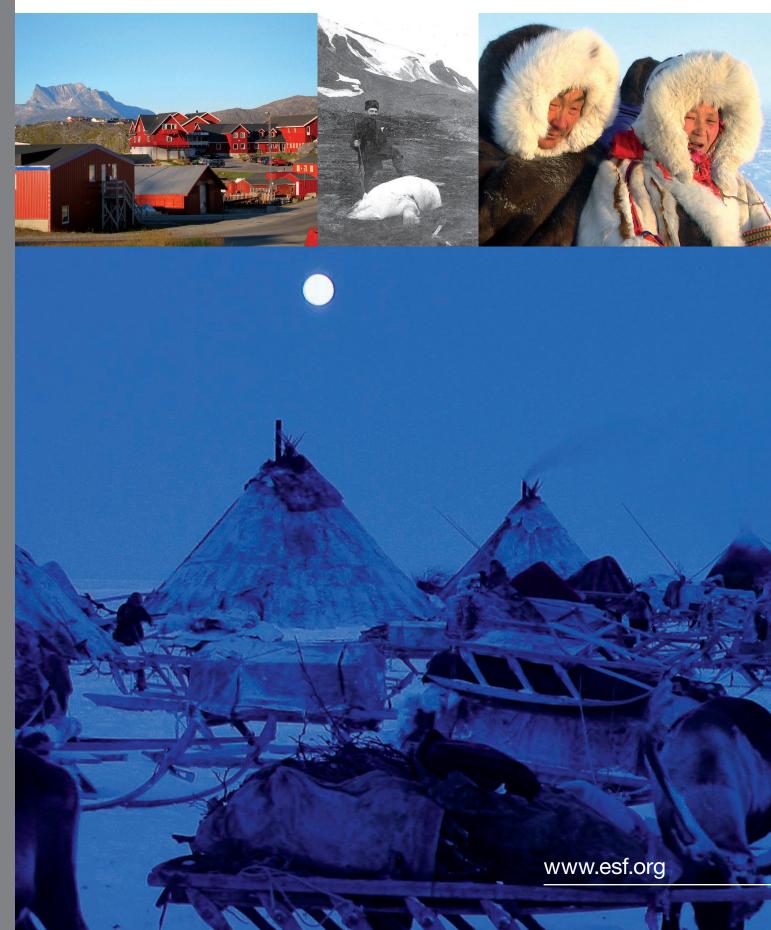


EUROCORES Programme

Histories from the North — environments, movements, narratives (BOREAS)



The European Science Foundation (ESF) was established in 1974 to create a common European platform for cross-border cooperation in all aspects of scientific research.

With its emphasis on a multidisciplinary and pan-European approach, the Foundation provides the leadership necessary to open new frontiers in European science.

Its activities include providing science policy advice (Science Strategy); stimulating co-operation between researchers and organisations to explore new directions (Science Synergy); and the administration of externally funded programmes (Science Management). These take place in the following areas:

Physical and engineering sciences; Medical sciences; Life, earth and environmental sciences; Humanities; Social sciences; Polar; Marine; Space; Radio astronomy frequencies; Nuclear physics.

Headquartered in Strasbourg with offices in Brussels, the ESF's membership comprises 75 national funding agencies, research performing agencies and academies from 30 European countries.

The Foundation's independence allows the ESF to objectively represent the priorities of all these members.

Contact details

For further information, please contact:

Dr. Rüdiger Klein

European Science Foundation 1 quai Lezay-Marnésia, BP 90015 67080 Strasbourg cedex, France Tel: +33 (0)3 88 76 71 04

Email: boreas@esf.org

Ms. Claire Rustat-Flinton

European Science Foundation 1 quai Lezay-Marnésia, BP 90015 67080 Strasbourg cedex, France

Tel: +33 (0)3 88 76 71 79 Email: boreas@esf.org www.esf.org/boreas

Editors:

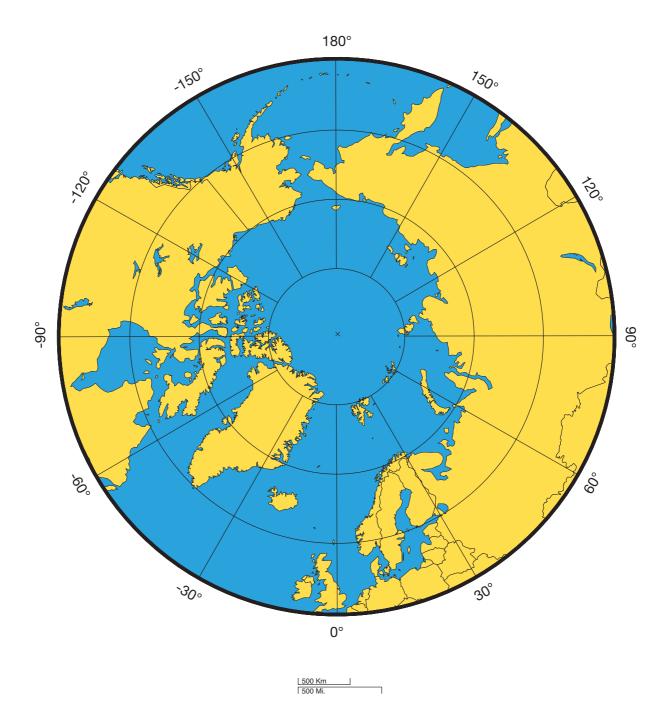
Dr. Rüdiger Klein Ms. Reija Tuomaala, M.A. Dr. Piers Vitebsky

Cover (clockwise from top left):

1. Nuuk, Greenland, with its signature peak Mount Sermitsiaq. Courtesy of Lawrence Hamilton – 2. Polar Bear hunting during the Swedish Arctic expedition of 1898 – 3. A Nenets couple on Yamal Peninsula. Courtesy of Piers Vitebsky – 4. Intersecting branches used as a framework for the traditional Saami lavvu, or tent, stand in the snow in Lapland, Norway. © Michel Setboun/Corbis

Contents

About BOREAS		3
Εl	UROCORES BOREAS Collaborative Research Projects (CRPs)	9
•	New Religious Movements in the Russian North: Competing Uses of Religiosity after Socialism (NEWREL)	10
•	Moved by the State: Perspectives on Relocation and Resettlement in the Circumpolar North (MOVE)	15
•	Understanding Migration in the Circumpolar North (UMCN)	20
•	Home, Hearth, and Household in the Circumpolar North (HHH)	22
•	Northern Narratives: Social and Geographical Accounts from Norway, Iceland, and Canada (NORSAGA)	29
•	Change and the Environment in Nordic Prehistory: Evidence from Finland and Northern Canada (SCENOP)	34
•	Colony, Empire, Environment: A Comparative International History of Twentieth Century Arctic Science (CEE)	36
Networking Circumpolar Research (2007- mid-2008)		43
	1. Conference BOREAS Research Programme Launch	44
	2. "Cyber-research Infrastructures and Data Management for Science and Communities"	47
	3. "New Methods for Understanding the Demography and Ethnohistory of Arctic Populations"	49
	4. "Understanding Migration in the Circumpolar North"	50
	5. "Life and Ritual: Spirit of the North: Community Histories and Religious Identities"	50
	6. "Polar Expeditions and the Measurement of Circumpolar Indigenous Populations"	51
	7. "Circumpolar Human and Social Science Research and GIS Applications"	51
	8. "Heading North, Heading South: Arctic Human and Social Science Research in a Global Dialogue"	51
	9. "Population Dynamics in the Circumpolar North"	52
	10. BOREAS at the VI th International Congress of Arctic Social Sciences	52
	11. "Boreal Connections: Environments, Narratives, and Histories in Iceland, Norway and Labrador"	52
В	OREAS Scientific Committee	53
В	OREAS Review Panel	53
R	OREAS Management Committee	5/



About BOREAS

("Histories from the North - environments, movements, narratives")

The context

The circumpolar North is now widely accepted as a unique early warning system for changing relations between society and the environment. This region, which includes the Arctic and the sub-Arctic, has moved to the centre of global debates on environmental change, human adaptation, new post-cold-war partnerships and issues of post-colonial governance and strategy. Yet, much Arctic research has been dominated by natural science agendas, looking at the region as a natural 'laboratory'. Inhabitants of the Arctic are often seen as natural variables, while their understandings of the natural, cultural and spiritual processes that have shaped Arctic civilisations have not been adequately taken into account.

Following Mikhail Gorbachev's 'Murmansk speech' in 1986, and the growth of worldwide concern with global climate change during the 1990s, the circumpolar region has only recently re-emerged as "one" area, revealing past connections and current common problems and pointing to future challenges, such as the relationships between communities and the modern state (whether Soviet, post-Soviet or Welfare), NGOs and the global economy.

The involvement of local populations as research partners is very advanced in the North, and BOREAS offers a unique opportunity for scholars to explore the intersections of Southern (or 'Western') ways of knowing the environment and their local counterparts. BOREAS can redefine the geography of knowledge in Northern Europe and relate it to circumpolar regions worldwide, by moving beyond South-North dichotomies and centre-periphery models, as well as by crossing disciplinary and national boundaries. BOREAS also invites the research community to reflect upon their own approaches to studying the North.

The Call

The BOREAS Call for projects, published in May 2005, identified certain priority areas for research. BOREAS places a strong emphasis on fieldwork and other evidence-based methods such as archival research. The aim is to form a wider archive of data, necessary for new approaches to problems of space and time, as well as synergies with other empirical domains of research in the social, natural and medical sciences. All scientific domains are invited to reflect upon their approaches to studying the Arctic.

In BOREAS, research on the circumpolar North focuses on the relationship between humans and **environments**; but both will appear as subjects, and not merely as the recipients, of change.

In order to challenge the image of a static Arctic, BOREAS explores the importance of **movements** (both seasonal and long-term), especially those associated with the creation, permanence and dissolution of communities, and ways in which these are mapped in new social forms.

A community's engagement with a given or changing environment finds expression in **narratives** (histories, philosophies, mythologies, arts and other forms). BOREAS goes beyond the recording of human techniques of local, ecological adaptation in extreme environments under conditions of (global) change and explores the philosophical and spiritual foundations of such knowledge 'from the North' and aims at tracing the dynamics that shape the transmission of knowing about sustainability in a fragile world.

Teams of scholars were invited to propose collaborative research projects that ask complex questions which require a multidisciplinary and transnational approach. Depending on the topic, all fields of the Humanities and Social Sciences, but also adjacent areas, such as climate, environmental or medical studies can be found among the expertise present in BOREAS teams.

The ambitious BOREAS Call had presented a long list of unresolved listed research questions and other examples for project foci:

1. Human ecology of time and space: change and movement

How can we best use the evidence offered by the northern environment to link the long time-scales from geology to archaeology with the shorter time-scales of colonial history and living memory?

How can we understand movement as a pattern of land/ water/ice use, and as adaptation to both stability and change?

How can we study forms of extreme environmental adaptation between Arctic and sub-Arctic, seaboard and interior?

- Commensurability of geophysical and archaeological data and more recently recorded human experience in small, highly mobile populations; perceptions by Northern residents of environmental change
- East-west migrations around the North, including European contacts with North America and North Asia; exchange of genomes with the "South"
- Human adaptation to extreme seasonality and longterm climate change: mobility of animals; settlement and mobility of humans; adaptation of movement and patterns to water, snow and ice
- Diversities and commonalities in northern understandings of space, movement, distance and direction; subsistence and plenty

2. Socio-economic and political impacts: governance and sovereignty, industrialisation and subsistence

How can we map the relationship between central state and local communities?

How can we interpret sovereignty and citizenship in northern societies dominated by southern demand for natural resources and revenue dependence on world markets?

How can we locate northern research in the field of socio-political forces?

- Comparisons of advances and retreats of the colonial and post-colonial state in these sparsely populated regions; range and sustainability of state power and infrastructure, access and role of NGOs
- Diversity of models and realisations of sovereignty, and of forms of governance; regional devolution and indigenous self-government; cross-border regimes and transnational forms of cooperation
- Politics and ethics of access to natural resources for utilisation in the South; the role of natural sciences and the impact of national and world economies
- Industrialisation and de-industrialisation in the socialist and capitalist North; regional revenue dependence on non-renewable resources
- Coexistence of mineral and subsistence economies; interplay between mineral/energy-based economies and animal-based economies

3. Local responses: vulnerability and resilience

What are the limits to social and cultural adaptability? Which local responses stem or channel outside political and cultural influences and domination?

What is the effect of the northern frontier on mutual identity formation between indigenous communities and immigrants?

Does technology (transport, communication, etc.) create a new North?

 The role of culture, consciousness and agency for models of change, response and feedback in remote



Feeding reindeer with salt to keep them tame. Indigenous accounts in Siberia of the first, prehistoric domestication of wild reindeer often emphasise the offering of salt as the foundation of their social contract with humans.

areas, e.g. applicability of the biology-derived concepts of vulnerability and resilience

- Qualitative, culture-based approaches to issues of social adaptability and public health, especially regarding diversities and convergences among parts of the region intensively subjected to both socialist and liberal development policies
- Electronic communications, cultural models and entertainment in isolated communities
- Perspectives and adaptations of southern settlers to northern conditions; interactions of indigenous communities with immigrants; social and legal statuses and senses of belonging; expression and resolution of conflict
- Scope and limits of social adaptability; generation, gender and family dynamics; education, including boarding school; alcohol, drugs and youth culture; violence, suicide and trauma
- Changing patterns of nomadic and settled space; health, household and food security in relation to seasonality
- Dependence on transport and supply lines; the development of consumer culture and the relationship to the environment

4. Representations: histories, language, identity

What are Northern techniques of history and memory? How has linguistic change affected Northern societies' ability to interpret their past, present and future? How do institutions (media, schools, museums, etc.) influence identity?

 The production and interpretation of histories, texts and diaries; techniques of memory, including myth, life history and autobiography; comparative collection of changing images, values and narratives by which Northern societies interpret their own pasts, presents and futures

- Post-colonial and other approaches to representation and history; including the relationship of orality, writing, visual arts and artefacts, music, theatre, film and new electronic media (criteria of validity, evidence and voice)
- Ethnic and other identities; contact zones; mutual representations between North and South; role of the North in European self-definition
- Properties of northern languages; changing linguistic forms, usages and contexts
- Indigenous and outsider religions and ideologies: implications of the various forms of shamanism, Christianity, Communism and capitalism for society, history and language
- The marketing of cultural heritage and management of sacred sites

5. Philosophies

How is the non-human environment (landscape, animals) conceptualised as a nexus of social relations and a field of multiple and contradictory agencies? How do narratives of the North's exceptionality and marginality influence research traditions?

How can researchers and northern residents collaborate as partners in the production of knowledge and the framing of political, cultural and science agendas for the North?

- Experience, evidence, reality and the self-situating of northern civilisations; multiple ontologies and cognitive resilience; implications of these for critiques of theories of knowledge
- Northern indigenous philosophies of human and animal nature and theories of identity, ethics, intention, agency and mental health; comparative cosmology; reincarnation beliefs and theories of identity, responsibility and free will
- Discourses of scholarly and scientific research traditions; definitions and boundaries of the North; southern constructions of "nordicity" and of the North's exceptionality, and contemporary re-evaluation of the region as exemplar of global processes
- The researcher and the human object of research, in a region of advanced involvement of indigenous and settler communities as full collaborators in the process of knowing; comparisons with methodological implications in other civilisations



A Nenets herder by an oil installation. Oil and gas works cut across reindeer migration routes and pollute them, but recent research shows that herders also use them as a source of materials and services.

Networking

European circumpolar research in human and social sciences research tends to be conducted by individuals and small teams linked by informal networks. The infrastructure of European humanities research on this region needs to be developed, both to ensure effective collaboration with other disciplines working in the North and to strengthen the ability of northern studies to make a basic contribution to wider debates in the humanities.

BOREAS provides a distinctive opportunity for forming multilateral and multidisciplinary collaborative research projects, not only between European researchers, but also with the USA, Canada and Russia. All three countries possess extensive northern territory, where northern research is undergoing significant organisational changes. BOREAS will create conditions to enter into a dialogue with these restructuring research systems and will be open to proposals for collaborative projects with research groups from those three countries.

Networking activities under BOREAS can also address the need for sustained interdisciplinary dialogue both within the humanities and social sciences, and beyond.

The process

Six Million Euros for ESF EUROCORES Programme BOREAS

The ESF EUROCORES Programme BOREAS ("Histories from the North - environments, movements, narratives") is funded to a total budget of approximately 6 Million Euros (incl. ESF networking grants). Financial support for BOREAS has been generated in Canada, Denmark, Estonia, Finland, Iceland, Norway, Poland, Sweden, and the United States to fund large-scale Collaborative Research Projects. Associated Partners are based (and funded) in Belgium, France, Germany, Russia, Switzerland, and the United Kingdom; some project members come from still further afield. Specific funds are provided by ESF to ensure networking activities between the funded CRPs, so that the programme as a whole may lead to new visibility of Humanities and Social Science based research into the circumpolar North.

Project selection

The selection of project proposals was achieved through a two-stage process with Outline Proposals, having been sifted by the international BOREAS Review Panel (which included European, Russian, Canadian and US-American academics), and Full Proposals for Collaborative Research Projects selected by the Review

Panel on the basis of international referee reports. BOREAS is a rare, successful experiment for such a "global" assessment and evaluation process.

Eventually, seven Collaborative Research Projects (CRPs) obtained funding, with 38 individual project teams and 14 Associated Partners now being part of the programme. The duration of research projects is between three and four years, depending on the funding granted under national rules and regulations.

While BOREAS has been significantly strengthened through the participation of many North American (Canadian and US) Principal Investigators, the involvement of European advanced PhD students and post-docs in BOREAS, and their exchange over the years to come, will create a vibrant circumpolar research community with new centres and new synergies emerging also in Europe. This would be in line with the philosophy of the EUROCORES Scheme, which is to foster the creation of critical mass at European level, aiming at strengthening the integration of Europe's scattered researchers in Arctic humanities.

The programme

Deprovincialising the Arctic

One ambition of BOREAS is to deprovincialise the Arctic (and the related Humanities and Social Science research): if hegemonic Arctic research has little room for the Humanities, the wider Humanities disciplines in turn know little about the Arctic. In anthropology, for example, specialists in Africa, Indonesia and the Amazon read and use each other's work. Yet, they rarely refer to any anthropology coming out of the Arctic, or make use of any theoretical advances which have arisen from Arctic research. The situation is similar in other disciplines.

Fortunately, there are signs of change. Externally, the "human dimension" of natural science programmes is becoming less of a token nod, as rapid global change forces those sciences to face more complex interactions between humans and nature; internally, younger Humanities researchers are emerging who are not constrained by the remoteness of "their" region. Anglo-Saxon, Danish, Russian and Venezuelan students in Cambridge recently organised a workshop comparing Siberia and Amazonia as resource frontiers (Cambridge Anthropology XXVI/2, 2006/07) showing persuasively that the study of these two regions throws a complementary light on each other and also on issues which are ultimately global.

BOREAS and International Polar Year (IPY) 2007-2008

The launch of BOREAS coincides with a major interdisciplinary research initiative in polar science, the Fourth



International Polar year (IPY) 2007-2008 [http://www.ipy.org]. One of the main objectives of the fourth IPY is an active inclusion of the human and social dimensions in polar research. Local communities are also encouraged to take an active role in the process.

BOREAS as a humanities-led research initiative can make a signal contribution to the IPY framework themes.

BOREAS researchers have been encouraged to take the lead for Humanities research among IPY initiatives: BOREAS offers a rare strategic opportunity to prepare the ground for a more sustained presence of Humanities and Social-Science-based circumpolar research in science planning for the next 10 years. During the launch conference, the assembled scientific community agreed that it would be wise to use BOREAS as a flagship to show the vitality and international nature of the field, notably in order to further strengthen it in Europe.

BOREAS has provided a funding opportunity for IPY-focused projects (particularly those initiated by European scholars), in a multilateral and multidisciplinary framework. Such IPY collaborations give a forceful voice to humanities and social sciences in Arctic studies as a whole.

Some of the funded BOREAS collaborative research projects are fully endorsed as IPY projects. BOREAS

researchers agreed they ought to explore whether and how Humanities and Social Science data can function in the context of the comprehensive and ambitious IPY data policy. BOREAS will aim at formulating guidelines for the use, sharing and storage of such data.

The relationship with IPY is an open one: parts of the BOREAS community will take a lead in fundamental research, in-depth studies in human cultural development and societal adaptation, while IPY teams will focus more upon practical, observational networks, educational and public outreach, and partnerships with polar communities. Similar synergies can be envisaged to develop with initiatives such as the International Study of Arctic Change (ISAC), the Arctic Human Development Report (AHDR) and their follow-up projects.

Data management

BOREAS projects, in view of the requirements for projects endorsed under the IPY, have developed a sensitivity on the risk to become tied down to unsuitable and inflexible data management models derived from natural sciences.

On the other hand, the IPY data policy recognises that humanities and social sciences have specific needs in terms of the design of their data structure, and in terms of the nature of some of the data they generate. Also, ethical and intellectual property rights issues which such data imply must be taken into account in the design and modalities of access to repositories.

At the first all-BOREAS workshop – organised by ESF in February 2007 in Paris – BOREAS researchers agreed on the necessity to archive and share data as appropriate and to collaborate on creating meta data. Working towards creating a common web portal was seen as a useful goal. A subcommittee would explore the institutional and ethical implications of the specific datasets (data providers and data users), and the possibilities for appropriate use of cyber infrastructure initiatives for these purposes.

The objective would be to make data available and usable (standard formats; metadata description), to the exceptions foreseen by the IPY data policy, and to reflect on and plan the long term preservation and sustained access to IPY data. BOREAS considers it its mission to present data in culturally appropriate manners to a variety of audiences, including those individuals and communities who provided the data, academics, government officials, policy analysts, as well as others.

The workshop also aimed at linking BOREAS data generating and storage activities to wider-ranging activities in Europe (digital research infrastructures for the Humanities), in the US (cyber-infrastructures), and elsewhere. With its comparatively compact and globally well-connected researchers' community, circumpolar research felt well-placed to take the initiative.

BOREAS at the European Parliament for IPY Launch

Seasonal nomadism, migration, and resettlement have always been important for the people living in the northern Polar Regions as these movements are key for their survival. In the past, movements such as aggregation in temporary winter villages near the sea ice for seal hunting and summer dispersal inland looking for wild reindeer were mainly triggered by local conditions.

Population movements and concentration have, since the 20th century, been more affected by outside factors such as the changes in policies reflecting market or state policies without a local character. The shift is causing damage to the social fabric of these societies.



Professor Csonka at the IPY Launch.

To address this problem, the European Science Foundation (ESF) launched the EUROCORES BOREAS Collaborative Research Project "Moved by the State: Perspectives on Relocation and Resettlement in the Circumpolar North (MOVE)" in November 2006.

"As the regions of the circumpolar north are more tightly integrated into the global economy, and the interests of the state come to bear more heavily on the organisation of settlement in the north, the answer to the question of where people live in the north, or whether they live there at all, is increasingly out of local hands", said Professor Yvon Csonka, of the University of Greenland, who is one of the principal investigators of MOVE.

"About half of the approximately 4 million people of the circumpolar Arctic live in northern European countries and the European Russian North," said Csonka at the European International Polar Year (IPY) Launch on 26 February in Strasbourg, France. "They are all influenced by environmental and societal changes, such as permafrost melting, changes in vegetation and fauna, exploitation of natural resources, pollution, flows of population to and from the South, and fluctuating redistribution of riches under the control of far away governments."

According to him, some of the forced relocations and de-nomadisation since the 1940s were aimed at improving health care, education, housing and welfare. Despite these good intentions, the initiatives were carried out through 'Social engineering' and State paternalism, which eventually led to an increase in social problems.

Anticipating future scenarios for northern European development is crucial for the survival of northern societies and their way of life. Understanding past state-driven relocations and developing the capacity to anticipate the consequences of future relocations is vital in this context.

"The results will become increasingly relevant in the ongoing negotiations between states and communities about relocation in the face of increasing social and climatic change", Csonka added.

MOVE will examine State induced resettlements, from the time of World War II until the present time, and their consequences, in a diversity of sites across the circumpolar north, from a ground-up perspective in order to address questions of community sustainability, social fabric and sense of belonging.

Mobilising an interdisciplinary team of anthropologists, demographers, historians and community-based researchers from Greenland, the USA, Finland, Canada and Russia, MOVE will for the first time consider in a single research framework, Russian/Soviet and Western modes of relocation, as well as indigenous and settler histories of migration.

Over a four-year project lifespan, field research involving five teams of researchers and local collaborators will be conducted in Alaska, Northern Canada, Greenland and regions of the Russian far North (Chukotka, Magadan, Yamal).

Csonka expects that the outcome of the collaborative research project could be useful in mitigating the adverse social consequences of future relocations.

"The knowledge gained from the project will also help find solutions for how northern experiences of resettlement contribute to our general understanding of similar phenomena worldwide," he said.

Reija Tuomaala

EUROCORES BOREASCollaborative Research Projects (CRPs)

BOREAS Collaborative Research Projects (CRPs)

New Religious Movements in the Russian North: Competing Uses of Religiosity after Socialism (NEWREL)

Overview:

NEWREL documents for the first time the complex topography of new religious movements in the Russian North. It aims to improve the understanding of the contemporary religious landscape and to investigate the interweaving of practices and representations across cultures in a complex society. NEWREL throws a new light on the dynamics of religious change among contemporary Arctic and sub-Arctic communities, covering various forms of neo-shamanism and New-Age spiritualities, evangelical Christian movements, revival of Russian Orthodoxy, etc.

More information on the NEWREL website: http://www.newrel.org

Individual Projects:

Missionaries, Humanitarian Aid, and Accompanying Ideologies in the Russian Far East

Patty A. Gray [Project Leader]

Funding agency: National Science Foundation (NSF), United States

This project investigates North American Christian evangelical activity in the Russian Far East (RFE), giving equal attention to the expectations of evangelical missionaries on the one hand, and the responses in the communities of those being evangelised on the other hand. North American Christian evangelical missionaries in the RFE often combine their proselytizing activities with the delivery of humanitarian aid in a variety of forms; moreover, they often include in their gospel message not only biblical information about salvation, but also economic information about the benefits of capitalism and a market economy. However, the few existing studies on Christian missionary activity in Russia have not explored this particular nexus of evangelism, humanitarian aid, and Western neoliberal economic ideology. In addition to investigating these issues, this study focuses on actual missionary encounters in local communities, evaluating how local economic practices might be changing as a result of encounters with this phenomenon of humanitarian aidcum-evangelism. These micro-level issues are explored through the connections between missionary groups, primarily in Alaska, and their target communities in the RFE, primarily in Magadan Province. Both converts as well as those who stand outside of this process are included, such as non-believers who eschew contact with missionaries or authorities who must regulate their



laranga from the Chukotkan village of Snezhnoye, North-Eastern Siberia (Russia)

activities. The methodology of ethnography is rigorously employed, combining participant-observation within the communities under study; in-depth, openended interviewing; and comparative investigation of a wide variety of public cultural productions. The gospel message of evangelical missionaries are analysed to ethnographically verify both the presence of non-religious messages and the specific content of those messages; themes and variations in the messages are documented.

New Religious Movements, Voluntarism and Social Mechanisms of Durability

David Koester [Principal Investigator]

Funding agency: National Science Foundation (NSF), United States

This Individual Project (IP) investigates the motivations, ideas and actions that bring cohesion and durability to religious practices. This dimension of religious practice is applied towards an analysis of church-building projects and community church revitalisation, memories of religious practices during the Soviet period and relations between indigenous revitalisation and religious movements. In all cases the project examines how people bring to bear their personal memories and socially shared historical understandings in approaching practices with a spiritual foundation. The project is divided into three phases. The first objective analyses the motivations behind participation in church construction projects and church revitalisation. In the second year of this study, the researchers focus on how the participants experience the continuity of these practices, specifically studying the memories of church construction and the contribution to personal and shared religious experience, and as well as to the community history as a whole. The final stage of this project will examine the properties of religious participation that create social boundaries. The research also attempts to understand the motivations and desires that draw individuals away from association with indigenous tradition and toward participation in new socially bounded groups with religious identities. The participant observation component of this project consists mainly of volunteer work on church construction. In addition to this component, the primary methodologies for this Individual Project is life history (interviewing and analysis), open-ended and multi-stage interviews.

Discourses of Religions, Mentalities and Languages in the Russian North

Art Leete [Principal Investigator]

Funding agency: Estonian Science Foundation (EstSF), Estonia

Art Leete examines Siberian indigenous peoples' worldviews, analysing the long-lasting stability of mentalities (i.e. their adaptation to Orthodox religion and later to Communist ideology) in conjunction with the restoration of the Orthodox Church and intensive growth of Evangelical missions in the Arctic. Discourses of Religions, Mentalities and Languages in the Russian North evaluates the strategies of northern groups as part of an 'in-between phenomenon': the religious mainstream being negotiated between indigenous peoples themselves, religious contacts between indigenous groups and institutions, and contacts with newcomers to this religious landscape. This multi-sited study investigates worldviews of peoples in the Sakha Republic, Taimyr Peninsula, Western Siberia and the European part of the Russian North, and how these worldviews are altered by conversion strategies. The project analyses the historical connections between Orthodoxy and folk religion, and investigates the Orthodox and Protestant missionaries' strategies in the North in historical (Tsarist and early Soviet periods) and contemporary contexts, taking into account the complex historical relationships with atheist ideology. The researchers incorporate the analysis of contemporary folklore, religious texts and narratives, recorded interviews, and documentary film. This project also studies the dialogue between religious institutions and local religious expressions such as the revival of shamanism, with the aim of looking at changes in identity and worldview, particularly among young people. The general approach is analytically interpretive, applying participant observation with different agencies (missionaries, priests, members of different religious communities). The aim is to develop a new view of religious change in post-Soviet northern areas and to analyse different strategies of indigenous religious survival.

Creating Belongingness: Neotraditionalism in the Multi-Religious Russian North

Anna-Leena Siikala [Principal Investigator]

Funding agency: Academy of Finland (AKA), Finland

This IP examines the (re)creation of religious practices and ideas among people speaking Uralic languages in the Russian North. The objective of the project is to illuminate current strategies of creating "belongingness," ethnic and otherwise, that draws on traditions of the (mythic) past, and manifests itself in local forms of neotraditionalism. The new uses of myth traditions open up possibilities for analysing the processes of reconstruction, recontextualisation and constant variation characteristic of mythic-historical discourse. This corresponds with communities which are active in determining the meanings and significance of ethnic cults and their sites. The research pays special attention to local forms of neotraditionalism, such as popular practices of Orthodoxy and the use of ethnic religious traditions and sacred places in present day contexts. Due to the cultural multiplicity of North Russian communities, this study evaluates the different 'voices' of minorities in culture-making processes. The field work investigates private and public representations of ethnic beliefs and ritualism, and its interaction with popular and official forms of Orthodoxy in the Russian North. In addition, in observing reactions by local groups to these institutions, this project also studies religious meanings of narratives and the role of holy places in present-day religious practices. The project's main theoretical themes, neotraditionalism and the idea of belonging, are applied to the researchers' approach in interpreting observations of political and cultural changes, recordings of rituals, interviews, discussions and other field materials. The results of the project will add to the knowledge of the ongoing sociocultural processes of Northern Russia and contribute to the understanding of the local manifestations and counter-currencies of globalisation.

Associated Projects:

New Religious Movements and Social Change in Situations of Contact

Patrick Plattet [Associated Partner]

This Associated Project compares contemporary religious phenomena in northern areas of the Kamchatksii Krai where contacts between competing religious systems are historically either strong, or weak. The contemporary religious landscape is examined through two communities, Lesnaia, a locality concerned with hunting and Achaïvaiam, whose residents engage in reindeer herding. In Lesnaia, the objectives of this project consist in examining the elements which favour or disadvantage conversation and interaction between the ritualised practice of seal/bear/mountain sheep hunting and other forms of religiosity.

The research focuses on the practices and representations of the currently mobilised spheres of religious influence in this locality (hunting shamanism, Russian Orthodoxy and Christian evangelism). Comparatively, the project evaluates the degree of religious interactions in Achaïvaiam, where herding shamanism is also converging with other forms of religiosity. Here, the study focuses on forms of domestic shamanism and evaluates its connection with the following hypothesis: the maintenance of herding rituals with shamanic practices can be attributed to the relative lack of Christian activists (missionaries and priest), but it also supports the emergence of an "ecstatic" or "mystic" view of shamanism. The primary fieldwork methodology consists of concerted interactions with local actors resulting from participant-observation as well as other ethnographic tools (semi-directive interviews with a large and diversified spectrum of actors; recording of photographic and



Even grave in a cemetery of the northeastern Kamchatka.

videographic data; viewing and discussing the filmic data with local actors; collection of press articles; study of the archives of Atchaïvaiam and Lesnaia, etc.). These techniques allow accessing the various (and sometime competing) emic categories of religious knowledge. Although this comparative project centres primarily on two settlements, it is nevertheless multi-sited insofar as the researcher travels locally and regionally with the herders, hunters and others.

The Rise of Protestant Denominations in Chukotka After Socialism (North-Eastern Siberian Arctic)

Virginie Vaté [Associated Partner]

This study investigates the situation of Protestant churches in Chukotka, from the perspective of the missionaries, the converts, and the non-converts. This research seeks to understand why conversion to Protestantism has become a central issue for many indigenous people in the last decade. The study focuses on three main issues: missionary activities and strategies; religion and ethnicity; and religious interactions between shamanism-animism and Protestantism. The project looks at conversion as a strategy of empowerment, enabling converts to deal with problems such as alcoholism, and putting them in a more valued position both at the local level but also integrating them into international networks of believers. Central to this research is the concept of 'interaction', the objective being to stress people's agency towards their religious practices. 'Interaction' stresses the dialogue existing at several levels in people's religious practices; this can be expressed in the way some converts reinterpret their previous Chukchi religion in the light of Christianity or in the way some non-converts reactivate their ancestors' practices in order to protect relatives from conversion. These 'interactions' are considered not only in the strict areas of religious practices but on a wider social level. Research on Protestant denominations needs to be documented through classic anthropological methods, such as participant-observation.

In addition to conversion testimonies, semi-directive interviews and informal discussions with missionaries, converts, non-converts and people who stopped being converts (if possible) from rural and urban contexts are incorporated in this study. The results of this research will provide a better understanding of the rise of a religious movement totally new to the eastern part of the Russian North, particularly among Siberian indigenous peoples. This study will provide new insights into the field of anthropology of conversion, into the study of religious change, and into issues related to ethnicity and religion in a multicultural context.



Cleaning the velvet of the reindeer antler is a sign of respect towards the animal, Chukotka. 2005.

Kinship and Religious Praxis of Tungus-Manchurian Peoples

Tatiana D. Bulgakova [Associated Partner]

This project explores the significance of kinship and ethnic dynamics that underlie religious change and new religious praxis of Tungus-Manchurian peoples. Traditional Tungus-Manchurian shamanism was a religion practiced by patrilineal clan societies, and clan societies in their turn were mostly structured by their religious praxis. In today's situation, when new religions mix new religious ideas with old traditional ones, people who lost most of their traditionally elaborated social means to deal with religion have to face some problems. These contemporary problems are influenced by previous Soviet strategies that attempted to transform social and religious life in the region.

The aim of the project is twofold: to investigate how social change influences readiness for religious change and how new religions affect social relations. The study is concerned with the hidden kinship/religious relationships which can manifest themselves in religious choices that native people are making as well as outside of religious praxis, mostly in the social domain. One of the projects' objectives is to determine the outward reasons for new religious movements among Tungus-Manchurian peoples, and whether the ethnic constituent is decisive in this process or is a part of a global phenomenon. Research consists of ethnographic fieldwork which includes interviewing

informants and sketching the topography of new religions in the region investigated, and working in local archives and libraries. The field research is supported by long-term relationships, which have been established during the Principal Investigator's 25 years of field research among the Nanai, thus providing an important basis upon which to use an emic approach. The results of the project will add to the knowledge on the socio-religious situation of Northern Russia, on how extra-religious (mostly, social and ethnic) factors influence religious choice among native peoples.

New Religious Movements in Siberia: Contemporary Religious Praxis and Cultural Change

Alexander Panchenko [Associated Partner] Sergei Shtyrkov [Associated Partner]

This project is a study of communities in the Russian North founded by contemporary Russian new religious movements (NRMs) and their influence on religious practices and identities of the local population. Most often, sociological approaches to the study of NRMs proceed from various theories of secularisation, local responses resulting in either forms of adaptation or resistance. It appears, however, that autochthonous Russian NRMs, which arose in the early 1990s should be interpreted as specific "crisis cults" responding to the collapse of the USSR. The project investigates the internal structure and religious practices of NRM communities along with their interrelations with various religious, social and ethnic groups of the local population. The field research includes both the study of well-known communities ("The Last Testament Church" in Krasnoiarskii Krai) as well as other NRMs in the regions of Sakha-Yakutia and the Russian Far East. The second phase of the research is dedicated to the search and study of unknown communities of contemporary Russian NRMs. The plan of the field research is based upon interviews and observations, aided by the collection of detailed questionnaires. The focused interviews cover topics of the internal organisation, practices and teachings of specific NRMs. The biographical interviews document individuals' involvement and experiences within the sect. A survey study of the local population of the particular NRM serves as a general assessment of the movement and its members. Apart from interviewing, the plan of the field research includes participant observation of rituals and ceremonies, participation in collective work, recording of photographic and videographic data and analysis of publications about the NRMs in local mass media.

People in NEWREL:

Project Leader:

Patty Gray, University of Alaska Fairbanks, Fairbanks, United States

Principal Investigators:

David Koester, University of Alaska Fairbanks, Fairbanks, United States Art Leete, University of Tartu, Tartu, Estonia Anna-Leena Siikala, University of Helsinki, Helsinki,

Associated Partners:

Tatiana Bulgakova, Alexander I. Herzen, State Pedagogical University of Russia, St Petersburg, Russian Federation

Alexander Panchenko, Russian Academy of Sciences, St Petersburg, Russian Federation Patrick Plattet, University of Neuchâtel, Switzerland/ University of Alaska Fairbanks,

Fairbanks, United States

Sergei Shtyrkov, European University at St Petersburg, St Petersburg, Russian Federation Virginie Vaté, Max Planck Institute for Social Anthropology, Halle Saale, Germany

Project Members:

Alexandra Antohin, University of Alaska Fairbanks, Fairbanks, United States

Alexey Azhinov, Nan Hua University, Da Lin, Taiwan – Province of China

Tatiana Degai, Kamchtka State University, Petropavlovsk-Kamchatka, Russian Federation **Irina Ilyina**, Komi Research Centre, Syktyvkar, Russian Federation

Karina Lukin, University of Helsinki, Helsinki, Finland Kaur Mägi, University of Tartu, Tartu, Estonia Anna Minaeva, Russian State University for Humanities, Moscow, Russian Federation Liivo Niglas, Tartu University, Tartu, Estonia Agrafena Pesikova-Sopochina, Eastern Khanty Folklore Archive, Ljantor, Russian Federation Viktoria Petrasheva, Russian Academy of Sciences, Petropavlosk-Kamchatka, Russian Federation Florian Siegl, University of Tartu, Tartu, Estonia Arno Survo, University of Helsinki, Helsinki, Finland Vera Survo, University of Helsinki, Helsinki, Finland Eva Toulouze, University of Tartu, Tartu, Estonia Oleg Ulyashev, Komi Research Centre, Syktyvkar, Russian Federation

Laur Vallikivi, University of Cambridge, Cambridge, United Kingdom

Aimar Ventsel, Tartu University, Tartu, Estonia

Moved by the State: Perspectives on Relocation and Resettlement in the Circumpolar North (MOVE)

Overview:

Migration and resettlement have always been core strategies of survival for peoples of the circumpolar north. In the past, such movements were usually responses to the local conditions upon which the subsistence lifeways of notherners were based. More recently, population movements have often been imposed as a result of policies which reflect market or state logics of a conspicuously non-local character.

Under a common rubric of "state-sponsored resettlement", MOVE brings together an interdisciplinary team of anthropologists, demographers, historians and community-based researchers to address questions of community sustainability and senses of belonging. This is the first time that Russian/Soviet and Western modes of relocation, as well as indigenous and settler histories of migration, have been considered within a unified research context.

More information on the MOVE website: http://www.alaska.edu/boreas/move/

Individual Projects:

Administrative Resettlement and Community Futures in Northeast Russia

Elena Khlinovskaya Rockhill [Principal Investigator]

Funding agency: Social Sciences and Humanities Research Council of Canada (SSHRC), Canada

Based at the University of Alberta, this research project examines problems of individual agency and community fabric, focussing on the majority settler population of Russia's Far Northeast, in the context of rapid deindustrialisation and managed depopulation. With primary field sites in Magadan and Chukotka, this project is timed to shadow World Bank and Russian Federal Government northern restructuring initiatives, which promised to relocate some 600,000 non-indigenous residents in order to create more "viable" and "sustainable" communities. These initiatives take place parallel to a process of spontaneous population decline since the collapse of northern living standards beginning in 1991, and signal a critical turning point in Soviet policies of northern development through mass settlement. The interest lies in gauging the reception of restructuring policy in local contexts, by developing an actor-oriented analysis of adaptation strategies and social capital in communities experiencing migrationrelated flux.

Justification for northern re-structuring and resettlement at all levels of government rest on a broad consensus among policy makers that the interests of the state and of northern population converge in finding sustainable patterns of settlement and development (ustoichivoe razvitie). This project assesses whether



The village of Thule in Greenland was displaced a hundred kilometers to the north in 1953, to make room for US military installations during the Cold War. Ever since, hunting has remained very traditional, but now the hunting way of life is threatened by the disappearance of the sea ice.

BOREAS Collaborative Research Projects (CRPs)

these programmes promise to succeed within their own conceptions of community interest, and analyses how northerners themselves view the health and viability of their existing and/or emerging communities and the wisdom of outsider-imposed relocation projects. Existing studies of population re-structuring in the Russian North have been of a demographic and economic nature, diagnosing a massive but unsatisfied demand for resettlement and yielding recommendations for large-scale planned relocation to address northern poverty in these regions. But a few findings on local perceptions and responses to re-settlement programmes in the Russian North reveal sentiments of northern belonging and even claims of native identity among non-indigenous northern populations, which in turn condition a diversity of local responses to state resettlement initiatives.

The project aims to provide a top-down account of emerging Russian state policy on the northern industrial population, as well as an ethnographically rich analysis of its reception and effects in the northern communities and communities of former northerners relocated to the western parts of the Russian Federation. We hope to do so by exploring:

- Local responses to re-settlement pressures and opportunities;
- The coping strategies of actors and communities in movement; and
- Sentiments of belonging in place versus the desire for mobility among local actors.

Assessing Mobility and sense of place in INdustrial NOrthern COMmunities (INNOCOM)

Florian Stammler [Principal Investigator] Alla Bolotova [Collaborator]

Funding agency: Academy of Finland (AKA), Finland

The project undertakes a comparative analysis of mobility and settlement in and around communities of industrial workers in Northwest Russia/Siberia. Fifteen years after the Fall of the Soviet Union, Russia's major northern industrial regions have all experienced substantial restructuring, in most cases resulting in depopulation, which is connected to industrial contraction and relocation politics of the Russian government and the World Bank. On the other hand, the Russian North is becoming more important as Russia's resource base in the 21st century, leading to potentially increased demand of industrial labour force. The research project investigates the determinants of northerners' resilience, the conditions under which residents of northern industrial towns - mostly non-indigenous incomers - choose to make the North their home, notwithstanding the contrary trends of relocation to the south supported by the Russian government. Underlying is the main question of the conditions of sustainability and viability of northern communities, a topic that has gained much scientific and practical recent attention.

The main interest is in the study of 'sense of place' among individuals, and 'social fabric of communities' that are composed of incomers of multiple regional and ethnic origins. This research contributes to a general understanding of the processes and conditions under which a place becomes important for an individual's and a community's identity. Connected to this is a research interest in the Russian concept of *rodina* (homeland, homeplace) and related ideas. The case studies from Murmansk Oblast and West Siberia will demonstrate how the North can become home for the majority of the population that has their roots somewhere else and settled there since WWII.

Using qualitative research methods and assisted by quantitative baseline data, the project aims to:

- Identify and analyse the main factors for sense of place and social cohesion in northern industrial communities.
- Assess the viability of communities after the loss of a common industrialising vision in the Soviet Union, focusing on possible common perspectives of northerners for post-Soviet city development.
- Analyse the implications of successful and failed economic diversification of cities for settlement and movement decisions of their inhabitants.
- Explore the theoretical implications of community viability research in the North for general understand-



Old residential skyscrapers dating back to the 1970s in Russia.

ings of sustainable communities, the socio-cultural impacts of industrial contraction and non-economic determinants of decisions to stay or move.

The research is embedded into the methodological canon of BOREAS-MOVE. The use of anthropological methods of participant observation, various forms of indepth interviews conducted locally and the recording of oral history and personal memory provide a strongly needed in-depth perspective of the view of individual community members. In addition, this project will make use of quantitative statistical and demographic baseline information provided by the individual project leaded by Peter Schweitzer.

A Comparative Study of Development and Settlement in the Circumpolar North

Timothy Heleniak [Principal Investigator]

Funding agency: National Science Foundation (NSF), United States

Using the tools of economic geography and population geography, the aim of this IP is to document and analyse changes in the spatial distribution of economic activity and settlements patterns across the circumpolar North. The project aims to be comparative, spatial, and temporal. A major component of this is to examine the events of the past decade and a half in the Russian North against the situation in other northern regions. The breakup of the Soviet Union, transition of the Russian economy, and liberalisation of society has had profound consequences for the Russian North as well as on relations among northern regions. A question is whether the Russian North is beginning to resemble other northern regions elsewhere or whether the past patterns of development and settlement will remain.

A major component upon which the analyses are based is a geodatabase of economic activity and population distribution across the North. Other geodatabases or GIS (geographic information systems) have been compiled on the Arctic or the North that emphasize changes in physical characteristics of northern regions, many emphasizing the impact of climatic change on these regions. The proposed geodatabase would emphasize the economic and human aspects of the circumpolar North and changes in these attributes.

The comparative analysis that the project is taking of the diverse circumpolar migration and resettlements movements has relevance and intellectual merit for the community of academic researchers interested in circumpolar issues. The combination of the broad comparative approach proposed in this project, along with comparative approaches being undertaken in the other projects at other geographic scales will contribute significantly to our theoretical understanding.

The models of economic and population change developed in this project will have broader impact and relevance for other academics and policy makers dealing with circumpolar issues. The geodatabase of economic and demographic characteristics across the circumpolar North will be of value to both groups as climate change and other factors impact on the North in the decades ahead. In order to enhance these broader impacts, outreach efforts will be undertaken to ensure wide distribution of the data collected and analysis undertaken in the project.

Histories and Futures of Relocations in Alaska and Rural Chukotka

Peter Schweitzer [Project Leader]

Funding agency: National Science Foundation (NSF), United States

Residents of Shishmaref, Kivalina, Newtok, and many other coastal communities of Alaska face erosion and, thus, the loss of their residential areas due to severe storm events and other consequences of a changing climate. The former residents and their descendants of Naukan and Chaplino in Chukotka and of King Island in Alaska preserve strong memories of being relocated almost 50 years ago. The indigenous residents in many communities on the Chukchi Peninsula have experienced waves of expansion and contraction of their villages, be it due to the sedentarisation of reindeer herders, the mass influx of Russians and other incomers, or their rapid out-migration since 1990. During the summer of 2005, the threat of the closure of an Air Force Base in the vicinity of Fairbanks spurred community protests and scenarios of economic and social decay. At the same time, a good portion of the nonindigenous population of Fairbanks is characterised by having arrived during or after the construction of the Trans-Alaska Pipeline in the mid-1970s, an event which serves as a dividing line between "old settlers" from "new settlers".

All of the cases mentioned above refer to past and future population movements triggered by outside forces, be they direct state intervention, market forces, or changes in the natural environment. They are also characterised by memories of past events and conditions, as well as by speculations about the future, in short by narrative ways of adapting to changing conditions. Notwithstanding these similarities, these and other examples are defined by a number of important differences. Most obviously, Alaska and Chukotka seem to represent two diametrically opposed experiences regarding the role of the state in population movements. While Chukotka has been the frequent recipient of Soviet and post-Soviet forms of social engineering, Alaska seems to have been relatively free from such interventions. A closer look, however, reveals that in Alaska too many small-scale communities have been closed or relocated, for a variety of different reasons. At the same time, large influxes of non-indigenous people occurred during economic boom periods, many of which were either initiated or regulated by the state.

One of the most compelling reasons for conducting this research is that there is hardly any documentation of the diverse relocation phenomena which have characterised Alaska and rural Chukotka throughout the 20th century and into the 21st. The first goal of documenting

what has happened and continues to happen is both of scholarly importance, as well as highly relevant to affected communities. The second goal of focusing on four or more case studies will, apart from providing more in-depth documentation, result in a better understanding of the factors which contribute to positive and negative effects of relocation events. This addresses important issues regarding the creation and re-creation of community identity and the importance of "place" in these processes. The project also applies a new, comparative approach and puts an emphasis on the people themselves. This project reaches beyond a general history of events and delves into their impacts and perceptions of those events.

Inuit Relocations in the Eastern Canadian Arctic and in Greenland: Evolving Perceptions and Long-term Outcomes

Yvon Csonka [Principal Investigator]

Funding agency: Danish Agency for Science, Technology and Innovation (DASTI), Denmark

In several countries and regions of the circumpolar North resettlements of indigenous people were a salient feature of twentieth century history. With the passing of time, it becomes increasingly apparent that, despite widely differing national political and ideological regimes, they were synchronous to the point of characterizing an era. Furthermore, the methods for carrying out and the consequences of these relocations were strikingly similar throughout the North. Recent publications have shed light on some of the relocations from both insiders' and outsiders' perspectives, but as of yet there exists no inter-regional or circumpolar synthesis.

This IP focuses on relocations of indigenous people in two neighboring regions: the Eastern Canadian Arctic and Greenland. While doing so, it also considers the migrations to and from the south of these countries, as the relocations of indigenous people were in most cases carried out under the supervision of southern immigrants. The beginning of the period of study is set in the 1920s, when Inuit both in East Greenland and in northern Canada were induced to move to better hunting and trapping grounds.

In a first phase, the project documents resettlements from outside as well as insiders' perspectives, as existing sources allow, and compare them across regions and across the two countries. In a second phase, the aim is to document and understand the consequences of resettlements over time, up to the present day. In this phase, historical sources will complement data that is obtained through fieldwork, in one or two case-study areas each in Canada and in Greenland.



A Chukchi hunter visits the ruin of the village of Nuniamo (Chukotka, Russia), which was closed by the Soviet authorities in 1987

The third phase consists of running comparisons with findings from other IPs within the CRP, particularly the one looking at similar topics in Alaska and Chukotka, with a view to synthesis.

The obvious fact that it is difficult to isolate the long-term effects of relocations from other factors has already been empirically verified. As a contribution to the ongoing discussions about northern (indigenous) "senses of place", and "social fabric of communities", however, this IP tests the hypothesis that because they were initiated by outside pressure, in a paternalistic framework, these twentieth century relocations are set apart from the ubiquitous movements of population which have characterised the North at all other times.

In this context, the perspectives of relocaters and relocatees did not match, and little effort was expended to include local perspectives into decision-making. Population movements, and in particular the closing and relocation of communities, will continue in the circumpolar North, as consequences of economic policies and of climate change. An interesting and important research question is whether one can bring these two perspectives closer to one another, for the sake of making future relocations less traumatic and more easily overcome. The contention of this IP is that fundamental humanities research can contribute to inform policy decisions just as well as, and in some cases possibly better than, applied research with limited mandates.

People in MOVE:

Project Leader:

Peter Schweitzer, University of Alaska Fairbanks, Fairbanks, United States

Principal Investigators:

Yvon Csonka, University of Greenland, Nuuk, Greenland

Timothy Heleniak, University of Maryland, College Park, United States

Florian Stammler, University of Lapland, Rovaniemi, Finland

Elena Khlinovskaya Rockhill, University of Alberta, Edmonton, Canada / University of Cambridge, Cambridge, United Kingdom

Project Members:

Tobias Holzlehner, University of Alaska Fairbanks, Fairbanks, United States

Elizabeth Marino, University of Alaska Fairbanks, Fairbanks, United States

Collaborator:

Alla Bolotova, Arctic Centre, University of Lapland, Finland

Understanding Migration in the Circumpolar North (UMCN)

Overview:

The goal of UMCN is to develop a better understanding of the patterns, causes, and consequences of migration in the Circumpolar North through interdisciplinary comparative research. The project addresses two important gaps in the research on migration. First, it proposes a set of coordinated quantitative studies of patterns and determinants of migration of Arctic indigenous people in North America, Greenland, Sweden and Russia. Second, it incorporates the results of that research into a broader synthesis of qualitative and quantitative research on migration of different populations throughout the Circumpolar North. The project takes a comparative approach describing similarities and differences across countries and regions. The range of different circumstances, environments, and policies can identify the factors that affect peoples' migration decisions, and consequently help predict population movements in response to future social, economic and environmental change in the north.

More information on the UMCN website: http://northmigration.iser.uaa.alaska.edu/



Polar Bear Skin Drying in Sun.

Individual Projects:

Research Coordination and SLiCA Research in Chukotka

Lee Huskey [Project Leader]
Matthew Berman [Principal Investigator]
Stephanie Martin [Project Member]

Funding agency: National Science Foundation (NSF), United States

This IP provides a synthesis of social science research on migration patterns and experiences in regions of the Circumpolar North. It includes organisation of two workshops that bring together migration researchers from a broad range of social science disciplines working in the North. The first workshop produces a consensus set of stylised facts of migration. The stylised facts, including similarities and differences observed across regions of the North, provide the empirical base around which to organize a synthesis of causes and consequences of migration. Contributed papers comparing different country perspectives on various themes discussed at the second workshop will be edited for publication as a book.

In addition to coordinating the synthesis activities, the project also contributes empirical research to understand similarities and differences in patterns of migration, its causes and consequences, among Chukotka communities surveyed by The Survey of Living Conditions in the Arctic (SLiCA). Research on factors contributing to migration decisions explores the contribution of individual and household characteristics relative to community differences in explaining migration patterns.

Research on consequences of migration would examine indicators of well-being and demographic and other characteristics of in-migrants, out-migrants, and non-movers, and consider the longer-term effects of the implied trends on the community.

The IP also provides leadership in project coordination with other IPs and the Associated Project.

Canada SLiCA and Census Research

Chris Southcott [Principal Investigator]
Jack Hicks [Project Member]

Funding agency: Social Sciences and Humanities Research Council of Canada (SSHRC), Canada

The IP builds on Arctic migration research currently funded through the US National Science Foundation in the Migration in the Arctic Project. This project provides a better understanding of circumpolar migration

through the analysis of recent Canadian migration data. The project analyses migration data from the census and the Canadian Aboriginal Peoples Survey, which provides information on subsistence participation and migration and employment responses. The project also establishes a non-Inuit Census database which is analysed for comparative purposes. Finally, the project examines migration data from Nunavut household surveys. These data will be used to examine hypotheses developed in the project.

Research with Greenland SLiCA

Birger Poppel [Principal Investigator]

Funding agency: Danish Agency for Science, Technology and Innovation (DASTI), Denmark

The main research objective of the IP is to understand similarities and differences in patterns of migration, its causes and consequences among Greenland communities. Research on factors contributing to migration decisions will identify the contribution of individual and household characteristics and community differences to an explanation of migration patterns. Research also examines indicators of well being and the longer term effects implied by community trends. The characteristics of in- and out-migrants and non-movers are described. The primary approach in this project is a statistical analysis of date collected for the Greenland sample for SLiCA. The methodology closely parallels the analysis described in the IP of Lee Huskey. The target population is the entire population not only the indigenous population.

Associated Project:

Geographical Mobility in Northern Sweden

Olle Westerlund [Associated Partner]

The purpose of this project is to conduct empirical studies of the determinants and economic consequences of migration and commuting among people living in the Arctic and the near-Arctic region of Sweden during the period 1985-2003. More precisely, the empirical analysis includes all individuals residing in the inland of the counties of Västerbotten and Norrbotten, or SE08 according to "Nomenclature des Unités Territoriales Statistiques" (NUTS) classification of the European Union.

The project includes two parts: The first part studys the whole population of the area, while the second part is devoted to the study of the indigenous Sami population. The realisation of the latter part is dependent on



"Migration in the Circumpolar North: Lessons Learned, Questions Remaining", June 2007, Roskilde, Denmark.

the accessibility to special data held by researchers/institutions already active in research related to the Sami population in Sweden.

There are four main questions for research:

1) How are migration, commuting and occupational mobility affected by individual characteristics, regional labour market conditions, and other regional attributes?

2) What is the economic outcome of mobility for migrants, commuters and for those who changes occupation? 3) What are the determinants for return migration back to the inland of Norrland? 4) How does the Sami population differ from the non-Sami population in migration behavior and outcomes?

Potential differences between males and females are considered in examination of the four questions of is-

People in UMCN:

Project Leader:

Lee Huskey, University of Alaska Anchorage, Anchorage, United States

Principal Investigators:

Matthew Berman, University of Alaska Anchorage, Anchorage, United States Birger Poppel, Ilisimatusarfik, University of Greenland Nuuk, Greenland Chris Southcott, Lakehead University, Thunder Bay, Canada

Associated Partner:

Olle Westerlund, Umeå University, Umeå, Sweden

Project Members:

Jack Hicks, Nunavut Research Centre, Canada Stephanie Martin, University of Alaska, Anchorage, United States

Home, Hearth, and Household in the Circumpolar North (HHH)

Overview:

This project uses the focal metaphors of hearth, home and household to understand northern ecological narrative, cultural resilience, and the use of space. By uniting the efforts of indigenous people, museum researchers, archaeologists, anthropologists, and historical demographers, we aim to demonstrate the special dynamics of northern households as well as contribute to the revival of cultural awareness now underway in indigenous societies across the North.

More information on the HHH website: http://www.sami.uit.no/boreas

Individual Projects:

Hearths and Homes in Canada and Siberia: Re-imaging Traditional Skills

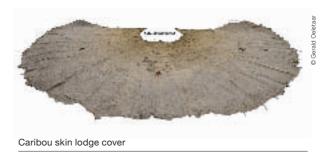
Gerald A. Oetelaar [Lead Principal Investigator] Charles D. Arnold [Principal Investigator] Thomas D. Andrews [Project Member] Peter C. Dawson [Project Member] Richard M. Levy [Project Member] Glen MacKay [Project Member] John B. Zoe [Project Member]

Funding agency: Social Sciences and Humanities Research Council of Canada (SSHRC), Canada

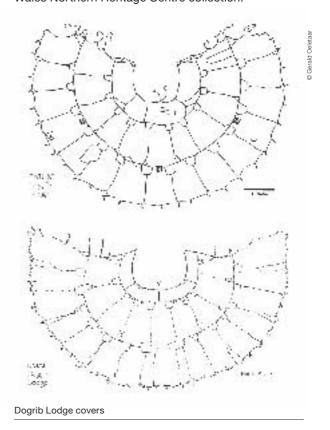
Circumpolar hunters and herders share a complex symbolic relationship with wild reindeer (known in North America as caribou), one that is reflected in local ritual, oral narrative, and subsistence practice. The three activities in this IP investigate how these complex relationships are built into the structures of Tlicho and Inuvialuit and will compare these experiences with those of Siberian Evenki and European Sami.

Activity One: The Repatriation of Knowledge of a Tlicho Caribou Skin Lodge

This activity is based around the study of a caribou skin lodge covering held by the National Museum of the American Indian.



It is one of only two surviving caribou skin lodges from an era when they were common and the primary form of habitation in the western Subarctic. During the project Thomas Andrews and Tlicho representatives travel to Washington for a month to make a detailed photographic record of the cover and to create a pattern for comparison with the lodge in the Prince of Wales Northern Heritage Centre collection.





Dogrib Lodges at Fort Resolution, North Western Territories, Canada, 1924.

Activity Two: A Comparison of Caribou/Reindeer Lodges in Canada, Siberia, and Northern Norway

This activity involves a comparative study of Evenki, Yakut and Tlicho lodge traditions by Tom Andrews and David Anderson. The study addresses aspects of vernacular architecture, manufacturing technique, symbolic use of internal and external space, and links to wider cosmological themes such as interactions with what the Tlicho refer to as *inkon* or 'medicine power'.

Activity Three: The Study of Space in Inuvialuit Dwellings

This activity explores the design, engineering and use of spaces in semi-permanent winter dwellings of the Inuvialuit (the Inuit of the Western Canadian Arctic) in the pre-1900 period through the use of archaeological and ethnographic data and virtual reality modelling. This research involves excavations at archaeological sites at the mouth of the Mackenzie River, ethnographic and oral history research, and the use of virtual reality models to explore the engineering involved in constructing these dwellings.



Winter dwelling seen through virtual reality modeling



Sami household in virtual modeling

BOREAS | 23

BOREAS Collaborative Research Projects (CRPs)

Households, Technological Change and the Use of Space in Swedish Sápmi

Per Axelsson [Lead Principal Investigator] Hugh Beach [Principal Investigator]

Funding agency: Royal Academy of Letters, History and Antiquities, Sweden

The Sami are one of many indigenous peoples in the North living in Sápmi, an area covering the northern parts of Norway, Sweden, Finland and Russia. Both the study of historical demography, and the study of Sami use of space, have so far been neglected in the academic analysis of Sápmi. This individual project unites the efforts of a demographer and prominent ethnographer to fill this lacuna.

Activity One: Vernacular Architecture in Sápmi

The goal of this activity is to demonstrate how social, economic, technological and political conditions are built into the architecture of Sami households. The basic research is conducted over two field seasons in Jokkmokk, Staloluokta, Puolemoive, Lillselet, Parka, as well as village sites along Stor Lule and also others within the Laponia World Heritage Site. The methods used are shared with the investigators working with the analysis of space in Canada and in Siberia. Much of the research done in this activity is also followed up by the HHH principal investigators in Norway.

Activity Two: The Dynamics of Sami Households

The historical and demographic activity of this IP studies the demographic experiences in a population marked by colonisation. This activity, led by Per Axelsson, uses the Swedish census of 1890 to investigate individuals and households in the Swedish parts of Sápmi. The activity mirrors the work being done on the Norwegian and Russian censuses in other IPs. Statistics are compiled from individual level microdata, combining the information in the census variables. This will for the first time give scholars a regional archive giving a coherent picture of the Sami experience in various countries from the 19th to the 20th centuries. The IP members aim at harmonising the variables between the 1890 census and the Russian and Norwegian data as well intensively studying ethnic markers in Eastern Sápmi.

The Environmental Archaeology of Sami Dwelling Places

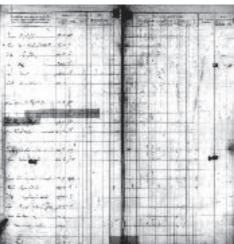
Mika Lavento [Lead Principal Investigator]
Petri Halinen [Principal Investigator]

Funding agency: Academy of Finland (AKA), Finland

The objective of this IP is to excavate house remains at the dwelling sites in three northernmost municipalities, Utsjoki, Enontekiö, and Inari, in Finland. The site-types of Sami populations which are excavated are dwelling sites with hut remains of different sizes dating to three periods: 1) Late Iron Age and the Middle Age dwelling constructions of portable lodges with hearth remains, 2) 16th and 17th century Nukkumajoki type of huts in winter villages, and 3) 17th century and later log houses/huts.

Although the research concentrates on known house types, new information is needed about the more detailed analysis of distribution of findings inside the





Left: Landscape over the Saami community of Saxnäs. Courtesy of Per Axelsson Right: Extract from a Swedish parish register giving historical demographic data on Saamis.



Petri Halinen, Kenneth Webb Vollan and Sven-Donald Hedman excavating at Oarddujavri, Varanger, northern Norway, July 2007.

house structures. Data which are necessary in production of contextualised and more conceptual knowledge about the circumpolar dwellings of different periods are obtained by detailed excavation techniques together with soil analyses. The northern ecological narrative, cultural resilience, and the use of space play a central role in this project. Households are places of learning and communication - of almost all kind of activities at the sites. Their investigation also opens possibilities to research change of household patterns from the Late Iron Age to modern times. Analysis of households of different periods will be connected with the ethnographic observation of the uses of houses. They are connected not only with the yards around but with their environment as well. This has been done in order to achieve more understanding about the contexts and reasons of the change of structures.

The Finnish team co-operates with the Norwegian IP in Finland and in Norway. One aim is also to carry out research in the Kola Peninsula, in order to obtain comparative material in different environments.

Home, Hearth, and Household in the Circumpolar North

The Norwegian IP contributes to all three research trajectories of HHH. The Centre for Sami Studies, University of Tromsø, serves as the home for all members of the CRP.

David Anderson [CRP Leader and Co-investigator]
Bjørnar Olsen [Lead Principal Investigator]
Ivar Bjørklund [Project Member]
Marianne Erikstad [Project Member]
Bjørg Evjen [Project Member]
Lars Ivar Hansen [Project Member]
Sven Donald Hedman [Project Member]
Hilde Leikny Jåstad [Project Member]
Carina Sandvik [Project Member]
Gunnar Thorvaldsen [Project Member]

Funding agency: Research Council of Norway (RCN), Norway

Activity One: Contextualising Sami Mobile Architecture

Within Sami reindeer pastoralism, the use of tents is a very important part of nomadic technology. The heart of this activity is to commission a winter *bealjigoahti* by an elderly couple in the Sami village of Kautokeino. The intention of this IP is to document the contemporary social ecology of life in Eastern Sápmi. This research project overlaps closely with the work conducted in Sweden by Prof. Beach, in Russia by Drs. Anderson and Ziker, and in Canada by Drs. Andrews and Arnold.

Activity Two: Hearths and Space in Eastern Sápmi

House grounds, tent rings and hearths represent the most common material signatures of past Sami households and *siidas*. The main objective in this activity is to explore the historical dynamics of Sami dwellings and social organisation of space. Research is based



Sami turf house from the 17th-18th century excavated at Oarddujavri, Varanger, northern Norway.

BOREAS Collaborative Research Projects (CRPs)





Left: A Tungus (Evenki) camp and reindeer pasture circa 1910 in the Lena Mining District, now Bodaibo District, Irkutsk Oblast. Right: Oleg Kuznetsov, David Anderson, and Evgenii Ineshin surveying the territory around Lake Tolondo, Boidabo district, Siberia for contemporary signs of Evenki land-use and forestry.

partly on existing archaeological records from Sápmi, but substantial new fieldwork needs to be carried out. Surveys and test excavation are carried out the first season in the easternmost part of Norwegian Finnmark (the Varanger-Pasvik area) and selected areas of the Kola Peninsula (Lake Lovozero, Varzina, Umba and Varzuga river basins).

Activity Three: Ethnohistorical research in Zabaikal'e

This activity is built around two ethno-historical expeditions to the Vitim river valley of Eastern Siberia. This work documents and analyses the use of space among Evenki reindeer herders in the recent past and present. Using the same methodologies as in Eastern Sápmi, the team investigates the social ecology of dwellings among hunters and reindeer herders. Activity areas in contemporary camps are mapped.



A Russian census enumerator recording household details for a family of eniseitsy [Ket] on the Podkamennaia Tunguska during the Turukhansk Polar Census Expedition of 1926/27.

Activity Four: The Demography of Circumpolar Households

The aim of this activity is to create an aggregate statistical overview of the social and demographic characteristics of the identity groups in Northern Norway. The dataset – an encoded version of the 1865, 1875 and 1900 censuses – has been digitised by previous research grants. For the first time these individual level microdata are available to be linked to similar Sápmi datasets in Russia and Sweden (both of which were also digitised using earlier grants). This newly accessible data is used to generate a longitudinal picture of Sami and Kvæn households for all of Sápmi (including the Kola peninsula).

Activity Five: An International Seminar on Circumpolar Mobile Architecture

The five activities in this IP are drawn together during an international seminar on mobile architecture to be held in Tromsø in the autumn of 2007.

Home, Hearth, and Household in Siberia and Northern Canada

John P. Ziker [Lead Principal Investigator] Patricia Nietfield [Principal Investigator] Rebecca Brollier [Project Member] Oksana Dobzhanskaya [Project Member] Christopher Hill [Project Member] Evgenii Ineshin [Project Member] Artur Kharinskii [Project Member] Chris Wilson [Project Member]

Funding agency: National Science Foundation (NSF), United States

The project supports primary ethnographic, demographic, and spatial studies in indigenous communities in the Central and Eastern Taimyr Region and participatory research exchanges with northern native Canadians and Siberians. Two combined ethnographic and ethnoarchaeological research seasons are proposed for the Taimyr Region to develop comparative information on vernacular architecture of mobile dwellings, the social use and importance of space, and site formation processes. Analysis of the 1926/27 Polar Census is planned to elaborate the historical demography of the region, particularly on the issues of land use, culture contact, and identity. Combined with current census information to be gathered during fieldwork, Ziker studies the dynamics of historic and contemporary households. Two ethno-archaeological expeditions with Russian archaeologists are proposed for the Vitim River to develop information on the use of space in a region inhabited since the Paleolithic. A series of research exchanges between craftspeople and representatives from the Tlicho First Nation and anthropologists at the National Museum of the American Indian in Washington, DC, and the Prince of Wales Northern Heritage Center in Yellowknife elaborates a participatory method of repatriation of knowledge between museums and local communities.

Together with its sister projects in "Home, Hearth, and Household in the Circumpolar North," the central aims and objectives are to conduct primary ethnographic and ethnoarchaeological fieldwork in Siberia, to support the reinvigoration of traditional knowledge about caribou skin lodges, to support the work of regional scholars and indigenous peoples in Siberia and Canada, to understand the role of circumpolar dwellings as arenas of learning and memory, mobility in and interaction with the environment, and as the social center of households, to link contemporary ethnographic and ethnoarchaeological work to recently available historical demographic records, and to support public access to important historical and ethnographic data sets in local languages.



Boris Elogir of Ust' Avam, Taimyr Russia reclining by the hearth (ochak) in a newly built conical pole lodge (uraha di'e) he raised in the spring 2007 to teach his grandchildren about traditional dwellings. The covering comprises a synthesis of the traditional eldun sewn from reindeer hides, along with some manufactured canvas.

Associated Project:

Going Home: Repatriation, Artefacts, and the Scottish Diaspora among Canadian First Nations People

Robert Wishart [Associated Partner]

This project undertakes a critical study of how the idea of a 'home' becomes inscribed within objects. The project has three trajectories that enrich the understanding of 'vernacular architecture' and 'circumpolar households' in field settings of Northwestern Canada and Siberia. The three trajectories are: 1) The ethnohistory of homes and vernacular architecture in Northwestern Canada, 2) Repatriation, and the creation of 'homes' for objects in museums, 3) Dwellings as artefactual symbols of identity.

This project is structured around the work of Robert Wishart. Wishart's work re-examines the historic relationship between Scots and north-western Aboriginal people in Canada. His ethnohistoric research brings substance to an investigation into how the Scots, many of whom were (or were the descendants of) crofters from northern Scotland expelled from Scottish lands,

BOREAS Collaborative Research Projects (CRPs)



Eileen Koe (Teetlit Gwich'in Elder) at "Mouth of the Peel," which was an important centre in the fur trade from the late 19th to mid 20th centuries. The abandoned log cabins often serve as a backdrop for the elders while they are telling stories and recounting their people's experiences during the fur trade.

influenced and participated in a documented history of Aboriginal resistance to industrialisation. Part of the attempted industrialisation of Gwich'in lands included coercive efforts to relocate people into town centres and government housing and in some key ways resembles the housing developments of Scottish cities. This project investigates how similar post-colonial relationships are literally built into homes.

People in HHH:

Project Leader:

David Anderson, University of Tromsø, Tromsø, Norway

Principal Investigators:

Charles Arnold, Prince of Wales Northern Heritage Centre, Yellowknife, Canada

Per Axelsson, Umeå University, Umeå, Sweden Hugh Beach, Uppsala University, Uppsala, Sweden Petri Halinen, University of Helsinki, Helsinki, Finland Mika Lavento, University of Helsinki, Helsinki, Finland Patricia Nietfeld, National Museum of the American Indian, Washington, United States

Gerald Oetelaar, University of Calgary, Calgary, Canada

Bjørnar Olsen, University of Tromsø, Tromsø, Norway **John Ziker**, Boise State University, Boise, United States

Associated Partner:

Robert Wishart, University of Aberdeen, Aberdeen, United Kingdom

Project Members:

Thomas Andrews, Prince of Wales Northern Heritage Centre, Yellowknife, Canada

Ivar Bjørklund, University of Tromsø, Tromsø, Norway

Rebecca Brollier, Boise State University, Boise, United States

Lars Göran, Carlsson, Umea University, Umeå, Sweden

Peter Dawson, University of Calgary, Calgary, Canada

Oksana Dobzhanskaya, Municipal Center of Folk Activities, Dudinka, Russian Federation

Marianne Erikstad, University of Tromsø, Tromsø, Norway

Bjørg Evjen, University of Tromsø, Tromsø, Norway **Lars Ivar Hansen**, University of Tromsø, Tromsø, Norway

Bjørn Hatteng, University of Tromsø, Tromsø, Norway

Sven Donald Hedman, University of Tromsø, Tromsø, Norway

Christopher Hill, Boise State University, Boise, United States

Evgenii Ineshin, Irkutsk State Technical University, Irkutsk, Russian Federation

Hilde Leikny Jåstad, University of Tromsø, Tromsø, Norway

Artur Kharinskii, Irkutsk State Technical University, Irkutsk, Russian Federation

Glen MacKay, Prince of Wales Northern Heritage Centre, Yellowknife, Canada

Carina Sandvik, University of Tromsø, Tromsø, Norwav

Gunnar Thorvaldsen, University of Tromsø, Tromsø, Norway

Chris Willson, Boise State University, Boise, United States

John Zoe, Tlicho Government, Rae-Edzo, Canada

Northern Narratives: Social and Geographical Accounts from Norway, Iceland, and Canada (NORSAGA)

Overview:

NORSAGA recognizes that economies, cultural traditions, and lifestyles in boreal landscapes are intrinsically closely bound to the environment. Within this context, the focus of the project is on histories, narratives and movements in northerly regions, specifically on mountainous and coastal areas in three countries: Norway, Iceland, and Canada. The study enhances understanding of perceptions of environmental changes, impacts and adaptations in these regions over the last 300 years. Historical and literary analyses are combined with sociological methodologies and advanced laboratory analyses of climate proxy data and natural archives.



Jaslangen, Vestre Slidre, in Valdres, Norway.

Individual Projects:

Histories, Narratives and Environments of Norway, Arctic Canada and Alaska

Astrid Ogilvie [Project Leader]

Funding agency: National Science Foundation (NSF), USA

i) Narratives of Climate and Culture from Norway

Information regarding past climate may be inferred from climate "proxy" data. These include documentary accounts drawn from a wide variety of historical sources. Many such sources regarding environmental and climatic changes and human perceptions exist for Norway. These include diaries kept by farmers which will be a major focus of this project. The linking of time-scales from the present to the past will involve a comparative study of the data afforded by such narratives with the insights and observations provided by the local community of Vestre Slidre.

ii) Mountain Farming in Norway: Studies in Adaptability and Sustainability

The main focus of this part of NORSAGA is Vestre Slidre in the district of Oppland (meaning "Highland") in southeastern Norway, which stretches from broad farmlands in the south to the Rondane, Dovre and Jotunheimen mountain ranges in the north. The population of Oppland is 184,000 (compare with Labrador's ca. 28,000 and Iceland's total population of some 310,000). The area includes high mountain terrain as well as tracts of forests and also agricultural landscapes with a focus on sheep and cattle as the main farming activities. The NORSAGA project will enable a valuable study to be made of the unique area of Oppland and Vestre Slidre and its cultural landscape, as well as the perceptions, narratives and histories of its inhabitants, in the context of a changing society and environment.

BOREAS Collaborative Research Projects (CRPs)

iii) Narratives of Climate and Culture from the European Exploration of Canada and Alaska

The main focus of this part of NORSAGA will be the writings of Arctic explorer and anthropologist Vilhjálmur Stefánsson (1889-1962). He undertook three expeditions to the Alaskan and Canadian Arctic, each of which lasted between sixteen months and five years. He published some 24 books and more than 400 articles on his travels and observations. His legacy is also closely connected with human-environmental relations, the sustainable use of natural resources and the survival of northern communities.

Histories, Narratives and Environments of Iceland

Ingibjörg Jónsdóttir [Principal Investigator] Níels Einarsson [Principal Investigator]

Funding agency: The Icelandic Centre for Research (RANNÍS), Iceland

i) Narratives of Climate and Culture from Iceland

As a result of the Icelandic penchant for meticulous environmental and social observation, many reliable historical documents are available. Major emphasis in this section of the project will be on one particular type of historical data that has had very little analysis in the past. This is the genre of diaries. Perhaps because the climate has always been so important to the Icelandic economy, many farmers wrote diaries concerning the weather and climate as well as sociological and other environmental aspects (presence of sea ice, landslides, avalanches etc.). Diaries form a veritable goldmine of social and environmental information that will contribute greatly to knowledge of environmental changes and human responses in the past.

ii) Coastal Fishing and Whale Watching in Iceland: Studies in Adaptability and Sustainability

This part of the project will consider changing perceptions of environmental and social change in Icelandic fishing communities and will bring a contemporary focus to the project. Use will be made of both historical and archival data as well as results of previous and recent fieldwork in Icelandic fishing villages. A major focus will be on the introduction of whale watching into Icelandic fishing communities, in particular how local people reconcile traditional views of whales and whaling with what some argue is an economically viable option to fishing. The project will focus primarily on the Húsavík region of northern Iceland. The theme of how Icelandic society manages to mediate old and new values, perceptions and experiences, lies at the heart of the NORSAGA project.



Whale watching in Skjálfandi Bay, North Iceland.

iii) Climate Proxy Data

Prior to the era of systematic continuous meteorological observations so-called "proxy" data must be used in order to establish changes in climate in the past. These include climate data drawn from what may be termed natural archives such as ice cores, trees, and ocean and lake sediments. NORSAGA research will draw upon previously published climate proxy data from the natural sciences, in particular, from other independent projects led by the Principal Investigators.

Labrador/Nunatsiavut

William Patterson [Principal Investigator]

Funding agency: Social Sciences and Humanities Research Council of Canada (SSHRC), Canada

i) Environmental/Isotope/Trace Element Chemistry of Tree-Ring Cellulose. Tree-ring Isotope Study

The Tree ring cellulose (TRC) archive developed by dendrochronologists is a spectacular library of sample material, with continuous and near continuous records dating back tens of thousands of years. TRC contains secular variations in carbon and oxygen isotope values that reflect changes in temperature, humidity, and moisture sources in the terrestrial environment during the growth of individual trees. TRC provides one of the best records of climate variation other than instrumental records because it is produced rapidly for many years and dates of climate/weather events can often be deduced precisely.

ii) Land People and Sea-Ice People in Labrador/ Nunatsiavut: Studies in Adaptability and Sustainability

This part of the project will focus on the impact of environmental changes, especially diminishing sea ice, on traditional ways of life in the coastal communities of Nain, Hopedale and Makkovik. Adjacent to the ocean known as "Iceberg Alley", they have been singled out for special study for a number of reasons. All three communities have been greatly influenced by the Moravian brethren, and we will be able to connect and compare historical climate observations with contemporary data. The three communities to be studied are geographically and culturally close, with much travel and inter-communication taking place between them.

Associated Projects:

Syntheses of Sea-Ice, Climate and Human Systems in the Arctic and Subarctic (SYNICE)

Astrid Ogilvie [Project Leader, Principal Investigator]
Jeffrey Rogers [Associated Partner]
Peter Wadhams [Associated Partner]
Brian Hill [Associated Partner]
Gaston Demarée [Associated Partner]

Project Members: Lisa Barlow; Roger Barry; Thor Jakobsson; Ingibjörg Jónsdóttir; Trausti Jónsson; Hjálmar Vilhjálmsson; Torgny Vinje and Tom Wigley.

SYNICE Abstract:

SYNICE will add useful climate proxy data as well as a further human dimensions perspective to NORSAGA. The SYNICE project seeks to further the understanding of pan-Arctic and North Atlantic climate and human systems by the integration and syntheses of several sea-ice data sets together with information from the physical and social sciences. The project will analyse data from the past 1000 years; however, major emphasis will be on the period c. AD 1800 to the present. Five major locations/sea-ice data sets will be considered: i) The sea-ice record from Iceland; ii) The sea-ice record from the Barents Sea area; iii) The record of historical ice conditions around Newfoundland and on the Grand Banks, and in the Gulf of St. Lawrence and the Scotian Shelf; iv) The Odden region of the central Greenland Sea: v) A climate and sea-ice record based on Moravian missionary accounts from Nain, Labrador. Two other components consider the role of what is termed sila in the Inuktitut language - "climate and all things that surround human beings" - in the lives of Arctic/Subarctic peoples and will investigate local knowledge of sea ice and other climate changes, specifically in Iceland and Labrador/Nunatsiavut. The Labrador and Iceland components, in particular, will be conducted in tandem with NORSAGA.

Abstracts of SYNICE Components: i) The Sea-Ice Record from Iceland

Early versions of this valuable data set were originally published by Koch and also by Bergthórsson. Both data sets were based on the compilation of sea-ice and weather events in historical accounts by Thoroddsen. The early works on reconstruction of the sea-ice records for Iceland were pioneering efforts; however, analyses by Ogilvie have revealed that lack of historical source analysis in these works has meant that much erroneous material has crept in. The revision of the historical sea-ice record from 1600 to 1869 is shown here. As well as eliminating erroneous data included in analyses mentioned above, this revision includes many new data discovered and analysed by Ogilvie. In spite of the work on source analysis that has demonstrated the shortcomings of the earlier sea-ice records, these flawed records continue to be used to the present day. The proposed research will enable a synthesis of the various records to produce a new homogeneous, comprehensive sea-ice record for Iceland.

ii) The Sea-Ice Record from the Barents Sea

The sea-ice record from the Barents Sea and Nordic Sea has been compiled by Torgny Vinje and is included in the data archive of the World Climate Research Program's Arctic Climate System Study (ACSYS http:// acsys.npolar.no/ahica/intro.htm). The ACSYS Historical Ice Chart Archive presents historical sea-ice observations in the Arctic region between 30°W and 70°E in the form of digitised maps, stored as shape files. The earliest chart dates from 1553, and the most recent from December 2002. Vessels sailing to the Arctic to explore or to hunt whales and seals made observations of sea ice. Over the centuries, technological advances and commercial opportunities in the Arctic led to more frequent and regular sea ice observations, with associated increasing accuracy. As sailing ships gave way to steam-powered vessels, and with the advent of aircraft and satellites, regular mapping of sea-ice conditions became an organised activity. From 1967 onwards, hand drawn weekly charts were produced, showing not only an ice edge, but also concentrations of sea ice within the ice pack. Since July 1997, improved technology has allowed daily production of digital sea ice maps on weekdays. In an effort spanning many years, early observations from ship logbooks and other records were collected, translated as necessary, and plotted as hand-drawn maps. For more recent years, sea-ice charts from various organised sources were collected. The total of over six thousand charts were placed on two CD-ROMs, and these can be viewed and analysed using GIS software.

iii) The Sea-Ice Records from Newfoundland and Labrador/Eastern Canada

• East Coast of Labrador, Newfoundland and the Grand Banks Area

The data set for the period 1810-1958 was compiled by Hill for sea-ice extent during the winter months, January through April. Earlier data sets, including those compiled in the nineteenth century, were based subjectively on an ice-severity index and often did not distinguish between sea ice and icebergs. For early years the Hill data set was compiled from ice sightings reported in shipping journals, gazettes and newspapers, and later, by the International Ice Patrol which commenced activity in 1914. The ice sightings were plotted on maps and for each month in which there was sufficient information an estimated sea-ice edge was drawn for the area south of 55°N. The area of sea ice bounded within this line and the coasts of Newfoundland and Labrador was calculated, and the sea-ice edge line digitised into latitude-longitude pairs. The Canadian government has published regular ice charts since about 1958 and the current observation and analysis program is performed by the Canadian Ice Service by which means the data set can be continually updated.

• The Gulf of St. Lawrence and the Scotian Shelf
This data set was compiled by Hill in a similar manner to
that for the east coast of Newfoundland and Labrador
described above and is continuous from 1817 to 1962
with additional data for a few earlier years. Further
sources include data held by the U.S. and Canadian
National Archives, and Canadian Ice Distribution Survey
reports. Ice information was collected November
though June for each ice season but it is normally only
to be found in the months January to April when sea
ice extends through Cabot Strait, between the island
of Newfoundland and Cape Breton of Nova Scotia, and
over the Scotian Shelf. The Canadian Ice Service now

routinely monitors the Gulf of St. Lawrence area.



Spring in Ilullisat West Greenland.

iv) Odden Region

A long sea-ice record has not yet been produced for the Odden region. However, records exist, primarily sealer's accounts, which would make it possible to compile such a record, and thus facilitate a complete synthesis of historical sea-ice data for the western and eastern Arctic. From the early seventeenth century, information on sea ice began to be periodically collected in connection with the hunting of bowhead whales, Balaena mysticetus, and continued in the eighteenth century when another "fishery" was initiated in the Greenland Sea. This involved the Greenland or harp seal Phoca groenlandica. The seals gathered to whelp on the sea ice in immense numbers at nearly the same time each winter in a relatively small area known as the "west ice" or Odden. According to Gray seals "look" for sea ice that is some distance inwards from the outer ice edge, but which, at the same time, is exposed to the action of the waves. Some information on the location of the whelping seals has been compiled by Nansen using information from sealers' log books and journals, meteorological journals, and also from a paper by Wollebaek. Even though it was known that the seals would haul out on the ice to whelp around the end of March, the location of the whelping patch seems rarely to have been in the same position two years running. It also appears from nineteenth-century accounts that ice conditions in the Odden region at that time were quite different from the present. Fieldwork in the region during the winter of 1993 shows that the Odden was composed completely of locally formed pancake and frazil ice. The non-formation of the Odden is becoming increasingly common and suggests a significant deviation from the normal ice conditions found within the region during the past few centuries. The present project will acquire additional data from sealers' logbooks held in the National Maritime Museum, London, and the Norwegian Polar Institute, Tromsø and will build on preliminary work by Wilkinson and Wadhams.

v) Climate Records from the Moravian Missionaries

The SYNICE project will benefit from a component focusing on historical climatic, environmental and seaice data from Labrador/Nunatsiavut. The recording of these data, comprising both instrumental and qualitative meteorological observations, began in August 1771, when the *Unitas Fratrium* or Unity of Brethren, established its first mission among the Inuit on the Labrador coast. The Moravian Brethren, as they are more commonly known, comprise a Christian church that has pre-reformation origins that go back to the Bohemian reformer Jan Hus (c. 1375-1415). Matthäus Stach (1711-1787) was the pioneer of the Moravian Greenland missionaries, and it was he who advocat-



Whale watching boats in Húsavík, northern Iceland.

ed missionary work among the Inuit of the Labrador coast. The data cover all the missionary stations in Labrador: Nain, Okak, Hopedale, Hebron, Ramah and Makkovik. The station with the greatest data coverage is Nain. The missionaries were usually of German origin (a few were English). Their meteorological observations lasted until 1939 when they were taken over by the Canadian Meteorological Service. After World War II, the missionaries lost their ties with the Inuit population and their missionary stations were regrouped. The last missionary left Nain in 2005. This part of the project is the responsibility of Gaston Demarée who has spent several years researching missionary journals of the Moravian church. These sources are a veritable goldmine. Although an impressive religious and historical data bank has been compiled of these records by Dr. Hans Rollmann of Memorial University and some published data have been used in pioneering climate and sea-ice studies the analysis of the unpublished meteorological records that will be made available to SYNICE will be completely new.

vi) Human Systems Data Sets

This SYNICE component focuses on the role of climate, especially sea ice, in two Arctic/Subarctic populations, Iceland and coastal Labrador/Nunatsiavut. In Labrador/Nunatsiavut there still exist both permanent communities and fishing stations – as was the case in Iceland in the past. Now the old fishing stations have either been abandoned or have become small towns. Both locations have a burgeoning tourist industry with both places seeking to attract tourists by advertising the quality and purity of their natural landscapes, and the excellent opportunities for whale watching. Both countries are developing hydro-electric power and are involved in the delicate balance between preserving unspoilt nature and in developing industries for much-needed revenue.

Iceland and Labrador/Nunatsiavut have relatively low population densities of approximately 310,000 and 28,000 respectively. Clearly, differences, of economy, culture, and language, exist and their relationship with coastal sea ice has traditionally also been very different. To Icelanders in the past, the ice that drifted to its coasts with the East Greenland Current brought with it famine and hardship and was known as "the country's ancient enemy". The recent trend towards a lack of ice is a blessing in Iceland but it causes numerous difficulties for the hunters of Labrador/Nunatsiavut. This part of the project will consist of analyses of data concerning the impacts of sea ice on human populations in Iceland in the past, with a particular focus on the last three centuries. The comparative Labrador/Nunatsiavut component of the project, with a primarily contemporary focus, is funded as part of the NORSAGA project.

People in NORSAGA:

Project Leader:

Astrid Ogilvie, University of Colorado, Boulder, United States

Principal Investigators:

Niel Einarsson, Stefansson Artic Institute, Akureyri, Iceland

Ingibjorg Jonsdottir, University of Iceland, Reykjavik, Iceland

William Patterson, University of Saskatchewan, Saskatchewan, Canada

Associated Partners:

Gaston Demarée, Royal Meteorological Institute of Belgium, Brussels, Belgium

Brian Hill, Institute for Ocean Technology, St. Johns, Canada

Jeffrey Rogers, the Ohio State University, Columbus, United States

Peter Wadhams, University of Cambridge, Cambridge, United Kingdom

Change and the Environment in Nordic Prehistory: Evidence from Finland and Northern Canada (SCENOP)

Overview:

SCENOP seeks to identify regularities and differences in human responses to rapid environmental change in prehistory in two widely separated but environmentally comparable circumpolar paleo-estuaries, the Yli-li area of Northern Finland and the Wemindji area of James Bay in Quebec. SCENOP examines archaeological and paleo-environmental evidence of transitions in the prehistory of both regions.

More information on the SCENOP website: http://scenop.googlepages.com/home

Individual Projects:

Paleo-Environmental Reconstruction

Gail Chmura [Principal Investigator]

Funding agency: Social Sciences and Humanities Research Council of Canada (SSHRC), Canada

The purpose of this IP is to identify and date the environmental transitions from the sediments retrieved from archeological sites at Old Factory Lake, on James Bay, Quebec and Yli-li, on the northern reaches of the Baltic Sea, near the Finnish coastline of the Gulf of Bothnia. The environmental reconstructions provide a background against which archaeological data from both regions can better be interpreted, and a context in which agent-based computer simulation experiments can be conducted.

Archaeology of Yli-li, Northern Finland

Jari Okkonen [Principal Investigator]

Funding agency: Academy of Finland (AKA), Finland

This IP collects data on archaeological sites in the Yli-li and Wemindji regions, and builds a database of information that can be used in the development of the combined environmental and archaeological GIS (Geographic Information System) as part of Zubrow's individual project (IP). A number of archaeological sites have been documented in the regions of interest, but the proposed GIS database calls for a comprehensive picture of prehistoric human activity in the context of the environmental transitions from marine, to inter-tidal, to terrestrial. This data is collected through systematic surface survey of the two regions, and excavation of selected archaeological sites.



Nocuso excavation. The rescue of the collapsed neolithic vessel.

Archaeology of Wemindji, James Bay

Andre Costopoulos [Project Leader]

Funding agency: Social Sciences and Humanities Research Council of Canada (SSHRC), Canada

The prehistory of the Wemindji area of Northern Quebec's James Bay region is relatively unknown. This IP first increases our knowledge of the area's prehistory through archaeological surveying and excavation. The new archaeological data is then prepared and formatted for integration with the paleo-environmental data produced by Chmura's IP.

Developing GIS Models of Paleo-Environmental and Archaeological Data

Ezra Zubrow [Principal Investigator]

Funding agency: National Science Foundation (NSF), United States

The aim of this IP is to develop GIS (geographical information systems) models of paleo-environmental and archaeological data within the larger objectives of SCENOP's BOREAS project. GIS layers are produced by integrating terrestrial models archaeological data sets produced by Okkonen's IP and Costopoulos' IP, and environmental data sets produced by Chmura's

Collaborative Modeling and Hypothesis Testing

While not an IP under the BOREAS programme, this phase of the SCENOP Collaborative Research Project is important enough to be listed separately. Using the model produced by the GIS integration (Zubrow) of the paleo-environmental (Chmura) and the archaeological (Costopoulos and Okkonen) data, the entire team participates in the production and testing of hypotheses about the differences and similarities in the history of human adaptations in the two regions under study. These hypotheses are tested using agent-based computer simulation tools.

People in SCENOP:

Project Leader:

André Costopoulos, McGill University, Montreal, Canada

Principal Investigators:

Gail Chmura, McGill University, Montreal, Canada Jari Okkonen, Oulu University, Oulu, Finland Ezra Zubrow, State University of New York at Buffalo, Buffalo, United States

Colony, Empire, Environment: A Comparative International History of Twentieth Century Arctic Science (CEE)

Overview:

"Colony, Empire, Environment" will produce a comparative international history of changing conceptions of the Arctic landscape, its scope ranging from science to art. It yields greatly improved understanding of Arctic scientific research during the twentieth century and new insights into the shifting meaning and significance of the northern landscape, as colonial domination was replaced by Cold War military activities and ultimately increased native autonomy.

More information on the CEE website: http://www.barentsinstitute.org/boreas.373619-40865.html

Individual Projects:

Constituting the Arctic Environment: How U.S. Military Patronage after World War II influenced the Environmental Sciences in the Far North

Ronald E. Doel [Project Leader]

Funding agency: National Science Foundation (NSF), United States

In 1947, the Pentagon became interested in global climate change. It did so not because of environmental concerns, as these became generally understood in the 1970s, but because of pragmatic defence issues: the prospect of climate change in high latitudes left military authorities worried about the United States' ability to confront the Soviet Union in the high Arctic, where a hot conflict with its emerging Cold War adversary seemed increasingly possible. Pentagon officials also saw polar warming as a broader kind of threat: a warming Arctic climate meant that the Soviet Union might obtain new advantages in developing its agriculture and deploying its fleet from high-latitude ports. By the late 1940s the polar region had become, as never before, a potential theatre of war.

State concern with the Arctic environment helped to shape U.S. Army, Navy, and Air Force scientific planning and tactical studies through the 1950s. In parallel ways, military fascination with the Arctic helped to shape the earth sciences research community in post-World War II America, creating new institutions and new funding to address broad interdisciplinary problems. It helped shape a distinct form of the environmental sciences in the United States before the environmental movement (which emphasised the biological environmental sciences including ecology, genetics, and natural history) gained ground in the 1960s and early 1970s. Pentagon officials sought knowledge about the upper atmosphere (for missiles and long-range communications) and the oceans (for submarine warfare) as well as about climate change, producing unprecedented volumes of data about Arctic conditions. Military patronage created a distinct form of the environmental sciences that stressed utilitarian and operational concerns. Yet the hope of military planners and civilian researchers to create comprehensive cross-disciplinary studies of this bounded geographic region — linking the biological and physical branches of the environmental sciences - initially proved difficult

Nature Conservation in the Arctic: Ideological and Scientific Origins in Comparative International Perspective

Urban Wråkberg [Deputy Project Leader, Principal Investigator]

Funding agency: Research Council of Norway (RCN), Norway

In this collaboration, Wråkberg traces the beginnings and development of nature conservation in the Arctic, initially focusing on its ideological basis and the scientific and political initiatives behind establishing a 'world nature park' on the national terra nullius of Spitsbergen in the early 20th century. Other studies, including field work, include regimes and rationales governing nature protection and nature reserves of the Kola Peninsula, northwest Russia, during its Soviet transformation from the 1930s onwards into one of the world's foremost mining and metal producing regions, notorious for its environmental degradation. Wråkberg traces the ambiguous transition from a colonial and national top-down administration of nature reserves in the circumpolar Arctic to modes in which the concerns of indigenous and other local settlers are more often taken into political account, balanced with those of tourists as well as highly influential military and territorial interests. The possibly de-colonizing character in this development is analysed and compared to similar processes of change traced in the other projects in the program. The research aims to shed light on change and variability in northern living conditions and metropolis administration of the Arctic environment. The project addresses the contextual issues of knowledge construction in the Arctic, the transformation of new knowledge into scientific advice and lobbyism and its influence on industrial and environmental policy- and decision-making. Wråkberg addresses questions of general interest regarding nature protection and sustainable use of natural resources, particularly petroleum; today a major part of Europe's energy supply comes from Arctic Russia. In this project, Wråkberg's closest collaborators are Ron Doel, Julia Lajus, Michael Bravo, and Robert Marc Friedman.



Glacier front in St John's fjord, Western Spitsbergen.

Sovereignty, Expeditions, and Science: International Controversies during the Second International Polar Year

Christopher Ries [Principal Investigator]

Funding agency: Danish Agency for Science, Technology and Innovation (DASTI), Denmark

Ries examines two main issues. One is the challenge of balancing international political rivalry and scientific collaborations in the Arctic. The other is the impact of different technological, scientific and organisational strategies of Arctic exploration on Western perceptions of the Arctic landscape.

During the Second International Polar Year, 1932 to 1933, an extended and escalating controversy relating to sovereignty of East Greenland between the Danish and Norwegian nations saw its culmination in a trial at the International Court in The Hague. The imperialistic rivalry between the two nations was accompanied by a fiercely competitive increase in scientific exploration of the region. Danish commitment to securing total scientific and political domination of Greenland during this period was reflected in the internationally well-crewed Danish Three-Year Expedition 1931-34, and the following Two-Year expedition 1936-38.

But these expeditions also marked a metamorphosis of the whole culture of Danish polar exploration. Since the turn of the 20th century, the exploration of Greenland had been the business of mainly sled-driving individualists in self-confessed empathic cooperation with indigenous assistants – a style perhaps most readily acknowledged in the North Greenland travels of the legendary Knud Rasmussen. The apparent willing assistance of the Greenlanders in the conquest of their land bolstered the Danish self-image as a benevolent, necessary, and welcomed colonial power in the Arctic.

BOREAS | 37

BOREAS Collaborative Research Projects (CRPs)

This trend was seriously challenged by developments in the late 1920s and early 1930s. Geographically, the focus turned from North to East. Professionally, archaeology and ethnology gave way to geology in terms of defining the purpose and value of Arctic conquest. New technologies such as field laboratories, aeroplanes, and telephones replaced the traditional tents, dogsleds and cairns. The Danish explorer-adventurer gave way to international teams of scientific specialists, and the culture and knowledge of the indigenous populations was rendered obsolete in Arctic exploration. As a consequence, a harsher, less romantic light was thrown on Denmark's domination of its Arctic possessions, and in a painful reordering of cultural values as a colonial power, the Danish nation was forced to redefine the justification for its sovereignty over Greenland.

Denmark might have had its own particular struggles in this respect, but the 'modernizing' of Arctic exploration was an overriding tendency of a host of other nations during this period. This project investigates the ways in which this process of 'modernisation' was expressed in a broader cultural sense, tracing the impact of emerging post-colonial trends in Danish involvement in the Arctic on the local communities of Greenland. It shares close ties with ongoing work by Doel, Wråkberg, Bravo, Granqvist, Friedman, and Lajus.

The Stockholm School of Glaciology and the Idea of Climate Change

Sverker Sörlin [Principal Investigator]

Funding agency: Royal Academy of Letters, History and Antiquities, Sweden

In this project, Sverker Sörlin investigates the role of the Arctic in the early history of climate change science. Although suggested in the 19th century, it was not until the 1920's and 1930's that historic, short term climate change became an issue. Important attempts to suggest such change came from physical geographers, not least glaciologists. Seminal results were provided by Stockholm professor of geography Hans Ahlmann, who had carried out glaciological field work in Scandinavia since the 1910's and extended his research into the Arctic in the 1930's and to Antarctica in the late 1940's. While Ahlmann's empirical data clearly underscored the notion of "climate embetterment" in the Arctic region, he was sceptical of hypotheses of human climate forcing which were advanced by nonspecialists.

Sörlin's research focuses on the techniques and tactics of the field science that Ahlmann carried out in an increasing number of locations in Scandinavia, Svalbard, and Greenland. He is also interested in



First Swedish polar expedition to Spitsbergen in 1861. Illustration from: Karl Chydenius Svenska expeditionen till Spetsbergen år 1861 under ledning af Otto Torell (Stockholm, 1865).

Ahlmann's work as a science diplomat, building bridges to colleagues and across the emerging Iron Curtain. This project also explores the possible relationship between Ahlmann's role as field worker and diplomat, where the building of trust around sensitive issues and vague information was a common denominator. In this work Sörlin's research interests coincide mostly with those of Ron Doel, Urban Wråkberg, Robert Marc Friedman, and Michael Bravo.

Visualizing the Arctic: Science, Culture, and Environment in early Twentieth Century Canada

Suzanne Zeller [Principal Investigator]

Funding agency: Social Sciences and Humanities Research Council of Canada (SSHRC), Canada

Zeller came to this individual project as a historian of science of 19th and early 20th century Canada, especially the impact of ideas of science at the intersection of culture and environment. The Canadian arctic came into play in a new way through its active role in shaping the radical post-Darwinian outlook upon nature of Ernest Thompson Seton (1860-1946), the internationally known artist and prolific author of "realistic" animal stories. Seton's widespread influence inspired several generations of nature-lovers, ranging from scientists to conservationists to weekend campers, not only in North America but also abroad.

As Seton's experience of the Arctic, including his admiration of its aboriginal inhabitants, altered his perspective on the wider world, his paintings, writings, and public performances drew the far north increasingly into the popular imagination. Zeller expects the collaborative research project to build upon the scientific and biographical bases of this case study, with its

implications for both history of science and environmental history, towards a more thoroughgoing analysis of Seton's role in framing a 20th-century discourse on the Arctic, especially in North America. Zeller's work intersects in particular with that of Karin Granqvist and Michael Bravo.

Associated Projects:

Polar Field Stations: Legacies for Science, Exploration, Environment, and Policy

Michael Bravo [Associated Partner] Sverker Sörlin [Project Member]

Bravo collaborates with CEE with the social science programme "Polar Field Stations and IPY History: Culture, Heritage, Governance (1882-Present)" which has been reviewed and endorsed by the ICSU/WMO Joint Committee to participate in the International Polar Year 2007-2008. Sverker Sörlin and Ron Doel are also members of this programme, and Urban Wråkberg has participated in the preparation of the individual project. He and several other members of CEE cooperate in the field research of this IPY programme; indeed, Bravo has established a project node at the Scott Polar Research Institute (SPRI), University of Cambridge.

Field stations have been one of the most salient and tangible features of IPYs since 1882-83 and through to the coming IPY 2007-08. The polar station is a modern feature, the smaller field cousin of the Laboratory, Instrument, or Observatory. It is a nexus, and a place, where a number of central features of the modern scientific enterprise – laboratory practices and methods, precision instruments, territorial claims – meet in the landscape and sometimes in close proximity to local groups and populations.

However, field stations remain a surprisingly neglected element in the study of the creation of scientific knowledge, and in relation to science diplomacy and geopolitical conflict. We also know quite little of the archipelago of IPY stations and their significance, some of them more than a century old. Nor are we yet sufficiently clear about their cultural and historical status - field stations are also legacies of past ambitions, a heritage in landscapes which was shared by science with local groups and indigenous peoples. This individual project approaches field stations from a range of disciplinary vantage points. The field stations are central units of knowledge production in the field. This is particularly pertinent to the IPY legacy. Cooperation in sharing field data is an ideal that has run through previous IPYs, and it has been given special prominence in the IPY 2007-2008 Framework. The original idea of



Field camp of Swedish polar scientists in Green Harbour, Spitsbergen 1861.

IPY emerged from a recognition that individual studies in the field sciences only contribute to a larger picture with a great deal of work. Field stations are one of the chief means by which a sustained presence in the field is maintained: field sites, instruments, and the movement of personnel are carefully coordinated; projects are vetted within research communities through systems of peer review; research efforts are directed with an eye to agendas decided by policymakers.

Bravo's research addresses the following problems: Why and how were research stations selected for IPYs in the past? Did the purposes and processes of station selection vary significantly around the circumpolar regions? How has the trade off between continuity and flexibility - or "station vs. travel" - been negotiated in the history of IPYs? Has creating field stations created field paradigms, bounded locations or micro-environments where specific kinds of scientific demonstrations take place, or where key hypotheses are tested? Have field stations produced site specific cultures of knowledge? Where field stations have been created either to study indigenous communities or else to take advantage of existing infrastructure, how have indigenous communities responded? Are collaborative approaches to research the product of a new public ethical consensus, or do they correspond to a much older tradition that has only recently become much more visible? What has been the relation to indigenous knowledge and production? Bravo's work intersects guite closely with that of Wråkberg, Ries, Friedman, and Lajus in this collaboration.

Norway and the Arctic: Environment, Science, and Internationalism

Robert Marc Friedman [Associated Partner]
Ole Anders Røberg [Project Member]

Friedman is exploring colonial outlooks in ethnography and physical geography in the early 1900s, as well as the influence of cold war politics on the agenda and territorial priorities of Norwegian polar research. CEE is an important partner in this endeavour and exchanges interpretations for its international comparative perspective.

Friedman focuses on polar geological, geophysical and ethnographical research at the University of Oslo as part of his work on the University of Oslo history, ca. 1880-1920. This focuses on the polar turn beginning in the 1890s in national and university cultural politics. Nansen's expeditions opened a polar path to national pride, as well as to polar research as a means of vitalizing academic science. Otto Sverdrup's 'Fram II' expedition along with those of Amundsen to the Canadian Arctic enriched Norwegian science by creating massive geological, biological, and ethnographic collections. These collections played important roles in disciplinary and institutional developments. The advent of frequent scientific expeditions after 1908 to Spitsbergen continued to enrich university Arctic holdings.

Important international comparisons results from an analysis of how university museums used these collections in a number of interconnected scientific, popular educational, and cultural-political agendas at a time when Norwegians were seeking to prove themselves to be worthy of the status as an independent 'civilised' nation. Some also began eyeing the Arctic as a region for colonial expansion. Further research goals include the depictions of Arctic nature, which tended to consider Svalbard as exotic, but also an extension of Norway's own nature: a laboratory where the physical-geographic processes that shape Norway could be studied in clearer relief. This study's broad ambitions intersect with all members of the CEE collaboration.

Friedman also aims to expand his earlier research on Norwegian polar research during the early Cold War. His work on the creation of the Norsk Polarinstitutt, the Norwegian-British-Swedish Antarctic expedition and the role of the Norwegian Foreign Ministry in shaping Norway's IGY participation open various perspectives onto politics and national styles of polar science. His work especially intersects with that of Doel, Wråkberg, Ries, Bravo, and Lajus.

Representations of Sami in Nineteenth Century Polar Literature

Karin Granqvist [Associated Partner]

Sami – their lives and culture – have been depicted as objects throughout history, both in images and in texts. This project explores representations of Sami made by four prominent nineteenth-century researchers who travelled in the north of Sweden, Norway and Finland; diaries, notes and letters from the fieldwork of these four natural scientists – and to some extent their scientific articles – are the sources. Working in Sweden, these scientists had degrees in geology, botany, oceanography, and zoology (ornithology).

Within natural science at that time, "objectification" was quite common: researchers identified, mapped and explained plants, animals and rocks. Sami were similarly objectified in the researchers' writings. The impact of the then-new scholarly field of Social Darwinism gave credence to their efforts to depict the Sami as a scientifically constructed "species."

Nevertheless, the type of relation these researchers had to the Sami coloured the representations of them in some cases. The closer the contact the researcher had with the Sami, the less objectified they were. Their desire to acquire Sami knowledge of (and experience with) nature, landscape and animals thus affected the representations. For instance, when these researchers needed Sami knowledge about reindeer herding, organizing mountain travels, animal hunting, or as guides, the Sami were described more in terms of subjects, in contrast to when they were 'just' objectified. This did not mean that the researchers understood 'insider's' culture, but that they did not focus just on the scientific way to produce knowledge in the common nineteenth century style. When the researchers had less need of Sami knowledge, they once again became objectified.

Field Sciences in the Russian North: Modernisationisation of Use of Natural Resources and Environmental Changes in the Twentieth Century

Julia Lajus [Associated Partner]

This associated project explores the development of the field sciences in the Russian North – particularly oceanography and the fishery science – within the broader context of colonisation and modernisation of the area. Sources for this historical study include written documents, visual information and oral interview collections.

Natural resources – especially marine resources, which for a long period of time were in common use – played an important role in unifying the region, caus-



Svea coal mine, Spitsbergen.

ing both cooperation and tensions. To discover and describe this role is the first aim of this project.

The development of field sciences such as oceanography, fishery science, meteorology and geology - as well as coming of the new technologies to the region - produced specific patterns in the use of natural resources, profoundly changing traditional relationships between man and nature and thus channelling the social behaviour of large groups of people, including local settlers and indigenous populations. Thus the second aim of this project is to understand the process of modernisation of resource use in the Russian North, along with the processes of industrialisation and militarisation of the area which had their own patterns and aims, especially during the Cold War period. An important issue within the subproject is the interplay of internationalism and nationalism in the development of polar field sciences in Russia.

The third aim of the project is to trace environmental changes in the region caused by modernisation of resource use, first of all in the marine ecosystems. The environmental focus of this project could be matched with other environmentally directed studies within the CEE in general, especially as it adds the maritime dimension to mostly terrestrial attitudes of the other individual and associated projects. This project overlaps particularly with those of Doel, Wråkberg, Ries, Friedman, and Bravo.

People in CEE:

Project Leader:

Ronald E. Doel, Oregon State University, Corvallis, United States

Principal Investigators:

Christopher Jacob Ries, Roskilde University, Roskilde, Denmark

Sverker Sörlin, Royal Institute of Technology, Stockholm, Sweden

Urban Wråkberg, Barents Institute, Kirkenes, Norway **Suzanne Zeller**, Wilfrid Laurier University, Waterloo, Canada

Associated Partners:

Michael Bravo, University of Cambridge, Cambridge, United Kingdom

Robert Marc Friedman, University of Oslo, Oslo, Norway

Karin Granqvist, University of Tromsø, Tromsø, Norway

Julia Lajus, European University at St. Petersburg, St Petersburg, Russian Federation

Project Members:

Marionne Cronin, National Air and Space Museum, Smithsonian Institution, Washington, United States Stephen Bocking, Trent University,

Peterborough ON, Canada

Julie M. Cruikshank, The University of British Columbia, Vancouver, Canada

Matthew Farish, University of Toronto, Toronto ON, Canada

Kristine C. Harper, New Mexico Institute of Mining and Technology / University of Utah, Socorro, United States

Edward Jones-Imhotep, York University, Toronto, Canada

Trevor H. Levere, University of Toronto, Toronto, Canada

Maiken Lolck, University of Aarhus, Aarhus, Denmark Cornelia Lüdecke, Munich, Germany

Liza Piper, University of British Columbia,

Vancouver B.C., Canada

Ole Anders Røberg, University of Oslo, Oslo, Norway **John Sandlos**, Memorial University of Newfoundland, St. Johns, Newfoundland, Canada

Jessica Shadian, The Barents Institute, Kirkenes, Norway

Networking Circumpolar Research: BOREAS Activities, 2007-mid-2008

EUROCORES Programmes comprise a networking and dissemination component which primarily aims at strengthening internal programme coherence and external programme visibility.

Networking with the aim of programme coherence would seek to develop synergies between the funded projects, and can address programme aspects that the highly competitive selection process has left uncovered. This may include forging links with other promising research networks.

Activities with the aim of programme visibility promote the contributions of the field to wider areas of participating disciplines or to spread it beyond core countries. The benefits of interdisciplinary and international collaborative research would become visible in such activities.

The EUROCORES networking and dissemination components can include workshops, conferences, summer schools, strategy and infrastructure meetings, mutual research visits, and dissemination support (e.g.: conference attendance, joint publications).

Considering that EUROCORES programmes privilege the funding of innovative, emerging and/or as yet under-connected research, the overall objective of these activities is to strengthen the field in question (capacity building) and to discover new research horizons (perspective creation).

Networking Circumpolar Research: BOREAS Activities

1) BOREAS Research Programme Launch Conference (Cambridge/UK)

[Convenor: Piers Vitebsky]

The BOREAS Launch Conference was organised at the Scott Polar Research Institute in Cambridge (UK) in October 2006 as a major networking occasion for the Arctic Humanities and Social Sciences research communities worldwide. It brought together some 100 researchers from the funded teams in the BOREAS Collaborative Research Projects (CRPs) and representatives from a number of other related initiatives in Humanities and Social-Science-based circumpolar research.

The conference helped further develop relations between projects: the EUROCORES networking philosophy aims at creating an integrated programme out of a clusters of first-class projects. The objective is to strengthen an emerging field, and to make it more visible to neighbouring areas of research (in the Humanities and Social Sciences of other regions, as much as in the Natural Sciences of the North). The Programme is thus expected to amount to more than just the sum of its projects.

BOREAS future networking activities were discussed and it was decided to launch them in February 2007 with a meeting dedicated to data management models. This was felt necessary in view of the ambitious data sharing projects aimed at by the "International Polar Year" (IPY) (2007/08).

The 1st Scientific Committee meeting was held in conjunction with the Launch Conference. A structured approach to the planning of science-, training- and fieldwork- related activities was devised for 2007. The next conference, planned for 2008, will address the necessity to "deprovincialise" circumpolar research.

EUROCORES Programme BOREAS: Histories from the North – environments, movements, narratives

Launching Conference, 14-17 October 2006 Scott Polar Research Institute, Cambridge, UK

Conference programme

Saturday 14 October

19:00 Reception with drinks in Fountain Court Walkway, New Hall

19:30 Dinner in Main Dining Hall, New Hall

Sunday 15 October

09:30 Welcome and introduction
Origins and objectives of the ESF
EUROCORES Programme BOREAS
Piers Vitebsky, Scott Polar Research Institute,
Cambridge / UK

The ESF EUROCORES Programme BOREAS: networking opportunities for circumpolar research

Rüdiger Klein, ESF, Strasbourg / FR

10:30 Coffee Break

11:00 7 working groups for internal coordination of Collaborative Research Projects

12:30 Lunch in SPRI

14:00 Presentation of the funded Collaborative Research Projects (CRPs)

Session 1: Chair: Piers Vitebsky, Cambridge / UK

14:00 Moved by the State: Perspectives on Relocation and Resettlement in the Circumpolar North (MOVE)

Project leader: Peter Schweitzer, Fairbanks / AK

"Histories and Futures of Relocations in Alaska and Rural Chuchotka"

Principal Investigators:

Yvon Csonka, Nuuk / Greenland:

"Inuit Relocations in the Eastern Canadian Arctic and in Greenland"

Florian Stammler. Rovaniemi / Fl

"Movement and Settlement Decisions in Industrial Towns (Northwestern Russia and Siberia)"

Niobe Thompson, Univ. of Alberta, Edmonton / AL "Administrative Resettlement and Community Futures in Northeast Russia (Magadan and Chuchotka)"

Timothy Heleniak, University of Maryland / MD "Comparative Study of Development and Settlement in the Circumpolar North"

15:00 Understanding Migration in the Circumpolar North (UMCN)

Project leader: Lee Huskey, Anchorage / AK Project Coordination: Survey of Living Conditions in the Arctic (SLiCA) Principal Investigators:

Lee Huskey, Matt Berman et al., Anchorage / AK "Migration in the Arctic Subsistence, Jobs, and Well-being in Urban and Rural Communities"

Chris Southcott, Lakehead University, Thunder Bay / CA

Canada SLiCA and Census Research Birger Poppel, Nuuk / Greenland:
Research with Greenland SLiCA
Olle Westerlund, Umeå University / SE
Geographical and occupational mobility in northern Sweden

16:00 - 16:30 Tea

Session 2: Chair: Gisli Palsson, Reykjavik, University of Iceland / IS

16:30 - 17:30

Colony, Empire, Environment (CEE): A Comparative International History of Twentieth Century Arctic Science

Project leader: Ronald Doel, Oregon State University / OR; University Utah, Salt Lake City / UT Principal Investigators:

Urban Wrakberg, Barents Institute, Kirkenes / NO

"Spitsbergen and the European Conservation Movement"

Julia Lajus, European University St. Petersburg / RU

"Field sciences in the Russian North: modernization of use of natural resources and environmental changes in the 20th c." Ronald Doel, Oregon State University / OR; University Utah, Salt Lake City / UT
"Constituting the Arctic Environment: How

U.S. Military Patronage after World War II influenced the Environmental Sciences in the Far North"

Sverker Sörlin, Royal Institute of Technology, Stockholm / SE

"The Stockholm School of Glaciology and the Idea of Climate Change 1910-1950"

Christopher J. Ries, Natural History Museum Copenhagen / DK

"International Collaborations in the Arctic and the evolving Western perceptions of the Arctic Landscape"

Karin Granqvist, University of Tromsø / NO "From the Arctic "Other" to the Scientific "Other": representations of Sami in 19th Century Polar Literature"

17:30 - 18:30

Home, Hearth, and Household in the Circumpolar North (HHH)

Project leader: David Anderson, University of Tromsø / NO Principal Investigators: Mika Tapio Lavento, University of Helsinki / Fl

The Environmental Archaeology of Sami Dwelling Places

Per Axelsson, Umeå University / SE & Hugh Beach, Uppsala University / SE

"Households, technological change and the use of space in Swedish Sami"

John Ziker, Boise State University / US

"Home, Hearth, and Household in Siberia and Northern Canada"

Patricia Nietfield, Smithsonian Institution / US "Reinvigorating Knowledge of the Tlicho Caribou Skin Lodge"

Gunnar Thorvaldsen, University of Tromsø / NO "The Demography of Circumpolar Households"

18:30 Drinks in SPRI

20:00 Dinner in Old Dining Hall, Queens' College

Monday 16 October

Session 3: Chair: Susanne Dybbroe, University of Aarhus / DK

09:15-10:15

Social change and the environment in Nordic prehistory: Evidence from Finland and northern Canada (SCENOP)

Project leader: Andre Costopoulos, McGill University / CA Principal Investigators: Gail Chmura, McGill University / CA Ezra Zubrow, Buffallo University / US Jari Okkonen, Oulu University / FI

Networking Circumpolar Research: BOREAS Activities

10:15 - 11:15

Northern Narratives: Social and Geographical Accounts from Norway, Iceland, and Canada (NORSAGA)

Project leader: Astrid Ogilvie, University of Colorado, Boulder / CO

Principal Investigators:
Astrid Ogilvie University of Colorad

Astrid Ogilvie, University of Colorado, Boulder / CO

"Narratives, histories and accounts from Norway" – "Narratives, histories and accounts from the European exploration of Canada" – "Cultural ecology and adaptation in mountain farming areas in Norway" Ingibjorg Jonsdottir, Reykjavik, University of Iceland, IS

"Narratives, histories and accounts from Iceland"

Niels Einarsson, Stefansson Arctic Institute, Akureyri / IS

"Cultural ecology and adaptation in Icelandic fishing communities"

William Patterson,

University of Sasakatchewan / CA

"Environmental / isotope / trace element chemistry of tree-ring cellulose" – "Cultural ecology and adaptation in Nain, Labrador" Gaston Demarée, Royal Meteorological Institute, Brussels / BE "Records of the Moravian Missionaries

"Records of the Moravian Missionaries in Nain, Labrador"

11:15-11:30 Coffee

Session 4: Chair: Jerzy Wasilewski, University of Warsaw / PL

11:30-12:30

New Religious Movements in the Russian North: Competing Uses of Religiosity after Socialism (NEWREL)

Project leader: Patty Gray

Principal Investigators: Patty A. Gray, University of Alaska, Fairbanks / AK

"Missionaries, Humanitarian Aid,

and Accompanying Ideologies in the Russian Far East"

David Koester, University of Alaska,

Fairbanks / AK

"New Religious Movements, Voluntarism and Social Mechanisms of Durability"

Art Leete, Eva Toulouze, Aimar Ventsel,

Tartu University / EE

Discourses of Religions, Mentalities and Languages in the Russian North

Anna-Leena Siikala, Helsinki University / Fl "Creating Belongingness: Neotraditionalism

in the Multi-Religious Russian North" Virginie Vaté, Max-Planck-Institute for Social

Anthropology, Halle/S. / DE

"The Rise of Protestant Denominations in Chukotka After Socialism"

Tatiana Bulgakova, Herzen State Pedagogical University, St. Petersburg / RU

"Kinship and Religious Praxis of Tungus-Manchurian Peoples"

Alexander Panchenko, Sergei Shtyrkov,

St. Petersburg / RU

"New Religious Movements in Siberia: Contemporary Religious praxis and Cultural Change"

Patrick Plattet, University of Neuchâtel / CH "New Religious Movements and Social Change in Situations of Contact"

12:30 - 14:30 Lunch in University Centre, Mill Lane

Session 5: Chair: J. O. Habeck, Max-Planck-Institute for Social Anthropology, Halle/S. / DE

14:30 - 18:00

Other Circumpolar Research Networks

Yvon Csonka / Birger Poppel, University of Greenland, International Arctic Social Sciences Association:

International Congress of Arctic Social Sciences VI, Nuuk 2008.

Michael Bravo, SPRI, University

of Cambridge / UK

"Social Sciences and Humanities in the International Polar Year (IPY)

Work-Programme 2007-08"

Yvon Csonka, University of Greenland

The International Conference on Arctic

Research Planning (II)

Anna Kerttula, National Science Foundation,

Washington / DC

Arctic Social Sciences - the view from NSF

(incl. NSF's IPY plan)
Gisli Palsson, Reykjavik,

University of Iceland / IS

Inuit Genetic History (incl.: Anthropology

and the new genetics)

Adam Guy, BBC Digital Arctic project Chris Southcott, Lakehead University,

Thunder Bay / CA

Social Economy Research Network for

Northern Canada

Chris Southcott, Lakehead University,

Thunder Bay / CA

The University of the Arctic Rasmus O. Rasmussen, Roskilde University / DK Cornelia Lüdecke, University of Hamburg / DE; International Polar Heritage Committee, ICOMOS

"Changing trends in polar research as reflected in the HISTory of the International Polar Years (Hist IPY)"

18:00 - 19:30 Drinks in SPRI

20:00 Dinner in Da Luca restaurant, Regent Street

Tuesday 17 October

09:30 - 10:00

Tour of SPRI library, incl. introduction to database and bibliographic services

10:00 - 10:30 Coffee

10:30 - 13:30

BOREAS 1st Scientific Committee Meeting

Chair: Piers Vitebsky, Cambridge / UK

- principles and plans for networking activities (proposals)
- drafting of policy statements or other documents
- development of PR material for BOREAS website

13:30 End of meeting

Organising Committee

Claire Rustat-Flinton (European Science Foundation, Strasbourg / FR)

Olga Ulturgasheva (Scott Polar Research Institute, Cambridge / UK)

Piers Vitebsky (Scott Polar Research Institute, Cambridge / UK)

Rüdiger Klein (European Science Foundation, Strasbourg / FR)

2) Workshop "Cyber-Research Infrastructures and Data Management for Science and Communities" (Paris/FR)

[Convenor: Rüdiger Klein]

The 1st all-BOREAS Workshop was hosted by ESF at UNESCO Headquarters in Paris (FR) in February 2007. As a multilingual and multicontinental community, researchers in circumpolar studies convened to study opportunities for bringing different levels of electronic collaboration and dissemination, both for the classroom, and for the interaction with local communities. The needs of this specific community were identified and interpreted against the background of major data archiving networks, which are developing in the context of US and European cyber research infrastructure strategies. Circumpolar specialists from around the globe were given an insight into ongoing research infrastructure programmes by speakers representing large-scale AAAS and NSF funded projects, such as "Arctic Research Mapping Application" (ARMAP), and European national and international consortia, such as the UK Arts and Humanities Data Service (AHDS) or the European Strategic Forum on Research Infrastructures (ESFRI) (see box p. 48).

The objective was to create, for BOREAS, an environment in which "Scholars, Tools and Developers" would be working together. The researchers assembled discussed the necessity of a BOREAS data policy that would respect the specific needs of local communities as much as the freedom of researchers to process and share qualitative and quantitative data. The challenges of the ambitious, interdisciplinary data sharing project of the "International Polar Year" (2007/08) provided the background for a joint statement on the contributions BOREAS researchers could make to such a wider project, while fully respecting their partners in research in the North.

Papers given at the BOREAS Workshop «Cyber-research infrastructures and data management for science and communities»

Introduction:

UNESCO Welcome

Rüdiger Klein, European Science Foundation, Strasbourg/FR: "Cyber-research-infrastructures, data management and the role of communities in the research process"

Keynote reflection 1:

• James Herbert, Centre for Research in the Arts, Social Sciences & Humanities, Cambridge/UK "Origins and outlines of ACLS and NSF cyberinfrastructures initiatives – perspectives for research infrastructures for the Humanities"

Keynote reflections 2:

Alexander Nakhimovsky, Computer Science
 Department, Colgate University, Hamilton / US:
 "Scholars, Tools and Developers, Working Together"

Research infrastructure and research data management in the circumpolar regions (Pt.1)

- Yvon Csonka, IASSA / University of Greenland: "The IPY data policy and opportunities for Humanities and Social Science circumpolar research data management"
- Anna Kerttula, NSF, Arlington, US:
- "NSF Office for Polar Programmes and perspectives for research infrastructures for the Arctic Social Sciences during and beyond the IPY"
- Lawrence Hamilton, University of New Hampshire, Durham, US:
- "Social Sciences in the Sustained Arctic Observing Network (SAON)"
- Cynthia Alexander, Acadia Univ., Nova Scotia, CA "Studies into ICT use of indigenous peoples in Canada"

The growth of European collaborative Research Infrastructures in the Humanities

- Peter Doorn, Data Archiving and Networked Services (DANS), The Hague, NL:
- "Permanent access to research data from the humanities and social sciences – from the Dutch experience to a European research infrastructure"
- Peter Wittenburg, MPI for Psycholinguistics, Nijmegen, NL:
- "From grid and archive federation to CLARIN
- Common Language Resources and Technology Infrastructure: networked technologies for linguistic fieldwork"

• Julian Richards, University of York, UK: "The AHDS Archaeology Data Service between research communities and outreach"

Research infrastructure and research data management in the circumpolar regions (Pt.2)

- Niels Einarsson, Akureyri, IS / Astrid Ogilvie, Boulder/Co., US:
- "Human Dimensions of Arctic Environments: A Multilingual Web Resource (HAWP)"
- Roberte Hamayon / Yves Dorémieux, Paris, FR: "Non European Components of European Patrimony" – an ECHO project and its use in outreach activities in North-Eastern Russia
- Craig Tweedie, The University of Texas at El Paso (UTEP), US:
- "The NSF Arctic Research Mapping Application ARMAP"

Research infrastructure and research data management in a global environment

- Paul Ell, Centre for Data Digitisation and Analysis, Belfast, UK:
- "Religious history and other historical GIS applications from case studies to the Electronic Cultural Atlas Initiative"
- Lars Bromley, American Association for the Advancement of Science (AAAS), Washington, US:
 "Geospatial technologies and sustainability data – case studies and methodologies"

Research infrastructures: the new challenges (Open access; qualitative data)

- Kevin Schürer, University of Essex, Colchester, UK: "The AHDS History Center and "Qualidata"
- Jürgen Renn, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin, DE:
- "The electronic workbench data management, data distribution and data access in multidisciplinary research production"

Concluding plenary discussions

"Cyber-research-infrastructures and data management for science and communities – What lessons for the BOREAS programme?"



Lake Baïkal, Siberia.

3) Session "New Methods for Understanding the Demography and Ethnohistory of Arctic Populations" at the Conference "The Ethnohistory and Archaeology of Northern Eurasia" (Irkutsk/RU)

[Convenor: David Anderson]

The conference in May 2007 brought together 120 scholars from 11 different countries and was hosted by Artur Kharinskii at the newly established Laboratory of Ancient Technology at the Irkutsk State Technical University. Papers explored new developments in historical, ethnographic and archaeological methods as applied to the study of indigenous peoples of Siberia. Perhaps for the first time in the Russian Federation, this meeting featured an emphasis on collaborative ethnography and the controversial subjects of repatriation and protection of cultural heritage. The conference also included an applied element, with three days spent among the famous ongoing Neolithic excavations near Olkhon island some 400 km north of the city.

Keynote presentations in the morning were followed by parallel panel sessions in the afternoon. Keynote speeches were translated and distributed before the presentations, and discussion was translated simultaneously. A book of abstracts in Russian and English was published and distributed at the start of the conference.

The themes of landscape archaeology and ethnoarchaeology occupied two days. A series of workshops on ethnohistory was spread out over three days of the conference, focusing on comparison of the Russian and Euro-american traditions of ethnohistory, the interpretation of historical demographic records on indigenous peoples, and the relatively new issue for Russia of 'repatriation' of objects to indigenous communities.

Keynote presentations challenged the idea that there could be a single unifying history to a particular ethnic group. These talks sparked a rich discussion on the role of local or individual agency in the creation of identities, with most Russian participants arguing that individual action, although evocative, can never overcome deeper objective commonalities held by 'ethnoses' and which can be represented by the Russian scientific tradition of writing ethnogenesis.

The conference received grants from SSHRC (Canada), AHRC (UK), the Norwegian Research Council and others. BOREAS supported the travel of 5 keynote speakers and sponsored a special section on the ethnodemography of indigenous peoples.

4) Session "Understanding Migration in the Circumpolar North" at the Workshop "Northern Migration Research: Lessons and Questions" (Roskilde/DK)

[Convenor: Lee Huskey]

This activity in conjunction with the workshop, "Northern Migration Research: Lessons and Questions" (and in association with to a meeting of the Arctic Social Indicators project) was planned originally for June 2007. Due to sufficient sponsorship from other, national sources (Canada, Denmark, USA), BOREAS funding could be rescheduled for a follow-up workshop in 2008 [see below: "Population dynamics in the circumpolar North"].

The objective of this workshop is to provide an understanding of the main results of current research on the patterns, causes and consequences of migration in the North.

The meeting aims at integrating BOREAS projects into the process of synthesizing existing research on migration in the circumpolar north. With three BOREAS projects (UMCN, MOVE, and HHH) focusing on migration, the primary networking dimension of the meeting is the discussion of questions and hypotheses about migration as examined from different perspectives in the three Collaborative Research Projects.

5) Session at field school "Life and Ritual: Spirit of the North: Community Histories and Religious Identities" (Kamchatka)

[Convenor: David Koester]

The field school in June 2007 built on a legacy of ethnological summer field camps held in Kamchatka occasionally since 1994, which promote the exchange of knowledge between indigenous elders, young people from villages in northern Kamchatka and invited scholars from the Russian West and abroad. Through the efforts of one of the original organisers of the 1994 and 1995 gatherings, Viktoria Petrasheva, Kamchatka State University has since adopted the ethnographic summer school idea with the name of "Heritage" (Наследие).

This field school focused on local historical processes, indigenous or religious issues. It consisted of methodological and theoretical lectures given by participating researchers, and research practica with community member cultural consultants and student presentations of preliminary research results. Students were able to work in communities with elders. The school was organised in two parts, one demanding a high degree of fluency in Russian, the other being appropriate for non-Russian speakers and focusing on cross-cultural collaboration and interchange of ideas, including presentation of results of the school in English and Russian.

BOREAS supported the participation of a number of project members from NEWREL and other CRPs, notably some with no prior exposure to Siberian fieldwork. Cross-CRP discussions contributed to the further development of research schemes.

6) Workshop "Polar Expeditions and the Measurement of Circumpolar Indigenous Populations" (St Petersburg/RU)

[Convenor: David Anderson]

The workshop will be convened in October 2007 at St. Petersburg State University. St. Petersburg is home to a number of historical demographers, geographers, and ethnographers in who are members in different BOREAS Collaborative Research Projects. Following the earlier workshop on data management, the need had emerged to operationalise a common agenda on the history of polar science, ethnohistory and ethnodemography. At the Irkutsk conference on the ethnohistory and ethnoarchaeology of Eurasia, two panel sessions at the Irkutsk conference identified the complex records of the 126/27 Soviet Polar Census, the Swedish parish records of Saami populations, and the digitised census holdings of the Norwegian Centre for Historical Research as possible case studies for this meeting.

The existing, large social surveys on circumpolar indigenous populations have become the object of intense efforts to digitise this material; similarly – be it through scanning or by entering data into databases – the record cards of several expeditions have been transformed into digital records. BOREAS has leaders of these projects among its programme researchers. The workshop will coincide with an international gathering of geographers celebrating the anniversary of the birth of Gumilev at St. Petersburg State University; it is anticipated that several prominent Russian geographers and historians of science who will be in the city can also join the round-table sessions.

Goals of the meeting include clarifying the historiography of the record series mentioned, develop standard queries for the BOREAS group on identities and ethnic markers, diet and subsistence, mobility and territoriality and trade, and on ways to share existing digitised records with the broader scientific community. The meting will also address the question. Another discussion will address how existing datasets might contribute to on-going aboriginal land claims, which are often based upon a burden of proof of occupancy.

The workshop will contribute to develop certain portions of these records for public access and comparison, thus fulfilling in practice the recommendations of workshop on data management.

7) Session "Circumpolar Human and Social Science Research and GIS Applications" at the EUROCORES Workshop "Towards a European Historical GIS" (Barcelona/ES)

[Convenors: Jordi Marti-Henneberg, Ian Gregory, Rüdiger Klein]

Although Geographical Information Systems originated in the Earth Sciences, since the 1990s its use has increasingly spread to historical research such that the field has become known as Historical GIS. While the original National Historical GISs focus on changing administrative boundaries linked to census and other data published using them (chiefly 19th and 20th centuries), increasingly GISs have focused on much smaller areas and on more qualitative sources. GIS components can help structure data, throw new light on research questions. The introduction of the time-dimension into GIS is relevant also for anthropological, archaeological and demographic research, to name only a few.

This workshop will be convened in Barcelona in late November 2007 and will bring together researchers from four EUROCORES Programmes (BOREAS, OMLL ("The origin of Man, Language and Languages"), Inventing Europe [on the history of technology] and TECT ["The Evolution of Cooperation and Trading"]). In addition, external speakers will present different approaches to historical GIS in other large-scale collaborative research contexts in the Humanities and Social Sciences. The objective is to test the usefulness of historical GIS to address the requirements of the multidisciplinary projects comprised under the four EUROCORES Programmes and to further develop the idea of a European Historical GIS.

8) Conference "Heading North, Heading South: Arctic human and social science research in a global dialogue" (Halle/DE)

[Convenors: J.O. Habeck, Piers Vitebsky]

This 2nd all-BOREAS workshop will be organised as a conference in spring 2008 by and at the Max Planck Institute for Social Anthropology in Halle (Saale) / DE, which offers the appropriate environment for a meeting with a high content of comparative, cross-cultural studies, with its centres on Siberian and African studies, and neighbouring universities known for their strengths in research into Middle Eastern and Latin American regions.

Since BOREAS aims to "place the circumpolar North into wider contexts", this conference will address the need for "deprovincialising" Arctic/ Northern human and social science research. BOREAS researchers will

Networking Circumpolar Research: BOREAS Activities

seek to disseminate lessons from "the North" to the wider academic community, while simultaneously incorporating "Southern" prospects and experiences (Africa, Central and South Asia, South America, and other regions of the southern hemisphere) into the work of Arctic specialists.

Panel sessions will be organised around seven themes: frontiers and borders; indigeneity and indigenism; conversion and community cohesion; migration; relocation; development and conservation; environmental change.

9) Workshop "Population dynamics in the circumpolar North" (Umeå/SE)

[Convenors: Lee Huskey, Olle Westerlund]

The workshop will be organised by the Centre for Population Studies (CPS) and the Centre for Sami Research (CeSam) located at Umeå University, in the north of Sweden, and is planned for June 2008.

It builds on the June 2007 workshop on "Migration in the circumpolar north", (Roskilde/DK): migration and other key features of population dynamics are important overlapping research areas in at least three BOREAS Collaborative Research Projects.

It is expected that the hypotheses on general patterns of northern migration from stylized facts presented in the 1st workshop in Roskilde will have grown into more comprehensive and validated studies:

In view of establishing patterns and specificities of Northern demographic change, four aspects of migration and locational choice will be examined: gender and family; changing age structures of local and regional populations; ethnicity. Finally, and as a complement to the analysis of migration, the workshop plans to initiate a discussion on long-distance commuting between the place of residence and the work place.

10) BOREAS at the VIth International Congress of Arctic Social Sciences (Nuuk/Greenland)

[Convenors: Yvon Csonka, Birger Poppel]

The International Association of Arctic Social Sciences, a major force behind the creation of the BOREAS programme, will hold the VIth International Congress of Arctic Social Sciences in Nuuk (Greenland) in August 2008.

It will feature a number of special sessions and research team gatherings related to BOREAS and other international research projects.



'Shamanskii mys' – a Buriat sacred site on the western side of Lake Baikal.

11) Workshop "Boreal Connections: Environments, Narratives, and Histories in Iceland, Norway and Labrador" (Reykjavik/IS)

[Convenor: Astrid Ogilvie]

The workshop will revolve around a number of interrelated themes, notably the study of traditional ecological knowledge (TEK), as well as the documentation and analysis of social, geographical and environmental movements. The main time period covered will be the past $\cong 300$ years to the present.

The use of data from the natural sciences, especially climate proxy data, will be explored. The Labrador/ Nunatsiavut component of the NORSAGA project analyses tree-ring cellulose data which will produce the highest resolution 300-year-record of proxy climate that has yet been produced for Labrador. This detailed record, together with proxy climate data for Iceland and data from Arctic Canada and Alaska, will be compared with documentary and TEK data in order to enhance understanding of perceptions of boreal environmental changes and climate impacts over the last 300 years.

As part of the BOREAS strategy to place research in the circumpolar North more centrally, the workshop also seeks to strengthen the exchange with climate and environmental historians working on other regions of the Northern hemisphere.

Governing Bodies

BOREAS Scientific Committee

Dr. David Anderson (HHH)

University of Tromsø, Tromsø, Norway

Dr. André Costopoulos (SCENOP)

McGill University, Montreal, Canada

Professor Yvon Csonka (President of IASSA)

University of Greenland

Professor Ronald E. Doel (CEE)

Oregon State University, Corvallis, United States

Dr. Patty Gray (NEWREL)

University of Alaska Fairbanks, Fairbanks, United States

Dr. Joachim Otto Habeck

Max-Planck-Institute for Social Anthropology, Halle, Germany

Professor Lee Huskey (UMCN)

University of Alaska Anchorage, Anchorage, United States

Dr. Rüdiger Klein

European Science Foundation, Strasbourg, France

Dr. Astrid Ogilvie (NORSAGA)

University of Colorado, Boulder, United States

Professor Peter Schweitzer (MOVE)

University of Alaska Fairbanks, Fairbanks, United States

Professor Przemyslaw Urbanczyk

Polish Academy of Sciences, Warsaw, Poland

Dr. Piers Vitebsky (Chair)

Scott Polar Research Institute, Cambridge, United Kingdom

Observer:

Dr. Anna Kerttula de Echave

National Science Foundation, United States

BOREAS Review Panel

Professor Rune Åberg

Department of Sociology, Umeå University, Sweden

Professor Daniel Alexandrov

Center for Environmental and Technological History, Department of History, European University of St. Petersburg, Russia

Dr. Susanne Dybbroe

Department of Anthropology and Ethnography, University of Aarhus, Denmark

Professor Roberte Hamayon

Centre d'Études Mongoles et Sibériennes, École Pratique des Hautes Études (EPHE), Université Paris Sorbonne, France

Professor Lotte Hedeager

Department of Archeology, History of Art and Conservation, University of Oslo, Norway

Dr. James Herbert

Centre for Research in the Arts, Social Sciences and Humanities (CRASSH), Cambridge, United Kingdom

Professor Tim Ingold

Department of Anthropology, University of Aberdeen, United Kingdom

Professor Manfred Lange

Zentrum für Umweltforschung, Institut für Geophysik, Westfälische Wilhelms-Universität Münster, Germany

Professor Veli-Pekka Lehtola

Center for Saami Studies, Giellagas Institute, University of Oulu, Finland

Professor Gisli Palsson

Department of Anthropology, Faculty of Social Sciences, University of Iceland

Professor Przemyslaw Urbanczyk

Polish Academy of Sciences, Institute of Archaeology and Ethnology, Warsaw, Poland

Professor Gail Guthrie Valaskakis

Aboriginal Healing Foundation, Ottawa, Canada

Dr. Piers Vitebsky

Scott Polar Research Institute, University of Cambridge, United Kingdom

Professor William B. Workman

Department of Anthropology, University of Alaska, Anchorage, United States

BOREAS Management Committee

Canada

Mr. Craig McNaughton

Social Sciences and Humanities Research Council of Canada, Ottawa



Conseil de recherches en Social Sciences and Humanides saintennes humanides de Casada Hessand Casada d'Casada

Denmark

Dr. Mette Bjerge

Danish Agency for Science Technology and Innovation, Copenhagen



Estonia

Dr. Luule Mizera

Estonian Science Foundation, Tallinn



Finland

Dr. Kustaa Multamäki

Academy of Finland, Research Council for Culture and Society, Helsinki



Iceland

Dr. Eiríkur Smári Sigurdarson

The Icelandic Centre for Research (RANNÍS), Science Division, Reykjavík



Norway

Ms. Kari Morthensen

Research Council of Norway, Division for Science, Oslo



Sweden

Professor Ulf Sporrong

The Royal Academy of Letters, History and Antiquities, Stockholm



United States

Dr. Anna Kerttula de Echave

National Science Foundation Office of Polar Programs, Arlington



