUNITIES

University of Oulu, Cultural anthropology hannu.i.heikkinen@oulu.fi

Presentation at ARKTIKO - Annual seminar of Arctic Programme of the Academy of Finland, Oulu 9th of May 2017



Map of Willem Barentsz third voyage 1599

Global Challenges

- Climate Change
- Loss of Biodiversity

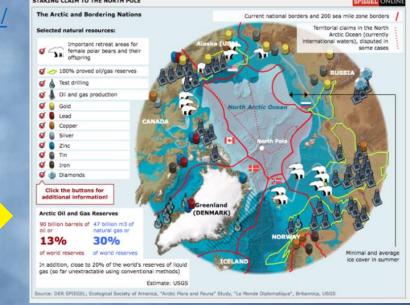
Long term challenges Needs global and international agreements, but local applications

Global and local or 'glocal' challenges

- Volatility of global markets (boom and bust economies, recessions and tourism)
- National ambitions and politics (e.g. rise of nationalism, protectionism)
 Short term, pretty quickly changing (east, west, north and south)
 Effects locally quite instantly (bankruptcies, unemployment, industrial hazards)

Maps, https://eurasiangeopolitics.com/arctic-maps/

'A New Arctic'





Maps from https://eurasiangeopolitics.com/arctic-maps/

'A New Arctic'



Promises for Global and National Policies

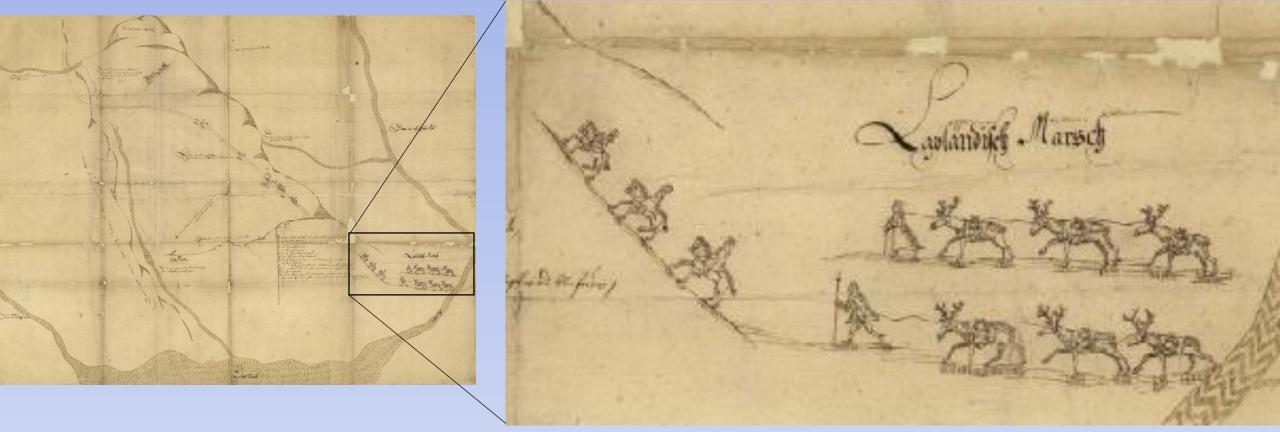
- New routes for sea transportation
- New non-renewable resources waiting under melting ice sheets
- "Hyper-industrialization" scenarios for predominantly harsh and sparsely populated Arctic

Riddles for National and Local Policies

- Securing shorter term new opportunities (new professions, taxes, immigration, tourism)
- Securing locally valued traditions and ways-of-life (fishing, herding, recreation etc.)
- Simultaneous managing of longer term needs and risks (energy, raw materials)
 - Including climatic and industrial hazards, and combination of these

Déjà-vu of 'a New Arctic' - rush to the North and colonization history

- First colonization of Greenland 2500 BC , new waves of Inuit 1200 AD onwards
- Norse colonization of Greenland AD 983, expeditions until AD 1200-1300
- Colonization of Lapland 16th century onwards etc.
- Effects of the Medieval Warm AD 950-1250 and the Little Ice Age AD 1300-1850



Piteå silverworks map from 17th century (Riksarkivet, Stockholm).

资

Globally connected – 'a New Arctic' and two recent discourses on adaptation

Need for, or inevitability of, profound social and economic <u>transformations</u> (Arctic resilience interim report 2013), but also need for socio-cultural continuity (values on <u>cultural resilience</u>)

- transformation means here fundamental changes "physical and/or qualitative changes in form, structure or meaning making [...]" - in societies, livelihoods and behaviour which will better fit to evidently changing environment and society (O'brian 2012, 4).
- cultural resilience means "the ability to maintain [e.g.] livelihoods that satisfy both material and moral needs in the face of major stresses and shocks: environmental, political, economic, or otherwise" (Crane 2010).



Resource Extraction and Sustainable Arctic Communities A Nordic Centre of Excellence

CORE PARTNERS

FUNDED BY









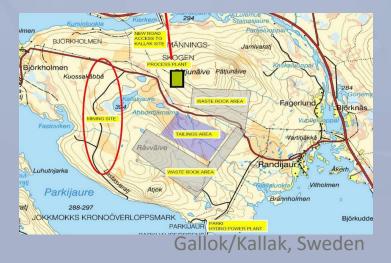
Resource Extraction and Sustainable Arctic Communities

Extractive industries as cultural, social, economic, and ecological phenomena



Pajala, Sweden

Why resource extraction commences



Consequences for communities in the Arctic and beyond



Pyramiden, Svalbard

Opportunities for transitioning toward post-extractive futures



A network of partner institutions

	FUND	ED BY		
(
	CORE P/	ARTNERS		
	Stock	holm ersity	SEI stock INSTIT	HOLM Onment Fute
	PART	NERS		
CARNA VERSITY €	ni institute el Kotural Resources	LULEA UNIVERSITY OF TECHNOLOGY	MEMORIAL UNIVERSITY	Nationalmuse Interdet.com
LU TAIL	PRANCING MARTINE	UNIVERSITY OF COPENHAGEN	UiO : University of Osla	
	LARNA VERSITY		DIOCKNINIII University PARTNERS EXERNAL EXERNAL	<image/> <image/> <complex-block><complex-block><complex-block><table-container><table-container><table-container><table-container><table-container><table-container><table-container><table-container></table-container></table-container></table-container></table-container></table-container></table-container></table-container></table-container></complex-block></complex-block></complex-block>



Program-wide meeting Copenhagen March 2017



How we work

- Common backgrounds: Climate change and extractive industries
- Interdisciplinary: Humanities · Social sciences · Natural sciences
- Case study areas and community engagement
- Education: PhD programme





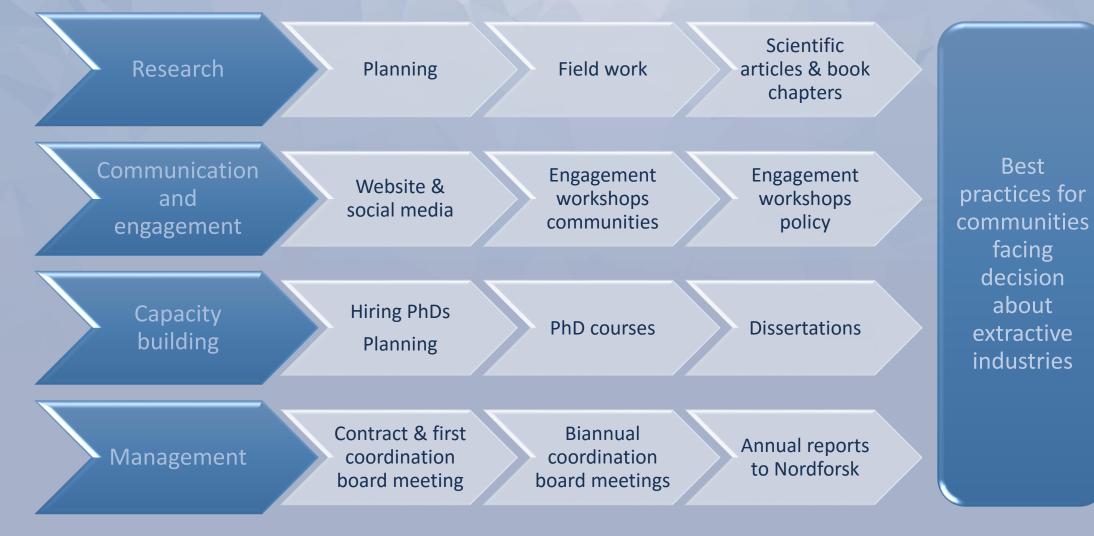




10 interlinked research tasks

Defining sustainable development: Indicators and assessment Joan Nymand Larsen	Impacts of multiple pressures and Arctic landscapes and societies Gunhild Rosqvist	Governance structures for extractive industries: Identifying path dependencies Mark Nuttall	Transnational companies, indigenous peoples – the politics of Arctic mining Peder Roberts
Affective economies: How are places, communities and identities constructed? Kirsten Thisted	Rewilding: The science and politics of environmental remediation Dolly Jørgensen	Material legacies as resources for sustainable futures: Tourism, infrastructures, heritage Dag Avango	Co-existences: Recoding natural resources for future livelihoods Marianne Lien
	Scenarios as a tool for co-production of knowledge Annika E Nilsson	Comparative global learning: Theorizing transitions to sustainable futures Sverker Sörlin	_ΒΕΎςΛΓ

Timeline



2016

2020

REXSAC

Staff and activities

- Network of **75 researchers** in Sweden, Denmark, Norway, Iceland and Finland, Canada and Russia
- Multidisciplinary
- Collaboration with local communities
- REXSAC Funds:
 - 6 PhD students
 - 1 post-doc
 - 11 senior researchers
 - Researcher schools
 - Mobility
 - Outreach
 - Conferences, workshops etc.



Examples of adapting Arctic communities

 Local meat processing and marketing as an bottom-up answer to limited reindeer numbers and degenerating reindeer pastures.

- Heikkinen, Academy of Finland post doc project 2004-2007.



Meat processing and sales facilities of Sevetin Kiela Ltd in Sevettijärvi, Finland

Reindeer at the forestry road in Muonio, Finland 1999.

Pahtavuoma copper mine leftovers in Kittilä, Finland 1999. Landscaping 2016.

Direct sales of reindeer meat to tourists in Äkäslompolo, near Ylläs Skiresort 2016.



SOUTH GREENLAND, Upernaviarsuk

- Dr. Joan Nymand Larsen and Jón Haukur Ingimundarson
- **Project**: Human- and Renewable Resource development in South Greenland Project, 2014 - Stefansson Arctic Institute & University of Akureyri, Iceland
- Increased awareness of the Arctic the new Arctic
- Linked to the global need to build capacity
- Continued innovation in governance at all scales
- Great expectations surrounding extractive industries, but also on new renewable industries



REXSAC PhD studies

Camilla Winqvist

Re-use of mining legacies - A comparative study

KTH Royal Institute of Technology, Div. of History of Science, Technology and Environment, Stockholm

Research questions:

- Cultural heritage/tourism ?
- Re-opening ?

- Mining companies use of history as a tool to get social license to operate?

- New questions from cases?

Kaolin mine in Cornwall, England



Eden project http://www.edenproject.com

REXSAC PhD studies Jasmiini Pylkkänen, UOulu

- Mining and environmental risk governance in the circumpolar North – a quest for social justice?
- Materialization of risks is not inevitable
- Risk governance is not a value free exercise
- Risk governance needs to decide:
 What exactly is treated as 'something of value'?
 What determines when 'something of value' is harmed?
 These decisions (as well as criticism) need to be justified



Photo: Lehtikuva/Kimmo Rauatmaa



Think pieces from the perspective of anthropology!

- Adaptability of human being is great from dry deserts to the Arctic rim, so the survival of the whole species is not my first worry,
- Instead, certain social, economic and cultural order can be very vulnerable,
 - Sole relying on certain resources (e.g. uni-crop farming and both historically and today),
 - Relying on certain and steady environmental conditions (ice roads, winter tourism, climatic hazards).
- Key to understand our concepts of "risk" or "threat" or "opportunity", depends on our values, context and perspective,
- Key of human adaptation has been and is finding of new ways, technologies and organizations that 1) fit better emerging conditions, but 2) serve the core values that keeps societies together (social cohesion),
- On other words, adaptive capacity of human systems is our abilities and possibilities to transform our culture to fit to different conditions without losing key values and social cohesion,
- Fashionable new conceptualization of a need for transformations is "Social innovation".

Idea for future research on social innovations

Two interdependent themes to pay attention to regarding local adaptation to globally connected 'a New Arctic',

- 1) Community-based Natural Resources Management,
- 2) Indigenous Entrepreneurship.

Hypotheses

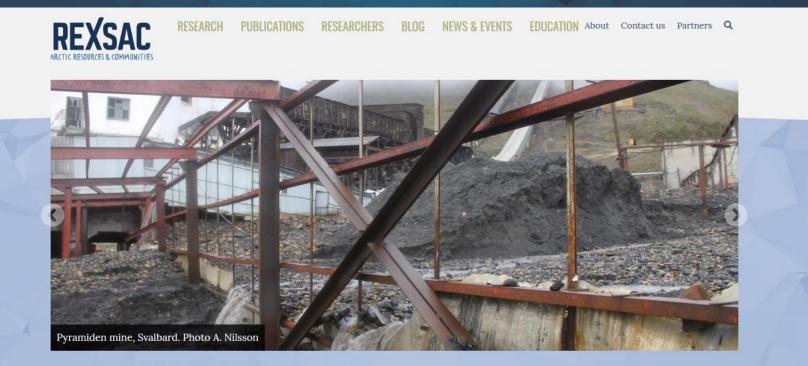
- The Former creates resources for the Latter and supports of securing of valued ways-of-life and cultural resilience?

- The Latter creates motivation for the Former: to manage resources in environmentally and socio-culturally sustainable way?

Need for broad temporal and spatial search for new ways to old problems!

18

www.rexsac.org



Resource Extraction and Sustainable Arctic Communities REXSAC - A Nordic Centre of Excellence



References

Arctic Resilience Interim report (2013). Environment Institute, Stockholm Resilience Centre and Arctic Council.
Crane, T.A. (2010) 'Of models and meanings: cultural resilience in social–ecological systems', *Ecology and Society*, 15(4): 19.
Maps <u>https://eurasiangeopolitics.com/arctic-maps/</u>
Piteå silverworks 1600s. Riksarkivet, Stockholm.
O'brien, K. (2012) 'Global environmental change II: From adaptation to deliberate transformation', *Progress in Human Geography*, Vol. 36 No.5, pp.667-676.



www.rexsac.org

Facebook: REXSAC - Resource Extraction and Sustainable Arctic Communities Twitter: @RexsacArctic