Journal of Northern Studies

No. 1-2 • 2007

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Published by Umeå University & The Royal Skyttean Society

Umeå 2007

The *Journal of Northern Studies* is published with support from The Royal Skyttean Society and Umeå University. Stiftelserna J. C. Kempe och Seth M. Kempes Minne (The J. C. Kempe and the Seth M. Kempe Foundation) have generously contributed to building up the editorial resources. Issue 1–2, 2007 has received financial support from Stiftelsen Riksbankens Jubileumsfond (The Bank of Sweden Tercentenary Foundation).

ISSN 1654-5915

Cover picture
Scandinavia Satellite and sensor: NOAA, AVHRR.
Level above earth: 840 km.
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Design and layout
Leena Hortéll, Ord & Co i Umeå AB
Fonts: Berling Nova and Futura.
Paper: Invercote G 260 gr and G-Print 1115 gr

Printed by
Alfa Print AB, Sundbyberg 2007

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Northern Studies at Umeå University

Northern Studies is one of the Areas of Excellence at Umeå University, Sweden, engaging scholars from a range of disciplines in all the University Faculties. One important focus for investigations is Northern Scandinavia, while other perspectives include the whole of North-West Europe or concentrate on the circumpolar area. Phenomena that could be gathered under the heading "northerliness" or "nordicity" are also subjects for research.

The North is a region full of contrasts. Its importance has varied greatly through history and it has been understood as the land of future as well as a marginalised periphery. Despite the region's rich natural resources, developments are hampered by sparse population and a peripheral geographical position in relation to the power and market centres of the surrounding world. Hunting, fishing and reindeer husbandry, and in later periods agriculture, forestry, hydroelectric power plants and mining have been and remain important bases for life in the North. The sometimes harsh climate means that the region is less suitable for crop production in agriculture, but prosperous farms based on especially animal husbandry exist in many areas. Today, the production industry and the service sector dominate the job market.

There has been varied and dynamic research concerning the North in Umeå ever since the University was founded in 1965. The Humanities have focused on people as cultural beings, and have studied, for instance, the languages and cultures that have existed in the North through the ages. Encounters between ethnic, cultural and social groups have shaped different identities and identification patterns that are manifested in languages, dialects, literature, art and music. Ground-breaking archaeological studies have changed the picture of ancient, northern history. An important field is what can be termed Sami studies, examining, among other things, migration patterns, health and living conditions within Sápmi from linguistic, cultural and demographic perspectives. Accounts by foreign visitors supply valuable information about outside images of the area.

In the Social Sciences, important research issues are questions concerning the development of the region and the various social and economic problems that seem to be particularly related to the North. Comparisons with other periods and locations add depth to the investigations. The emphases are on demographic developments, migration, available sources of income and the job market, the use of the region's resources and the structural transformation of the economy. The research is often connected to instruments for control of sustainable development, demographically, ecologically, economically and socio-culturally.

Ecologists at Umeå University study, for instance, how the exploita-

tion of natural resources has influenced northern eco-systems and how the resources can be used responsibly. Some issues in focus are how forestry influences biological variety and what effects reindeer grazing may have on the vegetation of the area. Interdisciplinary projects study the relations between forestry and reindeer husbandry in boreal forests.

Population genetics and research concerning genetic dispositions for various diseases are important strands in the medical research conducted at Umeå University. There are, for example, studies of the causes of hereditary diseases typical of Northern Sweden or infection diseases with a specifically northern distribution. Epidemiological studies provide comparisons with other regions.

Northern Studies at Umeå University is an interdisciplinary and comparative research field acknowledging the importance of both the past and the future. The research conducted illuminates the opportunities and difficulties for human activities in the North. There is front-line research as well as an excellent potential for developing and intensifying various thematic fields.

The *Journal of Northern Studies* is one way of consolidating the position of Umeå University in the field of Northern Studies. The refereed journal will be launched with a double issue in 2007, and from 2008, there will be two journal issues per year. Electronic publication is also planned and will be in full operation from 2010. Publication languages are English, German and French, with abstracts in English accompanying each article.

The journal will contain scholarly articles concerning human activities in northern spaces. There will be articles concentrating on people as cultural beings discussing, for instance, linguistic, historical or anthropological questions and articles focusing on people in society, treating economical or social issues. Other articles will concern people in their natural environment with an emphasis, for example, on the opportunities for human activity provided by the special features of northern eco-systems and the consequences disturbances of these systems may have. Articles within the medical field will deal with the health situation of people in the North. In many cases, the articles published will represent exciting interdisciplinary and multidisciplinary approaches.

Apart from the scholarly articles, the journal will contain a review section, a section with reports from conferences etc. and information about upcoming events relevant for Northern studies.

Umeå University will be responsible for the publication of the journal, together with Kungl. Skytteanska Samfundet (The Royal Skyttean Society), Sweden's northernmost Royal Academy.

Lars-Erik Edlund, Editor-in-chief

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JOURNAL OF NORTHERN STUDIES **1–2 • 2007**, PP. 13–30

SHERRILL GRACE

White Men Talking

ABSTRACT In this essay the author discusses a new play by Canadian playwright Sharon Pollock called *Kabloona Talk* (2007). The historical context for this contemporary play is the 1914 murders of two Roman Catholic Missionary priests by two Inuit in the Canadian Arctic, followed by two sensational trials held in southern Canada in 1917. Several attempts have been made by writers and scholars to represent what happened and why, but Pollock's play offers a fascinating look at the political manoeuvring that took place behind the scenes as the white lawyers struggled with the conflict between the dictates of European law and the principles guiding the behaviour of a remote group of Inuit about whom white southern Canadians knew next to nothing. Rather than focus on either the murders or the trials, Pollock uses this actual event to explore the timeless issues of justice, and cultural encounter and misunderstanding.

KEYWORDS Sharon Pollock, Canadian, drama, Arctic, Inuit, cultural conflict, murder, colonization

> We have arrived at the mouth of the Coppermine River. Some families have already left. *Disillusioned* with the Eskimos. We are threatened with starvation; also we don't know what to do. (Father Rouvière, 1913.)
>
> These remote savages, really cannibals, the Eskimos of the Arctic regions, have got to be taught to recognize the authority of the British Crown. (Crown Council C.C. McCaul, 1917.)
>
> We are now fast friends. Eskimos cannot be treated on the footing of master and servant. [...] Amongst these people, what one knows is known by all. (Inspector Charles D. LaNauze, 1916/1937.)
>
> Qui refusera de communiquer un peu de lumière à ces intelligences rabourgies comme les arbres de leur pays? (Paul Levesque, 1939.)
>
> DEFENSE: This is what it really comes down to [...] Sinnisiak and Uluksuk had a reasonable belief, culturally founded and honestly held, that their lives were in danger, and they acted on that belief to preserve their lives. (*Kabloona Talk*, 2007.)

I

IN NOVEMBER 1913, less than a year before the beginning of the First World War, a violent double murder took place in Canada's Northwest Territories not far from Bloody Falls on the Coppermine River (see Fig. 1). Two Oblate missionaries, Fathers Jean-Baptiste Rouvière (1881–1913) and Guillaume Le Roux (1897–1913), who had been sent into the Coronation Gulf area in the far north to convert the Copper "Eskimos," had not returned to their base at Imaerinik Lake. News travelled very slowly at that time: there were no roads, telephones, or mail services, and no easy way to get help if one encountered trouble. The isolation of the remote area was extreme and winters were (and still are) extremely harsh. Nevertheless, by the summer of 1914 rumours began to filter south that some Inuit had been seen wearing the garments of Roman Catholic priests and in possession of objects that were identifiably religious. These rumours, together with the fact that the priests themselves had not been seen or heard from for many months, led to a police search that started in the fall of 1915. This search eventually uncovered the scant remains of the priests and culminated in a confession by the Inuit encamped near the mouth of the Coppermine that two Inuit, Sinnisiak and Uluksuk, had killed the priests. The two Inuit were arrested, charged with murder, and brought south to Edmonton for a trial that began on 14 August 1917. But that is just the beginning – the bare bones, as it were – of the story.[1]

Versions of what happened to Rouvière and Le Roux, and to Sinnisiak and Uluksuk, have been told and retold since 1917. The most sensational aspects of events, including charges of cannibalism, have guaranteed the case a place in the annals of Canadian murder stories. Depending on who retells the story and when they retell it, interpretations vary: the priests may be seen as heroes and martyrs, or they may be seen as dangerous, ill-tempered intruders attempting to force an alien belief system on an indigenous people; the Inuit may be seen as brutal savages, the very worst type of pagans, or they may be seen as acting in self-defence and then as the helpless victims of a foreign justice system that could not, or would not, make allowances for the actual circumstances of life in Canada's far North. Whichever way the story is approached and re-created, one thing is absolutely clear: the murder (for indeed the two priests were killed, of that there is no doubt) stands for a much larger issue and represents a symbolic moment in the cultural encounter of two peoples, two views of reality, two value systems, and two responses to the stresses of isolation, starvation, and power imbalance.

In this essay I will focus my attention on a contemporary play called

Fig. 1. This portion of the map from Helge Ingstad's *The Land of Feast and Famine* ([1933] 1992), shows the Northwest Territories as it appeared near the time of the murders and trials; spellings of place names are as they appear in the original. Ingstad has drawn it with 200 miles to the inch, which gives a good idea of the vast distance (as the crow flies) between Calgary and Edmonton in the south, and Fort Norman to the north on the Mackenzie River, or the mouth of the Coppermine River on Coronation Gulf in the Arctic.

Kabloona Talk (which translates roughly as "whitemen's talk") by Canadian playwright Sharon Pollock, but I also want to situate the play in the wider context of representations of the events of 1914 to 1917 that have become popularized in the Canadian imagination as the case of REX vs Sinnisiak and Uluksuk. As I see it, from my perspective in the early twenty-first century, this case affords a classic example of what Mary Louise Pratt has called a "contact zone" (Pratt 1992: 5–9). It is also one in a series of actual encounters between northerners and southerners (be they Canadians from southern, eastern cities or Europeans) that have been re-invented by

contemporary writers and, through these inventions, installed in southern narratives about the North. Within what I have called the "discursive formation" of the Canadian North, Sir John Franklin and his three expeditions to the Arctic have inspired a host of representations, but others like John Hornby, Albert Johnson (the so-called *mad trapper*), Mina Benson Hubbard (as well as her husband who starved to death in Labrador in 1903), and Martin Frobisher have provoked endless curiosity and mythologizing.[2] In short, the *storying* of Rouvière and Le Roux and of Sinnisiak and Uluksuk is part of a larger narrative about what happens to white southerners who venture North in search of glory, adventure, riches, the Northwest Passage, or in pursuit of some other agenda, such as conversion of pagans to Christianity or the establishing of Canadian sovereignty over the high Arctic. It is also part of a lesser known and more recently told story about the fate of northern peoples – Inuit, Dene, Northern Cree, Objibwa, Innu, and others – who came into contact with white southerners during the nineteenth and early twentieth centuries.[3]

Inseparable from the story of Rouvière and Le Roux are certain aspects of the historical background of Canada between the 1890s and the First World War. During the 1890s, the Yukon Territory had experienced one of the great Gold Rushes of all time when thousands of miners and speculators flooded into the territory around the Klondike River in search of gold. Most of these men were Americans and it quickly became apparent to the distant Canadian authorities in Ottawa that they would lose control of this territory if they did not move quickly to establish a police force, mining regulations, banks, and a stable, domestic economy. One lesson learned from the Klondike Gold Rush was that sovereignty in the North had to be aggressively asserted by the Canadian authorities; the other lesson was that there were riches, possibly even untold riches, lying in Canada's far north waiting for white, southern interests to claim and develop them. Just because indigenous northerners lived in these distant areas and had done so for centuries, this did not mean southern explorers, governments, and developers should not stake their claims to the land and its resources. Any perceived challenge to this southern control over northern lands was to be taken very seriously indeed and crushed unequivocally by the firm hand of British law. Amongst the most powerful and pervasive of southern institutions to infiltrate the North, apart from the Royal Northwest Mounted Police, were the Christian Church and the English- or French-Canadian educational systems. First the "Indians" and "Eskimos" were to be converted to Christianity – Roman Catholic, or Anglican and other Protestant sects – and then their children were to be educated in the colonizer's languages and culture.[4] Moreover, by the time Sinnisiak and Uluksuk were arrested and brought to trial in the

summer of 1917, Canada had been at war for three years: patriotic feelings were high; the rhetoric of support for and pride in all things British was at fever pitch; and the belief that civilization was under attack and must be defended at all costs could not be questioned. So-called *savagery* was not to be tolerated. Underlying these attitudes was a deeper and pervasive racism. According to the dominant views of the period, Canada was a "White man's country," and all non-white peoples, including First Nations and immigrants from Asia or Africa (and Afro-Americans), were viewed with suspicion and denied the vote and other basic rights. There had been race riots on the west coast in 1907, followed by a deplorable incident in Vancouver's harbour involving a freighter carrying Sikhs in 1914, and there was an entrenched belief that all Indians must be converted to Christianity, educated in white culture at residential schools, confined to reservations, and ultimately absorbed into mainstream life.[5]

No one attempting to retell the story of Rouvière, Le Roux, Sinnisiak, and Uluksuk can ignore the known facts as presented in the trials. The two priests, whom the Inuit called *Kuleavik* and *Ilagoak* respectively, were killed not long after they had left the Inuit camp in November 1913 and begun their journey south. The two Inuit had either followed the priests or met with them and then been urged, possibly at gun point, to pull the priests' sled. According to testimony given through a translator, Sinnisiak and Uluksuk became afraid of Le Roux, who had a violent temper; moreover, they believed that the priests had promised their people a rifle in return for previous assistance rendered but had refused to hand it over. Clearly, there was considerable cultural misunderstanding between these two sets of men, and this was exacerbated by an inability to speak each other's language; moreover, all four were struggling with severe winter conditions and the spectre of starvation. The situation could scarcely have been more volatile. Precisely what precipitated the violence is not clear, but the priests were killed, shot and/or stabbed by the two Inuit, and then each of the men sliced off a small piece of each priest's liver and consumed it. When they left the scene they took the rifle and other objects with them.

By the time Inspector LaNauze found the priests' remains little was left except a jaw bone, a few pages of a diary, and blood-stained clothing; these items were presented as evidence at the trials. LaNauze also received a confession from the Inuit and then returned with them to Edmonton. During their August 1917 trials Sinnisak and Uluksuk sat in their heavy clothes with their feet in buckets of cold water while the white men around them talked at great length in English and the Judge dozed off in the summer heat. Then, to the horror of the Judge and the Prosecutor, Sinnisiak, who was tried alone for the murder of Rouvière, was acquitted by the all-male, white

jury. Furious with this result, the Prosecutor and the Judge agreed to hold the second trial in Calgary with a new jury, which would be sequestered, in order to try both Inuit on the charge of murdering Le Roux. This time the jury returned a verdict of guilty of first-degree murder which required the death penalty. In the event, the Judge sentenced the Inuit to death and then commuted the death sentence, as he had intended to do all along, to life imprisonment at Fort Resolution on the shores of Great Slave Lake in the Northwest Territories (see Fig. 2). After two years of working around the police detachment, Sinnisiak and Uluksuk were deemed to be model prisoners and released in 1919. They returned to the Coronation Gulf area, which is now called Kugluktuk, but by 1924 Uluksuk was dead, possibly murdered by his people for being a dangerous bully, and Sinnisiak was dead by 1930. The great lessons about law and order supposedly delivered by the trials brought little or no benefit to the Killiniqmiut (formerly called *Copper Inuit*, or *Eskimos*, by white southerners).

II

The earliest re-tellings of these events that I have seen are in French and consist of plays, stories, and essays assigned by the Roman Catholic clergy in 1938 to young men attending the church colleges across the country. The winning submissions were published in 1939 in a volume called *Martyrs aux glaces polaires* and, as the title suggests, Rouvière and Le Roux are classified as martyrs in a holy cause – the conversion of the heathen – and the two "Eskimos" are labelled monsters, while others of their race are depicted as evil incarnate. The authors of the plays, in particular, do not hesitate to create "Eskimo" characters and to put violent and horrifying dialogue in their mouths. By contrast, the white characters are represented as honest, kindly, and good, and the priests as self-sacrificing, forgiving saints. In one play, when the Judge is considering the death sentence, the Catholic Bishop, Gabriel Breynat, O.M.I., intervenes to urge clemency because "Christian charity is more powerful than the law" (p. 171). The essay by Paul Levesque from which I quoted at the beginning, is the most fanatical in its treatment of the subject, but all the creations conform to the ideology and rhetoric of Christian sacrifice and missionary self-righteousness.

In *British Law & Arctic Men*, R.G. Moyles writes as a scholar with a distinctly post-colonial understanding of cultural encounters in the Canadian North (Moyles 1979). He provides an accurate account of the known facts supported by extensive quotation from court records, and he re-creates the trial scenes as clearly as possible, noting the crowds that gathered outside

Fig. 2. The central figures in the 1917 trials were (back row, left to right) C.C. McCaul, Inspector D. LaNauze, James Wallbridge, and Constable Wight, and (front row, left to right) Ilavinik (a translator), Koeha (a witness), Uluksuk, Sinnisiak, and Patsy Klingenberg (another translator). Photograph: Glenbow Museum Archives, Calgary.

the Edmonton courthouse, the throng of national and international newspaper reporters, and the celebrity-status of Sinnisiak and Uluksuk, who were entirely out of their element in the heat and babble of a city summer. "Edmonton buzzed with excitement," he tells us, but no one knew how the Inuit felt about the situation (p. 35). Moyles's use of the court records allows us to *hear* how the Judge and the lawyers sounded, what views they espoused, and what they expected from the trial. As the Crown Prosecutor, Charles Cursolles McCaul, is quoted as saying (in addition to the remark I cited at the beginning), he hopes that the "savage notions" of the Eskimos will be "effectually dispelled" so that the northern regions of the country will be safe for the "many white men" who go there to explore (p. 39). Moyles goes on to describe the evidence and to single out for special attention the passage from Father Rouvière's diary that I quoted at the start: "Désenchantement de la part des Esquimaux," was translated at the trial as "Disillusioned with the Eskimos" (p. 43), but James Wallbridge, lawyer for the Defense, was unhappy with many aspects of the translation process during the trial and Sharon Pollock would seize on such issues for her play and focus on this phrase "Désenchantement de la part/ Disillusioned with" to dramatize the problem.

Moyles continues his narrative with a description of the uproar that followed the "Not Guilty" verdict. Rumours began to spread that the jury was biased against Roman Catholics or influenced by gossip about the priests'

relations with Eskimo women or swayed by sympathetic reports about the Eskimos from members of the public. As a result, the Crown persuaded the Judge, Chief Justice Horace Harvey, who had wanted a guilty verdict and required little persuading, to order that the second trial be held in Calgary with a new jury, which would be sequestered, and a new charge: Sinnisiak and Uluksuk would be jointly charged with the murder of Father Le Roux. In his account of the second trial, Moyles quotes extensively from the arguments of the Defense, who took great pains to explain matters from the Inuit perspective, to describe why Sinnisiak and Uluksuk were afraid for their lives and how Le Roux had forced them at gun point to pull the sled. In the words of Wallbridge, what happened near Bloody Falls in November 1913 was a "tragedy" arising from complete cultural miscommunication and the over-riding fear of starvation (p. 66). Sinnisiak and Uluksuk had done the only sensible thing possible under the circumstances *as they understood those circumstances*. Moyles concludes his narrative unequivocally: "The trial of Sinnisiak and Uluksuk went for naught" (p. 87) because neither man learned anything from it. The lesson Moyles draws from the story he has told is that these trials, "the first for any Inuit under the 'king's law,' were a significant part of the process of neo-colonialism" that would lead to the "ultimate disintegration of the Copper Inuit culture" (p. 90).

When McKay Jenkins published his new account of the Rouvière and Le Roux affair in 2005, he took a different tack. His title, *Bloody Falls of the Coppermine: Madness, Murder and the Collision of Cultures in the Arctic*, sets the stage for what is, finally, a rather sensationalized, lurid re-telling of events in which Jenkins creates Inspector LaNauze as the hero of the day because he was admired by the Inuit, treated them with respect, and travelled for many months over many hundreds of miles to investigate the disappearance of the priests and then to find and arrest the perpetrators – all without firing a shot. Like Moyles, he describes the Inuit as being afraid of the priests, especially Le Roux, and he interprets the eating of pieces of the priests' liver as a ritual act of appeasement (pp. 174–75). He dramatizes the Crown Prosecutor as a ranting racist – clearly the villain of the story – and he dwells upon the actual debate that took place over the translation of Rouvière's diary entry: "Désenchantement de la part des Esquimaux." As reviewers have noted, Jenkins makes several mistakes in his narrative, but what I find interesting in his version are the emphases he places on the sensational aspects of the case (blood, madness, violence, and ritual cannibalism), his elevation of Inspector LaNauze to the status of romantic adventurer/hero/Mountie who conquers the Barrens to get his man (or men), and his demonizing of Crown Counsel McCaul. *Bloody Falls of the Coppermine* is long on dramatic action but short on sober reflection.

When Sharon Pollock took up the subject, she created something completely different from the pious rhetoric of the early French pieces, the objective reporting of Moyles' narrative, or the heroics of Jenkins's adventure story. *Kabloona Talk* asks white audiences to reflect closely on what *might* have happened in a back room of the Edmonton courthouse immediately after the jury returned their verdict of "Not Guilty" in the first trial. As we know, the second trial was moved to another city with a new jury, which was ordered sequestered. How and why did this happen? There are no Inuit in Pollock's play; she refuses to create men from another race and to put words in their mouths. She does not retry them or take sides with them, nor does she dwell on the deaths of the two priests. Instead, Pollock invites us to consider how those in power – in the government and the justice systems – manoeuvre and connive to maintain and enhance their power because, as she sees it, "the ultimate victim may be Justice itself" ("Playwright's Notes"). There are only four characters in the play: the Judge, the Crown Prosecutor, the Defense, and a fourth man called Smith. This naming, or absence of names, is important because, with respect to the lawyers, their identification by function allows them to stand for powers beyond individual men in a specific time and place and to represent the general force of the law or the justice system – then and now.

Smith is a special case and a pure invention on the playwright's part; he is also the most important figure in the play. The play opens as he arrives alone on stage, which is set as a back room of the courthouse, within moments of the rendering of the "Not Guilty" verdict. He is expensively dressed, aloof, business-like, and authoritative, and he brings with him a box marked "REX vs Sinnisiak" and a rusted 44 Winchester rifle. The set design instructions call for a simple but stately room with high ceilings, doorways and windows, plush draperies and armchairs, and a liquor cabinet; however, in the middle of this elegant room is a plain, utilitarian table with a "bare, barren" top, and it is set at a slight rake and will be dramatically lit at certain points in the play. The first impression given by this set is one of incongruity: this table looks out of place in such a room. During the opening moments of the play, the man will silently lay the rifle and some objects from the box on the bare table – a bloodstained cassock, a few pages from what may be a diary, and a human jawbone. When the Judge enters he instantly knows who this man is; he also understands why he has come and called this meeting. The Prosecutor enters, furious with the acquittal; the Defense enters, pleased with the verdict. The stranger says nothing, but he observes the others as they enter, argue with each other, and pour drinks. When finally asked to identify himself he says he is simply "Smith," one of the most common of English surnames. From there the action unfolds quickly as

first the Prosecutor and then the Defense realizes that a power beyond the law and the courts has come to intervene in the progress of the case.

Smith proceeds to ask the two lawyers to review the facts of the case for him, and the Judge reminds them, more especially the Defense, that this case is a "seminal legal event" because "the Canadian Government is just now extending its Dominion" (p. 29) throughout the North. As the two lawyers rehearse the facts (and argue with each other over the interpretation of them), Smith sets up an elaborate map on the table to represent "the scene" – that is, the Barrenlands of the Northwest Territories between Edmonton and Fort Norman, one thousand miles to the north, where the headquarters of the Saint Theresa Mission run by Bishop Breynat is located, then, to the east, the cabin of the priests at Lake Imaerinik, and finally the boundaries created by the great waterways of the Mackenzie and Coppermine Rivers, Great Bear Lake, and Coronation Gulf in the Arctic, where the Inuit have their camp. Smith even places a red cross at a point on the Coppermine River to mark Bloody Falls, where the murders were believed to have occurred. In short, what he has done is to map the vast territory between the southern city of Edmonton and the Arctic Ocean, an area, as he notes, which is immense and may well be rich in mineral wealth. This mapping and naming of the Barrenlands controls it, contains it, brings it under the scrutiny of southern eyes that have never seen the real thing, but it also reminds us (audience and readers alike) of the physical presence and scale of the territory in which the tragic events of November 1913 occurred. When the table with its mock map is lit by "shimmering white" light at the end of the play, it will convey a mysterious, haunting quality of significance, possibly even of dread that lingers after the end of the play and persists, with the passage of time, into our present. That such a symbol should glow like this in the middle of a sophisticated back room in a southern, urban, Canadian court house suggests that just beneath the surface of our civilized systems and self-righteous rhetoric is another reality that will not go away and cannot be pushed aside by political or legal manoeuvring.

But this significance is also emphasized through words because Smith's plans to ensure a guilty verdict at the second trial quickly take shape while he listens to and then interrupts the lawyers' arguments. He wants a guilty verdict, one way or another, because like the Judge and the Crown Prosecutor, he must secure Canadian sovereignty over the North. "White men are pouring into the North," he tells the Defense, and "we know there's copper there, gold discovered in the past, diamonds may be found tomorrow. Who knows what lies beneath the surface?" (p. 69). As far as Smith (and the government he represents) is concerned, it is imperative that white men show the Inuit, and all other indigenous northerners, exactly who is

in charge of the North by extending the government's borders "geographically" and "morally" (p. 70). The Defense rejects this reasoning. He argues that a guilty verdict reached for government purposes (be they economic, moral, geographical, or political) is not "Prosecution or Justice. It is Persecution" (p. 71). But the Defense loses the argument this time. The Judge and the Crown Prosecutor agree with Smith; the larger stakes in the case must be served regardless of "Justice." And the outcome of this debate is that sufficient reason is found to request a change of venue and a new jury on the grounds that the first jury was unduly and improperly influenced by rumours and by people with sympathy for the accused. The play ends with the Judge, the Prosecutor, and Smith in agreement: the next trial will be organized to bring in the desired guilty verdict. The Defense lawyer is defeated before he even begins, outmanoeuvred by the powers of the State in collusion with the courts, both of which serve the interests of the South against the North, white developers against non-white inhabitants, civilized Christians against savage pagans. Smith is pleased and he compliments the Defense for his willingness to fight even when he cannot win: "I like you," he says. "Without men like you the system wouldn't work" because it needs "a few like you to make it all [...] look right" (p. 82). Smith's suave cynicism robs the Defense lawyer of his last shred of belief in justice and the Inuit of their freedom to live according to their own culture and traditions in their ancestral lands. The killing, whatever led to the tragedy, of Fathers Rouvière and Le Roux by the Inuit has provided the Canadian authorities with the excuse they need to take control of this part of the North.

III

I began my examination of these representations of the trials held in 1917 that brought two Inuit south charged with the murders of two priests by describing the *case* as an example of a "contact zone," a term developed by Mary Louise Pratt in *Imperial Eyes* to describe the colonization of South America (Pratt 1992: 5–9). In her book, Pratt is at pains to understand the complex interaction (linguistic and cultural) that occurs over time when a European culture arrives on foreign soil in an alien and alienating space and stays to claim, survey and control, and develop/exploit that territory. However, the area in which the two groups meet becomes a "contact zone" not simply because these groups come into contact (usually violent) with each other but because, over time, influence may become mutual, a two-way phenomenon that changes the invading culture as well as the invaded, indigenous one. Accommodations will be made; compromises reached, usu-

ally out of necessity or expediency. Different areas within the Canadian North, which since 1999 has comprised the three territories of Nunavut, the Northwest Territories (today a much smaller area than it was in 1917), and Yukon, as well as Labrador and large tracts of provincial norths across Canada, have developed unique cultures out of their distinct histories of indigenous traditions, non-indigenous exploration, and settlement. These differences and distinctions are imagined in literature and, therefore, can be traced through their representations, especially when those representations acknowledge the experience of contact as a fluid, evolving, dialogic aspect of their story. One key problem with the representation of North as a contact zone arises when the stories being told are created by and for southerners, when neither the story-teller nor his audience has any personal experience of the North being represented. Another inescapable problem – more perhaps in the nature of a dilemma – faced by anyone who chooses to recreate such stories, is the persistence of unacknowledged stereotypes and assumptions.

In the stories created about Sinnisiak, Uluksuk, Rouvière and Le Roux, the Royal Northwest Mounted Police, the lawyers, and the trials, both southern ignorance of the Coppermine area of the North and a set of stubborn stereotypes and assumptions have conditioned the kind of stories that could be told and have determined their reception. Perhaps understandably, given their faith and their mission, the Roman Catholic Church in the 1930s would insist upon representing the North as a battleground for souls, with room for only one victor – Christianity – in the contest between good and evil. By the 1970s, it was possible for a scholar like Moyles to see beyond and around such basic dichotomies to the political ramifications of the case and to the longer-term consequences of what Canadian politicians have called the opening up of the North. And yet even Moyles, who relies on careful research into court records and newspaper coverage of the trials, sets up a winner/loser opposition in which the Killiniqmiut people of the central Arctic lose to the powerful forces of southern assimilation, greed, and colonial development. Although Jenkins revisits the history with twenty-first-century eyes and cannot ignore the fact that many groups of indigenous northerners in all three territories continue to survive and adapt, despite real inequities and hardships, he nevertheless *constructs* his narrative as an action-packed adventure story with exciting challenges, a white hero (Inspector LaNauze) and a white villain (Crown Counsel McCaul). The two Inuit, like the two priests, slip into the background of his story, and the opportunity to explore the complexity of contact is lost.

Whether or not Sharon Pollock's *Kabloona Talk* can correct this imbalance in representation by exposing and analyzing the contact zone em-

bedded in REX vs Sinnisiak and Uluksuk remains to be seen. A play, unlike a novel or a non-fiction narrative, only exists fully in performance, and to date this play has received a workshop reading and a complete dramatic reading but not a professional stage premiere. Much will ultimately depend on the actors, the design, and even the theatre venue; a production in Yellowknife, NWT, will be received differently from a production in Calgary or Edmonton.[6] Nevertheless, the potential of a live theatre production to engage an audience in the experience of a contact zone is enormous, and this play could well achieve that result – one which, I believe, is intended by the playwright. By focusing exclusively on four white men, by avoiding the creation of Inuit characters, by dramatizing the verbal contest over language, and by staging the contact zone itself on a bare table top, Pollock invites us to see the situation arising from and informing a particular historical case *differently*, with something other than imperial eyes. Let me revisit each of these four aspects of the play in turn to present my case.

By using only white men who will argue with each other, and by denying them specific names (Smith scarcely qualifies as an identifier), Pollock positions her characters as representatives of points of view that still exist in Canadian society; she also resists the temptation to paint these men as simple villains, thoughtless racists or, in the case of the Defense, as an altruistic humanitarian with a heart of gold. To be sure, the Defense is not only doing his professional job – defending the accused – he is also struggling to see things from the *others'* perspective and that *other* is completely foreign to him. More than either of his colleagues, he is sensitive to the "cultural lens" (*Kabloona Talk*, unpublished script, p. 34) through which the Inuit and the priests necessarily viewed each other. But Pollock's Judge and Prosecutor are also trying to do their jobs as best they can, and each of them is concerned with the bigger picture of Canadian sovereignty and northern development. They may be more ethnocentric than the Defense and more committed to a narrow application of British law, but they are not villains. Smith is a more disturbing figure, a type of puppet master who controls the outcome of the play, and as such he is a favourite Pollock type because he embodies what she has always seen as the real devil in society – the system, any system, that operates bureaucratically, impersonally, relentlessly to reify the status quo and silence debate; and he is a suave, impervious devil who happily marginalizes opposition and erases the individual conscience (in this case that of the Defense). As we watch and listen to these men talk, it is impossible not to see them as representing us and as expressing a range of familiar, conflicting, yet often convincing arguments. If Pollock had created roles for Sinnisiak and Uluksuk, she could not have avoided objectifying them, dressing them (literally or figuratively) in skins and furs, fixing them in a frozen past that

no longer applies, or perhaps putting incomprehensible Inuktituk or broken English in their mouths. To do this would have invoked all the familiar stereotypes and assumptions made about the Inuit and the North by southerners. To have them talked about, sympathetically by the Defense and critically by the Crown Prosecutor, who will not forget the dead priests, is to make us (readers and audience) identify with these shifting perspectives in turn and to analyse them for ourselves, in short, to ask ourselves how we see things.

Integral to the choice of characters and setting – legal, professional, in an Edmonton court – is Pollock's stress on a spoken language which is, of course, the medium but also the focus of legal debate and a key subject of the play. The lawyers must fight with words and in terms of words and their meanings, and in the course of the play it becomes very clear just how slippery words can be. Can Sinnisiak and Uluksuk be called "murderers" when they are charged with but not convicted of murder? Did Sinnisiak understand the translator's questions and explanations? Indeed, how could he have when, for example, having what you say used against you in a court makes no sense in the Inuit culture? Was the priests' rifle *stolen* or were the Inuit *promised* the rifle? Are *we* the "foreigners" in their land or they in ours? Where do embellishment and speculation take over from facts? As far as the Defense is concerned, as white men from the South we cannot presume to understand Inuit from the North: "We misread them, we're culturally illiterate in their world," he says, at which the Prosecutor protests: "We're not the ones who're culturally illiterate" (p. 49). But of course, as the debate thus far has amply demonstrated, we are. And to further complicate this murky business of words and meaning, the translation between English and French is also problematic.

At a crucial juncture in her play, as Smith summarizes his understanding of events, Pollock pauses to reflect on this matter of translation. Smith thinks he is driving home a point by rendering the passage from Father Rouvière's diary – those water damaged fragments displayed on the table beside his jawbone and bloodstained cassock – as "some families already gone; *disappointment from* the Eskimos; threatened with starvation and do not know what to do," but the Defense corrects Smith: "'disillusioned with Eskimos' is what was quoted at trial" (p. 39). When the Prosecutor insists that there is no relevant difference between "disappointment from" and "disillusioned with," the Defense protests that there is and that the difference sheds light on the general situation and the motivation for what happened. Whether we accept one English translation or another, agree with the Defense or the Prosecutor, this much is indisputable: words are hard to understand and yet upon their meaning much rests, possibly even life or death, justice or injustice, innocence or guilt.

But perhaps the most telling and certainly the most theatrical representation of a contact zone is the rough table sitting at a slightly raked angle, centre stage, in this otherwise elegant, formal room. It is on this table that the exhibits have been placed by Smith and they have lain there, deliberately lit to emphasize their presence, throughout the play. In addition, Smith has *staged* the Northwest Territories, to the extent that he knows the geography and action of the tragedy that unfolded there in November 1913. This double move – the display of poignant *real* exhibits, joined later in the action by the false, toy-like props used to map the vast northern landscape – should create a number of interesting reverberations for anyone watching the play because their juxtaposition is disturbing and provocative. As we watch Smith we must ask ourselves exactly what we are looking at and what meaning these real and fictional objects could possibly have, why they occupy the same imagined space, and how they relate to each other as they lie there during the play or, indeed, when the lights go down and the play is over. It seems to me that many possibilities come to mind and that they are all prompted by this creation, this staging of a visual representation of a contact zone or of what I might better call, because it is a staging within a performance, a *meta*-contact zone. In Pratt's use of the concept to analyse travel writing, a contact zone is always an attempt to represent "the spatial and temporal copresence of subjects previously separated by geographic and historical disjunctures" (p. 7). Moreover, once contact between colonizers and colonized is established, the contact zone represents the space of "interactive, improvisational" relations that usually involve "conditions of coercion, radical inequality, and intractable conflict" (p. 6). By creating a *meta*-contact zone in *Kabloona Talk*, and by making that zone so central to the play, a haunting inescapable presence emphasized theatrically by the lighting design of the play and by the physical positions of the four actors, Pollock invites us to admit our ignorance, to contemplate the incommensurability of Smith's small mock rivers and cabins with the real physical geography of the North, and finally to witness the violence Smith's mapping does to the reality of what occurred *there* and then to grasp, to understand, the coercive power of such stagings of events.

By virtue of its staged presence as a literalized metaphor, this inspired theatrical trope serves ultimately to warn and remind us about the unreliability of representation on the one hand and our reliance upon such stagings and narrative retellings on the other. How, we are left asking ourselves, can we understand the nature of what happened between Fathers Rouvière and Le Roux, and the two Inuit, Sinnisiak and Uluksuk? And if our understanding is limited by culture, strategies of power (like maps, narratives, and plays), slippery translations across languages, and self-interest, how can we

imagine communities or even contact zones in which interaction is more than coercive and violent? The play does not answer these questions, nor should it. It leaves us thinking about what happened in the Canadian North almost a century ago and what still happens today in Canada and around the world. It leaves us with the haunting image of a contact zone that eludes, exceeds, and possibly subverts all the talking of white men.

NOTES

[1] For the facts of the story I have drawn on books by Moyles (1979) and Jenkins (2005), although this latter, rather sensational account is, in my view, less reliable than Moyles'. My prefacing quotations are, in sequence, from Moyles, Jenkins, *Martyrs aux glaces polaires*, and the script of Pollock's play *Kabloona Talk*. My thanks to Sharon Pollock for permission to quote from the play prior to its publication in volume 3 of her *Collected Works* and to the "Social Sciences and Humanities Research Council of Canada" for the funds that enabled me to travel across the Canadian Arctic in the 1990s and to conduct my research for Pollock's biography.

[2] I develop my concept of the discursive formation of North in Grace (2001: 23–30). Franklin has been indigenized as a Canadian myth (despite his British origins) by numerous Canadian stories, plays, paintings, novels, and non-fiction books; for an overview of these works, see Grace (1995). Hornby has been the subject of stories, biographies and plays. His death from starvation on the Thelon River in 1927, together with a young relative, Edgar Christian, whose diary was found later by police, and a third man, provides the basis for Lawrence Jeffery's play *Who Look in Stove*. Albert Johnson, who died in a shoot-out with police in 1932, remains a mysterious figure because he died without revealing his identity or his name; see Rudy Wiebe's *The Mad Trapper*. Mina Benson Hubbard (1870–1956) has become an icon in Canadian culture, with plays, songs, biography, films, and re-enactments celebrating the centenary of her 1905 crossing of Labrador, see Grace (2006) and the Introduction to the 2004 edition of Hubbard's book, *A Woman's Way Through Unknown Labrador*. Martin Frobisher (1539–94) was little better than a pirate, but his three voyages to what is now Baffin Island have inspired several drawings, historical accounts, and, most recently an opera, see Murrell & Estacio (2007).

[3] Among the most compelling recent novels and plays to explore the violence of contact from northerners' perspectives are Marie Clements' play *Burning Vision* about the discovery of uranium near Great Bear Lake and the development of the atomic bombs dropped on Japan during the Second World War; Tomson Highway's novel *Kiss of the Fur Queen*, which turns tales of cannibalism inside out to show how southerners have cannibalized the North; Robert Alexie's *Porcupines and China Dolls*, a painful re-telling of the abuse suffered by Dene children in residential schools and the long-lasting effects of that trauma; and Joseph Boyden's remarkable novel about Indian soldiers in the Great War, *Three Day Road*. I have discussed aspects of this northern "writing back" in Grace (2001: 229–260).

[4] I do not wish to imply that all representatives of church and state did nothing to assist northerners, but the general impact of colonialism in Canada's North has been devastating and the consequences of past policies and practices are still with us today. But

for a broader discussion of this history see Eber (1997), Levasseur (1995) and Tester & Kulchyski (1994).

[5] This is not the place to review the history of early-twentieth century racism in Canada; for a discussion of the problem see Ward (1990). In 1976 Pollock premiered her important play about the 1914 Vancouver harbour scandal called *The Komagata Maru Incident* and she has explored historical instances of cultural conflict and racism in several other plays such as *Walsh*, *Fair Liberty's Call*, *The Making of Warriors* and *End Dream*. For a discussion of *The Komagata Maru Incident*, see Grace & Helms (1998).

[6] Pollock received a commission for this play from Stuck-in-a-Snowbank Theatre in Yellowknife, NWT. To date, the play has not been performed there or had a professional premiere. It has received two readings, the first a workshop reading with professional actors in Calgary, and the second a complete dramatic reading, again with professionals, at the 2005 PlayWorks Ink Festival in Calgary, Alberta, sponsored by Theatre Calgary and Alberta Playwrights Network. The reading of *Kabloona Talk* was held on 6 November 2005 with Larry Reese as the Judge, Joe-Norman Shaw as the Prosecutor, Peter Strand Rumpel as the Defense and Grant Reddick as Smith.

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JOURNAL OF NORTHERN STUDIES 1–2 • 2007, PP. 31–50

KEN COATES

The Power to Transform

The Kemano Power Project and the Debate about the Future of Northern British Columbia

ABSTRACT The struggle to determine the pace and nature of resource development has long been at the centre of northern autonomy movements. The forty-year-long debate over the Kemano Power Project in Northern British Columbia reveals how the understanding of hydro-development has shifted from a major regional benefit to a more complicated and conflicted view in which environmental and indigenous concerns are balanced against economic opportunities. When built in the 1950s, Kemano was seen as the foundation for a stable and prosperous industrial economy. The planned expansion of the hydro-electric system in the 1980s and 1990s touched off a major debate inside and outside the region. The region wrestled with the difficult choices presented by such major projects but the decision to cancel the Kemano Completion Project (KCP) rested on the provincial government's reaction to southern pressures. Kemano, as with many major resource projects in northern regions, reveals the degree to which external political and commercial forces continue to determine northern development and therefore the very future of the region.

KEYWORDS northern development, hydro-electric power, Alcan, Kemano, Northern British Columbia

HYDROELECTRIC DAMS are among the pre-eminent symbols of economic progress in the post-World War II era. Industrial nations rushed to capitalize on growing international demand for manufactured goods, as the combination of the military expenditures of the Cold War and rapid growth in personal incomes generated exceptional rates of economic expansion. In regions as diverse as Siberia, the Australian outback, Canada's Mackenzie River valley and northern Norway, industrial mega-projects were touted as being the solution to both national

ambitions for economic prosperity and promoters' dreams of finally bringing northern and remote regions into the national mainstream. In Alaska and the Canadian Northwest, promoters offered dramatic plans to dam the Yukon River at several points or to capitalize on the hydro potential of the Peace and Fraser Rivers and their major tributaries (Coates 1993, Naske 1991, Mitchell 1983). Massive water diversion schemes were touted as holding the key to the economic future of British Columbia and the western United States. Hydro-electric projects figured prominently in most national strategies for remote area development and have played major roles in shaping the settlement and community formation in remote regions.

For northern regions, the region's capacity to determine its economic and environmental destiny remains a central issue in the debate about resource development. Regional aspirations in northern regions have repeatedly been subordinated to the commercial and political priorities of external agents, particularly regional and national governments and southern corporations, but expanding in recent years to include environmentalists and Aboriginal rights activists (Coates 1985, Pretes 1988, Weissling 1989, Coates 1994). The vigorous debate in northern British Columbia about hydro-development illustrates an effort by one northern region to gain control of its economic future and reveals the countervailing power of southern and external decision-makers. There are compelling illustrations of the power of external agents in the history of northern economic development. It is obvious that major development projects transform regions; it is much less clear as to whose priorities and concerns should determine the shape and timing of these major undertakings.

Post-World War II resource developments transformed northern British Columbia. Before the 1940s, the Grand Trunk Pacific Railway dominated regional life. Northern British Columbia experienced major pressure during World War II, but only in a few narrow corridors. The construction of the Alaska Highway and the Northwest Staging Route expanded activity in the Dawson Creek to Fort Nelson corridor, just as American and Canadian military operations in the Terrace and Prince Rupert regions had reshaped those communities. In general, however, the North remained largely undeveloped in 1950. A rough highway connected Prince George to the south of the province, although the Pacific Great Eastern (PGE) Railway reached that city only in 1952. There was no road construction further north until the completion of the Hart Highway in 1952, and the highway between Prince George, Jasper and Edmonton was not completed until the 1960s. The road from Prince George to Prince Rupert had been improved somewhat during the war, but was well below commercial grade at the war's end. Mining and logging operations in the region were small and unimpressive. Prince Ge-

orge had only 14,000 people in 1961 (ten years later it was 50,000), but even then it dwarfed the much smaller communities of Burns Lake, Smithers, Vanderhoof and Terrace.

The North had its dreamers and visionaries, the most of important of whom was T. Duff Pattullo, premier of British Columbia from 1933 to 1941. Pattullo was the first British Columbia leader to make a concerted effort to draw the North into the pattern of provincial development, although his initiatives foundered during the Depression (Fisher 1990, 1991). The province had, at the time, glimpses of the potential of the North, promoting the extension of the Pacific Great Eastern railway (now BC Rail) to link the province from south to north, and sharing the broadly held Canadian view that the North remained a treasure trove ready for southern exploitation (Wedley 1998). After the war, and particularly following the 1952 election of W.A.C. Bennett, another premier with roots in the hinterland, and his Social Credit Party, British Columbians seized on the promise of the northern districts. Bennett floated remarkable and audacious plans for the rapid development of the region, including the highly suspect and flawed Wren-Grenville water diversion schemes, the damming of the Peace River, the construction of a highway linking Prince George and the North East, the extension of the PGE to the Yukon and Alaska (started but not completed), and various other infrastructure mega-projects (Mitchell 1983, Barman 1991, Wedley 1986). The construction of the Kemano hydro-electric project by Alcan hastened community development in the North, albeit in a very different fashion than envisaged at the time of construction (Christensen 1995).

The development of a northern consensus on resource development has long been slowed by the mobility of the non-Aboriginal population. Newcomers to the provincial and territorial Norths in Canada have been extremely transient, coming to the region to capitalize on short-term opportunities. Few invested much in the region and most left the North with much of their money. The pattern changed, for the provincial Norths at least, after World War II. The rapid expansion of base metal mining resulted in the construction of numerous of company towns across the region. The growth of soft-wood lumber operations resulted in the building of dozens of sawmills and pulp mills away from southern population centres. Northerners told outsiders who complained about the sulphurous smell that it was "the smell of money." Equally important, hydro-electric projects fuelled large-scale construction activity, swelling the local population and encouraging industries to consider locating in the North. These industries, like the INCO smelter in Thompson, Manitoba, promised the long-missing stability to the North, creating mini-industrial centres with substantial permanent popula-

tions. For the northern provinces, much more than for the territorial north, the post-war period appeared to bring prosperity. If the decisions had been made in the south, by corporations and governments with limited northern presence, northerners could at least see some apparently permanent benefits arising from all of the investment and industrial activity.

Each of these developments alerted settlement patterns in the North. New communities opened at Cassiar and Mackenzie. Small villages like Hudson Hope were overwhelmed by construction workers. Prince George saw its population grow nearly ten times, from 5,700 in 1951 to over 50,000 in 1971. The combination of improvements to Highway 16, linking Prince George and Prince Rupert, expanding logging and milling, increased government services to Aboriginal peoples and the movement of indigenous peoples from mobile life ways to sedentary lifestyles resulted in substantial growth in the communities along the road. In ways large and small, northern British Columbia was transformed by the juxtaposition of corporate involvement, major government investments, and the impact of global resource markets (Coates & Morrison 1992, Bernsohn 1981).

Alcan's Kemano smelter, which came into production in 1954, is the exemplar of the post-war development boom. Aluminium production requires a ready supply of cheap electricity and access to ocean shipping for the bauxite needed in aluminium production and for the distribution of the finished product. Alcan, on its way to becoming a major international player in the sector, was rooted in its Quebec operations, particularly those at Arvida. Anxious to capitalize on the resource potential of the West Coast and the emerging markets in Asia, Alcan explored possibilities in northern British Columbia. The province offered a superb location at the head of Douglas Channel for the construction of production facilities and a company town. Proximity to the railway at Terrace and Highway 16 made the town and manufacturing site very attractive. Even more important, Alcan engineers identified the electric potential in the development of the Kemano River, particularly in concert with the damming of the upper reaches of the Nechako River. The larger project entailed the diversion of water from the storage lake inland from Kemano and the diversion of large quantities of water westward, through large tunnels constructed for the purpose, to the generating stations at Kemano.

After securing the necessary permission to divert water from the Nechako and construct the hydro-electric project and manufacturing facilities, Alcan proceeded with development (Hendrick 1987). The investment was one of the most impressive industrial undertakings in Canada in the post-World War II period, involving the construction of a company town (designed to house approximately 10,000 people), a small satellite commu-

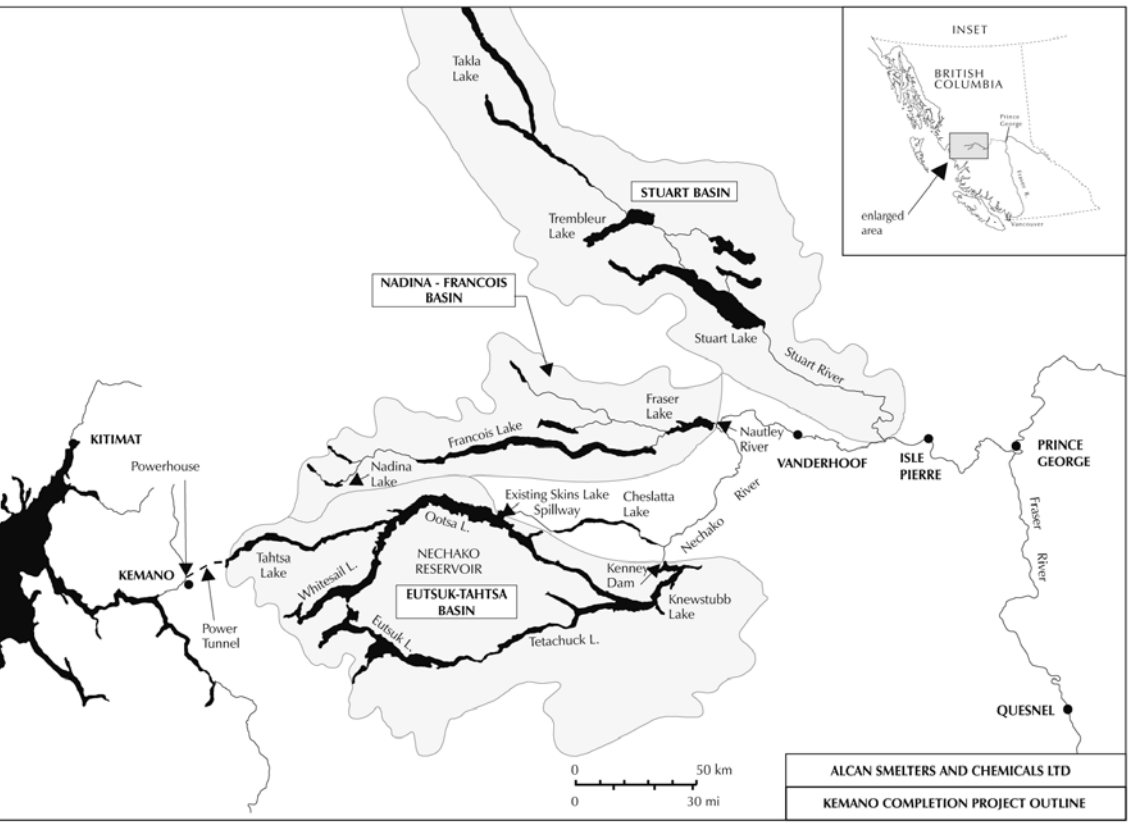

Fig. 1 Proposed Kemano Completion Project Facilities on the Nechako River. Source: Water Quality Branch, Ministry of Environment and Parks, "Water Quality Assessments and Objectives for the Nechako River," 1987.

nity at Kemano (accessible only by water and air), a massive aluminium smelter and, of course, the Kemano power plant, all at a cost of close to $500 million. The project involved the damming of the Nechako River Canyon (the Kenney Dam), the diversion of the water to the west, the construction of a 16 km tunnel to take the water from Skins Lake to the generating plant at Kemano. The powerhouse was itself an engineering marvel, carved deep into the mountainside and holding eight generators, each capable of producing 112 mega-watts. Alcan also built an 82 km transmission line to carry the power to Kitimat. Kitimat was built quickly, an impressive model of 1950s urban planning. As the *Northern Sentinel* observed in 1987:

> In the 1940s the site of modern Kitimat was one of wilderness. The tiny Indian Village represented civilization at the end of Douglas Channel. Some 37 miles away with nothing more than a foot trail between, lay Terrace. It had less than 500 population. The economic magic came for

> Kitimat with the building of such industries as Alcan smelter, Eurocan's pulp and paper mill and Ocelot's two petrochemical installations. Without them there would be no industry to support and industrialize Kitimat, no power, no road or rail line from Skeena to the beach and Terrace would not have had the leap in population in the 1950s to produce a figure of more than 6,000 population at the time the rail link and road to Kitimat were finished.[1]

With a short period of time, the Kitimat plant was the largest single source of mineral-based exports in British Columbia, with major contracts with emerging Japanese companies (Holroyd 1995). Much later, in the 1980s, Kitimat diversified away from its aluminium base, with pulp and paper producer and a petrochemical company setting up plants in the area.

The impact of the Kitimat plant extended well beyond the Kitimat Valley. The Kemano/Kitimat combination was the first major industrial plant in the province's north, and the first to move beyond the secondary processing of locally available raw materials. It attracted a large and diverse workforce noted by their long term commitment to the community. In contrast to the largely transient workers in mining camps elsewhere, the Alcan employees enjoyed high wages, a generally strong relationship with the company, a nicely built and well-serviced community, and a stunning location for the town site. Clearly, Kitimat was designed as a permanent town, expected to grow as economic diversification followed the smelter and power generating capability of the Kemano station. It was, in a way that pulp mills and saw mills were not, a declaration that the North could have a new and very different future, one based on manufacturing, new product development, and strong industrial exports.

Although the Kemano/Kitimat development had a broad and generally positive impact on economic development in the region, other communities in northern British Columbia were not strongly supportive of the new town. Vanderhoof and Prince George received many of the initial benefits from construction, since access to the upper reaches of the Nechako River basin was from these central communities. But once construction ended, the economic benefits for these towns fell off dramatically, and anticipated spin-off benefits, in the form of additional industrial activity, failed to materialize. Moreover, residents of the Nechako basin were quick to accuse Alcan and Kemano of adding to difficulties related to the flow of water along the river, although the actual impact was more mixed, with lower water levels offset in part by greater control over periodic flooding.

Intense rivalries developed between Kitimat, Prince Rupert and Terrace. The latter town, only 40 kilometres away, served as an economic satellite of Kitimat in terms of services and retail shopping, and clearly was made more

stable on that account. But Kitimat's better facilities, paid for by Alcan, and generally higher level of prosperity generated resentment. On several occasions, rivalries between Terrace and Kitimat impeded government investments in the area. While Kemano served as an economic spark, raising expectations across the North about the nature of corporate investment and engagement and about prospects for industrial stability in the region, Alcan's operations remained a touchstone for debates about the future of the region's communities.

But as Northern British Columbia became more stable, with more long-term non-Aboriginal residents, divided visions of the future emerged. Smithers, a settlement of under 5,000 people, became a centre of environmental activism and eco-tourism. While public sentiment in logging towns like Burns Lake, Houston and Fraser Lake and mining centres like Granisle welcomed the growth of industrial activity, strong environmentalist movements emerged in Vanderhoof, with an active agricultural sector, and Prince George. Furthermore, Aboriginal activism increased sharply, led by the Nisga'a in the Nass River valley north of Terrace, but increasingly focusing on the displaced community of Cheslatta, a Carrier village that had been relocated during the initial phase of Kemano construction. The Carrier-Sekani Tribal Council also joined in the criticism of the project.[2] Increasing attention was paid to issues like control over the Nechako water flow and salmon returns. Even trappers from Fort Fraser added their voices to the concern about the disruption of water flows, although they agreed to cooperate with Alcan on seeking means of ameliorating the impact on the beaver and their livelihood.[3] Agitation by communities like Cheslatta, which had been compensated by the Government of Canada for the original relocation, drew attention to the disruptions associated with hydro-development, an issue which gained a great deal of prominence in the 1970s with high profile battles over water diversion projects in northern Quebec and northern Manitoba (Waldram 1988, Leslie 2005, Rosenberg et al. 1997).

Alcan worked hard to document spin-off benefits throughout the region. Annual surveys were done to document the reach of Alcan's spending. A report released in 1986 reviewed revealed that Alcan had spent almost $160 million over the preceding seven years, distributed unequally among 13 communities in the North. Kitimat received the lion's share – over $120 million of the total – with Terrace ($19 million) and Prince George ($13 million) receiving substantial trade. Even the small community of Houston claimed, in 1986, that five local companies received Alcan contracts, amounting to close to $250,000 per year. Burns Lake had eight companies doing business with Alcan, and nearby Smithers had six firms selling services or supplies to the aluminium company.[4] As the following year's report concluded:

> Kitimat Works total expenditures in the northwest region benefited a wide range of businesses and industrial sectors. While the majority of these expenditures flowed to large construction, manufacturing and wholesale operations, many smaller businesses also benefited, particularly in the Kitimat and Terrace areas.[5]

Through the 1970s, debates about the future of Kemano picked up in intensity and acrimony. Under the terms of the original deal, Alcan had until the end of 1999 to complete the planned water diversion on the Nechako. If the project was not finished by that time, control of the river reverted to the government. The federal government, with responsibility for managing the salmon fishery and water flows, disputed Alcan's claim to control of the Nechako through the 1970s and challenged their right to complete the Kemano project. Negotiations, often acrimonious, followed. In 1979, Alcan re-asserted its right to control the river and declared its intention, under the terms of the 1950 agreement, to complete the water diversion and hydroelectric project. The federal government responded with injunctions to bar construction. In 1984, Alcan challenged the injunction sought by the Department of Fisheries and Oceans preventing further water diversions from the Nechako, forcing the federal government to reconsider their approach. Northern opinion makers, particularly in Kitimat and Terrace, criticized the government's handling of the affairs and challenged authorities to approve the next stage of the Kemano project.[6] Subsequent discussions, encouragement by northern communities to find a suitable agreement,[7] and the threat of a lawsuit by Alcan, led in 1987 to the announcement of an agreement that would allow the Kemano Completion Project (KCP) to proceed. The KCP was a $500 million undertaking designed to increase the water flow to the Kemano generating facilities and to provide Alcan with greatly enhanced electric output.

The announcement of KCP, as it came to be known, proved extremely revealing about community aspirations and expectations. Opinion was divided within each community in the North; even Kitimat had residents who opposed the expansion project on environmental grounds. The *Northern Sentinel* described the opposition in critical terms:

> Predictably this [the proposed development of industrial capacity in other communities] altered downstream regions' attitudes significantly but left the hot spots of opposition – the irreconcilables of the far left, Fishermen's Union in Prince Rupert, the Wildlife Federation, the people who, on principle, were going to attack anything but state ownership and control of power – ready to sacrifice new jobs for ancient prejudice.[8]

Quickly, however, clear distinctions emerged. Kitimat and Terrace supported the construction, with the Chambers of Commerce believing that it would spark economic expansion in the area and stave off threatened cutbacks in industrial operations. Mike Scott of the Kitimat Chamber of Commerce said that KCP would bring major benefits:

> We think that it could be as much as three or four thousand jobs. We look at the whole corridor north from Terrace right up to Cassiar, it's a vast area that's full of mineral resources; we look at the town of Stewart which badly wants to have hydro power delivered to it right now.[9]

That support, however, did not extend to the region's Member of Parliament, Jim Fulton (NDP), who was openly critical of Alcan.[10] Trade union members in Kitimat, many of whom were worried about continued job loss in the Kitimat smelter – estimated in 1987 at 400 positions over a decade – and who did not believe that KCP would result in additional industrial development. CASAW, the local union, declared their position:

> the union will be countering the dangerous and misleading propaganda put out by various groups on this topic. Kitimat's businesses must take a second look at their leadership and the path of misguided confrontation they are headed for.[11]

Smithers became the flag bearer for environmentalism, and residents often sought common ground with First Nations opposing the KCP undertaking. Pat Moss of Smithers and Chairperson of the Rivers Coalition responded to Alcan's position:

> We're not aware that there's any evidence that the Kemano completion is going to produce any permanent jobs in the northwest. Alcan's not talking about building smelters anymore [...] we find it very hard to believe that if there are industries wanting to develop in the north that power is the only impediment.[12]

The environmentalists opposed the transfer of effective control of the Nechako into private hands.[13] Local farmer, John Grieder, captured a widespread sentiment in the North when he said at a public meeting in Smithers:

> We shouldn't let them make these decisions in Victoria or Ottawa. They affect us here and that's where it should be made. As long as we have the current system, we'll get nowhere.[14]

Vanderhoof experienced considerable internal tension over the issue, as did Hazelton. The Mayor of that community, Alice Maitland, observed:

> [...] such a problem I've had all my life with Alcan being in control of such a large area of our province and there [are] people living here that are impacted by everything they do, but they rarely get to really say what they would like to see happen so that fisheries isn't the only body that's going to feel the impact of whatever Alcan does.[15]

Many residents hoped that KCP would produce sufficient power to support major industrial expansion in their community, providing a longed-for boost to the local economy. At a public meeting held in Vanderhoof in June 1989 to discuss the Kemano project, the most vociferous opposition came to the announcement that Alcan's construction would be undertaken by union contractors, thus shutting out many local non-union shops. As an angry contractor, Harold Giesbrecht said:

> It is discrimination, plain and simple. We've been ripped off. They took the river, and now we get nothing. We've been promised smelters, we've been promised pulp mills, but nothing ever comes of it. Now, with a closed shop at Kemano, we're closed out.[16]

Debate about the project spread widely. Prince George became the media centre for the controversy, with radio host Ben Meisner, journalist Bev Christensen, and the *Prince George Citizen* newspaper leading the campaign against the KCP. In Prince George, however, the business community and its supporters worried that a strong environmental stance against KCP would have a negative effect on northern economic development generally, and the result was a series of vigorous and often heated debates about the project. As a consequence, Prince George City Council came out in support of a negotiated settlement between the Department of Fisheries and Oceans and Alcan.[17] City planner Greg Farstad declared the impasse to be "one of the most protracted, complex and emotional disputes in the history of resource management in B.C."[18] Far to the west, the City of Prince Rupert declared strong opposition to the proposed construction, arguing that the "fisheries are in jeopardy"[19] and calling for a public inquiry.[20] The *Interior News* said about the controversy:

> The simple fact remains that the Nechako dispute is over who has, and who should have jurisdiction over river water – a government or a private corporation. Anything else confuses the issue." [21]

Echoing sentiments spoken widely in the region, N.D. MacRitchie wrote angrily:

> What we have here are recalcitrant bureaucrats impacting severely on issues they do not seem to understand. The children of this region (and

> probably other regions) are going to be punished economically because of the immaturity of bureaucrats in your Ministry [of Fisheries.][22]

In the end, the debate over KCP produced a surprising degree of agreement in the North. Kitimat and Terrace were solidly behind the project, as were Stewart, Cassiar and other communities along the Highway 37 corridor. Campaigning by the westerly communities, aided by Alcan's efforts to promote the project, ended up bringing Vanderhoof, Houston and New Hazelton on board with the "salmon plus power" plan advanced by Alcan. These communities urged British Columbia Premier Bill Vander Zalm to intervene with the federal government and to encourage an out of court settlement.[23] While there was considerable internal dispute, the North clearly wished to reach a northern-based decision. As one editorialist wrote:

> as for the wilderness buffs, when the clean, non-nuclear power is developed the wilderness [...] serenely beautiful and at times implacably cruel [...] will still be there. The 'last wilderness' alarms have become about played out in British Columbia.[24]

This stage in the battle over the KCP merged two crucial movements on the opposition side: the effort by northern communities to assume control of their future, and the growing power and effectiveness of global environmentalism. In the former instance, northern communities worried about the boom and bust nature of the regional economy and sought to stabilize northern society. A deep desire to wrest control of the North from southern interests and to establish north-centred decision-making was manifest in everything from Prince George MLA Bruce Strachan's campaign for northern autonomy and the Social Credit Government's various northern strategies, to a noisy but largely bar-room northern separatist movement (Weller 1984, 1994, Ramsey 2005).

Opponents of KCP, dominated by environmentalists, used the growing interest in northern autonomy to turn the battle over hydro-development into a grassroots campaign against a large, southern corporation (Alcan) and policies created in Victoria and Ottawa. They argued, in particular, that the 1987 agreement was unconstitutional and violated federal jurisdiction over the Nechako. Further, they claimed, the project was about hydro-electric profits, not aluminium production and would return few benefits to the region.[25] As Lee Straight, President of the Steelhead Society of B.C. wrote:

> To yield such vital resources which, in effect, encourage an already-coddled industry to diversify by increasing its hydro-electric sales program, is wildly extravagant. To yield such vital resources at the expense

> of the common-property owner, the citizens of Canada, is an act of betrayal.[26]

The debate over KCP took a decided turn against Alcan when, in the early 1990s, it became clear that the widely touted industrial expansion associated with the power project would not occur. The residents of Vanderhoof, in particular, had been torn between something of a Hobson's choice: support the power project and secure a major industrial establishment for the community or oppose KCP and lose out on hundreds of high-paying jobs. Initial talk focused on the construction of a second aluminium smelter in the community and, when the economics of global aluminium markets undercut that possibility, Alcan raised the possibility of constructing a pulp and paper mill in the community in 1988.[27] (The company had earlier raised the possibility of a meat processing plant.[28]) Mayor Len Fox declared himself to be "very cautiously optimistic" about the announcement, noting that

> Alcan is fully aware of the kind of disappointment that Vanderhoof has had over the last four years – not just with their project, but other projects that appeared to be in the future, and then had been shelved for one reason for another [...] I would suggest that we, the valley of Vanderhoof, have a lot of faith in Alcan to deliver on this particular proposal and there's no question in my mind that they will.[29]

When it became obvious by 1990 that Alcan's trial balloons about industrial development along the lower Nechako had run out of air, many residents of Vanderhoof dropped their support for the project and joined with the critics.

Until the early 1990s, the debate over Kemano was almost exclusively internal. The region seemed on course to make its own decisions about future developments. Southern British Columbia and the rest of the country paid very little attention to an obscure debate about the expansion of an existing hydro-electric facility. As the debate shifted from questions about community benefits to broader and less focused environmental concerns, external forces came into play. The northern message brought forward by Rivers Forever and the Nechako Defense Coalition, B.C. Wildlife Federation, Steelhead Society of B.C., Nechako Neyenkut Society, Save the Bulkley Society, Gulf Trollers Association, United Fishermen and Allied Workers Union began to resonate with environmentalists outside the region.[30] KCP, they argued, would kill the remaining salmon in the Nechako River, ensure permanent corporate control of a public resource (the river) and would irreparably harm northern ecosystems. An effective media campaign by the Cheslatta for additional compensation brought First Nations into the equa-

tion, and found supportive audiences in the southern part of the province. By the early 1990s, the debate over the KCP had ceased to be a northern issue. Rafe Mair, the provocative Vancouver radio host, joined the effort to stop Kemano and used his province-wide daily talk show as a bully pulpit against the project (Mair 1998). The otherwise pro-business Liberal Party of British Columbia sought to cultivate an image as environmentally-friendly and criticized KCP and attacked the New Democratic Party government for allowing it to proceed. Internationally-known environmental activist David Suzuki, weighed in on two counts: the potential environmental impact of the project and the impact on northern First Nations people.

The Government of British Columbia responded to the mounting pressure, now coming increasingly from outside the North, and announced in 1993 that KDP would be reviewed by the B.C. Utilities Commission (BCUC). The BCUC hearings provided powerful insights into the internal debate about the North's future, as each community hosted the Commission and took advantage of the opportunity to argue their case.[31] The federal government aided the inquiry, providing scientific and government documents on Alcan and the Kemano project and providing $150,000 to the Rivers Defense Coalition, a Smithers based group leading the campaign against KCP. The heated controversy spilled over into the provincial arena, with Alcan and the KCP attracting continued criticism from Rafe Maier and mounting opposition from provincial newspaper columnists Stephen Hume and Mark Hume. The BCUC hearings assembled dozens of scientific commentaries and submissions from hundreds of northern residents. The BCUC submitted its report to the provincial government in the last months of 1994. The report was balanced and, somewhat surprisingly given the increasing rancour of the now-province wide debate over the previous years, cautiously supportive of KCP. The Commission called for remedial measures and restrictions on Alcan's control of the Nechako, but did not recommend shutting down the project.

The NDP government nonetheless announced the closure of the KCP project in January 1995 – on the same day that they released the BCUC report. The government also produced an assessment of the project that declared – over Alcan's vigorous protests – that KCP was not financially viable, a judgment that did not explain the aluminium company's half billion dollar commitment. The BCUC's conclusion subsequently received little attention, with debate now focusing on the collapse of a northern megaproject and Alcan's demands for compensation for the costs of construction and the loss of electricity. Environmentalists hailed the decision as a major victory, even as northern communities wrestled with the consequences of the announcements. A Northwest Communities Coalition was formed has-

tily in Kitimat to lead the protest against the provincial decision and to seek alternate means of sustaining northern industry. In the months that followed, after lengthy negotiations and public acrimony, the Government of British Columbia reached an agreement with Alcan. The accord promised Alcan a steady supply of electricity, at rates comparable to what KCP would have produced.

The KCP debate demonstrated the intensity of internal northern disputes about the future of the region. They were, in fact, healthy and constructive, albeit often heated and acrimonious. The BCUC process gave voice to all northerners, on all sides of the debate, and seemed well-designed to provide a solution that was scientifically sound and regionally sensitive. The politics of 1990s environmentalism, and the spread of the Kemano controversy throughout the province, however, meant that the issue would not be resolved on northern terms. Instead, the interventions of Rafe Mair, Stephen and Mark Hume, David Suzuki and others, plus the engagement with the issues by the provincial Liberal Party, turned the KCP debate into a province-wide discussion of environmentalism versus corporate control.

The Kemano controversy was not the only such province-wide controversy involving northern resource development. Premier Michael Harcourt had in 1993 announced the cancellation of the Windy Craggy copper mine and the creation of the Tatshenshini-Alsek region as a provincial park – later designated as a World Heritage Site. The decision came, as with KCP, on the heels of a major national and international environmentalist campaign to protect a highly desire recreational and wildlife area. With Windy Craggy and with KCP, it was clear that provincial priorities mattered much more than northern concerns.

The KCP had been applauded by supporters as the beginning of a second industrial age in the North, but the cancellation immediately slowed economic activity. After the 1995 decision, mining and development companies cancelled their investments in the North, often citing NDP policies as the reasons for doing so. The North stopped growing, save for a fast-expanding First Nations population. Alcan did not proceed with their proposed expansion of the Kitimat smelter. In an unrelated event, Methanex closed their plant in Kitimat in November 2005. Alcan announced the closure of the Kemano settlement in 1999, removing the last 70 residents and mothballing a half-century old company town. The company also found itself in a protracted political and legal battle with the City of Kitimat over its decision not to expand the smelter and to sell surplus power outside the region.

The Alcan experience coincided with a sharp transition in the northern British Columbia economic system. Company towns throughout the region – Cassiar, Granisle, Tumbler Ridge – ceased mining operations entire-

ly, with Granisle and Tumbler Ridge marketing themselves as recreational centres. (The process is a inevitable part of mining company town life. Kitsault, a molybdenum mining town north of Prince Rupert, abandoned in 1982, becoming newsworthy when it was put up for sale for $5.4 million in 2004.) New resource developments opted for a radically different approach to staffing: joint ventures with local First Nations groups, capitalizing on local Aboriginal labour, and fly-in camps for workers who are based, for the most part, in southern centres. The forest industry, long the cornerstone of the northern economy, endured major transitions, including a widespread critique of clear-cut logging, loss of markets in Asia and the United States (the latter due to the softwood lumber dispute), and a mass infestation of the pine beetle, which is steadily destroying vast areas of northern forest. In the boom and bust cycle that has been the norm in the middle North, the post-KCP phase met the classic definitions of an economic bust.

The evolution of the Kemano hydro-electric project from a 1950s industrial mega-project to a hotly contested environmental issue, illustrates central features in the post World War II history of northern British Columbia. Communities in the region were transformed in this period from industrial outposts of southern Canada into regionally-focused though still economically vulnerable settlements searching for long-term stability and economic viability. But Northern British Columbia remained, as in the Kemano debates, bitterly and internally divided about the nature of that future. There is more than a little irony, however, in the reality that the decision to cancel the KCP came only because of outside protests about the undertaking. Even after a decades-long, community-based struggle over the future of the North, the region was denied the opportunity to make a clear decision on its own about the future.

Three fundamental elements have governed the development of communities in the middle and far North: the transiency of the non-Aboriginal population, the search for freedom from the boom and bust cycles which have governed northern life, and the struggle to wrest control of decision-making from external forces. Kemano, Kitimat and KCP represented, from the beginning, an attempt to escape from a well-established pattern of economic and social instability. Proponents of these projects saw power development as a fundamental element in the industrialization and stabilization of northern society, believing that the Kitimat smelter would be but the first major industry to be built off the steady supply of market-competitive Kemano hydro electricity. The North was not stagnant, in terms of its approach to development. In place of a strong consensus on the need for rapid development of resources and infrastructure, a new and different northern ethos emerged. The new North demonstrated tensions between sustained

or expanded industrial development and a commitment to environmental protection.

Kemano and KCP both encouraged population growth and revealed fault-lines in and among the residents of Northern British Columbia. The distance between First Nations communities and other northern British Columbians was revealed yet again, even though the indigenous population was more divided than environmentalists, in particular, assumed. The non-Aboriginal people in the towns founded on the opening of northern resource development revealed, through the debates of KCP, that a more diverse vision of the region's future had emerged. The open, passionate and divisive battle about further hydro-development in the region tested the communities and challenged northerners to articulate a regional strategy for development, bringing the North to the verge of an open, hotly contested and largely internal decision about the next stages of development.

In keeping with the broader pattern of Northern history, however, the opportunity was stripped from the North. The 1995 decision to cancel the KCP reflected the provincial government's response to broader province-wide environmental sensitivities and did not illustrate a North-centred judgment about the region's future. The British Columbia Utilities Commission investigation into the project, rendered irrelevant by the government's pre-emptive decision, revealed a region uncertain about resource development but willing to consider further expansion provided appropriate protections and precautions had been implemented. Instead, a mega-project was shut down and the much-vaunted regional benefits of KCP evaporated.

The promise of the post-World War II period proved as illusory as other dreams and visions of a new North. The levers of economic power remained in the South, and communities throughout the region struggled with little success to shape the region's future (Summerville & Poelzer 2005). Within less than a decade of the closing of KCP – an event that coincided with the closure of several major mines and the downscaling of northern infrastructure projects – another northern resource boom was underway, again propelled by outside forces. The election of Gordon Campbell and the Liberal Party in 2001, timed nicely with a surge in global commodity markets, reinvigorated the mining and oil and gas sectors just as a scourge of pine beetle infestations necessitated a rapid expansion of timber harvesting and as Chinese demand for resources permitted work to start on several northern mega-projects, including a planned pipeline to Kitimat and the expansion of the Prince Rupert port. The old style northern development – sparked by southern markets, southern governments, southern corporations and benefiting southern workers as much or more than northern communities – returned with a vengeance.

In the end, critics of KCP, and there were many, appear to have got what they wanted when the project was scuttled. But the NDP government's motivation had much less to do with a clear reading of northern sentiment than it did their assessment of the province-wide implications of permitting hydro-development to continue. Alcan got its future power, albeit through a complex arrangement with the province rather than through KCP, but the planned expansion of the Kitimat smelter was suspended and reductions in the labour force in Alcan continued. To add to the ironies surrounding the Kemano project, British Columbia now forecasts impending power shortages in the province, requiring both an increased reliance on imported power and the need to fast track power development on other British Columbia rivers, likely with greater environmental consequences than with KCP.

The ability to produce a consensus on regional economic priorities has long proven difficult in the North. The region's history has long been dominated by a culture of opposition – against the climate, distance, market forces, government policies, southern corporations, and broader images of the North. The strong, often bitter rivalries between communities in the region played out strongly during the KCP debates, as northern settlements offered competing visions of the region's future (Coates 1993, Naske 1991, Mitchell 1983). The absence of a common position on the KCP made it much easier for the provincial government to attend to political and provincial concerns, instead of regional ones. Kemano and KCP illustrate the cycles, tensions and challenges which have governed community formation and development in the post-World War II era and demonstrate the complex and often confusing manner in which personal choices, regional priorities, provincial concerns and international markets combine to ensure that Northern British Columbia remains without the means of determining its future.

Northern development requires complex trade-offs: between jobs and environmental change, between additional external control and business opportunities in the region, between serving the broader national interest and attending to regional needs. Over its history, the Kemano Power Project has been viewed as an engine for northern industrial development, an inspiration for economic expansion, a blight on the northern ecology, and a threat to indigenous communities. It has also been the focus of an intense political tug-of-war between competing regional interests. Half a century ago, hydro-electric developments were viewed throughout the world as the start of a new era in northern economic growth; they are now viewed in a complicated fashion, alternately lauded and criticized for representing the best and the worst in the modern industrial age. As Kemano demonstrates, however, the debates over northern resource development are, even after

decades of regional mobilization, typically decided on the basis of external ecological, economic and political priorities. Northern regions still have a long way to go before they gain the authority to determine their environmental and economic future.

NOTES

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[2] "Water basis of dispute," *Kahtou*, Jul. 1986.
[3] CFPR *Daybreak* transcript, 13 Dec. 1989.
[4] "Houston merchants benefit from Alcan," *Houston Today*, 2 Jul. 1986.
[5] "Alcan spends over $450 million locally," *Northern Sentinel*, 13 May 1988.
[6] "Half measures on power disappoint Northwest," *Northern Sentinel*, 3 Sep. 1987.
[7] See, for example, the resolution by the Fort St. James Village Council, Caledonia Courier, 5 Aug. 1987.
[8] "There can be more salmon and power too," *Northern Sentinel*, 21 Aug. 1987.
[9] CFPR *Almanac*, 26 Aug. 1987, transcript of an interview with Mike Scott. See also "What have you done to create jobs," *Northern News Advertiser*, 25 Aug. 1987, and "Residents clamor for Kemano 2," *Northern Sentinel*, 23 Jul. 1987.
[10] Among many examples, see "MP calls for full inquiry," *Terrace Review*, 2 Sep. 1987, and CFJW *News*, 25 Jun. 1987, News report; "Fulton points finger at Alcan," *Northern Sentinel*, 13 Oct. 1988.
[11] "Union Overwhelmingly Supported, Kitimat Chamber of Commerce Misleading Public," unpublished circular, 1987.
[12] CFPR *Almanac*, 26 Aug. 1987, transcript of an interview with Pat Moss.
[13] CFPR *Almanac*, 16 Jun. 1986.
[14] "Kemano II draws protest from Bulkley Valley," *Northern News Advertiser*, 4 Aug. 1987.
[15] CFTK *News*, Interview of Alice Maitland, 19 Aug. 1987.
[16] "Kemano project slammed," *Omineca Express-Bugle*, 7 Jun. 1989.
[17] "P.G. jumps on bandwagon," *Omineca Express-Bugle*, 19 Aug. 1987.
[18] "City to take a stand on Nechako dispute," *Prince George Citizen*, 11 Aug. 1987.
[19] "City tries one more time to block Alcan's proposal," *Prince Rupert Daily News*, 27 Aug. 1987.
[20] CFPR *News*, 21 Jul. 1987.
[21] "Power games," *Interior News*, 12 Aug. 1987.
[22] "We've been waiting five years for a settlement," *Northern News Advertiser*, 21 Jul. 1987.
[23] "More unity on the river use issue," *Hazelton Sentinel*, 3 Sep. 1987.
[24] "Mines, forests, factories need power," *Northern Sentinel*, 27 Aug. 1987.
[25] "No smelting expansion on the horizon at Alcan," *Prince George Citizen*, 13 Aug. 1988.
[26] "One last appeal against a negotiated settlement," *Northern Sentinel*, 20 Aug. 1987.
[27] CFPR *Lineup*, 3 Mar. 1988, interview with Bill Rich.
[28] "Fingers crossed on new pulp mill," *Omineca Express-Bugle*, 9 Mar. 1988.
[29] CFPR *Lineup*, 3 Mar. 1988, interview with Len Fox.
[30] "Groups enter legal battle," *Houston Today*, 2 Jul. 1986, and "Alcan battles court action," *Northern Sentinel*, 20 Jun. 1986.
[31] *British Columbia Utilities Commission, Kemano Completion Project Review. Report and Re-*

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JOURNAL OF NORTHERN STUDIES 1–2 • 2007, PP. 51–79

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Wissenschaft und Abenteuer in der Arktis

Beispiele deutscher Polarexpeditionen

ABSTRACT From its beginning in 1868 German polar expeditions were focused on scientific exploration. History shows that around 1910 only well prepared and equipped expeditions were successful and could gain valuable experiences. The training expedition of the Bavarian officer Wilhelm Filchner who subsequently led the German Antarctic Expedition (1911–1912) was one of these. This is contrasted by the preliminary expedition to Nordaustlandet (Svalbard) of the west Prussian officer Herbert Schröder-Stranz. Other expeditions gave rise to long-range investigations like the permanently occupied German Geophysical Observatory on Svalbard (1911–1914) established for the investigation of the upper air by aerological measurements to prepare a future exploration of the Arctic by airships.

There was a long tradition for German scientific expeditions to Greenland, which is represented for instance by Alfred Wegener's meteorological programme to investigate the glacial anticyclone. The year 1930 was a fateful year for German polar research, when he died on the ice-cap and geologist Hans Kurt Erich Krueger vanished in the north Canadian archipelago. Both men represented science as well as adventure.

International projects initiated or organised from the German side were always successful. Georg von Neumayer, director of the German Navy Observatory (Deutsche Seewarte), played an important role in organising the 1st International Polar Year (1882–1883) after the untimely death of Karl Weyprecht. Only extensive research without recognition of national borders would provide new scientific knowledge in meteorology and earth magnetics for weather forecast and shipping. After World War I economical ideas concerning the introduction of trans-arctic air traffic lead to the foundation of the International Society for the Exploration of the Arctic Regions by Means of Aircraft (Aeroarctic). In the meteorological planning of the first expedition with the airship LZ 127 "Graf Zeppelin" to the Russian Arctic, the results of the German Geophysical Observatory in Svalbard were used. This paper discusses the connections between science and adventure established through the German expeditions.

KEYWORDS Antarctica, Greenland, Spitzbergen, Svalbard, Aeroarctic, German Geophysical Observatory, 1st International Polar Year (1882–1883), 2nd International Polar Year (1932–1933), Wilhelm Filchner, Hans Kurt Erich Krueger, Herbert Schröder-Stranz, Alfred Wegener, Graf Zeppelin

1. Einleitung

Die Polarforschung bietet eine Vielzahl von spannenden Themen für bedeutende Beiträge zur Film- und Literaturgeschichte. Im Film "SOS Eisberg" von Arnold Fanck (1933, mit Leni Riefenstahl als Hauptdarstellerin und Ernst Udet als Pilot) wird möglicherweise in Anlehnung an den 1930 verschollenen Polarforscher Alfred Wegener (1880–1930) eine Rettungsexpedition an die Westküste Grönlands beschrieben, die mit einem Flugzeug versucht, einen verschwundenen Polarforscher zu finden (Fanck 1933). Bekannt wurden in neuerer Zeit die Bücher über John Franklin (1786–1847), der auf der Suche nach der Nordwestpassage 1847 auf der King-William-Insel in der Inselwelt Nordkanadas zugrunde ging ("Die Entdeckung der Langsamkeit" von Stan Nadolny, 1983), den Untergang des Expeditionsschiffes der Österreichisch-ungarischen Nordpolarexpedition (1872–1874) "Tegetthoff" ("Die Schrecken des Eises und der Finsternis" von Christian Ransmayer, 1987), oder die umstrittenen Figur des deutschen Spitzbergenkenners Theodor Lerner ("Der Nebelfürst" von Martin Mosebach, 2001).

In der deutschen Polargeschichte gab es neben wissenschaftlich geprägten Forschungsreisen auch weniger erfolgreiche Unternehmungen, über die hier berichtet werden soll. Der Grundstein wurde während der ersten deutschen Geographenversammlung gelegt, die 1865 in Frankfurt/Main abgehalten wurde. Hier fand der Geograph und Herausgeber der nach ihm benannten geographischen Mitteilungen August Petermann (1822–1878) ein geeignetes Forum, um seinem schon länger gehegten Plan einer Nordpol-Expedition den Weg zubereiten, während die von dem Hydrographen der Admiralität in Berlin Georg von Neumayer (1826–1909) propagierte Südpolarforschung auf keine Resonanz stieß (Krause 1993: 14). Nachdem der Hamburgische und Schleswig-Holsteinsche Walfang und Robbenschlag in Grönland vom 17. bis 19. Jahrhundert nebenbei wenig wissenschaftlich verwertbare Ergebnisse gebracht hatte (Oesau 1937, 1955), war Petermann derjenige, der die deutsche Polarforschung gleich von vornherein auf eine wissenschaftliche Basis stellte. Als er die erste und zweite Deutsche Nordpolar-Expedition (1868, 1869–1871) organisierte, versah er sie mit detaillierten Instruktionen, die das Forschungsprogramm genau fixierten (Abel & Jessen 1954). Diese Expeditionen sollten seine Hypothesen über die Schiffbarkeit der Nordpolarmeeres und die Landausdehnung von Grönland zum Nordpol und darüber hinaus belegen (Tammiksaar & Suchova 1998). Der Nordpol

spielte bei seinen Überlegungen keine Rolle. Selbst später kam in Deutschland nie die Idee auf, ihn als erster zu erreichen. Damit wurde das deutsche Programm der Polarforschung als solches auf wissenschaftliche Erforschung festgelegt und nur dafür gab es staatliche Unterstützung. Je bedeutsamer die Forschungsaufgaben, die auch von namhaften Wissenschaftlern wie Petermann, wissenschaftlichen Institutionen wie der Deutschen Seewarte in Hamburg oder Gesellschaften wie der Gesellschaft für Erdkunde zu Berlin und deren Vorsitzenden unterstützt wurden, desto höherrangig fiel auch die offizielle Förderung aus, die bis zur kaiserlichen Privatschatulle reichen konnte. An niedrigster Stufe sind vor allem Vereine zu nennen, die auf privater Ebene zur finanziellen und organisatorischen Förderung von Expeditionen gegründet wurden. Die Durchführung privater Expeditionen wurde mangels öffentlicher Finanzierung zwar erschwert, aber Katastrophen konnten dadurch nicht ausgeschlossen werden.

Über den Erfolg oder Mißerfolg einer Expedition entscheiden neben den Fähigkeiten der Teilnehmenden wissenschaftliche, vor allem aber auch externe Faktoren wie Wetterbedingungen, Ausrüstung, Logistik, Transporttechnik, Ernährung, Führungseigenschaften, oder politische und kulturelle Gesichtspunkte. Einzelne Aspekte machen heute die Polarforschung als Spezialbeispiel für Historiker und die Ausbildung von Managern interessant. Dieser Beitrag stellt nun einige Beispiele für erfolgreiche Wissenschaft und für tödliche Abenteuer aus der deutschen Arktisforschung vor.

2. Forschungsschwerpunkt Spitzbergen um 1910

Nachdem der Walfang in den Gewässern um Spitzbergen zurückgegangen war und Dampfschiffe für windunabhängige Transporte zur Verfügung standen, rückte diese Region Anfang des 20. Jahrhunderts wegen lohnender Kohlevorkommen wieder in das Gesichtsfeld vieler Nationen. Die erste Kohlenmine geht auf den Amerikaner Longyear zurück, der 1906 mit der Kohlenförderung im Adventfjord begann. Vor allem Schweden, Norwegen, die Vereinigten Staaten und England führten nun Expeditionen durch, um sich durch geologische Erkundungen einen Anteil an den Kohlefeldern zu sichern (Philipp (Hrsg.) 1914: IV). In diesem Zusammenhang kommt es nicht von ungefähr, daß die Exkursion des 11. Internationalen Geologenkongresses, der 1910 von Prof. Gerard de Geer (1858–1943) in Stockholm ausgerichtet wurde, Spitzbergen zum Ziel hatte.

2.1 Expedition der Zeppelin-Studienkommission (1910) und das deutsche geophysikalische Observatorium auf Spitzbergen (1911–1914)

Zu Beginn des 20. Jahrhunderts war es erstmals möglich, im Rahmen der Aerologie mit Fesselballonen und mit Kastendrachen, an denen Registrier-

geräte befestigt waren, routinemäßig Luftdruck, Temperatur und Feuchte der höheren Luftschichten zu messen, während freifliegende Pilotballone Auskunft über die Windrichtung und Windgeschwindigkeit gaben, wenn sie mit Theodoliten im Doppelanschnittverfahren verfolgt wurden. Aber nicht nur die Meßgeräte sollten in die Höhe steigen, sondern auch der Mensch wollte mit den neugeschaffenen Luftschiffen die Welt gezielt von oben erkunden. Bemannte Ballone konnten dafür nicht eingesetzt werden, weil der Wind ihre Flugrichtung bestimmte, die nicht beeinflußt werden konnte. Das tragische Ende der Ballonexpedition des schwedischen Ingenieurs Salomon August Andrée (1854–1897), der 1897 mit zwei Kameraden versuchte, den Nordpol mit einem Freiballon zu erreichen, gibt ein beredtes Beispiel dieser Fehleinschätzung (Andrée 1930).

Seit 1906 versuchte der Amerikaner Walter Wellman (1858–1934) von der Däneninsel in Nordwestspitzbergen aus mit einem Luftschiff zum Nordpol zu gelangen (Capelotti 1999). Sein dritter und letzter Startversuch scheiterte 1909. Auch in Deutschland gab es Ambitionen. Graf Ferdinand von Zeppelin (1838–1917), der inzwischen sein Luftschiff LZ 7 "Deutschland" baute, wollte seine Erfindung zur Erforschung unbekannter Gebiete in der Arktis zur Verfügung stellen (Miethe & Hergesell (Hrsg.) 1911). Auch dachte man damals nicht nur an die Möglichkeit der geographischen Entdeckung sondern auch schon an den Einsatz für die Fernerkundung der Meereisbedeckung. Die Expedition der sogenannten Studienkommission brach im Juli 1910 an Bord der "Mainz" in Kiel auf, der in Tromsø noch die "Fönix" für ozeanographische Untersuchungen angeschlossen wurde. Ziel der Unternehmung war es, die Voraussetzungen für Luftschiffahrten in der Arktis zu prüfen, die vorherrschenden Wetterbedingungen durch die Untersuchung der höheren Luftschichten mit Ballonen abzuschätzen und die Möglichkeit der Einrichtung von Luftschiffhäfen zu klären. An der Deutschen Arktischen Zeppelin Expedition beteiligten sich neben Graf Zeppelin u.a. Prinz Heinrich von Preußen (1862–1929, Bruder des deutschen Kaisers), der international renommierte Aerologe Hugo Hergesell (1859–1938), mit dem Zeppelin schon länger zusammenarbeitete, der Polarforscher Erich von Drygalski (1865–1949), der sowohl auf Grönland (1892–1893) als auch in der Antarktis (1902) überwintert hatte, und der norwegische Eislotse Paul Björvik (1857–1932). Im Adventfjord an der Westküste Spitzbergens wurden die ersten Verankerungsversuche durchgeführt. Im Kongsfjord weiter im Norden folgten Aufstiege mit dem Fesselballon. Aufstiege mit Registrierballonen und Pilotballonen ergänzten die Untersuchungen. Allerdings reichten die während der Expedition gewonnenen Erkenntnisse nicht aus, um den sicheren Betrieb von Luftschiffreisen in der Arktis gewähren zu können.

Als Konsequenz daraus richtete Hergesell mit Unterstützung des

deutschen Kaisers im darauffolgenden Sommer 1911 das deutsche geophysikalische Observatorium in einer unbewohnten Hütte bei Hotelnesset südwestlich der Advent Bai ein, wo sich heute der Flughafen von Longyearbyen befindet (Hergesell (Hrsg.) 1914, Rempp & Wagner 1914). Im ersten Jahr führten die Meteorologen Georg Rempp (1882–1937) und Artur Wagner (1883–1942), die von zwei Assistenten unterstützt wurden, 78 Aufstiege durch, davon 17 mit Drachen, die eine Maximalhöhe von 3310 m erreichten und 61 mit Registrierballonen (Abbildung 1), die bis 2480 m gelangten (Kopp 1935: 144, Dege 1962: 137).

Während des nächsten Sommers wurde die Station in der Advent Bai aufgegeben und in Ebeltofthamna am nördlichen Eingang des Crossfjordes eine neue Station errichtet. Kurt Wegener (1878–1964) wurde Stationsleiter während der Überwinterung 1912–1913. Mit Hilfe von Max Robitzsch (1887–1952) und den beiden Assistenten führte er 15 Drachenaufstiege bis 1590 m Höhe und 99 Registrierballonaufstiege bis 5400 m Höhe durch. Im folgenden Sommer wurde die Mannschaft von Otto Stoll (1885–1923) und Dr. Hoffmann abgelöst, die bis zum Ausbruch des Ersten Weltkrieges dort ihren Dienst ausübten. Das deutsche geophysikalische Observatorium stellt mit seiner permanenten Besetzung und kontinuierlichen Messungen über drei Jahre hinweg einen Vorläufer der später eingerichteten wissenschaftlichen Observatorien im nahegelegenen Ny-Ålesund dar.

2.2 Filchners Übungssexpedition für die Antarktis (1910)

Der bayerische Oberleutnant Wilhelm Filchner (1877–1957), der für eine Ausbildung als Trigonometer zum Königlichen Preußischen Großen Generalstab nach Berlin abkommandiert war (Filchner & Seelheim 1911: 1), wandte sich Anfang 1910 in Berlin an den berühmten Geographen und Vorsitzenden der Gesellschaft für Erdkunde zu Berlin Albrecht Penck (1858–1945), um sich mit ihm über eine Expedition in die Antarktis zu beraten (Filchner 1922: 6). Bereitwillig unterstützte Penck den Offizier, der sich bereits mit seiner Expedition durch China und Tibet (1903–1905) einen Namen als Forschungsreisender gemacht hatte. Im März stellte Filchner den Plan seiner Deutschen Antarktischen Expedition in einer Sitzung der Gesellschaft für Erdkunde zu Berlin vor (Filchner 1910a). Er wollte die Frage lösen, ob und wie die Ost- und Westantarktis zusammenhingen (Filchner 1910b: 426f.): Trennte ein eisbedeckter Meeresarm den antarktischen Kontinent vom Weddellmeer bis zum Roßmeer in einen östlichen und einen westlichen Teil? Oder befand sich dort Land? Um die richtige Antwort zu finden, wollte Filchner mit zwei Expeditionsgruppen sowohl vom Weddellmeer als auch vom Roßmeer aus in das Innerste der Antarktis vordringen, um sich in der Mitte zu treffen (Filchner 1910a: 153). Schon bald stellte sich

Abbildung 1. Fesselballonaufstieg am Deutschen Geophysikalischen Observatorium in der Advent Bai (Rempp & Wagner 1914: Tf. 2).

heraus, daß dieser Plan überhaupt nicht realisierbar war – erst während des Internationalen Geophysikalischen Jahres (1957–1958) wurde er ausgeführt. Schließlich beschränkte Filchner sich in der *Denkschrift über die Deutsche Antarktische Expedition* auf eine Expedition ins Weddellmeer, deren wissenschaftliche Aufgaben sich an der ersten deutschen Südpolarexpedition (1901–1903) unter der Leitung von Erich von Drygalski (1865–1949) orientierten (Filchner (1911): 3ff.). Zusätzlich sollten die höheren Luftschichten erforscht werden, für die es während der Südpolarexpedition noch keine entsprechende Meßtechniken gegeben hatte.

Während Filchner noch seine Expedition plante, die von einem Verein unterstützt wurde, war der Brite Robert Falcon Scott (1868–1912) schon kurz vor der Ausreise zu seiner zweiten Antarktisexpedition (1910–1913), um bis zum Südpol vorzudringen, von der er jedoch nicht mehr lebend zurückkehren sollte. Gleichzeitig machte sich auch der Norweger Roald Amundsen (1872–1928) auf den Weg, um Scott zuvorzukommen. Filchner folgte Scotts Vorbild und wollte für die Transporte auf der Inlandeisdecke Pferde einsetzten, obwohl Hundeschlitten, wie es Amundsen am Südpol zeigen sollte, das bessere Verkehrsmittel auf großen Eisflächen waren.

Im August 1910 führte Filchner mit fünf Begleitern eine Vorexpedition nach Spitzbergen durch, damit die künftigen Expeditionsteilnehmer – allesamt Neulinge im Polareis – während einer kleinen Durchquerung Polarerfahrung sammeln konnten (Filchner & Seelheim 1911, Philipp (Hrsg.) 1914). Vor allem sollten die Ausrüstung für die Antarktisexpedition getestet und technische Erfahrung bei der kartographischen Aufnahme des unbekannten Übergangs von der Temple Bai im Westen zur Wiche Bai im Osten gesammelt werden. Die technische Vorbereitung lag in den Händen des Geographen Heinrich Seelheim (geb. 1884), während die alpinistische Unterweisung Carl Potpeschnigg (geb. 1875) aus Graz übernahm, der allerdings später nicht an der Expedition teilnahm. Leider konnten aufgrund unglücklicher Umstände im letzten Moment die Pferde aus Platzmangel nicht an Bord der "Äolus" mitgenommen werden, die neben den Teilnehmern der Geologenexkursion kurzfristig auch Filchners Vorexpedition nach Spitzbergen brachte. Deshalb mußte noch an Bord die Ausrüstung gesichtet und für den Transport auf den von den Männern gezogenen Schlitten reduziert werden. Diese Änderung wirkte sich recht negativ aus, denn das Gepäck war überhaupt nicht auf Gewichtsersparnis ausgelegt, so daß die gesamte "Kraft durch das Ziehen der schweren Schlitten" absorbiert wurde (Philipp (Hrsg.) 1914: III, 1–2). Zum Glück hatten sie als Neuerung die Kufen der Nansenschlitten mit Stahlblech beschlagen, die sich nicht nur auf Schnee sondern auch auf sandbedecktem Gletschereis und Moränenstreifen sehr bewährten. Dennoch gab es "nichts Unangenehmeres, als solche Strecken

mit selbstgezogenen Schlitten überwinden zu müssen", die mit schweren Instrumenten und Apparaten beladen waren, die während der Überwinterung in der Antarktis auf der Station verwendet werden sollten (Philipp (Hrsg.) 1914: 4, 6). Am 11. August 1910 erreichten sie nach orkanartigen Stürmen während des Aufstieges den höchsten Punkt des von Post Gletschers (Von Postbreen), wo sie an der Wasserscheide ihr Zentrallager einrichten (Abbildung 2).

Abbildung 2. Zentrallager auf dem von Post Gletscher nahe der Wasserscheide (Filchner & Seelheim 1911: Tf. 7).

Mit leichtem Gepäck ging ein Teil der Gruppe den Prinzregent Luitpold Gletscher (Luitpoldbreen) hinunter, währen der Astronom Przybyllock (1880–1954) und der Meteorologe Erich Barkow (1882–1923) im Lager blieben, um ihre Messungen fortzuführen. Nachdem, was sie während der Gletscherüberschreitung erlebt hatten, riet der Geologe Hans Philipp (geb. 1878) "von Versuchen, zur Durchquerung der so gearteten Gletscher Spitzbergens Pferde zu verwenden", dringlich ab (Philipp (Hrsg.) 1914: 4, 6). Dennoch verlief die Vorexpedition recht erfolgreich. Die Ausrüstung konnte durch geschickte Improvisation den tatsächlichen Erfordernissen angepaßt werden. Die Herausgabe der wissenschaftlichen Ergebnisse übernahm Philipp, während sich Filchner der weiteren Vorbereitung und Durchführung der Antarktisexpedition widmete. Diese Übungsexpedition hat durch ihre Vermessung des von Post und Prinzregent Luitpold Gletschers bleibende Spuren hinterlassen, denn noch heute findet man 19 von Filchner verliehene Namen auf der Karte von Spitzbergen (Philipp (Hrsg.) 1914: 77–78).

2.3 Schröder-Stranz-Vorexpedition (1912–1913)

Im Jahr 1911 – gut 30 Jahre nach der ersten Befahrung der Nordostpassage durch den Schweden Adolf Erik Nordenskiöld (1832–1901) – plante der westpreußische Offizier des Kolbergschen Grenadierregiments Nr. 9 Herbert Schröder-Stranz (1884–1912) eine groß angelegte Deutsche Arktis Expedi-

tion (DAE) zur Wiederholung der Nordostpassage. Sein *Allgemeiner Plan einer wissenschaftlichen Expedition durch die Nordostpassage (Taimyr-Halbinsel) und durch den stillen* Ozean, mit dem er um Sponsoren warb, führte eine umfangreiche Aufgabenliste auf (Schröder-Stranz 1911). Unter anderem sollten während der Schiffsreise sowohl ozeanographische Messungen als auch geographisch-kartographische Küstenarbeiten durchgeführt werden. Dazu gehörten selbstverständlich auch meteorologische und magnetische Messungen. Auch Schröder-Stranz ließ sich durch einen Verein unterstützen, der übrigens 16 Mitglieder aus Politik und Forschung hatte, die sich bis hin zum Ehrenpräsidium auch schon in Filchners Verein engagierten (Lüdecke 1995: A18). Nachdem Schröder-Stranz jedoch bisher wissenschaftlich überhaupt noch nicht in Erscheinung getreten war, wollten ihm namhafte Geographen wie Albrecht Penck in der Regierungsstadt Berlin keine Unterstützung gewähren. So entschloß er sich, im Frühjahr 1912 kurzfristig zu einer Vorexpedition nach Spitzbergen. Hier wollte er die noch offene Frage klären, ob das Innere von Nordostland von einer einheitlichen Eisdecke überzogen war oder nicht (Rüdiger 1913: 33). An eine Überwinterung in Spitzbergen wurde zunächst nicht gedacht. Erst als die Teilnehmer der Vorexpedition in Tromsø an Bord gingen, eröffnete ihnen Schröder-Stranz seinen Plan, bei dem eine Überwinterung nicht mehr ausgeschlossen wurde (Rüdiger 1913: 8, Wedemeyer 1914: IX). Mit seiner Durchquerung des Nordostlandes wollte er etwas außerordentliches leisten, um sich gegenüber dem Widerstand der Autorität Penck durchzusetzen. Nach dieser überraschenden Eröffnung verzichteten zwei Teilnehmer, darunter Ludwig Kohl-Larsen (1884–1969), der Filchners Antarktisexpedition nach einer Blinddarmoperation Ende 1911 auf Südgeorgien vorzeitig verlassen mußte, in Tromsø auf ihre Mitreise.

Da der Winter 1912/13 recht streng war, konnte das Expeditionsschiff "Herzog Ernst" wegen der starken Meereisbildung die Küste östlich des Nordkaps nicht mehr erreichen. So wurde der Plan dahingehend geändert, daß Schröder-Stranz im Beiboot soweit wie möglich nach Osten vordringen wollte, um dann mit Schlitten, die von acht Berliner Straßenhunden gezogen werden sollten, den äußersten Zipfel von Nordostland bis zur Hinlopenstraße zu durchqueren (Rüdiger 1913: 33–34). Mit Kajaks und Schlitten sollte der Weg über die Teurenbergbai, Wijdebai, Liefdebai bis zum Crossfjord im Westen fortgesetzt werden, wo das Schiff nach einer Depotlegung in der Teurenbergbai und ozeanographischen Messungen in verschiedenen Buchten bis zum 15. Dezember auf die Schlittengruppe warten sollte. Allerdings war es unsicher, ob die Gruppe dort von dem Schiff abgeholt werden könnte, denn üblicherweise war die Nordküste Spitzbergens ab Mitte August wegen Eis nur noch schwer zugänglich.

Es zeigte sich, daß Schröder-Stranz wenig Verantwortungsgefühl gegenüber den Expeditionsteilnehmern hatte, als er sich am 15. August 1912 zwischen Nordkap und Kap Platen mit drei Begleitern absetzten ließ. Ungeachtet der örtlichen und jahreszeitlichen Gegebenheiten wollte er vor allem den Zweiflern zu Hause seine Fähigkeiten als Polarforscher beweisen. Aufgrund völliger Fehleinschätzung der Situation wurden Schröder-Stranz und seine Begleiter nie mehr wiedergesehen (Abbildung 3).

Als sich die "Herzog Ernst" wegen eines Sturmes wieder in die Teurenbergbai verholen mußte, wurde sie wegen der schon fortgeschrittenen Jahreszeit eingefroren und für den ganzen Winter dort festgesetzt. Um vielleicht doch noch auf einem anderen Schiff Spitzbergen verlassen zu können, brachen die verbliebenen Expeditionsteilnehmer nach Advent City (heute Longyearbyen) auf, zersplitterten sich jedoch unterwegs in mehrere Untergruppen (Barr 1984). Kapitän Alfred Ritscher (1879–1963) gelangte erst am 27. Dezember 1912 nach einem abenteuerlichen Marsch durch die arktische Winternacht nach Advent City, um Nachricht über die versprengte Expedition zu bringen und Rettungsaktionen für Schröder-Stranz einzuleiten (Ritscher 1916).

Währenddessen hielt sich Kurt Wegener (1878–1964) als Leiter des deutschen geophysikalischen Observatoriums in Ebeltofthamna im Crossfjord auf (K. Wegener 1914). Als er am 27. Januar 1913 durch ein Telegramm über die verunglückte Expedition benachrichtigt wurde, organisierte er spontan eine Rettungsexpedition, die sich als abwechslungsreiche Unterbrechung des Routinealltags in der Winternacht anbot (K. Wegener 1913). Am 22. Februar 1913 brach Wegener zu seiner dilettantisch durchgeführten Hilfsexpedition auf und kehrte 26 Tage später nach Ebeltofthamna zurück. Immerhin lieferte er die Information, daß sich kein Expeditionsteilnehmer mehr in den Hütten der Wijdebai befand, da die drei Männer, die sich dort eine Zeitlang aufgehalten hatten, laut zurückgelassener Nachricht wieder zur Sorgebai zurückgekehrt waren.

In Deutschland nutzte man die Winterzeit, um für das kommende Frühjahr eine Hilfsexpedition auszurüsten. Gegen den Widerspruch der Berliner Wissenschaftler schlug man in Frankfurt/Main den deutschen Spitzbergenkenner Theodor Lerner (1866–1931) als Leiter einer privaten Frankfurter Hilfsexpedition vor. Lerner hatte sich jedoch durch seine Besetzung der Bäreninsel südlich von Spitzbergen in Berliner Regierungskreisen zu einer Unperson gemacht und wurde deshalb von offizieller Seite kategorisch von der Suche ausgeschlossen (Villinger 1929: 7). Dennoch brach Lerner mit privaten Mitteln auf und gelangte schon ungewöhnlich früh im Jahr an das Nordkap Spitzbergens. Hier wurde sein Schiff "Loevenskiöld" jedoch vom Packeis festgesetzt, bis es schließlich sank. Alle Männer konnten sich

Abbildung 3. Ort des letzten bekanntes Camps von Schröder-Stranz auf Nordostland im Sommer 2006. Foto: Max Wisshak.

zum nahe gelegenen Kap Rubin retten. Von dort aus gelangten sie nach Überquerung der Hinlopenstraße zur Teurenbergbai, wo sie bei den zu Rettenden in der "Herzog Ernst" Unterschlupf fanden. Schließlich brach am 8. April 1913 die deutsche Rettungsexpedition unter der Leitung des Norwegers Arved Staxrud (1881–1933) in Spitzbergen auf, um die verbliebenen Expeditionsteilnehmer und zusätzlich auch Lerners gestrandete Expedition in die Heimat zurückzubringen.

Wegen völliger Unerfahrenheit der Teilnehmer endete Schröder-Stranz' Unternehmung in einem Desaster, das in der Sensationspresse entsprechend vermarktet wurde. Von fünfzehn Teilnehmern kehrten nur sieben wieder in ihre Heimat zurück. Neben der norwegischen Mannschaft waren es nur drei Deutsche: Kapitän Ritscher, der für ozeanographische Messungen vorgesehene Hermann Rüdiger (1889–1946) und der Marinemaler Christopher Rave (1880–1933), während mit Ausnahme des Kochs, der an Bord starb, der Rest verschollen blieb. Die Hauptschuld an der größten deutschen Polarkatastrophe wurde Schröder-Stranz selbst zugeschrieben,

> der durch Überschätzung seiner eigenen Fähigkeiten und durch Unterschätzung der Gefahren [...] so viele Menschenleben aufs Spiel gesetzt und dem deutschen Namen wenig Ehre gemacht hat. (Anonym 1913: 582.)

Auch der Geologe Philipp von Filchners Übungsexpedition übte Kritik. Nachdem es für typisch galt, daß die Eisverhältnisse nordöstlich der Hauptinsel schnell wechseln, kam es oft zu unfreiwilligen Überwinterungen, die manchmal tödlich endeten, weil der Entschluß zur Umkehr zu spät kam oder man die Verhältnisse nicht kannte. Es muß

> als ein ungeheurer Leichtsinn angesehen werden [...] wenn wissenschaftliche Expeditionen ohne genügende Erfahrung mit knappster Verproviantierung und mit einem für Überwinterungen keineswegs geeigneten Schiff im Spätsommer erst gegen die Ostküste von Spitzbergen aufbrechen. Ein solch völlig unüberlegtes Unternehmen kann nur als blindes Draufgängertum bezeichnet werden und muß notwendigerweise zur Katastrophe führen. (Philipp (Hrsg.) 1914: 9–10.)

3. Forschungschwerpunkt Grönland

Durch Peterman wurde die Ostküste Grönlands um 1870 das erste Ziel deutscher wissenschaftlicher Polarexpeditionen. 1891 folgte die von Erich von Drygalski (1865–1949) geleitete und von der Gesellschaft für Erdkunde zu Berlin – Freiherr Ferdinand von Richthofen (1833–1905) war damals Vorsitzender der Gesellschaft und zugleich auch Drygalskis Doktorvater

– finanzierten Vorexpedition an die Westküste, um in der Umgebung von Umanak ein geeignetes Gebiet für die Untersuchung der Bewegung des Inlandeisabflusses und der lokalen Küstengletscher zu finden (Lüdecke 1990). Mit zwei Kameraden überwinterte er 1892–1893 am Karajakgletscher. Mit den Ergebnissen seiner Gletscherforschung habilitierte sich Drygalski 1898 und wurde wenige Tage später zum Leiter der von Neumayer initiierten ersten deutschen Südpolarexpedition (1901–1903) ernannt. Manche Wissenschaftler widmeten ihre ganzes Leben der Forschung in Grönland, während für andere Grönland ein Sprungbrett für weitere Unternehmungen wurde.

3.1 Hans Kurt Erich Krueger in Grönland und Nord Kanada (1925, 1929–30)
Der wissenschaftlicher Assistent am Institut für Geologie und Gesteinskunde an der Technischen Hochschule in Darmstadt Hans Kurt Erich Krueger (1886–1930), der sich sein geologisches Wissen als Autodidakt in südwestafrikanischen Minen angeeignet hatte (Barr 1993: 278), plante in der Mitte der 1920er Jahre eine fünfjährige Deutsche Arktische Expedition, die nur mit drei Teilnehmern die nordamerikanische Inselwelt erforschen wollte (Anonym 1924, Krueger 1925). Um seinem großen Ziel näherzutreten, führte er zusammen mit dem Geographen Fritz Klute (1885–1952) die Hessische Grönland-Expedition durch, die vom Land Hessen gefördert wurde (Krueger & Klute 1926).

Mit den geologischen Ergebnissen promovierte er 1928 (Krueger 1930), bevor er im Sommer 1929 zusammen mit zwei deutschen Wissenschaftlern zur 2. Hessischen Grönland-Expedition aufbrach (Rohde 1931: 136). Nach Beendigung der Studien kehrten die beiden Wissenschaftler nach Deutschland zurück, während Krueger zusammen mit dem Dänen Åge Rose Bjarre in Nequi (Robertson Fjord südlich Etah, NW Grönland) überwinterte, um im Frühjahr seine Arktische Expedition zu beginnen (Barr 1993: 285ff.). Zuvor wollten sie von der einheimischen Bevölkerung lernen, wie man nach Vilhjalmur Stefanssons (1879–1962) Vorbild „vom Lande lebt" (Stefansson 1913). Anfang März 1930 setzten sie in Begleitung von erfahrenen Grönländern mit Hundeschlitten über den Smith Sound zur Halbinsel Bache auf Ellesmeere-Land (Nordkanada) über. Nachdem sie die kanadische Polizeistation auf Bache verlassen hatten, wurden nur noch einige in Steinhaufen hinterlegte Nachrichten gefunden, sie selbst aber blieben verschollen. Erst 1999 entdeckten Kanadier durch Zufall die Überreste seines letzten Lagers (Brooks et al. 2004).

3.2 Alfred Wegener in Grönland (1906–08, 1912–13, 1929, 1930–31)
Alfred Wegener (1880–1930, jüngerer Bruder von Kurt Wegener), der durch die Entwicklung der Kontinentaldrifttheorie bekannt wurde, verdiente sich

während der zweijährigen dänischen Expedition (1906–1908) unter der Leitung von Ludvig Mylius-Erichsen (1871–1907) seine ersten Sporen als Polarforscher (A. Wegener 1908, Wutzke 1997: 26–72). Wegeners Ziel war, am Überwinterungsplatz der "Danmark" an der Ostküste Grönlands bei 77 °N die aerologischen Meßmethoden, die er sich seit 1905 als Assistent am Aeronautischen Observatorium in Lindenberg östlich von Berlin angeeignet hatte, in die Polarforschung einzuführen. Außerdem wollte er natürlich alles über die Durchführung von Polarreisen lernen. Eine gute Gelegenheit dafür bot sich während einer zwei-monatigen Exkursion entlang der Küste unter der erfahrenen Anleitung seines Expeditionskollegens Hauptmann Johan Peter Koch (1870–1928), der ihm das Fahren mit Hundeschlitten beibrachte. Als der Expeditionsleiter Mylius-Erichsen im Winter 1907 verschollen ging, mußten sie feststellen, daß so spät im Jahr keine Schlittenreisen mehr möglich waren, um nach ihm zu suchen. Auch im folgenden Jahr konnte er nicht gefunden werden. Nach seiner Heimkehr habilitierte sich Wegener mit den Ergebnissen der 99 Drachen- und 26 Fesselballonaufstiegen, die bis 3100 m bzw. 2400 m hinaufreichten (A. Wegener 1909).

Als sein Freund Johan Peter Koch eine eigene "Inlandeis-Expedition 1912–13" zur Durchquerung Grönlands an seiner breitesten Stelle plante, war Wegener als wichtiger Partner wieder mit dabei (Wutzke 1997: 87, 91–92, 96–129). Wie zuvor schon bei Scotts (1910–1913) und Filchners (1911–1912) Antarktisexpeditionen sollten Ponys als Zugtiere eingesetzt werden. Diese Entscheidung stellte sich aber als sehr ungünstig heraus. Nicht nur, daß es für Koch und seine drei Begleiter im Herbst 1912 schwierig war, die Ponys im Küstenbereich ohne Baum und Strauch über Nacht an einer Stelle zu halten – manchmal mußten sie tagelang in den Nachbartälern nach ihnen suchen – sondern es mußte während des Marsches über die Inlandeiskappe im Sommer 1913 auch jeden Abend für sie ein schützender Stall in Schnee und Firn gegraben werden – eine kräfteraubende und zeitaufwendige Arbeit, die man sich bei der Mitnahme von Schlittenhunden hätte sparen können (A. Wegener 1961, Wutzke 1997: 99, 119–130). Während der Überquerung des Inlandeises wollte Wegener die meteorologischen Verhältnisse studieren, um hinter das Geheimnis der über Grönland vermuteten glazialen Antizyklone zu kommen, d.h. er wollte herausfinden, was sich hinter dem stationären Hochdruckgebiet auf dem Inlandeis verbirgt, das durch Windmessungen an den Küsten angedeutet wurde. Unterwegs kamen durch die Strapazen nacheinander alle Ponys um und die vier Männer erreichten nach 1000 km und einer Schlechtwetterperiode gerade noch mit allerletzter Kraft und halb verhungert die Küste, wo sie glücklicherweise ein Grönländer vom Kajak aus entdeckte. Auch von dieser Expedition brachte Wegener wertvolle Ergebnisse zurück. Er hatte eine ausgeprägte Zone mit tiefen Temperaturen

festgestellt, die als Region der glazialen Antizyklone gedeutet wurde, über deren Ursprung er jedoch nichts aussagen konnte (Koch & Wegener 1930).

Eine Nachfolgeexpedition, mit meteorologisch-aerologischen Stationen an der Westküste bei 72 °N und auf dem Inlandeis sollte nun folgende Fragen klären:

1) Wie sind die Temperaturen der glazialen Antizyklone im Winter?
2) Können Zyklonen (Tiefdruckgebiete) die innere Region der Inlandeiskappe überqueren?
3) Sind die Bedingungen an der Westküste der an der Ostküste ähnlich?

Leider kam zu Wegeners größtem Bedauern diese Expedition nicht mehr zustande.

Erst als die Notgemeinschaft der deutschen Wissenschaft Ende 1928 mit der Bitte an Wegener herantrat, mit ihrer finanziellen Unterstützung eine neue Methode zur seismischen Bestimmung der Eisdicke in Grönland zu testen, bot sich ihm die erste und auch letzte Möglichkeit, eine eigene Expedition auszurüsten (Wutzke 1997: 161–221). Von Seiten der Notgemeinschaft wurde an nichts gespart, denn es ging darum, anderen Forschern mit dem Einsatz dieser Methode zuvorzukommen, um damit nach dem verlorenen Ersten Weltkrieg Deutschlands frühere Stellung in der internationalen Wissenschaftsgemeinde wieder zu erhalten.

1929 wurde für die Vorbereitung der Hauptexpedition (1930–1931) zunächst eine Vorexpedition an die Westküste Grönlands unternommen, an der neben Wegener dessen ehemaliger Schüler Johannes Georgi (1888–1972) und Fritz Löwe (1895–1974) als Meteorologen und Ernst Sorge (1899–1946) als Glaziologe teilnahmen. Die Hauptexpedition (1930–1931) wurde mit zwei unabhängigen Gruppen durchgeführt (E. Wegener (Hrsg.) 1932). Wegener fuhr mit der größten 14-köpfigen Gruppe an die Westküste, die auch Ausgangsort für die Einrichtung der Eismittestation war, die von Georgi und Sorge betrieben werden sollte. Eine zweite Gruppe mit vier Personen fuhr an die Ostküste, um die dritte Station nahe der Kolonie in Scoresby Sund einzurichten. An allen drei Stationen entlang 72°N waren gleichzeitige aerologische Aufstiege mit Fesselballonen und an den Küsten zusätzlich auch mit Drachen vorgesehen (Abbildung 4), um das Rätsel der glazialen Antizyklone endlich zu lösen.

Verschiedene unvorhersehbare Umstände gestalteten den Ablauf der Expedition recht abenteuerlich (Lüdecke 2000). Das Schiff mit der Expeditionsausrüstung mußte wegen der in jenem Jahr ausnahmsweise noch vorhandenen Meereisdecke sechs Wochen lang untätig vor der Westküste auf seine Anlandung warten. Dadurch verzögerten sich entsprechend die

Abbildung 4. Drachen im Schnee an der Oststation (E. Wegener 1932: rechts von S. 272).

Transporte auf das rund 1000 m hoch gelegene Inlandeis, an dessen Rand die Hauptstation errichtet werden sollte, erheblich. Zudem war die Oberfläche des sogenannten Aufstiegsgletschers schon so weit ausgeapert, daß es extrem schwierig war, die neumodischen schweren Propellerschlitten überhaupt bis zu ihrem Einsatzort zu bringen.

An dieser Stelle muß man sich fragen, ob sich Wegener über die Folgen dieses Zeitverlustes eigentlich recht im Klaren war? Nach der nutzlosen Wartezeit vor der Küste mußte doch alles daran gesetzt werden, daß die Station Eismitte möglichst rasch ohne weiteren Zeitverlust in Betrieb genommen werden konnte. Dafür wurden die schweren Propellerschlitten nicht gebraucht. Es unterliefen weitere Fehler. Offenbar wurde später mit den Hundeschlitten zu wenig Nahrung und Brennstoff nach Eismitte transportiert, statt dessen jedoch eine schwere Filmausrüstung und andere Dinge, die erst nach der Überwinterung benötigt wurden. Zudem war Wegener die Bedeutung einer Funkstation nicht bewußt, denn er hatte ihre Nützlichkeit während seinen früheren Expeditionen noch nicht kennen gelernt. Und schließlich waren die mitgenommenen Propellerschlitten auf dem weichen Neuschnee nicht einsetzbar. Bisher hatte Wegener seine Erfolge als hervorragender und kreativer Wissenschaftler im Alleingang oder zusammen mit seinem Schwiegervater Wladimir Köppen (1846–1940) und seinem Bruder Kurt erzielt, bzw. als Teilnehmer von dänischen Expeditionen. Er verfügte aber nicht über die Fähigkeit, eine große Expedition so zu leiten, daß er alles übersah und das Wichtige vom Unwichtigen trennen konnte. Schließlich verstieß er gegen seine eigenen eisernen Regeln, die er aufgrund seiner

Erfahrungen während der Mylius-Erichsen-Expedition aufgestellt hatte (Weiken 1980: 90):

1) Im Sommer können nur drei Hundeschlittenreisen durchgeführt werden, um den Mindestbedarf von 3500 kg zur Einrichtung der Station Eismitte zu transportieren.
2) Die Propellerschlitten sind nur ein Versuch, so daß sich niemand auf sie verlassen darf.
3) Von Mitte September bis Mitte April sind keine Reisen auf dem Inlandeis möglich.

Hätte die Station Eismitte über eine Funkstation verfügt, wäre Wegener als verantwortungsvoller Expeditionsleiter nicht am 22. September 1930 aufgebrochen, um sich zu vergewissern, daß Georgi und Sorge trotz eingeschränkter Bedingungen doch überwintern konnten. Wegen der späten Jahreszeit kehrten jedoch unterwegs 12 von Wegeners 13 begleitenden Grönländern mit ihren Transportschlitten lieber rechtzeitig um, als in die beginnenden Winterstürme zu gelangen. Nachdem sich Wegener von der Funktion der in den Firn gegrabenen Station Eismitte überzeugt hatte, ließ er seinen Begleiter Loewe mit erfrorenen Zehen als dritten Überwinterer zurück und trat am Tag nach seinem 50. Geburtstag mit dem einzig verbliebenen Grönländer Rasmus Villumsen (1909–1930) die Rückreise an. Es ist tragisch, daß Wegener, der es besser wußte, zusammen mit seinem Begleiter im November 1930 auf dem Inlandeis umkam.

4. Internationale Forschungsprojekte

Internationale Forschungsprojekte zeichnen sich dadurch aus, daß sich Wissenschaftler oder Wissenschaftsorganisationen aus verschiedenen Ländern zusammenschließen, um gemeinsam einer wissenschaftliche Fragestellung nachzugehen, die mit den zur Verfügung stehenden Mitteln aus dem eigenen Land nicht gelöst werden kann. Dies bietet sich insbesondere für die meteorologische Forschung an, deren erste internationale Meßnetze ins 18. Jahrhundert zurück reichen.

4.1 Erstes Internationales Polarjahr (1882–1883)

Das erste internationale Polarjahr (1882–1883) geht zurück auf eine Initiative, die unabhängig voneinander sowohl von Neumayer, der inzwischen zum Direktor der Deutschen Seewarte in Hamburg aufgestiegen war, als auch von Carl Weyprecht (1838–1881), einem deutschen Leutnant in österreichisch-ungarischen Diensten, ausging (Neumayer 1901: 172–173). Während Neumayer sich eher theoretisch für die deutsche Südpolarforschung einsetzte, hatte Weyprecht praktische Polarerfahrung als Leiter der verun-

glückten Österreichisch-ungarischen Nordpolarexpedition (1872–1874) mit der "Tegetthoff", die Franz-Josef-Land entdeckt hatte.

Auf der 48. Versammlung deutscher Naturfreunde und Ärzte in Graz präsentierte Weyprecht 1875 seine "Grundzüge der arktischen Forschung". Nach der Expedition war ihm klar geworden, daß solche vereinzelt durchgeführten Expedition wenig Wert haben, wenn sie nicht in ein größeres System eingegliedert waren. So hatten zwei Punkte für ihn besondere Bedeutung:

> Der geographische Pol besitzt für die Wissenschaft keinen höheren Wert, als jeder andere in höheren Breiten gelegene Punkt. [...] Vereinzelte Beobachtungsreihen haben mehr relativen Wert. (Weyprecht 1875.)

Damit verurteilte Weyprecht als Wissenschaftler das sportliche Streben nach den Polen und befürwortete statt dessen die gemeinsame Erforschung der Naturphänomene in den Polarregionen, denn einzelne Expeditionen könnten nur zufällige Bruchstücke erfassen.

Seit den 1870er Jahren wurden nationale meteorologische Dienste gegründet und die ersten internationalen meteorologischen Kongresse abgehalten, um die Wetterbeobachtungen länderübergreifend zu organisieren und zugänglich zu machen (Lüdecke 2004). Nachdem das schlechte Wetter in Europa von polaren Tiefdruckausläufern verursacht wird, lag es nahe, daß die Meteorologen mehr Wetterdaten aus dem Hohen Norden für die Wettervorhersage haben wollten. Schließlich wurde 1879 auf dem Meteorologenkongreß in Rom eine internationale Polarkommission gegründet, die sich unter Neumayers Leitung im Oktober desselben Jahres in Hamburg traf. Nach einigen Verzögerungen konnten schließlich elf Nationen zwölf Beobachtungsstationen in der Arktis und zusätzlich noch zwei auf der Südhemisphäre errichten, an denen vom 1. August 1882 bis 31. August 1883 nach einem koordinierten Programm meteorologische und magnetische Messungen durchgeführt wurden. Deutschland richtete zwei wissenschaftliche Stationen ein, eine im Kingua-Fjord am Ende des Cumberland Sundes auf Baffin Island/Ostkanada (Abbildung 5) und eine in der Royal Bai auf Südgeorgien (Südatlantik).

Darüber hinaus konnte die Deutsche Seewarte in Hamburg einen Wissenschaftler mit meteorologischen Instrumenten ausrüsten und an die Ostküste Labradors senden, wo er auf sechs Missionsstationen der Herrnhuter Brüdergemeine Beobachter einwies (Lüdecke 2005).

Das Leben auf den temporären Polarstationen war durch das vorgegebene Meßprogramm festen Regeln unterworfen, die von einem äußeren Zeitschema diktiert wurden. So blieb meist wenig Zeit, die Umgebung zu erkunden. Dennoch wurden durch eigenes Interesse angetrieben erstaunliche

Abbildung 5. Deutsche Station am Kingua-Fjord, Cumberland Sund (1882–1883) (Neumayer 1901, rechts von S. 60).

Beiträge für andere Disziplinen geleistet, beispielsweise führte der Physiker Heinrich Abbes (1856–1937) ethnologische Untersuchungen der Eskimobevölkerung am Cumberland Sund durch (Abbes 1884, 1890). Dadurch wurde er zum Vorläufer von Franz Boas (1858–1942), der mit der "Germania", welche die Stationsmannschaft 1883 abholte, nach Baffin Island kam, um zu seiner legendären Forschungsreise (1883–1884) zur Untersuchung der Lebensgewohnheiten der dortigen Eskimos aufzubrechen (Boas 1885). Er sollte später zum Begründer der amerikanischen Ethnologie werden.

4.2 Internationale Studiengesellschaft zur Erforschung der Arktis mit Luftfahrzeugen – Aeroarctic (1924–1937)

Die Studienreise von Graf Zeppelin nach Spitzbergen im Jahr 1910 hatte zwar die Zweckmäßigkeit der Verwendung von Luftschiffen für die Erforschung der Arktis bewiesen (Miethe & Hergesell (Hrsg.) 1911), aber erst nach der forcierten Weiterentwicklung der Zeppeline während des Ersten Weltkrieges, die im Gegensatz zu Flugzeugen schwere Lasten weit transportieren konnten, wurde die Idee in den 1920er Jahren wieder aufgegriffen. Um einer Realisierung näher zu treten, mußten jedoch zunächst weitere wissenschaftliche Grundlagen geschaffen werden. Dafür war vor allem in-

ternationale Beteiligung erforderlich, denn es wurden Wettermeldungen und Wettervorhersagen der arktischen Anrainerstaaten benötigt, sowie Luftschifflandeplätze und eine in die hundert Personen zählende Betriebsmannschaft. Glücklicherweise konnte Fridtjof Nansens (1861–1930) 1924 als Gründungspräsident der Internationalen Studiengesellschaft zur Erforschung der Arktis mit Luftfahrzeugen gewonnen werden, die schon bald unter ihrer Telegrammadresse "Aeroarctic" bekannt wurde (Kohlschütter 1927, Breitfuß (Hrsg.) 1927, Breitfuß 1928). Nansen war die geeignetste Person, um Deutschland nach dem verlorenen Ersten Weltkrieg in einem groß angelegten Projekt wieder als friedlichen Partner in die internationale Wissenschaftlergemeinde einzuführen. Auch sollte der renommierte Polarforscher die geplante Forschungsexpedition mit einem Zeppelin in die russische Arktis leiten. Zusätzlich wurden gezielt Direktoren der meteorologischen Dienste der Anrainerstaaten als Mitglieder in der Gesellschaft eingeworben.

In der Denkschrift der Aeroarctic wurden die Probleme des Nordpolargebietes im Zusammenhang mit dem sich ausweitenden Luftverkehr auf einer transarktischen Route formuliert (ISEAL 1924). Nach Auffassung der Gesellschaft lag in der Arktis

> der Schlüssel für die Erkenntnis der atmosphärischen Zirkulation und der für Weltverkehr und Landwirtschaft so wichtigen Wetterverhältnisse der nördlichen Welthalbkugel. Ähnlich verhielt es sich bei den ozeanischen Zirkulationsproblemen, und in erdmagnetischer Beziehung würden erst genaue Messungen an vielen Stellen des Polarbeckens das Netz der magnetischen Linien im Norden schließen lassen. (ISEAL 1924: 15.)

Während der Expedition mit dem Zeppelin sollte die Land-Seeverteilung insbesondere nördlich der Beaufortsee und bei Nikolaus-II.-Land (Severnaja Semlja) geklärt werden. Ebenso interessierte die Morphologie und Glaziologie der überflogenen Landgebiete, u.a. auch der Taimyr-Halbinsel, die Schröder-Stranz seinerzeit während der Expedition untersuchen wollte. Oberstes Ziel war jedoch die Vorbereitung eines transarktischen Luftschiffverkehrs von Europa nach Jokohama in Japan bzw. nach San Francisco an der Westküste der Vereinigten Staaten. Zur Festlegung der besten Zeit für den Start der Expedition konnte auf die Ergebnisse der aerologischen Untersuchungen am Deutschen Geophysikalischen Observatorium in Spitzbergen aus den Jahren 1911–1914 zurückgegriffen werden.

Auf der 2. Mitgliederversammlung im Jahr 1928 wurde ein Forschungsrat gegründet, der aus 11 Kommissionen bestand, um die Expedition mit dem kostenlos vom der Zeppelinwerft zur Verfügung gestellten Zeppelin konkret vorzubereiten (Arktis 1928). Nachdem Nansen 1930 überraschend

verstarb, mußte die Expedition um ein Jahr verschoben werden. Hugo Eckener (1868–1954) von der Zeppelinwerft wurde sein Nachfolger. Schließlich konnte die Expedition an Bord des LZ 127 "Graf Zeppelin" am 26. Juli 1931 in Leningrad (heute St. Petersburg) unter der wissenschaftlichen Leitung des Russen Rudolph Samoilowitsch (1881–1940) starten. Auch Kohl-Larsen ging mit an Bord, der für die Polarausrüstung zuständig war (Kohl-Larsen 1931).

Nach fünf Tagen kehrte die Expedition erfolgreich zurück. Der Zeppelin hatte seine Bewährungsprobe als Meßplattform für magnetische Untersuchungen (Deklination mit einem Peilkompaß und Horizontalintensität mit einem Doppelkompaß) und aerologische Messungen mit der gerade entwickelten Radiosonde zur Untersuchung der Luftmassen unterhalb und oberhalb des Luftschiffs bestanden (Abbildung 6) (Berson, Samoilowitsch & Weickmann (Hrsg.) 1933).

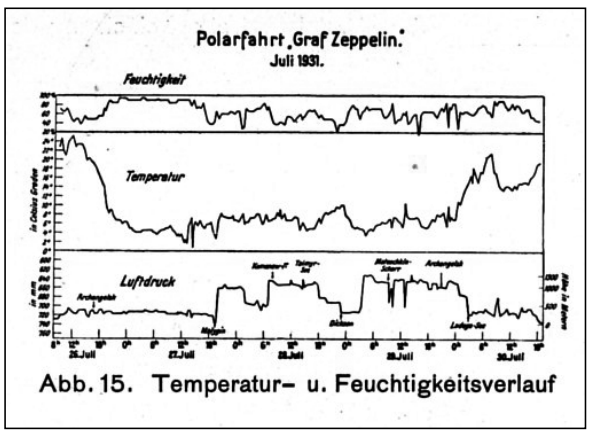

Abbildung 6. Meteorologische Datenaufzeichnung während der Expedition der Aeroarctic mit dem Luftschiff LZ 127 Graf Zeppelin in die russische Arktis (Berson, Samoilowitsch & Weickmann (Hrsg.) 1933: Tf. 17.)

Sehr viel Wert wurde auf die luftphotogrammetrische Vermessung der überflogenen Küsten gelegt, um damit neue Landkarten zu konstruieren. Wegen der sich verschlechternden Wirtschaftslage und den massiven politischen Veränderungen in Deutschland kam kein weiterer Forschungsflug mehr zustande und die Aeroarctic löste sich 1937 auf (Lüdecke 1995: 145) .

4.3 Zweites Internationales Polarjahr (1932–1933)

Die Anregung, das erste Polarjahr von 1882–83 nach 50 Jahren zu wiederholen, kam aus einer Sitzung des Forschungsrates der Aeroarctic Ende 1926 (Berson & Breitfuß 1927: 111, Heidke 1932b: 470). Der anwesende Meteorologe Johannes Georgi gab diesen Vorschlag an seinen Vorgesetzten, den Direktor der Deutschen Seewarte in Hamburg Hugo Dominik (1872–1933) weiter, dessen Vorgänger Neumayer seinerzeit ja das erste Polarjahr orga-

nisiert hatte. Dominik nahm die Sache in die Hand und präsentierte die Idee auf internationaler Ebene, indem er den Plan an den Vorsitzenden des Internationalen Meteorologischen Komitees Ewoud van Everdingen (1873–1955) weiterleitete, der wie Dominik ein Mitglied der Aeroarctic war (Heidke 1932a: 85, 1932b: 470). Als das 2. Internationale Polarjahr (1932–1933) beschlossene Sache war, wurde auf der außerordentlichen Direktorenkonferenz der Deutschen Meteorologischen Institute, die Anfang 1930 in Berlin stattfand, die Deutsche Polarjahrkommission mit Dominik als Vorsitzendem eingesetzt, die sich um die Vorbereitung des deutschen Beitrages kümmerte.

Kurz zuvor hatte man den Tod des damals prominentesten aktiven deutschen Polarforschers Alfred Wegener zu beklagen, der auf dem grönländischen Inlandeis umgekommen war. Nicht nur dieser Umstand, sondern auch die durch die Weltwirtschaftskrise bedingten finanziellen Beschränkungen reduzierten die offizielle deutsche Beteiligung auf intensivierte Messungen an bestehenden meteorologischen Stationen zu Land und auf Schiffen der Handels- und Reichsmarine. Auf dem Gebiet der maritimen Meteorologie und Aerologie war Deutschland damals führend. Zudem wurden aerologische Untersuchungen durch Flugzeug- und Radiosondenaufstiege verstärkt. Da offiziell keine deutschen Expeditionen stattfinden konnten, wurde die Möglichkeit einer Beteiligung im Ausland gerne wahrgenommen. Hierbei ergänzte man bestehende Programme durch spezielle Einzeluntersuchungen, wie in Rußland z.B. durch luftelektrische Untersuchungen, die Joachim Scholz (1903–1937, Assistent am Meteorologischen-Magnetischen Observatorium Potsdam) auf der Hooker-Insel (Franz-Josef-Land) durchführte, und durch seismische Eisdicken- und Luftschallmessungen, die Kurt Wölken (1904–1992, Teilnehmer von Wegeners letzter Expedition), während einer russischen Expedition nach Nowaja Zemlja vornahm (Heidke 1933, Wölken 1934). In Zusammenarbeit mit einer englischen Gruppe wurden in Tromsø Nordlichter und die Ausbreitung von elektromagnetischen Wellen beobachtet (Heidke 1933: 380–381).

5. Schlußfolgerung

In der Polarforschung kommt alles zusammen, die reine Forschung, das Abenteuer, das sich mit der Forschung tarnt, und die Abenteuerlust. Manche Polarforscher konnten dies voneinander trennen, manche jedoch nicht. Nachdem in Deutschland Polarexpeditionen von jeher wissenschaftlich ausgerichtet waren, hatten es Nichtakademiker traditionellerweise schwer, für ihre Pläne finanzielle Unterstützung zu finden. Im Rahmen großer internationaler Unternehmungen zählt das große Ganze, wobei die zusam-

mengetragenen Ergebnisse über Erfolg oder Mißerfolg Auskunft geben. Hierbei können einzelne beteiligte Expeditionen dramatische Abenteuer durchstehen, wie beispielsweise die Greelyexpedition nach Lady Franklin Bay (1881–1884) während des ersten Internationalen Polarjahres, bei der von 26 Teilnehmern 20 an Erschöpfung und Hunger starben (Barr 1985: 6–34). Andere Organisationen wie die internationale Aeroarctic setzten über Jahre hinweg alles daran, den projektierten Forschungsflug in die russische Arktis mit einem Zeppelin im großen Rahmen optimal vorzubereiten und erfolgreich durchzuführen.

Spitzbergen eignete sich durch seine Nähe zu Deutschland besonders gut, um Trainingsexpeditionen in hohen Breiten durchzuführen. Hier fanden die Anfänge der Luftschiffahrt in der Arktis statt und für weitere Untersuchungen wurde das erste permanent besetzte Forschungsobservatorium eingerichtet. Filchner erprobte für seine geplante Expedition in die Antarktis Ausrüstung und Begleiter und kartierte dabei Neuland. Schröder-Stranz hingegen war zweifelsohne den Abenteurern zuzuordnen, die sich ein wissenschaftliches Mäntelchen überwarfen, um ihre persönlichen Ziele zu verfolgen. Das katastrophale Ergebnis seiner unüberlegt und dilettantisch durchgeführten Vorexpedition nach Spitzbergen spricht Bände. Besonders in der nautischen Presse wurde damals diskutiert, was für die Gewähr einer erfolgreichen großen Expedition zu tun wäre (Behm 1913, 1914). So forderte Konteradmiral Behm 1914 auf dem VI. Deutschen Seeschiffahrtstag in Berlin eine staatliche Organisation für Polar- und Forschungsreisen.

Und Alfred Wegener? Er baute Schritt für Schritt sein meteorologisches Forschungsprogramm aus. Die Aufgabenstellung seiner letzten Grönlandexpedition war allerdings sehr umfangreich und konnte erst durch Expeditionen in den 1950er Jahren zu Ende geführt werden. Wegener verfügte jedoch nicht über die bei einer solchen Unternehmung dringend benötigten Managerfähigkeiten. Offenbar war die Expeditionsmannschaft zu groß und bestand aus zu vielen Individuen mit eigenen Vorstellungen, als daß er sie mit seinen bisherigen Erfahrungen adäquat hätte leiten können (Lüdecke 2000: 149–150). Ein Abenteurer wie Krueger, der ohne Kenntnis der örtlichen Verhältnisse auf Stefanssons Motto „vom Land leben" baute und dabei zugrunde ging, war er jedoch nicht. Er war nur nicht auf die ungewöhnlich widrigen Umstände vorbereitet, die trotz seiner Polarerfahrung alle akademischen Pläne zunichte machten. Bei der Betrachtung der Polargeschichte muß man sich immer beide Aspekte vor Augen halten. In einem Fall überwiegt die Forschung, in anderen das Abenteuer. Auch spielen unkontrollierbare Einflüsse wie das Wetter und die jeweilige Eislage eine entscheidende Rolle.

Abschließend sei an dieser Stelle an Max Grotewahl (1894–1958) erinnert, der nach seiner wenig erfolgreichen Spitzbergenexpedition (1925) ein

Archiv für Polarforschung gründete, um für spätere Expeditionen Informationen und Material bereitzuhalten. Aus dem Förderverein des Archivs entwickelte sich schließlich die noch heute bestehende deutsche Gesellschaft für Polarforschung (Lüdecke 1995).

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Dieser Artikel basiert auf Ideen, die publiziert wurden in C. Lüdecke (2007). "Sehnsucht nach Forschung oder Abenteuer?", in *Es gibt für Könige keinen besonderen Weg zur Geometrie*, ed. G. Wolfschmidt, Augsburg: Dr. Erwin Rauner Verlag (Algorismus, Heft 60), S. 371–382.

JOURNAL OF NORTHERN STUDIES 1–2 • 2007, PP. 81–94

EINAR NIEMI

North Norway

An Invention?

ABSTRACT The article has as a starting point the fact that regions are one of the central political topics of today. Though regions have certain roots in history, they were not politicized until the nineteenth century, when they were "invented" as a tool for identity-shaping and development in the fringe areas of the state. The article operates with North Norway as a case in analyzing modern region-building processes and state regionalization strategies. This region is well suited as a case because of its particular position as a border area and its unique position in Norway's political and economic history. The region-building process developed through distinct stages. In the 1970s North Norway came close to being understood as an identity region. Since the early 1990s, however, there have been fissures in this identity and the old regional visions have been under pressure from within as well as from without. In addition old tensions within the region have been disclosed. The most striking example is Finnmark, the northernmost county of the region, and of the nation as well, which through history has played a role in the margin. It is a kind of historical irony that the current development of the Norwegian "northern policy" programme together with the promising prospect of ocean-based oil and gas industry has put Finnmark in the forefront of future expectations.

KEYWORDS region, region-building, regionalization, transnational regions, Sami politics, Norway, marginal and fringe societies

REGIONS ARE ONE of the political topics of today. Currently Norway is set to undertake one of the most far-reaching governmental reforms ever, affecting both geographic divisions and levels of administration, namely a regionalization that is scheduled to take effect in 2010, re-mapping Norway's pattern of counties, *fylker* (Selstad et al. 2004, KOU 2004: 1, NOU 2004: 19). Similar reforms have been implemented or are planned in a great number of European countries, including the Nordic world.

In many ways North Norway represents an instructive case in the study of regions. First, thanks to substantial empirical data the regional history of North Norway offers good opportunities for testing theories on regionalism and region-building. Second, North Norway was among

the first regions of Norway to be defined as districts, *landsdeler*, larger than the county (*fylke*) and subject to state regional policy (*landsdelspolitikk*).

In order to provide some context for the ongoing debate on regionalization, it might be helpful to provide a historical sketch of the origin and evolution of North Norway as a concept, and of that part of Norway as a modern region. We will then discover that the idea of northern Norway, as a region in its own right, gained acceptance through the concerted efforts of an elite of regional enthusiasts. In this sense the region was "invented." However, we will also see that the idea of the region bestowing identity, though "invented," was nonetheless historically rooted – it was not invented *ex nihilo*. What we are dealing with is a regional building process that is probably unique in a Norwegian context, both in regard to the goals and to the organized use of means employed across distinct phases over time. The process is more or less representative of similar processes in many European countries.

Regions – really something new?

The claim has been made that Norway has historically been particularly strongly marked by the importance of regions, both in terms of administration and sources of identity (Rian 1997, 1998). Thus, there is undoubtedly evidence in the early historical records of the idea of separate parts of the country as regions and as "historical landscapes" and to some degree, administrative systems accommodated this awareness. However, it does seem to be the case that the emphasis on regions "from within" is a modern phenomenon. The major local governmental reform of the 1830s involved devolution of policy-making and administration to local communities, to municipalities and counties respectively (*Formannskapslovene*). But this reform represented in the main the demands of farmers for greater control of economic resources through local self-government, rather than any interest in region-building as such.

The first steps toward modern regionalism in Norway were taken as late as the end of the nineteenth century and the beginning of the twentieth century with the formation of historical societies, the publication of local newspapers, a consiousness of regional place names and political demands based on regional interests. Such regional tendencies are in evidence in Agder/Sørlandet, the southernmosts part of Norway (Slettan 1998, Andreassen (undated), Ohman Nielsen 1995, Bringa & Mygland 2001), as well as around Strilelandet, the coastal environments of Bergen (Døssland 1998, Døssland et al. 1999), in Møre and Romsdal, in the northwestern part of Southern Norway (Ljøseth 1996), in Trøndelag (Tretvik et al. 2005), and generally in

Western Norway (Helle (ed.) 2006). And last but not least, we find a climate for such ideas in Northern Norway, which we will soon consider in more detail.

On the one hand, this first phase of modern regionalism can be seen as an extension of and giving greater depth to nation-building and nationalism. The national project was not completed until the regional mosaic of the nation had been illuminated. But this phase at the same time represented a reaction to a one-sided aspect of nation-building: the emphasis on the higher interest of the nation, at the expense of regions, and on strong visions of national homogeneity. These tendencies can be found throughout Europe and the United States and in the scholarly world as well, with a focus on regions within the discipline of geography, whereas history essentially remained anchored in the idea of the nation (cf. Niemi 2000: 227).

With the exception of North Norway, however, the movement toward regionalism had more or less faded away in the years between the World Wars. During the post-war reconstruction period, regional mobilization was overshadowed by the rebuilding of the nation, in spite of signs of a dormant regionalism. However, in the 1970s, regionalism re-emerged with greater force as a result of ideological trends associated with the values of local communities, the movement for protection of the environment and culture, "roots" and identity formation. At the same time, the European Economic Community legislated a framework for regional policy which from the late 1980s has remained one of the main pillars of further development of the EEC, today the European Union. There is no doubt that the Community/Union has also been a stimulus towards late modern regionalism and regionalization outside its borders, as in Norway. The title of the French geographer Jean Labasse's book *L' Europe des régions* (1991) became a slogan for this change of political direction (cf. Veggeland 2000).

The "invention" of North Norway

As late as the second half of the nineteenth century, there was no term or name in common usage that applied to the whole northern region of the country, Northern Norway. Indeed there was no clear conception in the public consiousness of that part of the country as a distinct territorial entity. In more distant history, different terms had been used, but none that applied to the area as a whole. *Hålogaland* was originally used only in reference to Helgeland, the southernmost part of the later county of Nordland (*Nordland fylke*). But gradually, as the Norse settlement spread farther north during the Age of the Sagas, or the Early Middle Ages, the name came to encompass the area as far north as Malangen, immediately south of Tromsø, while

Finnmark remained outside, as "the land of the Sami." In the nineteenth century the only common term used for the whole of Northern Norway was Tromsø diocese (*Tromsø stift*), a usage which appears in the 1840s after Tromsø became the bishop's residence for the northernmost bishopric, in other words, the whole of Northern Norway. But, of course, it goes without saying that a term referring to the diocese was not a suitable general term or name for the region as a whole; thus, it never came into popular use.

In the nineteenth century as well as in earlier times, there were clearly historically conditioned notions of North Norway as a special area with distinctive characteristics – historically, topographically and culturally. However, the small group of now mobilizing regionalists had to create a name that could capture and unify their ideas and visions.

The name *Nord-Norge* ("North Norway") was created at a small gathering around a coffee table at a café in Kristiania (later named O*slo*) in 1884 (Niemi 1993, Tjelmeland 2000, Martinsen 2003, Niemi 2006b). The group consisted of students, artists, academics, and politicians from Northern Norway who belonged to the Association of Northerners (*Nordlændingenes Forening*) started in 1862, the first regional district association of its kind in the capital, in other words a kind of *diaspora* group. In this circle there are names like Sivert Nielsen, from Helgeland, member and later president of *Stortinget* (the National Assembly); Ole Olsen, composer from Hammerfest in Finnmark; Elias Blix, later professor, cabinet minister and hymnist; Ole Tobias Olsen, later pastor, folklorist, engineer and also known as "the father of the Nordland railway"; Anton Christian Bang, later professor, cabinet minister and bishop; Richard With, the father of *Hurtigruta* (the coastal express liner). Thus, this was an elite group, residing in the capital, generating visions of its own future, in the same manner as similar groups in other European capitals. Their point of departure was regional pride and the desire to settle the historical argument in opposition to the bureaucratic administration from above which had imposed a colonial-like status on Northern Norway. At the same time, the ideology was future oriented: these architects of regionalism were modernists with visions of a "land of the future" which would benefit from enormous natural resources that would raise the region from a state of backwardness to a developed, modern part of the country. These modernist visions were closely related to similar contemporary ideas of Norrland, the northern parts of Sweden (cf. Sörlin 1988).

Nord-Norge ("North Norway") was a felicitous choice of name in the context of visions and ideas, yet it was simple and rooted in history as well as in geography and culture. It was akin to the old concepts *Nordlandene* ("the Northern Lands") and the *nordafjeldske* (the land north of the mountains

ending at Dovre) respectively, and it had parallels in names like *Vestlandet* (West Norway) and *Østlandet* (East Norway) which occasionally were used at this time (Helle (ed.) 2006: 17–19). The name signalled that the region was *Norwegian* – a part of Norway. There was to be no suggestion of any form of segregation or any hint of separation, a sensitive question relating to the far northern borderland during the nation-building project of the nineteenth century. The name also emphasized the special geographical dimension of the north as a main identity marker, as well as to notions of a northern culture, for example represented by the Sami and the peasant–fisherman society. And finally, the name signified a decoupling from the historical baggage represented by the Age of the Sagas and national romanticism and the mental block that this weight of history had created against the modernist project (Niemi 2001a).

The name did not, however, come into common usage quickly in spite of aggressive marketing, though it appeared from the very start in certain contexts, for example as part of the name of newspapers and voluntary associations. It was not until the period between the two World Wars that the name really caught on as a result of political parties making the development of North Norway part of their platforms. The "region builders" had a significant influence on this process. But the name did meet with some competition from the name *Hålogaland*, which still survived and gained acceptance especially within the arts and humanities; cf. *Hålogaland historielag* ("Hålogaland Historical Society"), and the regional history journal *Håløygminne*, which was first published in 1920. Even today, Hålogaland has been used for new initiatives and institutions, such as *Hålogaland teater* ("Hålogaland Theatre"). Another example demonstrating the use of the name to-day, is the building of a separate, but not yet formalized local region encompassing the north of Nordland county and the south of Troms county, the so-called *Hålogaland region*. Thus the competing name *Hålogaland*, in spite of its heavy burden of historical heroism and romanticism, has been very tenacious until the present day. However, *Nord-Norge* ("North Norway") actually turned out as the winner as early as the interwar period in the sense that the designation was adopted as the official name of the whole region, and as such, it has never since been contested.

Building North Norway

The development of North Norway as a region occurred across distinct phases, a process which is in keeping with the ideas on phases in theories on national and regional development, especially that of the Czech historian Miroslav Hroch on different historical phases (Hroch 1985) and of the

Finnish geographer's Anssi Paasi's model of regional institutionalization (Paasi 1986, 1996).

The first phase lasted from about 1860 to 1914 in which *Nordlændingenes Forening* was the main region-building instrument. Thus this was a phase when regionalism was mainly a concern of an elite residing in the capital whose main mission was to create a consciousness of the northern region, not least of which involved the use of symbols, with the choice of a name as the most important. But other symbols were also employed, such as landscape photos and photos of the well known northern fishingboat, *nordlandsbåten*, with its links back in time to the Viking ship, all of which were associated with distinctive aspects of the North. The regionalists mobilized during the elaborate national centennial celebration of the constitution in 1914, when they reminded people that northern Norway was often overlooked in the national context.

The second phase lasted from 1914 to the Second World War, a phase characterized by knowledge production regarding northern Norway and the creation of an action programme for the region; the latter was often presented under the heading "Northern Norwegian Rising." The regionalists took advantage of and disseminated the extensive research that was being produced at this time on the region within many disciplines and fields, both in terms of consciousness-raising and identity-building as the basis for new initiatives. At this stage, a number of region builders in the north came on the scene and made common cause with the old elite in the capital. Public officials and merchants were particularly prominent among them. The new programme being developed encompassed a range of concerns, such as demands for cultural and educational institutions, modern means of communication, industrial development, improved organisation of imports and exports from north Norwegian harbours, etc. In the 1930s, this work began to bear fruit insofar as north Norwegian political concerns became important issues on the national political agenda, and as such were dealt with in political programmes and campaigns. A significant number of measures aimed at regional development were actually implemented.

At the outbreak of the Second World War, North Norway was in the process of becoming a kind of administrative region or "periphery" or "front region" with hints of an identity region in the making. Many people felt or wanted to feel like a *nordlending* (a person from the North, a Northerner) and the conscious use of both *nordlending* and *Nord-Norge* undoubtedly contributed to the development of identity. To some degree, the regionalists exploited the widespread fears of the "the Russian danger" in their arguments for special measures: if the nation did not take responsible action, North Norway could fall victim to the powerful neighbour in the northern bor-

derlands. At the same time, the region builders emphasized that region and nation building went hand in hand – they were two sides of the same coin.

The third phase, a kind of interlude, lasted until roughly 1970, a period when organized regionalism and institutionalization played a modest role. The period was characterized mostly by reconstruction after the devastation of war and of new economic and social initiatives (Tjelmeland 1997). However, interestingly enough from our point of view, North Norway was viewed as a special regional case. Thus, in the early 1950s the first plan by the national government for regional development involved North Norway exclusively (*Nordnorgeplanen)*. A few years before, in 1947, the development centre for north Norwegian trade and industry (*Studieselskapet for nordnorsk næringsliv*) was founded, a for-profit organization acting in the interests of businesses, organizations, municipalities, and counties, in order to promote economic development in the region. In this phase, with national and regional economic plans focusing on solving "the problem of North Norway," there was little room for building identity on the foundation of the arts and humanities. However, certain initiatives along these lines were taken, such as founding the *Hålogaland Amatørteaterselskap* (the Association for the development of a regional theatre in North Norway) in 1954, with the mission to promote the "North Norwegian language on a North Norwegian stage." Other examples would be the establishment of *Festspillene i Nord-Norge* (the Musical Festival of North Norway) in 1964 and of *Nordnorsk kulturråd* (the North Norwegian cultural council) of the same year – actually before the Norwegian Cultural Council at the national level saw the light of day.

The fourth phase lasted from about 1970 to roughly 1990, eventually with identity-building being a central concern and strongly linked to cultural institution building. The shared north Norwegian identity has hardly ever come closer to being realized than at this stage. Identity building found expression in a range of cultural developments, such as extensive organization of museums and historical societies, a flourishing of research and publishing in local and regional history, the establishment of *Hålogaland teater*, the first professional theatre in the region, and *Nordnorsk Magasin* (the north Norwegian magazine), a vibrant and dynamic mouthpiece for northern identity. There was an upsurge of popular songs with north Norwegian themes, as well as a national breakthrough for north Norwegian football, which rounded out earlier north Norwegian successes in winter sports. The district community colleges and the University of Tromsø made their contribution through the work of scholars and scientists which in some measure could both confirm and promote regional identity. A special commission established in 1974 to deal with concerns of importance for

North Norway (*Landsdelsutvalget for Nord-Norge*) made its contribution to the image of the region within social planning and development.

North Norway in decline?

In a fifth phase of the modern history of North Norway, from about 1990 until the present, questions have been raised about both regional identity and the old idea of one unified region. Fissures have emerged in the image of North Norway as an identity region; there are disconcerting signs of decline, and the region seems threatened by both internal and external forces.

To begin with, a new generation in this phase has not recognized itself in the images of the region and of "the Northerner" (*nordlendingen*), developed and almost canonized in the preceding phase with references to metaphors like "skiff and skerry" (*sjarken og støa*) and the symbols like Oluf i Raillkattlia, a well known north Norwegian comic with a far-reaching effect on north Norwegian identity-shaping in the 1960s and 70s. In the new phase regional discourses have revealed anti-essentialistic conceptions of identity with a contrary emphasis on flexibility, location, "creolization," etc. Similarly, younger social scientists have opposed aspects of the interpretation of modern North Norwegian history and society that was developed in the 1960s and 70s. Thus, the pioneer and the giant among north Norwegian social scientists, Ottar Brox, has suffered "parricide" although there is still considerable support for his basic theses on north Norwegian economy and society, first presented and elaborated in his classic study *Hva skjer i Nord-Norge?* ["What happens in North Norway?"] from 1966 (Brox 1966, cf. Brox 1997). A clear sign of the break with conventional wisdom of the past is the never-ending public debate on the Northerner about who he/she actually is, and about who has the legitimate claim to be the "authentic" Northerner (cf. Eriksen (ed.) 1996;, Tjelmeland 1996, Thomassen & Lorås (eds.) 1997, Fulsås 1997, Arbo 1997, Thuen (ed.) 1999, Jaklin 2004: 463–64, 470–477).

Secondly, new ideas about regionalization have come to the fore in the region, stimulated by neo-liberalism, centralism, structural changes in the economy, and by trends in general regional ideology. Several examples of institutional indifference to north Norwegian regional initiatives demonstrate that a decline from within has already occurred, such as discontinuing local regional efforts in the organization of arts, Norwegian Broadcasting Corporation's (*Norsk rikskringkasting*) dismantling of regionally anchored organization and transmission, the prioritizing of county-level ambitions at the expense of north Norwegian regional efforts, the evolution of colleges into engines of local development, etc.

Thirdly, the pressure from outside is divisive in several respects. One

issue is the linkage between regionalism and ethnic mobilization, particularly with regard to indigenous policy and the Sami Parliament. The Sami Parliament, established in 1989, is a Norwegian "national" institution, but the Sami are an indigenous people spread across several countries within a "homeland territory," Samiland/Sápmi, which in different contexts embodies an idea of a separate transnational region (Niemi 1997: 67 ff., 2001b: 35 ff.). Furthermore, international regionalization demands political resources and attention. On the one hand, North Norway is an integral part of the Barents Euroarctic Region and cooperation initiatives in the Arctic area of the Scandinavian countries and the Kola peninsula (Dellenbrant & Olsson (eds.) 1994, Stokke & Tunander (eds.) 1994) established in the 1960s and 1990s respectively. But on the other hand, there are tendencies for counties orienting themselves in different directions within the international cooperation of the region – such as Nordland towards St. Petersburg, and Finnmark towards Murmansk and Archangelsk.

Finally, there will be further pressure on North Norway as a region coming from developments in the Barents Sea – "the last frontier" – with its tremendous possibilities projected within the gas and oil industry. Thus far, there is activity related to this field only in the far north, with the opportunities that open up for Finnmark in particular. If the sea territories further south, that is the Norwegian Sea north of Helgeland, is not opened up for exploration, there will be a geographical asymmetry in developmental potential, and the local region most relevant in this context, Vesterålen and Lofoten, would be losing out and would become economic backwaters, as claimed by Nordland and Troms politicians. Environmental concerns constitute one set of issues which may contribute to such asymmetry, in particular the concerns for the Lofoten fisheries, the world's largest cod fisheries.

Regions within the region, peripheries of the periphery

In the wake of all the reports and research findings related to regionalization lately, there is especially one important issue facing political groups in the peripheries' struggle with small and diminishing populations and low employment: Will new regional boundaries work to the advantage or disadvantage of the peripheral area in question (cf. Pedersen 2006)? The question is especially urgent in Finnmark, where the county level assembly has recently passed a resolution stating that the county of Finnmark should remain a separate region even after the administrative reform – whereas some municipalities within the county are of a different opinion.

Because of Finnmark's peculiar position and role in the current political debate – and because of the necessity to realize that there more often than not are regions within the region – I will conclude with a historical overview of the issue of Finnmark as a special part of North Norway, and of the country as a whole for that matter. Over and above the political issues of any given day, are there not historical factors that can explain the scepticism in Finnmark against the county being integrated into the larger north Norwegian region?

Finnmark has clearly had a historically unique position in the history of Norway (Niemi 2006a). It was settled by Norwegians later than any other part of the country, and Finnmark is still the land of the Sami, *par excellence*, as the name indicates (*Finnmark*, from *finner* 'Sami'). The great waves of immigration have also given the history of settlement in Finnmark a unique character. This is particularly the case with the immigrants from Finland, called *kvener* (*kvæner*) in Norwegian, who have acquired their own distinct ethnic profile through their cultural encounters in the north. Similarly, the political incorporation of Finnmark within the nation state of Norway also highlights particular historical features of Finnmark, which is indeed the youngest part of the country. This came about initially when the Swedish-Norwegian northern border was drawn in 1751, with the inclusion of Kautokeino and Karasjok within Norwegian territory, and in 1826 when the Russian-Norwegian border was agreed, when South Varanger was included into the Norwegian territory. These circumstances contributed to the image of Finnmark as "a frontier," a dynamic borderland with great opportunities for settlement and economic development (Brox 1984, Niemi 2005a, 2005b).

Another salient feature of the history of Finnmark is the prolonged efforts by the national government to integrate the county within the state, in the face of stubborn cultural and ethnic resistance. A number of projects along these lines have been launched over time, in due course stimulated by conceptions of state building, nation building, and welfare state building, with varying means employed, from economic policy to missionary activity, from minority policy to defence policy, etc. Many of these policies put a stamp of inferiority on the area and its people, especially in the harsh assimilation minority policy era – the *Norwegianization policy* – from the middle of the 1800s to at least the Second World War (Eriksen & Niemi 1981, Niemi 2006c). At the same time, the focus of tourism on Sami culture gave a lustre of exoticism to the whole county. The perceptions of historical injustice, being used and exploited and relegated to colonial-like status and the experience of being discriminated against, have hardly been more intensely felt in any other area in the North than in Finnmark.

Throughout all this, actors in and from Finnmark had the experience of

the county being *different* even within the north Norwegian context. The people of Finnmark were not "real" *nordlendinger* in spite of the fact that North Norwegian regionalism applied to North Norway was a whole. There was and is still a widespread feeling that it is more appropriate to refer to oneself as a *finnmarking* than a *nordlending*.

The somewhat tense relationship between Finnmark and the rest of North Norway was clearly in evidence even in the early phase of north Norwegian regionalism; the "us-and-them" rhetoric was at work. One instance can be documented in the correspondence between two individuals who belonged to the elite who were advancing the project of North Norwegian regionalism. The individuals involved were the composer Ole Olsen, residing in the capital, and the poet Julius Bauman, who had emigrated to America and was engaged in the regional project from there. In their private correspondence they reveal that as *finnmarkinger* they had encountered an attitude that assigned "an essential difference in rank" between people from the counties of Nordland and Troms on the one hand and Finnmark on the other. The former perceived themselves as a people with an old and heroic history going all the way back to the great Hålogaland chieftains of the Saga Age and to the famous north Norwegian pastor and poet Petter Dass, often named the first Norwegian poet as well, and "true" north Norwegian culture, whereas people from Finnmark could essentially be passed over historically and culturally. According to Ole Olsen, any attempt to identify oneself as *finnmarking* invited indifference or ridicule (Niemi 2001a: 64–65). Through numerous encounters of this kind, the people for Finnmark were confirmed in their belief that they were perceived as existing on the margin of the region, in a periphery of the periphery, in a region within the region.

The Second World War and the reconstruction work after the war further contributed to the image of Finnmark as a separate territorial entity, which in some way included the northern part of Troms county as well. The scorched earth tactics of the German occupying power was a disaster that befell only the area north of the fjord of Lyngen in northern Troms. The reconstruction was thus organized with a local regional focus, among other things, through a separate Finnmark office, *Finnmarkskontoret* (Hage 1999).

The recent Sami mobilization and the rights issues that have been raised constitute a new development that further highlights the distinctiveness of Finnmark. The Sami Rights Commission, appointed by the government in 1980, finished its report on the general legal principles of minority and indigenous rights in 1984 (NOU 1984:18), and then it went on to concentrate exclusively on legal issues applicable to Finnmark, an undertaking that was brought to its conclusion in 1997 (NOU 1997:4). One of the results of this undertaking is *Finnmarksloven* (the Finnmark Act), adopted by the National

Assembly in 2005, and implemented 1 July, 2006. The Act places the entire land area of Finnmark at the disposal of the people of Finnmark, as represented by an executive committee chosen by the Sami Parliament and the County Assembly (*Fylkestinget*); the area has been officially designated as *Finnmarkseiendomen* (the property of Finnmark). In other words, this involves – in a Norwegian context at least – a unique transfer of autonomy to a regional body. The Finnmark Act is a clear recognition that Finnmark has a unique legal history, that the state has committed violations of rights throughout history and that the time has now come to right the wrongs of the past. That said, the people of Finnmark are strongly divided about the possible long-term effects of the Act.

Finnmark has also emerged with an especially interesting profile in a regional perspective, given the new relationship to north-western Russia after the end of the Cold War, the oil and gas industry in the Barents Sea, and "the Polar policy" of the Norwegian government (*nordområdepolitikken*, cf. NOU 2003: 32). In conjunction with the Finnmark Act, these developments may exemplify a new historical phase: a county with administrative autonomy over its territory, and with a strong hand to play given its geographic position and close involvement with almost every aspect of Norwegian polar policy.

In the years between the two World Wars, the North Norwegian regionalists dreamt that one day the people of the North would become "masters of their own destiny." The people of Finnmark are perhaps no less entitled to entertain similar dreams today.

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JOURNAL OF NORTHERN STUDIES **1–2 • 2007**, PP. 95–122

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Liminality, Rock Art and the Sami Sacred Landscape

ABSTRACT The paper suggests that cultural landscapes were permeated by religious meanings in all pre-modern societies, including Sami societies before c. AD 1600. We suggest that knowledge of this sacred landscape was not restricted to an elite or to shamans, but was widely shared. For the Sami, religious rituals and associated images (e.g. rock art) involved all levels within a social hierarchy that linked the individual adult or child, the family, the band or *sijdda*, and the association of family groups or *vuobme*. We can decode the sacred landscapes of such societies if we can reconstruct sites of perceived anomaly and liminality in the landscape. This is discussed in the article with reference to Proto-Uralic cosmology in general and the Sami world-view in particular. The concepts of anomaly and liminality enable us to interpret the Badjelánnda rock art site in Laponia, northern Sweden, as not only a place of resource procurement (asbestos, soapstone) but also a sacred site. We suggest that the Badjelánnda site should be seen as a gateway to the Underworld, and therefore visits for quarrying, human burials at the site, or wild reindeer hunting in the vicinity were marked by ritual acts, directed perhaps towards the Sami female deity *Máttaráhkká*. The rock art should therefore be interpreted as an aspect of religious ritual, and in a context where anomalous topography signified that the Badjelánnda site was necessarily a liminal place.

KEYWORDS liminality, rock art, cultural landscape, sacred sites, Proto-Uralic cosmology, Sami religion, soapstone, *Máttaráhkká*, Badjelánnda, Laponia

Introduction

How can the 'sacred' aspects of landscape be defined? To broaden the question, how can the division between 'sacred' and 'profane' be understood, and can these concepts help us to reconstruct the cultural landscapes of past societies? In this paper we approach these questions through the related concepts of 'anomaly' and 'liminality'. We shall argue that more rigorous definitions are needed if we are to adopt the more holistic view that archaeologists like Bradley (2000) and Insoll

(2004) have advocated. Our case-study is the Badjelánnda site in the Laponia World Heritage area in northern Sweden, where scratched images of anthropomorphs, boats and reindeer have been found. We have documented these images in a full-length research monograph, where we also propose a chronology and offer interpretations of both their iconic and symbolic meanings (Mulk & Bayliss-Smith 2006). In this article we expand on our interpretation of the Badjelánnda site as a sacred place as signalled by its topographic anomaly and perceived liminality.

The Badjelánnda site consists of a small hill bounded by cliffs, and is located in the zone of alpine vegetation in the Scandes mountains about 700 metres above sea level. Today, Laponia is an area of summer grazing for reindeer as well as a popular tourist destination and a region of nature conservation. Formerly it was a place for hunting wild reindeer, for fishing, and, at the Badjelánnda site itself, for the quarrying of asbestos and soapstone (Fig. 1). The site exemplifies the problems of archaeological interpretation that occur in cases where, self-evidently, the use of a site seems to make sense purely in terms of an 'economic' rationale. We believe, however, that the Badjelánnda site was seen as a sacred place, and that during visits to the

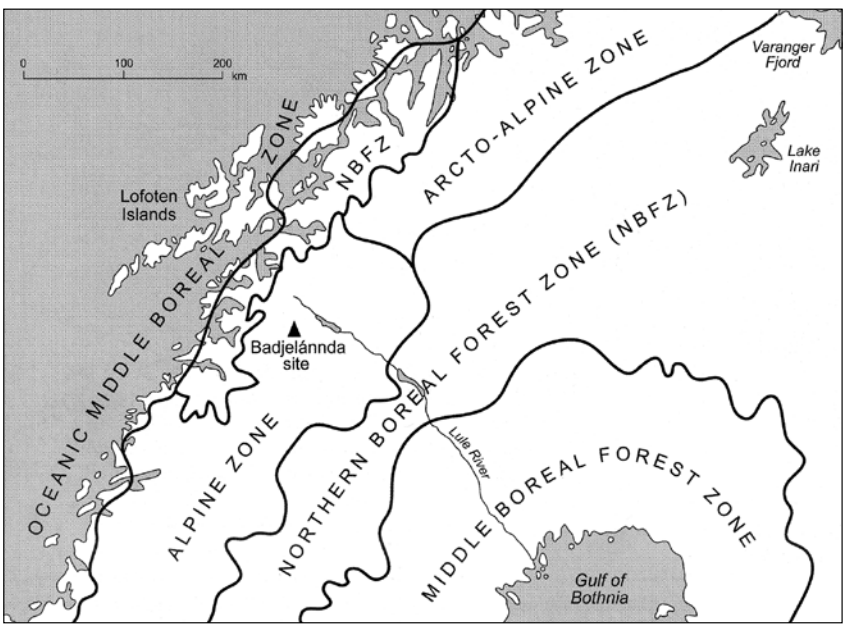


Fig. 1. Map showing location of the Badjelánnda site, and also boundaries of the major physiographic-vegetation zones (after Påhlsson (ed.) 1984).

site the Sami carried out rituals in which the scratched images ('rock art') played some part.

For an understanding of 'the sacred', cultural landscapes have proved to be a useful integrating concept (e.g. Schanche 1995, Mulk & Bayliss-Smith 1998). Ethnographic studies have shown that a strong emphasis on the sacred as an aspect of landscape is justified, except perhaps in western/urban/industrial societies. Arguing from ethnographic evidence, Richard Bradley suggested

> that many features of the landscape might have special powers. They could play their part in a mythical narrative and their significance might well be interpreted and reinterpreted from one generation to the next. Places that were left entirely unmodified might be among the most significant to those who visited them: rivers could assume special properties; the paths crossing the landscape recreated the movements of the ancestors; and entire areas of the country might take on a sacred character. [...] Such information could be lost to field archaeology, even though it plays a crucial role in defining land rights in the present. The everyday landscape that offers food and shelter for those who live there might also provide a means of interpreting the world. (Bradley 2000: 28–29.)

Yet most archaeologists come from western/urban/industrial cultures in which such ideas are foreign, and their religious beliefs, if any, do not match the 'sacred landscape' world-view. Particularly when wedded to a positivist or evolutionist methodology, such scholars may have difficulty in empathising with the religiosity of the world majority, past and present. In his book *Archaeology, Ritual, Religion* Timothy Insoll (2004: 22) estimates that today perhaps 80 per cent of the world's population live lives in which "religion provides the overarching framework for other aspects of life, at least as outwardly manifest." If, for most people today, technology, diet, refuse patterning, housing, gender relations and landscape perception are all influenced by religion, why should this not also be true of the past?

Insoll concludes that the expected norm for prehistory is for religion to permeate all aspects of life, providing for people the basic structure into which their secular concerns are fitted. Yet 'the sacred' and 'the secular' can often be hard to separate in a landscape. Using as an example the Bambara in West Africa, Insoll suggests that the interweaving of natural places with features created by human action and invested with spiritual meanings makes a rigid division between sacred and secular difficult to achieve. Making such a distinction is also complicated by variations in perception, with some groups having more access to knowledge of the sacred landscape than others, and some individuals having more interest in such things (Insoll 2004: 91).

By focusing on the concepts of anomaly and liminality, we aim to show how cultural landscapes like the Badjelánnda site can be decoded. We first need to understand these landscapes using the broader perspective, both social and religious, that is provided by research on other northern hunter–gatherer-fisher societies. To reconstruct this context we need to expand our view from Sami archaeology, in order to incorporate insights from the ethnography and cosmology of other Finno-Ugrian societies. There is evidence to suggest that Sami religion shared some features with Nordic religions in the Iron Age and Medieval periods. However, there seems little doubt that Sami cosmology originated in interactions with other Eurasian hunting societies in the post-glacial period. The present-day relict distribution of Finno-Ugrian languages and peoples extends from northern Scandinavia eastwards as far as Siberia, and this wider cultural context can provide some useful insights into the beliefs that structured Sami cultural landscapes.

The social organisation of sacred acts

In hunter–gatherer societies knowledge of the landscape and what it signifies is rather widely shared, at least among adults, because social difference and gender divisions are much less marked than in most agrarian societies. Much of the ritual that connected people to the spirit world was not restricted to a special elite, for example shamans, but was instead part of everyone's everyday activities. Peter Jordan (2001) has argued that in most discussions about north-Eurasian hunter–gatherer cultures, too much emphasis has been put on the role of the shaman:

> Drawing on a case-study from the Siberian Khanty, I will argue that the actions of the shaman form but one, albeit celebrated, dimension to a much wider dialogue between human and spiritual domains. In this broader field of communicative contact the actions of creation, use and deposition of material culture form the essential media of communication. (Jordan 2001: 88.)

The Khanty are hunter–fishers who live in the Ob river region of western Siberia. They speak a Finno-Ugrian language that, like the Sami language, can be traced back to common Proto-Uralic roots. Jordan's model for the social organisation of sacred acts among the Khanty is shown in Fig. 2. Rather than acts of communication being restricted to an elite, everyone, even children, acknowledge the existence of the spirit world on a daily basis, for example by following routine taboos concerning the sacred groves and the deposition of bones and discarded clothes. Minor but rather frequent acts of sacrifice (Khanty *pory*) involve almost all the adult population. It is only the

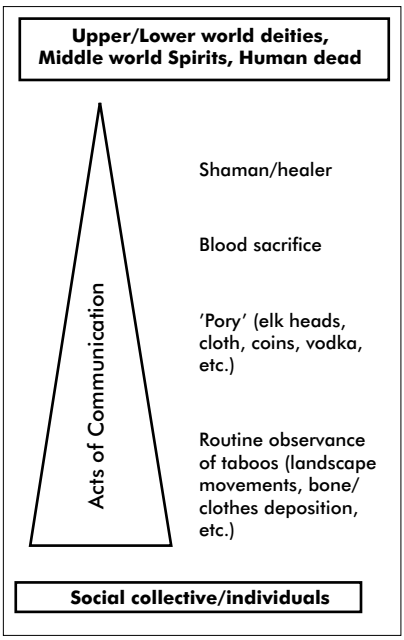


Fig. 2. Jordan's (2001) model showing the various acts of communication that link the Khanty human and spirit domains, and suggesting a restricted role for shamans by comparison with the more frequent and more widely distributed ritual acts of other groups in society.

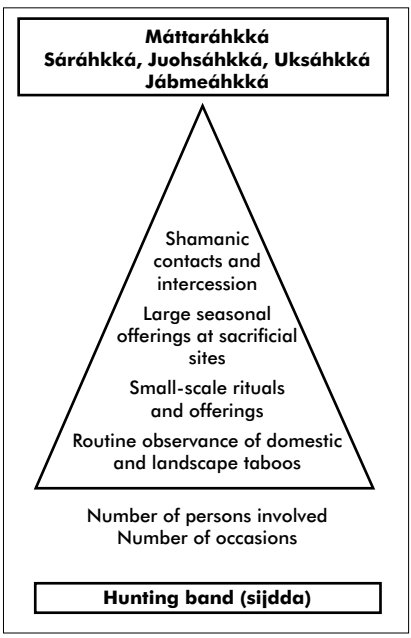


Fig. 3. A model for Sami hunting society (Mulk & Bayliss-Smith 2006: 91) indicating the wide range of religious practices that linked members of the sijdda with Máttaráhkká and other primary deities, and suggesting that sacrifices, offerings and ritual observance were widely shared as well as widely dispersed in the sacred landscape.

larger-scale blood sacrifices occurring seasonally that might be restricted, for example to expert hunters. The occasional intercession of the shaman or healer, although spectacular, only involves a few people, and shamanising is confined to the dwelling place rather than leaving some material trace in the wider cultural landscape (Jordan 2001, 2003).

This model can readily be transposed to the Sami past, and it provides a useful structure for understanding the relations between the Sami and their prime female deity *Máttaráhkkhá*, for example (Fig. 3). At the family level *Máttaráhkká* and her three daughters were acknowledged by everyone in the routine observance of taboos, such as the division of space within the tent (Swedish *kåta*) between male–north–blood and female–south–milk, and by making everyday token sacrifices of food and drink (Ränk 1955, Manker 1957, Mulk 1994, 1996).

In this society the most individualistic acts of communication were those of the Sami shamans (Lule Sami *noajdde*) who were engaged in divination and acts of intercession with the deities by transporting their souls

to the Underworld while in a state of trance (Hultkrantz 1978, 1992, Bäckman 1975). There is no evidence from historical sources that the *noajdde* performed any wider social role (Laestadius 2002), and Hultkrantz (1978: 53) doubted that the person officiating at sacrifices was necessarily a *noajdde*, although sometimes he might have had this position.

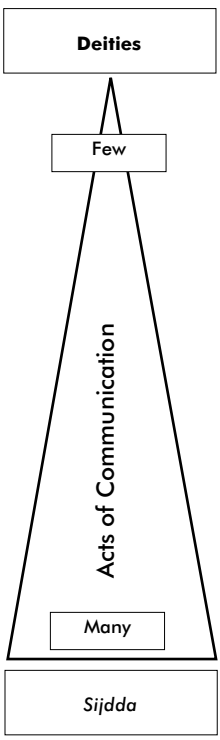
Instead, sacrifice in Sami society was an act carried out by adult men and women at the family level. Everyday offerings to *Máttaráhkkhá* and other female deities often took place inside the dwelling. Other deities were the focus for small-scale ritual offerings at shrines sometimes placed on small wooden platforms (Lule Sami *luovve*) and often situated on the north side of the settlement (Rheen [1671] 1897, Mulk 1994). Laestadius, writing in 1840, reviews the eighteenth century sources and concludes that "brushing the idol's image with blood and fat was the practice in all sacrificial situations" (Laestadius 2002: 152). Funerals were also occasions for ritual at family level, the main participants being the close kin of the dead person (Pettersson 1957).

The organisation of space in and around the family dwelling reflected the concepts of sacred and profane that everyday rituals both reflected and reinforced. There was a gendered division of space within the dwelling (Sw. *kåta*) itself. Daily small-scale offerings to *Sáráhkká* (*Máttaráhkká*'s daughter) were made in the central hearth. The main south-facing doorway was for general use, but the northern door was restricted to men and was used only for bringing meat and fish into the dwelling. Outside on the northern fringes of the settlement were the places for animal slaughter, processing and meat storage. Located further away to the north were the holy places and shrines visited for more occasional offerings. Men, women and children moving through this landscape would at all times have been aware of sacred ('liminal') boundaries, gendered taboos, and the various signs of ritual observance (Mulk 1994: 203–217, Kleppe & Mulk 2006).

At a more aggregated level of activity than the family, task groups consisting of closely related families, or several men (for hunting), or several women (for fishing) would have worked together on a more occasional basis, or seasonally. The Sami equivalent of the Khanty blood sacrifices were the large-scale rituals involving adults from several families, such as women at the start of the salmon fishing season in summer (Terebikhin 1993), and groups cooperating for the wild reindeer hunting (Vorren 1978: 265f., 1980: 247f., Sammallahti 1982). It would have been a task group that quarried stone at the Badjelánnda site, and as in these other cases, religious ritual would have been part of the activity.

Sami Hunting Society

In fact, for Sami hunting society in the interior of northern Sweden before c.1600 the situation was more complicated than the Khanty model suggests, because individuals related not just to their families and task groups within the local band (Lule Sami *sijdda*) but also to social institutions at a higher level in the overall structure (Fig. 4). In Mulk's (1994: 186–195) reconstruction of social organisation in the Lule river valley, there were four *sijdda* that made up an integrated regional network (*vuobme*) of about 1,000 people. Each *sijdda* consisted of a set of related families totalling 200–350 people and occupying a large territory of about 20,000 sq. km of boreal forests, foothills and mountains. Within this *sijdda* territory people moved seasonally, following the wild reindeer migrations and taking advantage of local and seasonal opportunities for fishing, hunting fur-bearing animals, and communicating with outsiders.



Means of Communication	Principal actors	Main occasions	Material remains
Shamanic drum divination, sorcery and trance experience	Shamans *(noajdde)*	Times of crisis (infrequent, unpredictable)	Shamanic regalia, costumes, drums, etc.
Blood sacrifices and offerings at special shrines	Hunters of large game (wild reindeer, elk)	Animal slaughter during seasonal migrations (especially autumn)	Offerings at sacrificial sites (meat, antlers, jewellery, coins) + ROCK ART
Regular small-scale sacrificial offerings	Hunters of small game, fishers, collectors of natural resources	Other occasions for hunting, fishing, quarrying, etc.	Token and ephemeral offerings, *siejdde* stones + ROCK ART
	All adults	Births, deaths and marriages	
Routine observance of restrictions and taboos	Everyone – men, women and children	Day-to-day actions and movements in the home and in the landscape	Almost no material trace

Fig. 4. The totality of act of communication with deities and spirits in Sami hunting society, showing frequency of ritual acts, size of the social unit involved, and number of places in the cultural landscape that were affected. This model proposes a role for rock art at the intermediate level of family or task group, within the overall social and ritual hierarchy.

At family, *sijdda* and *vuobme* levels these different activities would have required co-operation at different social and spatial scales, both for ritual acts and for economic activities. For example, membership of the sijdda brought with it the obligation to participate in collective hunting but also the right to share in the meat and skins gained by this activity. While prestige as a successful hunter might accrue to the individual, many of the rituals that accompanied the killing of animals were organised collectively, and were carried out at sites close to where the co-operative hunting or fishing activities were taking place.

In the above reconstruction of Sami hunting society co-operation and sharing are recurrent themes, but the giving and receiving of gifts was a principle not confined to the material world. Reciprocity was also a feature of the relations between people and the divine powers. To understand the social and ideological meaning of sacred sites, it is important to consider sacrificial offerings as a form of gift. It may be significant that the Sami word for 'sacrifice' and 'gift to the gods' is *vaerro*, a word that also means 'tax' (Fellman 1906, Solem 1933: 246f., Mebius 1968).

For the Sami the giving of gifts to the gods would have corresponded exactly to the giving which was part of their everyday life, as well as signalling exceptional happenings. Sacrifices to the deities must have occurred at various levels in society, taking place during the periodic gatherings of elders, being enacted by large or small groups during hunting and fishing trips, or occurring to mark special occasions in the life of a household. Such rituals must have happened at each level in society: (a) the regional network, *vuobme*; (b) the association of family groups, *sijdda*; (c) the family; and (d) the individual (Mulk 1994: 187f.).

Religious rituals were one of many collective activities that helped to maintain social networks and an egalitarian social structure (Mulk 1996). Interactions within the *sijdda* most probably integrated several functions at the same time. The council from the different *sijdda* communities met to resolve problems affecting the *vuobme* as a whole, while the people in general met in order to exchange goods, make marriage alliances, perform religious ceremonies, etc. The religious ceremonies were most probably carried out at special places whose location and significance was a form of knowledge shared by the entire society. Easy access was important, so the most important sites needed to be in close proximity to winter settlements, other base camps, transit camps, or hunting and fishing sites. The winter settlements were particularly important for ritual fellowship, and in addition they were the major centres for trade in goods from faraway places (Mulk 1994: 30f., 247f.).

At the largest normal scale of aggregation, the band of related families

sharing a *sijdda* territory would have organised a collective blood sacrifice on those few occasions when the whole *sijdda* was living or working together, probably at times of autumn reindeer hunting and midwinter residence at the base camp. The most celebrated sacrificial sites, for example Sájvva near Gällivare, were probably visited by people from different *sijdda*, or may have been used on the rare occasions when elders from *sijdda* within a regional network, *vuobme*, came together (Mulk 1994: 186f., 199).

Rock art and the Sami *sijdda*

We interpret the material evidence for anthropomorphic and zoomorphic imagery in the Sami cultural landscape as more likely to reflect intermediate levels in this hierarchy of sacred acts performed at different levels of social aggregation. Images at the Badjelánnda site, for example, should not be seen as reflecting the esoteric knowledge of *noajdde*. Instead, we believe the images were produced by persons who shared 'shamanistic' beliefs about the world but who were not themselves necessarily shamans. After reindeer hunting in the vicinity of the Badjelánnda site, or after visits there to quarry soapstone, or because of the wish to revisit a place where ancestors were buried, rituals and offerings were made for which the images on the rock played an important role. It could well be that *noajdde* as such played no part in this activity, except in his everyday role as hunter, quarryman or participant in sacrifices to the ancestors.

How did the use of this site relate to the social organisation of Sami hunting society? Archaeological reconstructions of prehistoric northern Fenno-Scandia have been based on models that predict a hierarchical structure of individuals, families, task groups, bands, and regional networks or aggregations, each level mobilising for different economic purposes (Forsberg 1985, 1993, Mulk 1988, 1991, 1994, Bergman 1995). The task group occupied a small 'extraction camp' located close to the resources that were being targeted. The camp would be occupied for one or two days before the group moved on. We believe this 'task group' is the type of group that would have visited a site like Badjelánnda. Although ritual is likely to have accompanied resource extraction, in Neolithic and Bronze Age extraction camps we do not usually find evidence for rock art or sacred offerings, although of course such evidence may not have survived (Fig. 5).

We find instead that in the Neolithic and Bronze Age rock art was likely to be associated with more important ritual practices, those that were restricted to either 'base camps' or 'aggregation camps'. Forsberg (1985, 1993) and Baudou (1993) have shown that the spectacular rock carvings at Nämforsen in central Norrland were made at an aggregation site, where mem-

Archaeological site categories	**(A) Associated rock art in Neolithic and Bronze Age**	**(B) Social equivalents in the Sami Iron Age**	**(B) Sacred sites in Sami hunting society**
BASE CAMP: centre of a resource utilization area used by the whole tribe	ROCK PAINTINGS (e.g. Jansjö, Boforsklacken, Brattfors, Högberget, Fångsjön)	The SIJDDA'S WINTER SETTLEMENT	Siejdde stones and idols and local sacrificial sites, located in the boreal forest zone
FIELD CAMP: occupied by part of the tribe for shorter periods of time	[No evidence for rock art. Instead ritual may have focused on sacred natural places, stones and idols, and routine observances]	Smaller settlements for FAMILY GROUPS in spring, summer and autumn	Sacred stones (siejdde) and wooden idols (värromuorra) and local sacrificial sites located in foothills and mountains zones
EXTRACTION CAMP: occupied by a task group for a few days to extract a particular resource	[No evidence for rock art, sacred stones or idols. Instead perhaps ritual was focused on token sacrifices and routine observances]	TASK GROUPS from within the sijdda, engaged in hunting, fishing, etc.	Sacred sites associated with specialised hunting, fishing, collecting or quarrying places [e.g. Badjelánnda site]
AGGREGATION CAMP: large site where groups from different tribes met for short periods; located in areas rich in food resources and preferably near tribal borders	ROCK CARVINGS (e.g. Nämforsen)	Occasional (annual?) meetings of sijdda elders and other from within the vuobme	Regional sacrificial sites (Sájvva-, basse-) e.g. Skierffe, Basseuksa
Sources, notes: Forsberg (1985), Mulk (1988, 1991, 1994: 248), Bergman (1995) English terminology follows Ramqvist (2002: 155)	Source for link between sites and rock art/paintings: Ramqvist (2002). Other suggestions [in square brackets] are by Mulk & Bayliss-Smith (2006)	Source: Mulk (1994, 1996)	Sources: Rydving (1993), Mulk (1994, 1996). Source for the Badjelánnda suggestions [square brackets] Mulk & Bayliss-Smith (2006)

Fig. 5. The organisation of space in Norrland, showing the sacred sites and types of rock art associated with different levels of social organisation and settlement: (A) in the Neolithic/Bronze Age; and (B) in Sami hunting society of the Iron Age–Medieval period.

bers of different groups met in summer during the salmon run. Ramqvist (2002) has suggested that inland from Nämforsen we can find the winter base camps of smaller tribal units, and here there is evidence for sacred sites where rock paintings were produced on vertical cliffs and other outcrops, usually close to water. At the 'field camps' that were only occupied for shorter periods during seasonal migrations, rock art is absent and instead ritual must have been done in other ways, leaving no archaeological trace.

When we move forward from the Bronze Age period of rock engravings and rock paintings into the Sami Iron Age, we can identify the same hierarchy of social groups and settlement sites, but with different mobility patterns (Mulk 1988, 1994:188f, 1996, 2005). However, at the main sacred sites the evidence now consists not only of rock art, but also sacrificial sites with *siejdde*-stones and *värromuorra* (see Fig. 5). Lack of evidence or loss of evidence may underlie this apparent change between Bronze Age and Sami Iron Age in the way that the landscape was used for religious acts. However, we believe we can see clearly a continuity in the nested hierarchy of social groups that had a ritualised engagement with the landscape and its resources, even if the forms of ritual have changed.

Phase 1 of the images scratched at the Badjelánnda site pre-date the Viking Age and may relate to the period of asbestos quarrying at the site during the Asbestos Ceramic period in the Bronze Age, or even before. It was the availability of smooth soapstone surfaces that made it possible for groups visiting the site to leave behind evidence of its status as a sacred place and threshold to the Underworld. Use of the site could be commemorated not only through ritual and perhaps sacrifices but also through rock art. In this way groups visiting the site were able to reinforce their collective memory and so create a form of 'monument' (Rowlands 1993), a process that perhaps could be accomplished at other extraction camps in other ways.

What kind of commemoration did the various images achieve? As we have argued elsewhere (Mulk & Bayliss-Smith 2001, 2006: 53–63), it is not possible to specify with certainty the identity of the Phase 1 anthropomorphs, although Máttaráhkká is a possibility. We find it hard to 'read' these symbols today because as icons we find them ambiguous, but as 'cosmic symbols' their contemporary identity was no doubt absolutely clear.

The Phase 2 images are more varied, and we can speak with some certainty about the boats. The images have been drawn with much iconic detail (masts, sails, side-rudders, anchor) that suggests they depict the maritime technology of the period c. AD 800–1350. They may have had, in part, a narrative function, reflecting the new 'historical' rather than 'cosmic' world-view that began to prevail as a response to growing contacts between the Sami and the outside world in the Viking Age. Nevertheless we believe that the

choice of boat motif reflects the symbolic meaning that underlies these iconic images. In the Early Medieval period right up until Early Modern times boats were used by the Sami as potent metaphors for suggesting the transport of souls to and from the Underworld (Bayliss-Smith & Mulk 1998, 1999, Mulk & Bayliss-Smith 2006: 65–88). The symbols displayed at the site might have changed in Phase 2, but there is an underlying continuity of deeper meanings.

Badjelánnda's place in Sami sacred geography

Despite this weight of circumstantial evidence, we still must face the fact that the 'hard' evidence for Badjelánnda being a sacred site is slight and rather intangible. It is only when we consider its place in the overall cosmology or world-view of Sami hunting society before c. 1600 that its status as a place of special significance, probably a holy mountain and sacrificial site (*bassevárre*) and sacrificial site, becomes more secure. To substantiate this claim, we must reconstruct the main features of the 'sacred geography' of the Sami. An equivalent 'map' of Proto-Uralic cosmology has been constructed by the Russian scholar Vladimir Napolskikh (1992) using a wide range of ethnographic and historical sources (Fig. 6).

Proto-Uralic is the term given to the original language and culture of the people speaking the Finno-Permian group of languages, which includes Sami, Finnish, Karelian and Estonian, and also the Ugric language group,

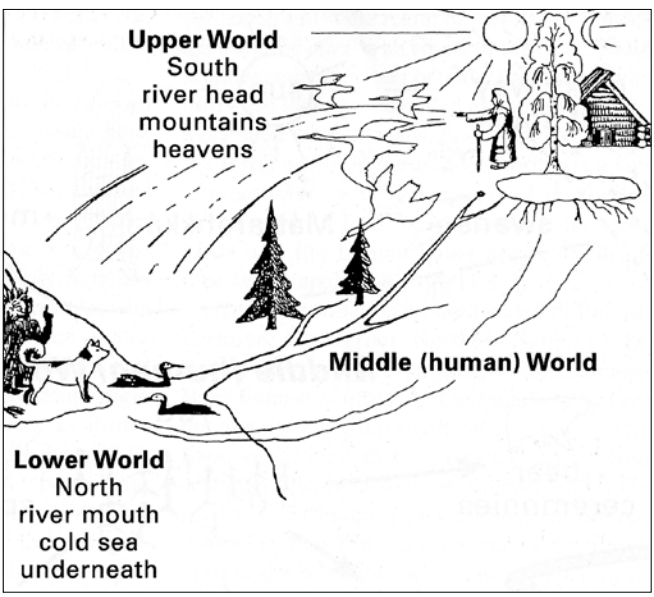


Fig. 6. The Proto-Uralic world-view according to Napolskikh (1992).

which includes Hungarian and Khanty. Together the two groups form the Finno-Ugrian language family. Scholars have long recognised that the various peoples who speak these languages share various cultural traits, and it was generally assumed that these common traits reflected a common origin in a reconstructed language known as Proto-Uralic that existed around the fifth millennium B.C. (Uibopuu 1988: 39). In fact Proto-Uralic is more likely to have been a group of mutually intelligible languages whose integrity was maintained by interaction based on similar traditions, trade and kinship connections, leading to borrowing (Wiik 2000).

A key feature of the Proto-Uralic world-view is the division of the world into three realms:

- The Upper World = South = river headwaters = mountains = heavens;
- The Middle (Human) World, in which the World River runs, connecting upper and lower worlds, and in which fir trees connect the earth with the heavens;
- The Lower World = North = river mouth = cold sea = underneath.

The deity who rules the Upper World is described as the Old Woman of the South, mistress of life, protector of birth and motherhood, sender of souls, mother of gods, and mistress of migratory water-birds. The sun, the moon and the Milky Way are other key features of the upper world. Migratory water-fowl such as swans, ducks and geese serve as messengers to the celestial realm; they also symbolize human and animal souls, and they bring the new year in spring. The Lower World begins where the World River flows into the icy seas of the north, and is the realm of evil and the land of the dead. It contains an Island of the Dead, which is either under the water or under the earth. Diving birds like loons are regarded as bad spirits or are associated with shamans. Souls can return from the lower world to the middle world via a subterranean river, which emerges in a Lake (or Sea) of the Water of Life, which is where the water-birds and the human souls are revived and renewed (Napolskikh 1992: 11–12).

This reconstruction is based on Volga-Finnish, Permian, Ob-Ugrian, Northern Samoyed and Selkup data, with some input from Sami and Balti-Finnish sources. Not surprisingly, we cannot identify all of this mythical geography in the Sami world-view that we can reconstruct from scattered historical sources, folklore and a few myths. In Fennoscandia rivers flow in directions that often do not match the simple north/south = cold/warm = Lower/Upper World dichotomies that we find in the Finno-Ugrian cultures in Russia. The Lule river, for example, originates in the (cold, northern)

mountains in the Badjelánnda region and flows southeast to the (warm, southern) Gulf of Bothnia. Instead, according to the *Mjandasj* myth, it is the River of Blood that separates the Middle World from the supernatural world, and indeed the Upper and Lower Worlds often seem to be conflated.

Nonetheless there are many similarities. The Old Woman of the South of the Proto-Uralic cosmology has a direct parallel in *Máttaráhkká* of the Sami but *Jábmeáhkká* who guards the Underworld is not a separate deity but rather a different aspect of *Máttaráhkká* herself.

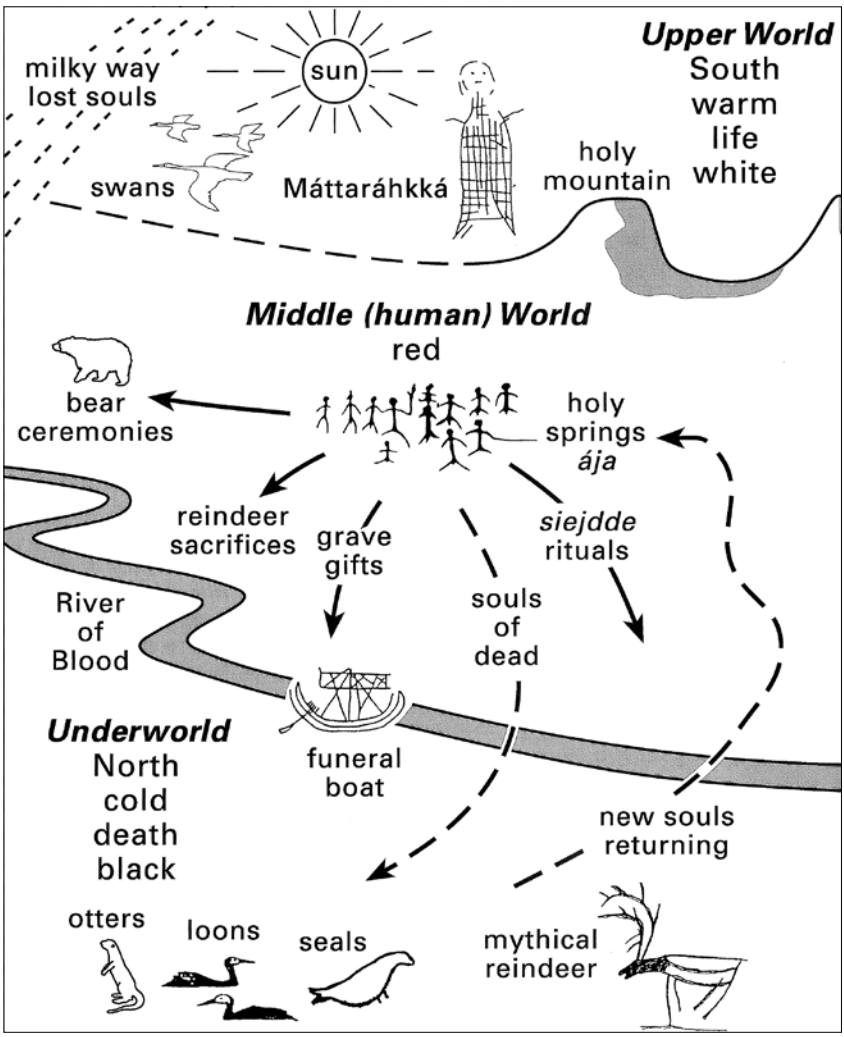


Fig. 7. Our reconstruction of the ancient Sami world-view, based on various sources (Mulk & Bayliss-Smith 2006: 96). In this diagram the images representing Máttaráhkká and the funeral boat are copied from two figures depicted at the Badjelándda site (D18 and D13 respectively).

We attempt to depict the main features of this Sami cosmology in Fig. 7. Like the Napolskikh model, this 'map' of Sami sacred geography should be regarded as a generalized and abstract picture rather than something that existed in complete and concrete form in the minds of every individual. Myths show that in Sami cosmology it was the River of Blood that separated the Middle World from the Underworld. The free-souls of the dead needed to cross this river, while new souls returning emerged in the Middle World from holy springs (*ája*). Boats symbolized the transport of souls to the Underworld, which was also the domain of mythical reindeer like *Mjandasj*. The mother Earth figure *Máttaráhkká* and her daughters belonged to the Upper World but pervaded all worlds. Their domain was accessible via holy mountains, and their presence was acknowledged by the Sami in everyday rituals and taboos. This world view, or some version of it, must have structured people's everyday behaviour in a range of contexts, by defining what aspects of life and landscape were regarded as normal and what aspects were regarded as special or 'sacred'.

Defining the boundaries of the sacred

What do we mean when we claim that the Badjelánnda site was a 'sacred' place for the Sami who visited it in the past? The English word 'sacred' is derived from the Latin verb sancire, 'to separate', 'to set bounds to' or 'to sanctify', but we can find an equivalent word in almost all languages: "its root universally denotes 'to cut', 'to set apart', 'to mark off'" (Anttonen 2000: 1). What times or places, what artefacts or what people are regarded as 'sacred', and which ones are thought to be impure, dangerous or polluted? These are actually questions about the agreed boundaries between categories. All such boundaries are cultural constructs that are maintained by norms, taboos and rules of avoidance, which serve to protect a social consensus by making behaviour toward the sacred morally binding (Douglas 1966).

For the Sami, the cultural categories that underlay their notions of what was 'sacred' were often subject to challenge from the alternative world-views of several of the groups with which they interacted. Louise Bäckman (2005) focuses on challenges to the authority and world-view of the noajdde, and she divides the history of contact into four different periods:

- *The pre-Viking period, before the 9th century AD*. Despite the transfer to the Sami language of some loan-words of Germanic origin, it is difficult to see Sami religion at this time as being significantly affected by Germanic society, and the *noajdde* retained his authority as sole arbiter of the sacred.
- *The Viking period, approximately 800–1000 AD*, saw intensified contact between Norse and Sami. While the Scandinavians showed great

respect for Sami 'sorcery', at the same time the Sami adopted some designations of Nordic origin for their gods.

- *The Roman Catholic mission* to the north began about 1200, when churches were first established in north Norway, serving as new sacred places to rival the old sites, and Catholic priests and monks set out to contact the Sami people. (This process began somewhat later along the coastline of the Gulf of Bothnia.) New concepts were incorporated into Sami belief, and "the *noaidi* was no longer the only one who was able to give answers to the fundamental questions of life and death" (Bäckman 2005: 37).
- *The Lutheran Mission* began in the first half of the 16th century under state sponsorship; in northern Sweden new churches were built inland at traditional Sami meeting places. By about 1700 "the *noaidi* was outmanoeuvred as the one responsible for the well-being of Saami society" (Bäckman 2005: 37).

We have proposed that the Phase 1 images at Badjelánnda are standardised symbols of the supernatural, with anthropomorphs representing deities, and we associate them with the pre-Viking period of Bäckman's scheme. These symbols reflect the unmodified 'cosmic' world-view of the Iron Age Sami. The more varied images of Phase 2, while still permeated by the symbolic meanings of Sami cosmology, nevertheless begin to reflect Sami–Nordic interaction in the Viking or early Roman Catholic period. We see at this time a more 'historical' style of depiction, as shown particularly in the detailed pictures of sailing boats and reindeer.

By Phase 3 the site's sacred character was in dispute, following the intense confrontations with the Lutheran mission and the Swedish state that challenged the validity of Sami beliefs. The shamanic cosmos no longer defined the boundaries of the sacred. After 1700 many of the Sami sacrificial sites were desecrated by priests, and they gradually fell out of use. Increasingly the Badjelánnda site was becoming merely a place of resource procurement, with a few graffiti to commemorate visits to the site.

Liminal times, places and persons

The two related concepts of *anomaly* and *liminality* are useful ways of defining what is 'sacred' in any culture. If we can establish what was regarded in the Sami world-view as *anomalous* and *liminal*, then we can specify why certain times and certain places needed to be marked by religious ritual, and why such events were sometimes memorialised by images. We argue that it was in the context of ritual that the making of images took place, and we

suggest that the Badjelánnda site provides us with a rare opportunity to gain insights into this process.

Ideas about *liminality* were first developed in social anthropology by Arnold van Gennep (1909), in his analysis of the meaning of rites of passage such as birth, coming-of-age, marriage and death. Van Gennep argued that before a person could be regarded as having made the transition from one state to another, three steps had to be taken. First was 'separation' of the person, second was his or her 'transition', and third was his or her 'incorporation' into a new state of being. The second stage Van Gennep termed the 'liminal phase', after the Latin word *limen* meaning 'threshold', 'gateway'.

Victor Turner (1967, 1969) greatly extended the notion of liminality through his work on the rituals that accompanied rites of passage in African tribal societies. His focus on liminal persons, those who have entered into the state of liminality, generated many insights:

> Liminal entities are neither here nor there; they are betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial. As such their ambiguous and indeterminate attributes are expressed by a rich variety of symbols in the many societies that ritualise social and cultural transitions. (Turner 1969: 95.)

He shows that the symbols employed to represent liminality often relate to death, dissolution, decomposition, and foetal loss, or to their opposite states – gestation, birth, suckling, etc. (Turner 1967: 96). In tribal societies the liminal state and its associated ritual is something that everyone experiences at points of transition in their lives, but on a temporary basis.

Liminality is also attributed to ritual specialists such as shamans, and to persons who are expert in negotiating boundaries. Smelting iron or making jewellery involved controlling a material and symbolic transformation, and included the production of objects that mediated between mankind and the supernatural world (Hedeager 1999, 2001: 484). Terje Gansum (2004: 52) has noted how, in Iron Age Europe, the smith acquired "an odd and liminal role compared to other craftsmen". In more hierarchical societies liminality becomes institutionalised in the roles played by monks, priests, healers, tricksters and others (Turner 1969: 107).

Turner discusses liminal people, and he identifies certain occasions as being necessarily liminal (rites of passage, for example), but he pays less attention to liminal spaces. He does, however, note that "liminality is regarded as a time *and place* of withdrawal from normal modes of social action" (Turner 1969: 167, emphasis added). As an example he cites the initiation rites of North American Indians, which involved going alone into the wilderness to fast and to pray: "this solitude is liminal between boyhood and manhood"

(Turner 1967: 100). Seclusion of the liminal group of boys (*neophytes*) in an isolated place such as the forest is also common at some stage in their initiation. As Jane Harrison first pointed out for Ancient Greece, it is in the liminal state that sacred mysteries (*sacra*) are communicated to neophytes, as (1) exhibitions, 'what is shown', (2) actions, 'what is done', and (3) instructions, 'what is said' (Harrison 1903: 144–160).

Turner suggests that the messages conveyed to novices are predominantly through non-verbal, symbolic forms of communication, for example pictures representing the journeys of the dead or the adventures of supernatural beings (Turner 1967: 102). Other symbolic means include:

> masks, arrays of sacred objects, body painting, rock painting, and so on, often accompanied by the telling of recondite origin-myths or other type of gnomic utterances, secret languages, and songs [presenting] the basic assumptions of their culture. [...] This liminal phase in tribal societies [...] constitutes, quite typically, a cultural domain that is extremely rich in cosmological meaning, though often misleadingly simple in outward form. The symbol vehicles may be unimpressive, but the messages they convey are highly complex. (Turner 1974: 196.)

In this way, perhaps, simple images of Sami deities or sailing boats could have been the starting point for long stories about the creation of new life or about the transport of souls across the river that separates this world from the Underworld.

In more recent writings the term 'liminal place' has become more prominent (Trubshaw 1995). Victor Turner himself examined pilgrimage, an institution that developed from the localised liminality of tribal initiation rites to become mass journeys to distant sacred places, involving for participants long periods of absence. Pilgrimage is seen by Turner as a kind of 'anti-structure' that "breeds new types of secular liminality," such as the fairs and fiestas that surrounded sacred shrines in medieval Europe (Turner 1974: 182). In various ways the pilgrimage constitutes a liminal experience for participants, and the destination is invariably perceived as a liminal place. In the case of Mecca, Jerusalem or Rome it is seen as the sacred centre. In the case of Compostela it is a peripheral place at the western limits of the known world but also the burial place of the apostle James, providing for pilgrims a direct connection (*limen* 'threshold') to Jesus Christ. Several Indian pilgrimage shrines are liminal in the sense of being located in the borderland between different language groups. The two holiest destinations for Hindu pilgrimage are at the extreme margin, being located on the far side of the Himalayas in western Tibet (Turner 1974, Turner & Turner 1978).

Liminality and rock art

One of the first archaeologists to apply Turner's ideas of liminality to rock art in a systematic way was Christopher Tilley (1991: 140f.), in his book on the Nämforsen rock art site in central Norrland. Tilley suggests that the elks, boats and other images at Nämforsen are a kind of 'text', organised according to a male–female oppositional logic. Different motifs were associated with different clans and moieties, and they were combined to form visual narratives. These images were produced at a place that was seen as liminal, and on ritual occasions when liminality was celebrated. In an argument that parallels Turner's 'anti-structure' through pilgrimage, Tilley regards the happenings at Nämforsen as a hunter–gatherer version of Foucault's 'heterotopia'. It was a magical place associated with life-crisis rituals and religious ceremonies, far removed from everyday existence (Tilley 1991: 137).

In Tilley's view, Nämforsen's liminality is demonstrated by the position of the rock carving sites next to the Ångerman river. Most of the images are found on small islands where the river ran through rapids and plunged down to the sea. This location matches well the ideas contained in shamanic myths of the Evenki people of Siberia, who see the entrance to the Underworld as connected to islands and whirlpools (Tilley 1991: 134). Sites like those on the Ångerman river would therefore have been perceived as essentially liminal, and highly appropriate places for rites-of-passage ceremonies:

> It seems very likely that the carved islands in the rivers and the carvings on the northern river banks at Nämforsen would have been used in initiation ceremonies for novices – places of liminal seclusion where vital ritual information was conveyed through instruction and inspection of the cosmologies and mythic stories inscribed on the carved rock surfaces, no doubt involving the ancestors (mythic double-headed elks, elk-humans?, etc.). (Tilley 1991:169–170.)

This interpretation is not entirely imaginary. The archaeological evidence shows that Nämforsen was indeed an 'aggregation camp' where different groups came together in summer to fish for salmon and for social interaction (Forsberg 1985, 2000, Baudou 1993, Ramqvist 2002). In other respects Tilley's account contains too many assumptions and assertions that cannot be substantiated. For example, he assumes that the images were almost contemporary, whereas Forsberg (1993) has shown that different motifs belong to different periods. Tilley's use of ethnographic analogy seems tenuous, and it is particularly mysterious that he uses the Evenki from Siberia rather than the cosmology of the Sami whose ancestors occupied the Nämforsen area. Nevertheless his application to rock art of Turner's (1969) ideas, espe-

cially the idea that myths, rituals and liminality are inter-connected, signals the route towards a more holistic understanding.

Tilley's approach to liminality has stimulated some productive research in both northern and southern Scandinavia. In south-west Sweden Richard Bradley (1997) has examined rock art from Bohuslän, interpreting it in the context of the Bronze Age landscape of islands on which were placed burial cairns, and further inland some former islands turned into low hills by a rapid fall in sea level. On many of the hills there is rock art, with numerous images of boats in the zone surrounding these former islands. Nordbladh (1980) had already suggested that the carved rocks define the outer edges of the domestic landscape and separate it from the places of the dead on higher ground. Bradley suggests that the boats are intended to convey the idea of water itself, so "the effect of these drawings was to convert the higher ground into another set of islands, where the dead might be commemorated" (Bradley 1997: 322). Life-size footprints traverse this boat-dominated zone of symbolic water. These footprints, Bradley suggests, mark the pathways of the dead and connect the land of the living to the domain of the ancestors. The rock art was created or used in the context of funerary ritual, and the liminal zone between the living and the dead was the appropriate place for these rituals to be undertaken (Bradley 1997: 322).

In Finnmark, north Norway, Knut Helskog (1999) identifies the actual shoreline as the liminal zone in his interpretation of the rock art of Alta fjord. From a comparison of Alta, Nämforsen and Besoki Sledki in Karelia, he suggests that "the carvings represent liminal places where spirits and people met to maintain and reinforce relationships" (Helskog 2004: 282). Ethnographic analogies from a range of north Eurasian cultures including the Sami support the notion that water, lakes and rivers are elements that facilitate communication with other dimensions. The place where air, land and water meet is therefore an appropriate place for rituals that connect people with the spirit world:

> Turner (1969) discusses spatial oppositions, mostly in natural landscapes, when discussing connections between rituals and symbols. [...] Liminality might [...] be associated with places of unique spatial attributes, such as the shore, where the metaphysical and cosmological worlds have a possible counterpart in nature [...]. (Helskog 1999: 79–80.)

Oppositions expressed in the rituals might, he suggests, have a symbolic counterpart in the rock-art motifs. Perhaps in the images sky–land–water is represented in oppositions between land and sea animals, birds and fish, or dancers and hunters, etc. Helskog admits that the problem with Alta is that there are so many images, and sometimes it is uncertain what they show (iconic meanings) or represent (symbolic meanings). The vast range of

possible interpretations means that there could be an almost infinite number of symbolic oppositions (Helskog 1999: 80).

Sacred boundaries in the Finnish landscape

Independently from Tilley, Helskog and Bradley, the concept of liminal space has also been explored by Veikko Anttonen (1992), using ancient Finnish cultural landscapes as material for a case study. Building on the concepts of Mary Douglas and Victor Turner, Anttonen examines the boundaries of the sacred (Finnish *pyhä*) and the changing meaning of cult sites (Finnish *hiisi*). He argues that all societies make the invisible boundaries of everyday life visible by acts of separation and prohibition. The selection of markers of the sacred is based on the perception of *anomaly* and *liminality*. Elements that signal *anomaly* (plants, animals, persons, objects, events) are those that are regarded as exceptional within a cultural system. The detailed and somewhat bizarre list of 'anomalies' specified for the Israelites in the Book of Leviticus, especially the numerous food taboos, is a well-known example (Douglas 1966: 42–58). Anttonen's concept of *liminality* derives from Turner, and emphasises points of transition or transformation. When applied to boundary markers in the cultural categories of pre-Christian Finns, the two concepts, anomaly and liminality, have a considerable overlap

In Finland the connotations of *hiisi* (sacred place) were transformed by Christianity. Christian burials were confined to churchyards and social life became focused on the farm or village. The sacred places known as *hiisi* were changed, from 'place for the dead who are favourable to the living', to 'a symbol of a world [outside the village] that is hostile to humans' and the home of evil giants, devils or hell. Yet the word *hiisi* was originally attached to place-names for sites that were topographically exceptional:

> Topographical anomaly and liminality cover such exceptional points of terrain as stone and boulder fields, rocks, and trees with special forms. They have symbolic value as indicators of meaningful border lines [...]. In addition, topographical anomaly explains why springs and other openings, holes and cracks in the ground, have belonged to the prehistorical conceptual sphere of the sacred [...]. A mountain, a hillock or a flat treeless hilltop is attached a special meaning as swollen, grown land; its power and substance is stronger than that of a territory which does not contain any fixing points for a boundary that separates. (Anttonen 1992: 37.)

Even today more than one hundred *hiisi* place-names can be found in Finland, and there are also many in Estonia. It was these anomalous places that were chosen for burial of the dead.

According to this view sacred space is the category of 'that which is beyond the borderline' or *limen*, and that borderline is defined by things in the landscape that are perceived as being anomalous. Liminal spaces are impossible to possess or fully control because they are sources of supernatural energy. They are places "in which humans and other entities in perceived reality are regarded as having originated (grown) and where they return in various processes of life (birth, dying, decomposing, decaying, burning, etc.)" (Anttonen 1992: 36).

Therefore, to discover why particular places (*hiisi*) were selected for burials in pre-Christian Finland we need to understand the indigenous concepts of 'sacred' (*pyhä*). To make something sacred and mark it off as a separate place (or time, or person) from a profane one "requires a perception of boundary and difference", so that we can divide off the exceptional from those phenomena that belong in the sphere of everyday life (Anttonen 1992: 37).

Archaeological evidence for liminality

Independently the same logic has been applied by Antti Lahelma (2005) in his analysis of Finnish rock paintings. Lahelma points out that no ethnography or oral tradition from Fenno-Scandinavia can definitely connect rock art to sacred sites, but the nature of rock art sites provides us with strong clues about their original meaning. In Finland the rock paintings are generally located in places that are obvious topographic landmarks along rivers or lakes, very often "impressive light-coloured rocky cliffs rising on lakeshores," or large boulders by the water side, sometimes close to rapids. These places, like Sami *siejdde*-stones, waterfalls and holy mountains, are "breaks in the homogeneity of space" – in other words, they are topographically anomalous in the terms used by Anttonen (1992). These places also suggest liminality. Cliffs rising from lakeshores could readily be constructed as transitional points between the lower world (water) and the upper world (sky), as represented in the three-tiered cosmos of the Sami *noajdde's* drum (Lahelma 2005: 38–40). Therefore we can understand better the meanings that underlie Finnish rock art by recognising the anomalous and liminal status of the actual rocks upon which they are painted.

Another example from Finland is provided by *lapinraunio* or 'Lapp cairns', large circular stone cairns that sometimes contain graves and/or offerings. Many are located along the boundary between the coastal zone and interior of central Finland, and they are usually built on bedrock foundations on dry slopes close to water, or on hill tops, or on small islands in lakes. Those that have been dated were built in the late Bronze Age or the pre-Roman Iron Age (Taavitsainen 2003).

Taavitsainen suggests that the concept of *pyhä* can help in the interpretation of this cultural landscape. This word was used as an adjective to describe boundaries of social significance. Very often the sites of *lapinraunio* have place-names that include the words *pyhä* (sacred), *hiisi* (sacred place) or *lappi*. The word *lappi* is a reference to hunter–gatherers, probably Sami, who occupied the interior, while the coastal zone was the domain of a Proto-Germanic speaking population in the period 1500–900 BC. It was probably the Sami who constructed these cairns, which were positioned along the boundary between the agricultural zone along the coast and the forests of the inland (Taavitsainen 2003: 34). Whether the *lapinraunio* are territorial markers or sacred sites, their place-names remind us of their original role in demarcating liminal space.

Badjelánnda as a liminal place

These various examples demonstrate that identifying difference (anomaly) and boundary (liminality) is the main challenge when researching cultural landscapes of the past, especially where religion is centred on natural features rather than monuments. Anomaly and liminality can suggest, for example, that a burial mound or rock art site belonged to the sacred rather than the profane sphere of life.

For the Badjelánnda site there are numerous signs (*indices*) that would have been interpreted by the Sami as indicating its anomalous and liminal position in relation to the Sami cosmology or world-view (Mulk 1997, 2004, Mulk & Bayliss-Smith 2006). Today these signs can provide for us a range of field evidence, as summarised in Fig. 8. Anomaly would have been signalled by the shape of the landform itself, and by the valuable soapstone and asbestos that was found there. As a special landmark it could be constructed as a holy mountain and an appropriate place for sacrificial ritual. The need for reciprocal gifts to the deities would also have been signalled by the useful resources that could be quarried there.

If graves were still visible at the site, or if their presence was signalled by stones or wooden idols, this would have indicated the site's liminal status as the home of ancestor spirits. Liminality was also signalled by the vertical south-facing rock faces that provided a direct gateway to the Underworld, always perceived as being in the north. The black colour of the rock and its almost transparent smoothness also suggested that this was a threshold to the Underworld, while the water that seeped out of cracks in the rock signalled that this was a holy spring, the source of new souls returning to the Middle World in which people live.

All these signs would have affected people's behaviour at times when

Type of evidence	**Perception of the evidence**	**Interpretation of the evidence**
Evidence of LIMINALITY in the landscape	South-facing cliff	A threshold to the Underworld
	Smooth rock surface, black in colour	Boundary between this world and the Underworld
	Water seeping from the rock	A holy spring, the source of new souls
	The graves of certain ancestors	An underground home of the spirits, in need of sacrifices
Evidence of ANOMALY in the landscape	Unusual topography, vertical cliffs, etc.	A sacred mountain
	Rocks containing valuable resources (soapstone, asbestos)	A gift of nature, requiring reciprocal offerings
Images (ICONS) suggesting both ANOMALY and LIMINALITY	Anthropomorphs	Máttaráhkká, Earth Mother
	Sailing boats, reindeer	Transport of the soul
LIMINAL life cycle events	A death within the sijdda, task group or family	A soul in transition
LIMINALITY in people's relations to animals	Hunting and killing wild reindeer in the autumn	A gift of nature, requiring reciprocal offerings

Fig. 8. Signs of the anomalous and the liminal at the Badjelánnda site. The table summarises the types of evidence that might have signalled to the Sami that Badjelánnda was a sacred site.

they were visiting or passing by the Badjelánnda site. Important liminal events occurring in this Middle World, such as illness, the death of people, or the slaughter of reindeer during their autumn migration, would have found an apt focus in rituals carried out there. The rock art that is still visible today would simply have reinforced symbolic meanings that were already apparent to most observers in the past.

We have therefore argued that our understanding of cultural landscapes like the Badjelánnda site will be enhanced if we consider how people in pre-modern societies perceived topographic anomaly. We have seen how, for members of Sami hunting society, certain anomalous breaks in the homogeneity of space, for example cliffs, caves, springs or waterfalls, signified boundaries or gateways between this world and other worlds. Resource procurement in this landscape was never merely an economic activity. Decoding the ways that past landscapes were used requires an appreciation of

how sacred boundaries were defined, how rituals were necessary to mark liminal times and liminal places, and how, sometimes, the production of images would be implicated in the reinforcement of these meanings. In modern times and in a World Heritage Area like Laponia, the concept of 'sacred' is likely to be restricted today to the boundaries of national parks and to lists of protected species, either 'keystone' or 'charismatic' in their status. However, in their interpretation of the cultural landscapes of the past archaeologists require a much broader definition of the boundaries of the sacred, as this paper has tried to demonstrate.

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JOURNAL OF NORTHERN STUDIES **1–2 • 2007**, PP. 123–142

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Early Mesolithic Hunter–Gatherers and Landscape Acquisition by the Arctic Circle

The Ipmatis valley 7000 BC–1 AD

ABSTRACT Archaeological and palaeoecological studies in the Arjeplog area of northern Sweden have verified the arrival of hunter–gatherers soon after deglaciation. After modelling and subsequently surveying the reconstructed shorelines of tilted watercourses, Early Mesolithic settlements dating to 8600–8000 BP (^{14}C years BP) were discovered. Makrosubfossil-, pollen- and charcoal analyses of peat stratigrafies and lake sediments corroborated that deglaciation was completed more than 1000 years earlier than has previously been postulated. Pollen records show that the early postglacial environment included complex plant communities lacking present day analogies, providing optimal subsistence conditions for the pioneer settlers. Studies of charcoal influx into lake sediments indicate that fires were more frequent than ever after, contributing to a productive natural environment. Regional studies in the Ipmatis valley in combination with in-depth analyses of selected archaeological sites, display that hunter–gatherers made the resources of the valley an integral part of their subsistence at an early stage. Landscape acquisition included not only the adjustment to existing conditions, but the actual manipulation of the environment. The interdisciplinary research approach has produced unique sets of archaeological and palaeoecological data. Results open new perspectives on human pioneer colonisation and landscape acquisition in relation to deglaciation and the development of postglacial ecosystems. The variety of methods applied sets a new standard for future research on early societies in sub-arctic regions.

KEYWORDS multidisciplinary research, archaeology, palaeoecology, Mesolithic, lake tilting, landscape acquisition, pioneer plant communities, nitrogen, fire

Introduction

Recent archaeological excavations in the Arjeplog area (Fig. 1) of interior northern Sweden have provided an entirely new perspective on the process of colonisation by human pioneers during the early postglacial period. Within the framework of the interdisciplinary research project "Man, fire and landscape," archaeological and palaeoecological research was conducted in 1999—2003 with the aim of identifying the earliest phase of human colonisation in interior northern Sweden in relation to landscape dynamics and ecological setting. The oldest settlement sites in northern Sweden, dating to 8600 BP (^{14}C years BP), were discovered after the non-uniform isostatic land uplift was taken into account and the shorelines of tilted lakes were reconstructed. Detailed archaeological surveys conducted in the Ipmatis valley, situated c. 20 km north of Arjeplog, have revealed cultural remains covering a period of almost 7000 years. This article aims to elucidate the development of hunter-gatherer societies in interior northern Sweden, and the reasons for their establishment specifically with regard to landscape acquisition and anthropogenic influences on the environment. Unless otherwise stated, all dates mentioned in the text refer to uncalibrated radiocarbon years BP. The term "indigenous" is used in accordance with the ILO convention's definition (see Lane 2006: 72).

Research strategy

The archaeological and palaeoecological investigations in the project "Man, fire and landscape" were focused on identifying early postglacial settlements in the interior of northern Sweden. The causes and course of pioneer colonisation and the ecological conditions of subsistence were central objectives of research as was the interaction between pioneer settlers and their environment. The effect of isostatic land uplift and lake tilting on shoreline displacement and settlement location was of specific interest.

The research procedure initially included the construction of an empirical lake-tilting model, based on calculated rates of non-uniform isostatic land uplift and the tilting direction (Bergman et al. 2003). Using shoreline displacement curves, the ancient shorelines of a number of selected lakes and watercourses at different points in time were reconstructed. Subsequent field surveys focused on the identification of prehistoric settlements located on ancient shores. More than 60 sites close to reconstructed shorelines were discovered. Excavations were carried out at 15 sites, with the primary aim of acquiring reliable radiocarbon dates. Extensive excavations were carried out at five of these sites, in order to record artefacts and other features at each site. Palaeoecological field work was performed parallel to

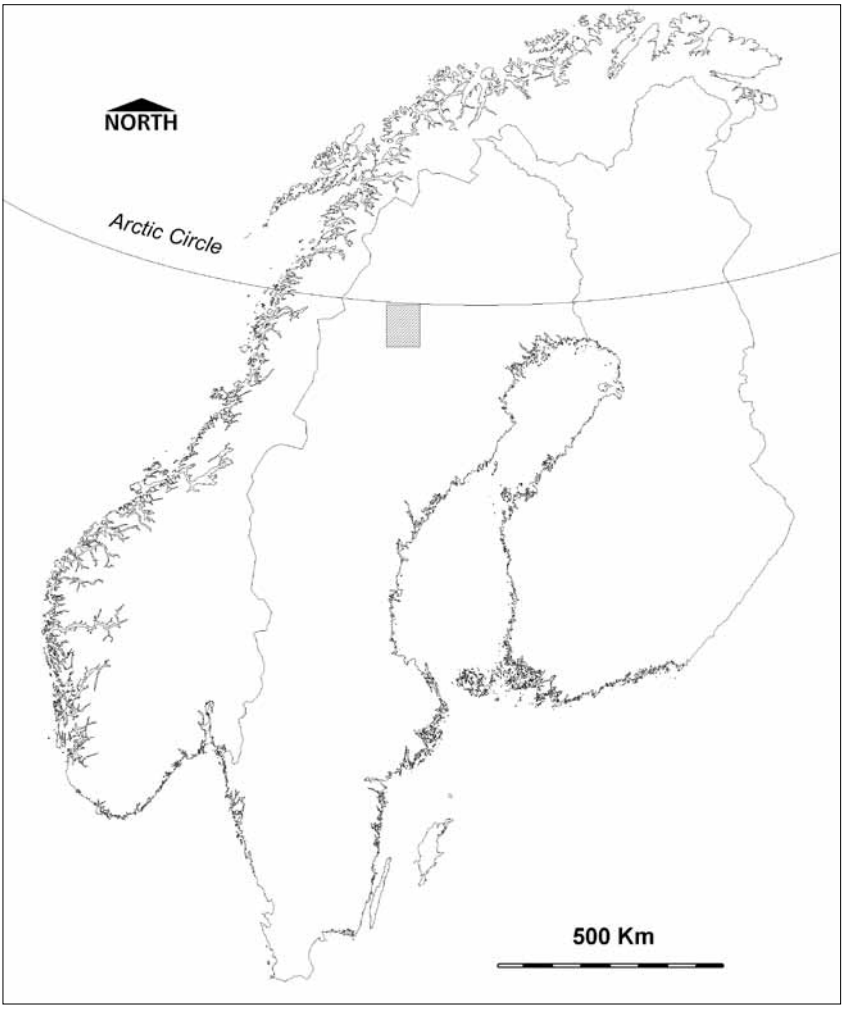


Fig. 1. Map of Northern Fennoscandia showing the location of the study area in Arjeplog.

the archaeological field investigations. This included the examination of peat and lake sediment samples already available from biological archives, in order to perform fine resolution pollen analyses (FRPA) and charred particle analyses (Hörnberg et al. 2005, Carcaillet et al. 2007). There were two overall aims of the palaeoecological analyses: to describe the environmental setting (i.e. the vegetation composition) from a landscape perspective and to identify the human influence on vegetation and fire use patterns in the area surrounding the sites. In order to locate close canopy sites with the deepest accumulations of peat, mires were surveyed using soil-penetrating radar (Bérubé 2001).

Glacio-isostatic land uplift, lake-tilting and landscape dynamics

The isostatic land uplift that followed the retreat of the Weichselian Ice continues to be an active process in Scandinavia, and is particularly pronounced in the coastal areas of the Baltic Sea (Ekman 1993, Berglund 2004). In northern Sweden, uplift rates decrease from east to west, resulting in a tilting effect. Since deglaciation, the landscape in this area has gradually tilted down towards the west (Ekman 1996, Påsse 1997, 2001, Hörnberg et al. 2004). In the Arjeplog area the direction of the gradient is c. 125° (ESE) and the gradient at 8500 years BP is estimated to have been 1.0 m/km which means that the tilting magnitude amounts to 10 m along a 10 km distance (for a detailed discussion on lake tilting see Bergman et al. 2003). The interior lakes and watercourses of northern Sweden are generally elongated along an east-west axis. This corresponds to the approximate tilting direction and thus the tilting effect strongly affects them. If a lake's outlet is situated at its eastern end, where the degree of uplift is the greatest, the opposite shores of the lake will be continuously encroached by water. In contrast, if the outlet is situated in the western part, the water line will recede. Consequently, the eastern parts of the beds of the water bodies will be lifted above the water line, while the western shorelines will be submerged. Lake-tilting is most evident in flat terrain, where minor changes in water level have had a significant effect due to the level topography. Shoreline displacement also depends on other topographic factors, such as the location of inlets, outlets, thresholds, soil and bedrock. All of these factors need to be considered when ancient shorelines are reconstructed. In areas with a shallow topography even minor changes on a vertical plane may have a significant impact on a horizontal plane. Early Mesolithic settlements may be situated several hundred meters, even kilometres away from present day shore lines.

In areas with glaciofluvial sediments, the shorelines of ancient lakes and watercourses are sometimes indicated by beach terraces at different levels, which are often connected to mires. Fault scarps bear witness to the immense seismic activity that occurred soon after deglaciation, when earthquakes are estimated to have reached magnitudes of 6.5—8 on the Richter scale (Lagerbäck 1990: 351—353, Olesen et al. 2002: 12). Faulting resulted in abrupt and radical landscape changes due to floods and landslides. Drainage of lakes, caused either by successive tilting or faults, resulted in the paludification of watercourses, turning them into mires. Large areas with fine sediments, which originally formed lake beds, were exposed to eolic processes that led to a build-up of dunes that may have covered original shorelines and archaeological sites. The effects of non-uniform isostatic land

uplift on landscape formation also included shifts in mountain forest limits, and a continuous displacement of groundwater levels and outflows.

Deglaciation and vegetation

According to prevailing models of ice recession, parts of interior northern Sweden were still covered by ice in 8500 BP and deglaciation was not completed until c. 8000 BP (cf. Karlén 1979, Cato & Kjellin 1996, Lundqvist & Vilborg 1998, Stewart et al. 2000, Fjeldskaar et al. 2000, Påsse & Andersson 2005: 264). However, dating the ice recession in this region is difficult (Kleman 1992, Harbor et al. 2006). Recession rates are currently based on rather disparate data sets, none of which from the studied region, however (Cato 1987). Sampling from peat deposits and lake sediments, together with analyses of macrosubfossil material, pollen and charcoal, was conducted with the aim of reconstructing the vegetation present at the time of the pioneer settlers' arrival. The sampling was restricted to peatlands and lakes located above the highest estimated water level of major water bodies, which were largely unaffected by tilting. Unexpectedly early dates were obtained from the lowest levels sampled, just above the glacial clay (Tab. I). The palaeoecological data were confirmed by dates obtained from archaeological features, preferably pit hearths containing charcoal. These dated to 8630±85BP—8440±90BP (uncalibrated dates, Bergman et al. 2004a: 165), suggesting that the area became ice free more than 1000 years earlier than previously postulated (Fig. 2).

Pollen records show that the early postglacial environment included many complex plant communities which have no parallel in present-day ecosystems. Plant communities disappeared under stress during the Weichselian ice age, and their component species may have reformed into quite different assemblages during the ice recession. Arctic and alpine plants (e.g. *Dryas*, *Astragalus* and *Saxifraga alpinus*) appeared together with southern lowland species (e.g. *Hornungia*, *Sinapis* and *Armeria maritime*) shortly after the ice receded (Hörnberg et al. 2005). This mixture of plants formed unique communities that are very different from present-day ecosystems. It is likely that the plant communities were favoured both by the improved climate *per se* and other factors, such as dispersal opportunities, the generally high calcareous content of unleached mineral soils, and the lack of competition from established vegetation. The lack of modern equivalents to these pioneer communities makes interpretation of the palaeoecological record in relation to nutritional factors and climate extremely difficult (cf. Edwards et al. 2007). The timing of the Holocene thermal optimum (HTM) and the seasonality of climate in northern Europe is so far under much

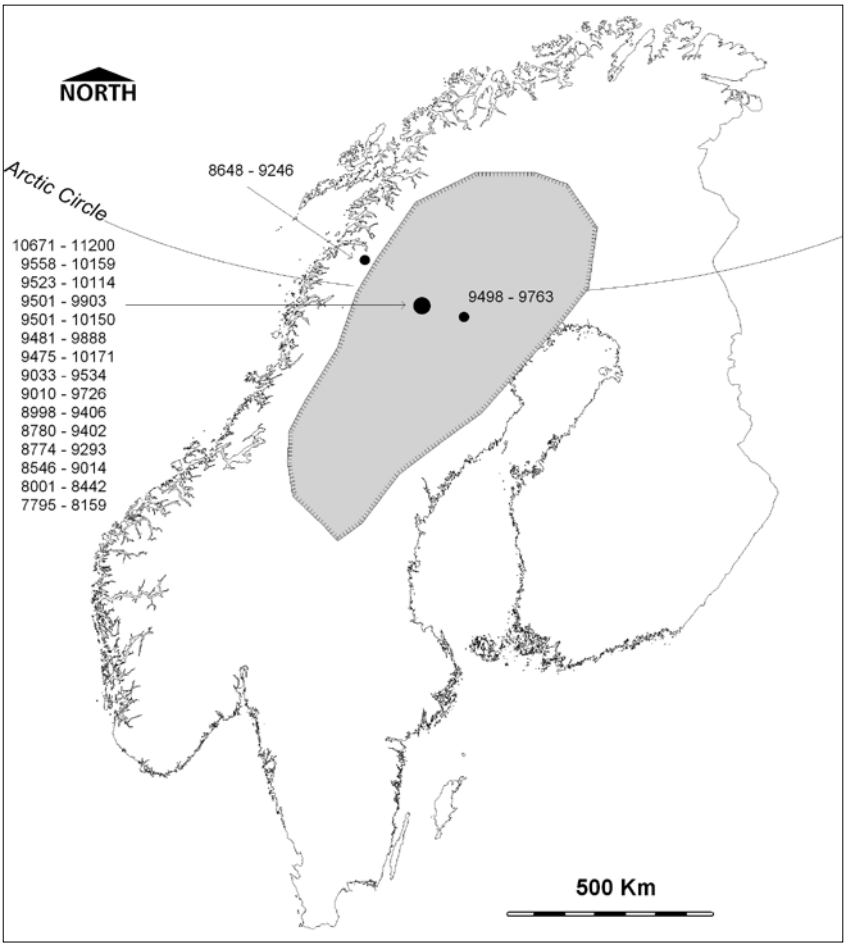


Fig. 2. Calibrated radiocarbon dates from biological archives and archaeological sites, in relation to the estimated size of the Weichselian ice sheet at c. 9300 BP (ice cover according to Alexandersson et al. 1995: 23 and Lundqvist 1998: 131).

dispute (Rosen et al. 2001, Larocque & Hall 2003, Andreev et al. 2005, Rohling & Pälike 2005, Kultti et al. 2006, Caseldine et al. 2007). Temperature could well have peaked (HTM) already before Mesolithic hunter–gatherers arrived to interior northern Sweden. The geological conditions were very unstable due to earthquakes, faulting and a rapid tilting of the early landscape which dramatically influenced local soil conditions and biological archives (Bergman et al. 2003, Hörnberg et al. 2005). Climatic factors affecting vegetation are easier to isolate at later periods when more stable conditions occurred and plant communities typical of the boreal forest (conifer-ericaceae-feathermoss communities) had established (Bradshaw & Zackrisson 1990, Hörnberg et al. 2004).

Tab. I. Radiocarbon-dated archaeological sites, lacustrine sediments, peat deposits and subfossil pine, Arjeplog, Sweden. Calibrations by Calib rev.5.01.

Site	Type of site	Lab. no	Reported age (^{14}C yr BP)	Calibrated age (2 sigma) BP
Döudden	Peat (360-361 cm)	Ua-20509	8695±105	9501-10150
Dumpok A*	Peat (167 cm)	Ua-19215	8795±105	9558-10159
Dumpok A*	Peat (174)		8660±80	9501-9903
Dumpok D*	Peat (260 cm)		8685±80	9523-10114
Dumpokjauratj Raä 1568**	Archaeological site (charcoal, Salicaceae)	Ua-19212	8630±85	9481-9888
Lattok***	Tarn	Ua-12632	9590±95	10671-11200
Lattok***	Tarn	Ua-18028	8420±150	9010-9726
Gublijaure	Drained watercourse	Ua-18685	8690±145	9475-10171
Raigejegge***	Tarn	Ua-12633	8195±80	8998-9406
Raigejegge***	Tarn	Ua-18017	8150±80	8780-9402
Lövnäs***	Tarn	Ua-18021	8355±115	9033-9534
Kåbdalis 4	Tarn	Ua-22562	8635±60	9498-9763
Bierre	Subfossil pine	Ua-22562	8065±80	8648-9246
Blomnäs, R1299	Archaeological site (charcoal)	Ua-15464	7930±95	8546-9014
Ipmatis, 1997:1	Archaeological site (charcoal, Pinus sylvestris)	Ua-15380	8120±75	8774-9293

* Published in Hörnberg et al. 2005.
** Published in Bergman et al. 2003.
*** Published in Carcaillet et al. 2007.

Some very rare plant genera have been discovered in material from the earliest plant colonisation period in the study area. Two of the more surprising genera to occur in the pollen assembly are *Malus* and *Allium*. *Hordeum* type pollen is also found in sediments from the pioneer period (Hörnberg et al. 2005, Hörnberg unpublished data). It is tempting to speculate about these genera and their possible use and spread by the pioneer settlers and verifications by macroscopic remains (especially at archaeological sites) would greatly help to interpret pollen finds.

Many of the alpine species that were important pioneer invaders (e.g. *Dryas octopetala* and *Astragalus alpinus*) have symbiotic relationships with nitrogen-fixing cyanobacteria, which allow them to produce the nitrogen they require for growth. Following deglaciation, nitrogen was not provided by the bedrock or mineral soils. Therefore, it had to be fixed from the air

through biological and atmospheric processes in order for most plant species to establish. Sea buckthorn (*Hippophae rhamnoides*), now a lowland seashore species, extensively colonised newly deglaciated areas with exposed mineral soils. It grew as trees (Fig. 3) and, being a nitrogen fixer, contributed substantially to the build-up of nutrient pools and the establishment of ecosystems. Hops (*Humulus lupulus*), now totally absent from this region, may have covered these early tree stands (see Hörnberg et al. 2005 and Fig. 3). However, *Hippophae* and *Humulus* only successfully competed with other species under the conditions present when they initially established. Within a few hundred years after deglaciation, they were succeeded by more competitive tree species and ground vegetation. That succession may have little more to do with climatic changes and nutritional conditions may play a more important role. The positive nutritional effect of the pioneer nitrogen builders is clearly seen in the pollen record. An obvious increase in nutrient demanding ferns (*Polypodiaceae*) is thus observed at the end of the period with *Hippophae* vegetation. The nutrient capital built up by *Hippophae* and other nitrogen fixing plant communities was probably crucial not only for ferns but for many important processes in terrestrial and aquatic ecosystems during the early postglacial period.

Fig. 3. Sea buckthorn *(Hippophae rhamnoides)* at Leinøra, Norway. It is tempting to assume that the tasty and C-vitamin rich berries of sea buckthorn were used by the Early Mesolithic settlers.

The role of sea buckthorn as the main nitrogen supplier through fixation was later taken over by ground-covering feather mosses in association with cyanobacteria when typical coniferous forests developed (DeLuca et al. 2002). Ericaceous dwarf shrubs (*Vaccinium*, *Calluna* and *Empetrum*) gradually became more dominant in the field layer vegetation as leaching of top soils progressed and the calcium content decreased (lower pH). Thereafter, the productivity parameters were governed mainly by the decomposition of accumulated organic matter from coniferous trees and Ericaceae dwarf shrubs. The high polyfenol contents of humus effectively limited nu-

trient availability for most herbaceous plants by complex binding nitrogen (Zackrisson et al. 1997, Nilsson & Wardle 2005). The boreal forest had then acquired the controls that regulate present-day ecosystems, and has only been marginally modified since then by external factors such as climatic changes and progressive nutrient leaching (Iversen 1973, Bradshaw & Zackrisson 1990, Tallis 1991).

Forest fire was the only factor that could shift the boreal coniferous forest temporarily back to an ecosystem characterized by plant communities with higher productivity, more useful for humans and wild game. However, fire events were relatively short-lived and had little influence unless they were repeated (Zackrisson 1977, Zackrisson et al. 1996, Wardle et al. 2003). If repeated excessively, however, the burning of forests in subarctic environments can lead to severe ecosystem degradation due to nitrogen losses and by the elimination of nitrogen fixers (Zackrisson et al. 2004, Hörnberg et al. 1999, Deluca & Zackrisson 2007). Despite such long term changes, we conclude that fundamental, dramatic changes in plant communities and ecosystem functions mainly occurred within the first thousand years following deglaciation. From an archaeological perspective, elucidating the composition and development of these early post-glacial plant communities and their associated fauna is crucial for understanding the processes promoting pioneer colonisation, and its rapidity. Specific qualities of the plants in the primary succession communities, and their utility for early post-glacial settlers, remain largely unknown, and warrant much greater consideration in future research.

Early postglacial settlements

Settlement sites dating to 8600—8000 BP were discovered during the archaeological investigations, confirming the early arrival of humans in the area (Bergman et al. 2004a). There were various types of settlements with various functions, ranging from small field camps with a single pit hearth and no artefacts, to base camps containing several features and many artefacts. Sites are strategically positioned in the landscape, on promontories or islets, near channels and by streams. It appears that settlements were located in close proximity to shallow water bodies that provide rich fishing grounds. Osteological material from the oldest and richest site (Dumpokjauratj) includes burned fragments of reindeer (*Rangifer tarandus*), beaver (*Castor fiber*), pike (*Esox lucius*) and birds (unspecified), confirming that diverse subsistence sources were available, very similar to those present in subsequent periods (Bergman 1995). Reindeer was in clear predominance (89 % of the identified bones). The bones from the Dumpokjauratj site represent the

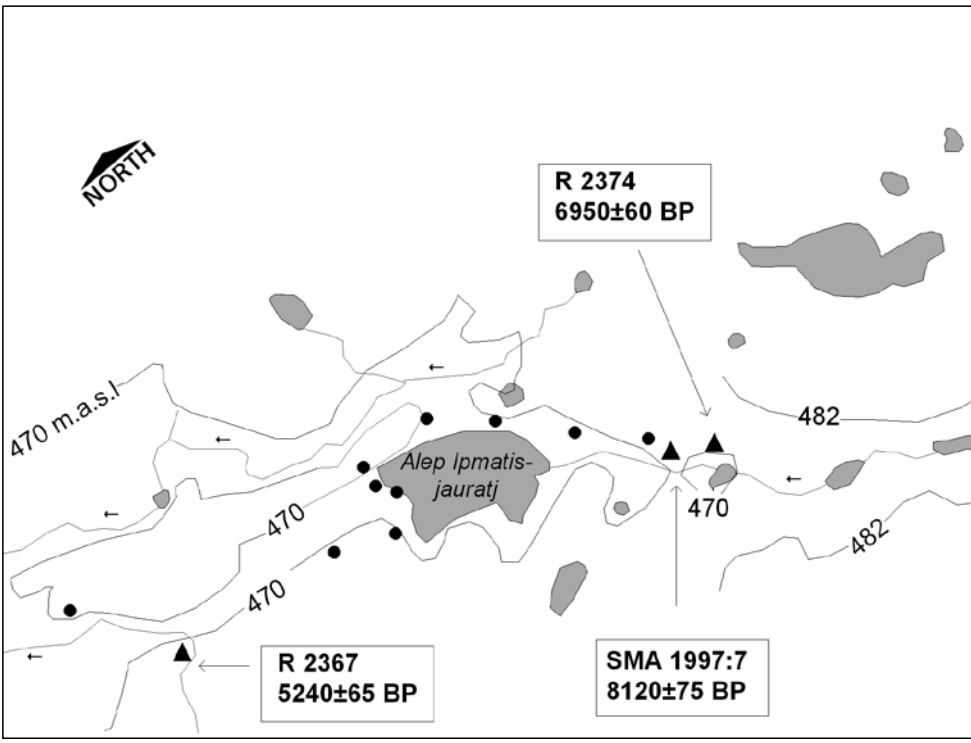
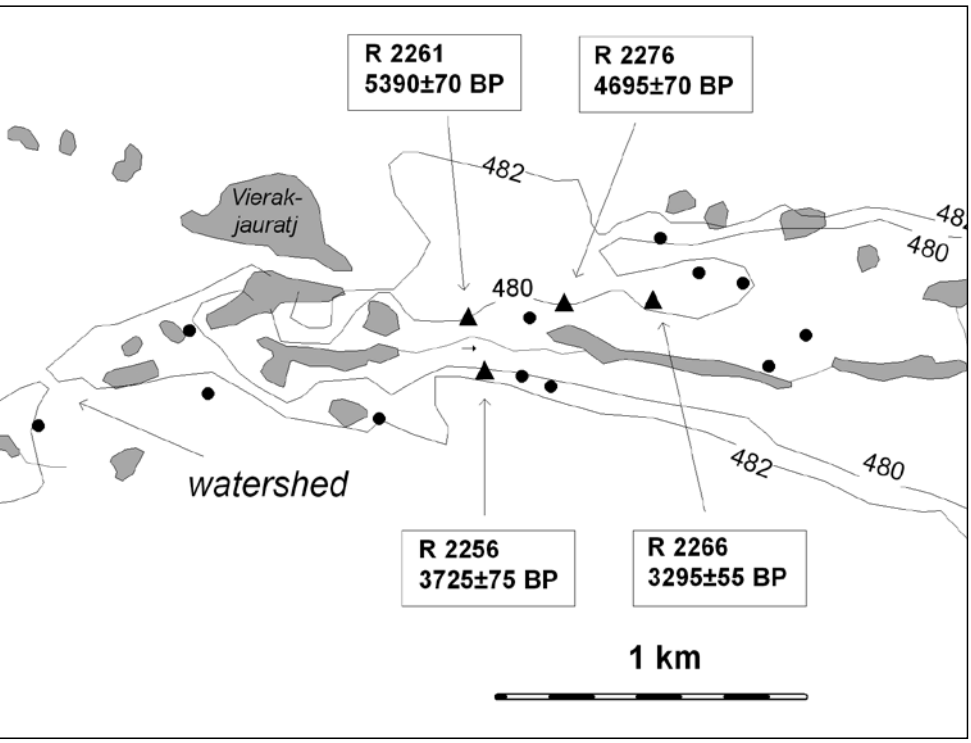


Fig. 4. Map of the Ipmatis valley and location of settlement sites in the Ipmatis valley, Arjeplog, Sweden.

oldest instance of reindeer bones in a north Fennoscandian archaeological context so far dated. Burned bones from elk were found on a lower terrace belonging to a later phase of occupation (Bergman et al. 2004a). In addition, evidence of complex yet selective exploitation of local stone indicates that the settlers had good knowledge of the occurrence and quality of rock material. The Ipmatis valley and the surroundings of the Dumpokjauratj site present rich and varied geological settings including quartz, quartzite and volcanic rocks suitable for the production of stone tools.

Overall, the archaeological data verify the early establishment of a hunter–gatherer society in the Arjeplog area. The speed with which pioneer colonisation occurred reflects the diverse subsistence options available in the environment of interior northern Sweden. However, it is difficult to discern whether the interior served as a separate resource area, or whether it was an integral part of a wider subsistence region comprising both coastal and interior areas. The oldest sites dated may represent a second phase of colonisation characterised by regionalisation (Fitzhugh 2004: 17), following an earlier phase that included scouting trips and seasonal migrations targeting specific resources (Bratlund 1996).



The Ipmatis valley

The Ipmatis valley, situated c. 20 km northeast of the municipality of Arjeplog, is characterised by moraines with zones of fine-grained sediment soils. The c. 8 km long valley basin is intersected by two major streams: one running from lake Lulep Ipmatisjauratj in a westerly direction through lake Alep Ipmatisjauratj and further west, while the other runs from lake Vierakjauratj eastwards into lake Västra Rebraur (Fig. 4). The present day streams, mires and tarns are the relics of a former river that ran through the valley from west to east. Due to non-uniform isostatic land uplift the river basin tilted westwards, eventually forming a threshold and dividing the water flow into two opposite directions. The topography, length and orientation of the river basin make it highly exposed to the tilting effect. Changes in the water levels and water flows illustrate the complex processes, including paludification, that have occurred in both the eastern and western parts of the valley. Although the lake tilting process has not been modelled in detail, its development can be outlined as follows: east of the watershed, water levels were alternately raised and lowered depending on the tilting, which led to blockage followed by sudden drainage of water through dams of fine

sediment. This constantly changing landscape has created a resource area that hunter–gatherers used intensely during the entire prehistoric period and thereafter. Archaeological surveys have discovered 22 settlement sites close to ancient shore lines, eight of which have been excavated (Fig. 4), covering a time span from 8120±75 BP to 2095±70 BP (Tab. II and Fig. 5). The oldest dated settlements, east of the watershed, are located at the lowest elevations. These locations were revisited on later occasions when water levels had altered. On the west side of the watershed, lake tilting proceeded with successive lowering of water levels, seemingly without any dramatic alterations.

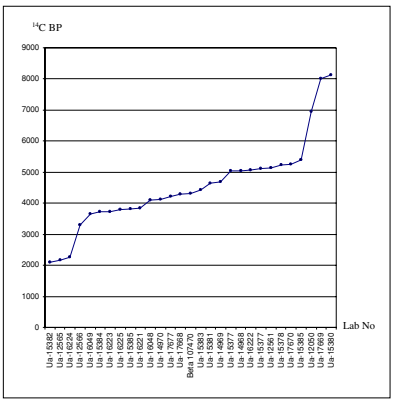


Fig. 5. Distribution of radiocarbon dates from excavated sites in the Ipmatis valley.

The distribution of dates obtained from radiocarbon-dated objects found in excavated sites indicates that the Ipmatis valley became a resource area that was more or less continuously used by hunter-gatherers from 8000 BP to 2000 BP (Fig. 5), corresponding to calibrated dates of c. 7000 BC—1 AD. The oldest site (No 1997:7, Fig. 4), dating to 8120±75BP and consisting of a single pit hearth with charred wood and fire-cracked stones, was located at the edge of a sandy terrace near a stream. No bone material or artefacts were found in or around the pit hearth. The campsite marks the beginning of human presence in the area and is typical of subsequent settlements in location, size and contents. Sites were small, generally comprising only a few pit hearths and very limited, if any, quantities of artefact material and burned bones. They represent short visits, probably connected with the exploitation of specific resources. This pattern is consistent over time. One of the sites (R2367, Fig. 4) provided information about the reasons for and characteristics of visits in the area. The site included at least eight features: a concentration of fire-cracked stones (F1, Tab. II), a roasting pit (F3, Tab. II), and six pit hearths with charcoal and fire-cracked stones (F4—F7, F9, Tab. II). Radiocarbon dates indicate that it was visited on a number of occasions. Furthermore, some features were stratigraphically separated due to eolic processes that resulted in repeated deposition of sand. Material found included a retouched flake, a retouched knife, flakes, microblades, and fragments of burned bones. Osteological analysis verified the presence of beaver bones, possibly from a single individual, in the area where fire-cracked stones were concentrated (F1, Tab. II). However, due to the high degree of

Tab. II. Radiocarbon dates from settlement sites in the Ipmatis valley, Arjeplog, Sweden.

Site number	Feature number	Lab number	Reported age (^{14}C yr BP)	Wood species
Raä 2367	F7	Ua-15378	5240±65	Pinus sylvestris
	F5	Ua-15377	5105±65	Pinus sylvestris
	F6	Ua-16222	5055±70	Pinus sylvestris
	F4	Ua-14968	5035±80	Pinus sylvestris
	F9	Ua-15377	5035±65	Pinus sylvestris
	F3	Ua-17668	4290±60	Pinus sect. sylvestris
	F3	Ua-17677	4215±60	Pinus sect. sylvestris
	F3	Ua-16048	4095±70	Pinus sylvestris
	F1	Ua-16221	3830±85	Not identified
SMA 1997:7	F1	Ua-15380	8120±75	Pinus sylvestris
	F1	Ua-17669	8020±75	Pinus sylvestris
Raä 2374	F2	Ua-12050	6950±65	Not identified
	F2	Ua-17670	5250±75	Not identified
	F2	Ua-12561	5145±55	Not identified
	F2	Ua-15381	4630±70	Pinus sylvestris
	F1	Beta 107470	4320+-50	Not identified
Raä 2266	F1	Ua-12566	3295±55	Pinus sect. sylvestris
	F1	Ua-12565	2160±55	Not identified
	F2	Ua-15382	2095±70	Pinus sylvestris
Raä 2276	F1	Ua-14969	4695±70	Pinus sylvestris
	F1	Ua-15383	4430±75	Pinus sylvestris
Raä 2256	F1	Ua-15384	3725±75	Pinus sylvestris
	F1	Ua-16223	3725±75	Pinus sylvestris
Raä 2261	F1	Ua-15385	5390±70	Not identified
	F5	Ua-14970	4130±70	Pinus sylvestris
	F6	Ua-15385	3810±70	Pinus sylvestris
	F4	Ua-16225	3800±75	Pinus sylvestris
	F2	Ua-16049	3645±80	Pinus sylvestris
	F3	Ua-16224	2255±75	Pinus sylvestris

fragmentation, only a small proportion of the bone material could be identified at species level. The location of the site, on the top of a low ridge near the point where a stream flows into a shallow lake, would have provided optimal fishing conditions. Evidently, the streams and waters in the vicinity of the site also provided access to beaver hunting grounds. Lithic material indicates that curation and repair took place during the stay. Pit hearths and roasting pits represent outdoor activities and suggest that visits were made during the summer period (Bergman 2006a). Altogether, the archaeological record indicates that the Ipmatis valley provided a resource area that was extensively used during the summer period, possibly in connection with hunting and fishing.

Landscape acquisition

The systematic regional approach of the archaeological investigations in the Ipmatis valley and adjacent areas, in combination with detailed study of selected sites, allows diachronic and synchronic analyses of landscape acquisition during the Mesolithic era to be conducted for the first time in interior northern Sweden. The functional diversity of sites and their strategic location, the selective exploitation of animal resources and the skilled use of local rock demonstrate a profound understanding of the qualities of the interior environment (Bergman et al. 2004a: 173). However, pioneer colonisation was not only an ecological process but also a social activity. Landscape acquisition included the naming of places and establishment of common frames of references. Mental maps had to be established in order for people to find their way to hunting and fishing grounds, campsites and quarries. The landscape was assigned meaning (Bergman 2006b: 145–147). Archaeological investigations suggest that hunter–gatherers made the Ipmatis valley an integral part of their range at an early stage. The location and size (features and artefacts) on registered sites (n= 29) indicate that the role of the Ipmatis valley in terms of the overall subsistence strategy seems to have remained largely unchanged over a period of almost 7000 years.

From an international perspective, the relationship between traditional economies and environmental change is a controversial issue (see e.g. Krech 1999). Recent research at the interface of social anthropology and ecology focuses on the use and management of natural resources by traditional societies (Berkes et al. 2000). Ethnobiological data on the use of edible plants among native North American societies show that the management of plant resources was a major concern, and a sustainable strategy for the use of resources. Plants were tended and maintained by pruning, selective exploitation and burning (Peacock & Turner 2000).

The emphasis of discussions on the subsistence basis of hunter–gatherers in Fennoscandia has generally been on faunal resources and animal food. However, plant resources may have been an equally important, or even critical, determinant of land procurement strategies and settlement patterns. The use of edible plants by indigenous Sami, specifically the use of Scots pine (*Pinus sylvestris*) inner bark, illustrates the significance of plant resources in the subsistence of traditional societies in sub-arctic areas (Bergman et al. 2004b, Östlund et al. 2004, Zackrisson et al. 2000). It seems reasonable to assume, therefore, that this would also have been the case in prehistoric times, and that plant resources were maintained in the following periods.

Forest fires were clearly frequent in this region during the early phases of forest development, shortly after deglaciation (Hörnberg et al. 2005, Carcaillet et al. 2007). Detailed studies of charcoal influxes into lake sediments indicate that fires were more frequent during this early postglacial period than they have ever been thereafter (Carcaillet et al. 2007). The factors responsible for the high frequency of fires are largely unknown, and distinguishing between fires arising from human activities and those arising from climate-based factors (lightning) is very difficult. Humans arrived as the build-up of organic material was beginning, and there is clearly a strong likelihood that hunter–gatherers ignited and spread fires. There is practically no location within the study area where human presence during the pioneer phase can be excluded. Observed correlations between archaeological features and the frequency of forest fires are inevitably imprecise, due to the limitations of using archaeological material for this purpose. Procurement strategies involving seasonal and extensive use of different resource areas may have included repeated burning and temporary abandonment of certain areas according to a logistic system. However, the archaeological data do not permit the patterns to be described at such high resolution.

Regardless of whether fires were ignited by humans (deliberately or accidentally), or caused by climatic or other factors, fire disturbances have probably resulted in the increased growth of various edible herbaceous plants and berries (e.g. *Epilobium*, *Rumex* , *Oxyria*, *Rubus*, *Angelica* and *Urtica*). Several of these genera were also important food plants for wild game. The succession dynamics of plants following fire disturbances may have played an important and integral role in subsistence strategies among Mesolithic hunter–gatherer populations (Mellars 1976, Bennett et al. 1990, Simmons & Innes 1996a, 1996b, Tipping 1996, Edwards et al. 2007). Considering the very early ranging in of a variety of landscape qualities into subsistence- and settlement logistics, and the establishment of differentiated resource areas, palaeoecological studies focusing on the identification of possible anthropogenic effects on the environment in the vicinity of Early Mesolithic sites

were conducted. Indeed, human impact on vegetation was detected close to the oldest dated settlement at Dumpokjauratj, c.15 km SE of the Ipmatis valley. Fine-resolution pollen analysis (FRPA) from close canopy sites revealed vegetation changes that coincided with human occupation of the land. There were reductions in the abundance of *Pinus* and *Betula* trees, as well as shifts in the forest floor layer, including increases in the abundance of *Poaceae*, *Hippophaë*, *Humulus*, *Melampyrum* and *Rhinanthus* (Hörnberg et al. 2005: 21). Thus, the hunter–gatherers settling at Dumpokjauratj actively opened up the forest around the settlement. Similar anthropogenic effects on vegetation have been observed at Early Mesolithic sites in Great Britain (Smith et al. 1989, Bush 1993) and Germany (Bos & Urz 2003). Not only did the pioneer hunter–gatherers adjust to existing conditions, but they actively shaped their living space by manipulating the environment, creating a landscape in a literal sense.

Conclusion

Early postglacial settlement sites near ancient shorelines in the Arjeplog area were discovered as a result of the development of of a theoretical model of non-uniform isostatic land uplift and lake-tilting. Palaeoecological data and radiocarbon dating of settlement sites challenge the prevailing models of ice recession, suggesting that deglaciation was completed more than 1000 years earlier than previously postulated. Pre-boreal tundra-like vegetation prevailed only for a short period after deglaciation, and was replaced by forest vegetation within 500 years (Hörnberg et al. 2005: 20). These first forests were frequently disturbed by natural or anthropogenic fires. The early post-glacial ecosystem presented a productive and diverse environment that was attractive to hunter–gatherer societies. Pioneer colonisation was rapid, and indicative of a well-developed, flexible technology that could meet the challenges imposed by the environmental conditions. Landscape acquisition included the ranging of the landscape into logistic subsistence and settlement patterns, and into social and ideological frameworks. In addition, pioneer settlers interacted with and actively influenced their environment at an early stage. These findings are the first to verify such early human impact on the environment in northern boreal areas. The archaeological sites of the Ipmatis valley of Arjeplog, constituting a 7000-year long record of human presence and habitation, show that the logistic patterns of hunter–gatherer subsistence were established virtually at the outset of human occupation in the area.

Prior to 1999 the very limited number of Early Mesolithic settlements (<5) hindered any attempt at interpreting the process of pioneer colonisation. Although the present study has been conducted on a local and regional scale

within a limited geographical area, the number of known Early Mesolithic settlements sites in interior northern Sweden have increased significantly. The present study opens new perspectives on early hunter–gatherer societies and landscape acquisition and the variety of methods applied sets a new standard for future research on early societies in sub-arctic regions.

Acknowledgements
This study was supported by Stiftelsen Riksbankens Jubileumsfond (The Bank of Sweden Tercentenary Foundation). We thank Sees-editing Ltd. for improving the language and Anna-Karin Lindqvist for making the figures.

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Reports / Rapports / Berichte

SVERKER SÖRLIN & DAG AVANGO

Humanities and the Social Sciences in the International Polar Year

Issues and Projects from a Swedish Perspective

ABSTRACT In this article, we present research and other International Polar Year (IPY) related activities within the humanities and the social sciences with an emphasis on Sweden. The three previous IPYs in 1882–83, 1932–33, and 1957–58 (IGY) were almost exclusively a domain for the natural sciences. The inclusion of the humanities and social sciences, as well as the involvement of Arctic peoples, is one of the major developments in the present IPY – a recognition of the fact that the polar areas are the home of people and scenes for human action and interaction of global importance. There are several IPY research projects with Swedish participation under way, on themes such as governance and adaptation of human-environment systems, industry and science in the field, social strategies of Arctic indigenous peoples, and North Atlantic diplomacy. There are also a number of activities within outreach and education that will present the pressing issues of polar science to students, policy makers and the general public. The IPY effort is the largest ever undertaken by the Swedish social sciences and humanities in and on the polar regions in such a short period of time. The research is conducted at several universities, notably Gothenburg, Umeå, and the Royal Institute of Technology. It will leave a legacy of importance for the polar research community as well as for the peoples of the North.

KEYWORDS Arctic humanities, Arctic social sciences, Arctic research, International Polar Year (IPY), Arctic field sciences, Arctic industrial heritage, Arctic research funding

The International Polar Year 2007–08 includes something that in the IPY framework programme is called "The Human Dimension," one of six major areas of interest (ICSU/WMO 2007, ICSU 2004, www.ipy.org). It is a timely acknowledgement of the long standing human presence in the polar region, and of the knowledge traditions that the peoples of the North have developed in the past and the present. The Arctic in itself represents a multitude of parallel knowledge traditions, some of which are modern and have arrived with colonialism and polar science. Nevertheless, so dominating has the image of the natural sciences become that until recently it completely overshadowed other forms of knowledge, whether indigenous or stemming from the humanities or the social sciences.

However, if we look more closely at the research done by polar scientists historically, it is of course clear that the so called "human dimension" is not new. Even in the early years of exploration by European hunters, traders, and navigators there was a considerable interest in indigenous populations, their culture, myths, religion, and language (Harbsmeier 2002, Nansen 1911). This interest mirrored general interest in overseas cultures and gradually formed part of colonial science, as it emerged in the eighteenth and particularly the nineteenth centuries (Sörlin 2001, Bravo & Sörlin (eds.) 2002, Sörlin 2006). Toward the end of the nineteenth century a modern Arctic anthropology emerged, with Franz Boas as one of the celebrated pioneers, conducting field work during the first International Polar Year 1882–83 (Cole & Müller-Wille 1984, Boas 1894), but with important German colleagues in the field such as Heinrich Abbes (Abbes 1884, 1992), and with forerunners among, for example, Swedish (A.E. Nordenskiöld) and German scientists (Lüdecke 2007).

With the exception of individual scientists or anthropologists, the human dimension has been largely absent from the research programmes during the International Polar Years, however. The first IPY, in 1882–83, was motivated by the belief that the solutions to fundamental problems of meteorology and geophysics were to be found in the polar areas and that such phenomena could not be surveyed by one nation alone (Lüdecke 2004). These motivations have been strong also in the following IPYs. In 1932–33, meteorology was the dominating discipline, focusing on the global implications of the newly discovered jet streams (Korsmo & Sfraga 2003). The International Geophysical Year (IGY) 1957–58 focused on research problems concerning the geophysical properties of the earth – the volume of the ice-cap in Antarctica and the theory of continental drift are examples – with some medical observations on the personnel of the ice stations in Antarctica and on the drifting floes as marginal exceptions (Chapman 1959, Belanger 2006). Thus, the rationale for the international cooperation effort of the IPY was closely tied to the nature of the research problems and the methodological and logistical needs of the research. Understanding human activities in the polar areas was simply not on the agenda. The peoples of the circumpolar Arctic were at best regarded as useful local informants or resources for the logistical needs of the scientists.

The IPY 2007–08 represents a breach from that tradition. In our view, one of the greatest advances of this IPY is that it emphasizes the fact that the polar areas are the home of people – indigenous peoples and others – and scenes for human action and interaction, today and in the past. The inclusion of the "Human dimension" in the scope of science for the IPY is a recognition of the fact that the polar areas are not just an arena for natural science, but also for Ssocial science and the humanities. A substantial part of the projects supported for participation in the coming IPY involves disciplines like anthropology, sociology, economics, history and archaeology. The emphasis on including the human dimension is also visible in the outreach activities being planned and implemented in connection with the IPY.

Polar arenas for inclusiveness and learning

For the social and human scientists and the polar communities alike, the International Polar Year 2007–08 promises to be a watershed experience. One major

concern is inclusiveness and participation, so that local people, social scientists and different kinds of stakeholders can find ways of cooperating in earnest in IPY projects. This is not a trivial task but already at the starting phase there are signs to suggest that this is actually happening, for example with participatory observation in projects in northern Canada and Alaska, and in projects in northern Scandinavia (see below). The ambitions include the organisational structure of data gathering, management and sharing, outreach, education and information in order to facilitate a convergence of social science issues and the concerns and knowledge interests of local communities.

The IPY will provide arenas of collaboration between physical sciences and the humanities and social sciences. This is not totally unchartered ground, but the presence of the non-sciences will be much larger in this IPY so as to hopefully contribute to a genuinely multi-disciplinary (and not simply 'systems-based') understanding of the environment. The need for cooperation across disciplines is dire because of the rapid social and environmental change that is giving great impetus to coupled human-environment systems. Almost by necessity this will have to include local or 'traditional' knowledge, which should be quite natural when scientific work is undertaken in the back-yards and on the environments of local people. Ultimately it is expected that this IPY will provide opportunities for a broad scientific community to include the hopes and visions of local peoples into their concerns and research agendas, a meeting the fruits of which will be reaped long after the IPY has concluded. With any reasonable sense of expectation this will in turn lead to better prospects for policies in the and for the polar regions. Some of the social sciences and humanities projects address these issues head on: policies for sustainable development, adaptive resource management, and policy tools for vulnerability and resilience (Krupnik et al. 2005).

The social sciences and the humanities also play considerable roles in data management and monitoring, areas which traditionally have been almost exclusively pursued by the natural sciences or the national agencies concerned with weather, natural resources or others. In preparation for an integrated set of Sustained Arctic Observation Networks, SAON, the social sciences have provided inputs, through IASSA and through special workshops on social science data management, one in Copenhagen in June 2007. The Swedish input into that process has been considerable and Sweden was chosen as the first venue in a series of workshops to establish SAON as a major multinational legacy of IPY with strong implications for Arctic residents and Arctic policies. Initiatives from Swedish participants have assisted in this development, not least through the Arctic Council.

Governance and adaptation of human-environment systems

The human dimension also takes a central place in International Polar Year activities in Sweden – in humanities and social science research and in IPY outreach activities. In academic research, several different themes can be identified – Governance and adaptation of human-environment systems, Industry and science in the field, Social strategies of Arctic indigenous peoples and North Atlantic diplomacy (the presentations of IPY research projects in the following are based on IPY project descriptions at www.ipy.org and on personal commu-

nication with project leaders). Several research projects take their starting point in the ongoing and accelerating process of climate change, focusing on its impact on northern communities, northern peoples – indigenous and others – and governing systems in the Arctic. Two such projects – CIGSAC and CAVIAR – involve researchers at Umeå University in Sweden.

CIGSAC (IPY project ID 316) – "The Capability of International Governance Systems in the Arctic to Contribute to the Mitigation of Climate Change and Adjust to its Consequences" – is a multidisciplinary project, based in the sciences of international relations, international law and political science. Its objective is to study how Arctic international governance systems respond to the predicted impacts of climate change on the peoples of the far north. It will analyse the vulnerability and/or resilience of these regimes to changes and how they are capable of being part of the effort to mitigate their effects. The project intends to highlight weaknesses and strengths of the various international governance systems. On a theoretical level, it seeks to understand general changes in international governance and soft-laws, which are believed to assume a stronger role than previously. The project will study a number of international co-operation bodies in the Arctic, including those of indigenous peoples, but will focus on the Arctic Council, because of its potential role as a platform to present Arctic views in negotiations concerning global climate change. Beside a book and journal articles, the project hopes to deliver several PhD thesis.

The Swedish subproject within CIGSAC is called "National and international adaptation to climate change in the north: international organisational capacity" and is financed by the Academy of Sciences in Finland. Its focus is not only the adaptive capacity of Arctic international governance systems to the impacts of climatic change, but also to the effects of globalisation. It aims to identify the capacity of political systems to respond, adapt and interact internationally, both as individual organisations in horizontal networks and vertically on the national level. What is the adaptive capacity of international Arctic organisation? To what degree does vertical organisation and coordination to support adaptation exist between different levels of governance? The study will map and describe the international Arctic governance system, its overlaps, its gaps, and the communication between organisations, their political readiness, capacity and awareness.

There is also a Swedish project within the IPY consortium CAVIAR (ID 157) – "Community Adaptation and Vulnerability in Arctic Regions." The starting point of CAVIAR is the rapid environmental and social changes facing local communities and societies in the Arctic and the anticipation that local responses to these changes will depend on the vulnerability and adaptive capacity of human-environment systems. The objective is to develop and adapt methods for assessing the vulnerability and adaptive capacity of the "human systems" in local Arctic communities. On the basis of such analysis, the project will compare experiences of change in different communities and differing contexts. The project has an interdisciplinary character, involving researchers in political science, geography, anthropology, ecology and animal physiology in the nations involved. It aims to develop the empirical and theoretical understanding of processes that shape vulnerability and adaptation in the circumpolar region. Researchers will base their studies on government data on socio-economic and

climate conditions as well as field work in communities across the circumpolar Arctic – fieldwork that, in line with the call of the present IPY, will be based on close collaboration with indigenous peoples and make use of their knowledge. It is hoped that the project will provide bases for policy-making locally and regionally. The Swedish sub-project within CAVIAR is called "Vulnerability and resilience of coupled socio-ecological systems in multi-use forests" and is funded by the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS). It focuses on the management of so called *multi-use forests* (forests used for forestry, reindeer herding, tourism and recreation). Such forests are often subject to controversies over policy aims, land use rights and management, while the policy and management systems dealing with them often are sectorial and unable to integrate the needs of different land users in a satisfactory way. A hypothesis is that under external challenges, such as climate change, such systems will face increasing problems. The aim of the sub-project is to identify the needs and goals of the stakeholders in multi-use forests and to identify vulnerable nodes in these socio-ecological systems. Another objective is to identify good examples in terms of resilient, adaptive nodes in the systems, and ways in which the systems can be made more resilient. With an inter-disciplinary approach, the research will be based on interviews, stakeholder meetings and literature surveys. The study will develop qualitative narratives as well as models to describe the system and its way of functioning, especially in the light of external forces such as climate change.

A third IPY project with Swedish participation, funded by the Norwegian Research Council, and dealing with the impact of climate change on Arctic peoples is EALAT (ID 399) – "Reindeer herding and climate change." This project deals more specifically with the impacts of climate change on the indigenous peoples in northern Scandinavia – the Sami – and their reindeer herding. The project involves both scientifically trained researchers and people from Sami communities and will focus on the capacity of reindeer herding to adapt to climate change and variability. The project will rely heavily on reindeer herders' traditional knowledge and analyses of their ability to adapt to environmental variability and change. It is emphasised that reindeer herding practices and knowledge can be used as models for sustainable exploitation and management of northern terrestrial ecosystems. However, it is not only a matter of making use of indigenous knowledge, but also to document this knowledge before it is lost in the societal and cultural transformations in the Arctic, associated with globalisation.

Indigenous knowledge is also at the core of IPY projects based at the Abisko research station in Swedish Lappland – ENVISNAR (ID 213) and "Snow and Ice." These projects are interdisciplinary, mostly based within the natural sciences, but they deal with the impacts of climate change on people. In ENVISNAR (Environmental baselines, processes, changes and impacts on people in sub-arctic Sweden and the Nordic Arctic Regions), the knowledge of Sami and their observations of climate change impacts are integrated with natural science research to deal with the research problems of the project.

Industry and science in the field

Societal consequences of climate change are also a starting point for research projects within the field of history and archaeology. An IPY project with signi-

ficant Swedish involvement is LASHIPA – Large Scale Industrial Exploitation of Polar Areas (ID 10). The project is led from the Arctic Centre, University of Groningen and involves researchers at the Division of History of Science & Technology in Stockholm. Its point of departure is the increasing interest in the fossil energy resources in the circumpolar north, triggered by the new possibilities for extraction and transport that global warming may offer, as well as the rising world market prices for crude oil and beliefs that the existing oil resources in the world will be significantly reduced in a couple of decades. In the wake of this development, attempts have been made by states to establish exclusive rights to natural resources in the Arctic. Therefore, national rights and sustainable resource management will be on the agenda of international negotiations in the future. These developments call for research efforts on how operators from the west have dealt with the natural resources and territorial rights in the polar regions in the past – in the Arctic and the Antarctic.

The aim of the LASHIPA project is to explain the development of industry in the polar areas from the seventeenth century until today, and the consequences of that development for the geopolitical situation and for the regional environment in the polar areas. Previously, historical research on whaling and mining in the Arctic and Antarctic has often been characterized by a narrow national perspective. In contrast, the LASHIPA project is problem-oriented and will seek explanations from an international comparative perspective. Besides the traditional written sources of historical research, it will study the material remains of industry on different sites in the Arctic and Antarctic. At least four field campaigns will take place during the IPY – two on Svalbard in the Arctic, two in the Antarctic, South Georgia and South Shetland.

There are two subprojects with Swedish participation, funded by the Research Councils in the Netherlands (NWO) and in Sweden (VR). "Green Harbor, Spitsbergen and the international history of exploitation of the polar areas" aims to give general explanations to the development of industry in the polar areas from an international comparative perspective. It will focus on the three target areas for the LASHIPA project – Grønfjorden on Svalbard in the Arctic and South Georgia and South Shetland in the Antarctic. The project will deal with research problems concerning driving forces behind industrial development in the polar areas, and interaction between governments and companies in the struggle over natural resources and territorial control. Moreover, it will investigate the strategies of industrial companies in designing and transferring technology to the polar areas and in establishing social order on isolated sites with no-man's land conditions. Another sub-project, "Rituals and symbols in the struggle over the polar areas and their natural resources," aims to study the relation between industrial activities in polar areas and the strategies of national governments in establishing influence. The project focuses on the symbolic and ritual activities of industrial companies in claiming control over natural resources and territories, and their impact on the geopolitical situation in the Arctic and Antarctic. Both sub-projects build on previous work by Dag Avango (Avango 2003, 2005). At the Royal Institute of Technology in Stockholm (KTH), there will also be researchers dealing with social history and community planning in mining communities on Svalbard.

Scientific research on climate change has, for the last century, been increas-

ingly based on data collected at field stations in the polar areas. Yet, within the history of science, as well as among the public, our knowledge of how this data is created and how the knowledge is constructed – in the field – is limited. Therefore, scientific practises at research stations in the polar areas, IPY field stations in particular, is a core theme in another IPY project with strong Swedish participation – "Field stations" (ID 100). In this project, researchers from six nations study the history and legacy of the four IPY's through some of their field stations, which are compared with other field stations in the Arctic and Antarctica.

The project identifies several rationales for studying field stations. Historically, they have been the most prominent and concrete feature of the International Polar Years, including the present one. The polar field stations are modern features, comparable to laboratories or observatories and encapsulate many characteristics of modern science – laboratory practices and methods, precision instruments and territorial claims. Field stations, and the scientific expeditions that created them and used them as vantage points, are inseparable from polar research. They form important parts of the infrastructure of polar research in the past two centuries. They have also served as flag carriers, and as symbols of political, diplomatic and economic ambitions of the nations to which their founders belonged.

The core theme of the project concerns field stations as units of knowledge production in the field, but also their role in broader networks and contexts of science, policy making and polar politics. With an anthropological approach, researchers from the project will identify and analyse the work (e.g. planning, calibrating, publishing, management, hidden labour, sharing data) required to make field observations meaningful across a range of scales and contexts of users or audiences. To the field stations project, the present IPY 2007–08 represents a unique opportunity to understand how the field sciences have generated a scientific and cultural legacy. However, the project will also analyse former research station sites and important non-IPY sites, to understand how the residues of scientific practice become valid knowledge, collective memory and heritage.

In the "Field stations" and LASHIPA projects, the geopolitical dimensions of stations in the polar areas are important research problems. The political dimensions of polar research are also at the core in another IPY project with Swedish involvement – "Changing Trends in Polar Research as Reflected in the History of the International Polar Years" (ID 27). This project brings together political scientists and historians of science (Umeå University, Gothenburg University), in an effort to study the development and institutionalisation of Antarctic research, with a focus on the International Geophysical Year (IGY) 1957–58. An important objective of the project is to understand to what degree the previous three International Polar Years were driven by scientific criteria. The project will investigate to what extent compromises were made as a result of political barriers and logistical limitations, as well as the role of new technologies. The project will seek an understanding of the background factors driving nations to choose to participate, or not to participate, in the International Polar Years – territorial interests, security politics, national prestige, scientific agendas etc. Special attention will be devoted to the relation between the IGY and the national security politics of the USA and the Soviet Union during the Cold War.

Moreover, the project will deal with the process leading to the institutionalisation of Antarctic research and the formation of SCAR – Scientific Committee on Antarctic Research. The project will be based on archival sources, but when possible also with oral sources since important participants in the IGY 1957–58 and behind the Antarctic Treaty are still alive.

Sami, social strategies, and North Atlantic diplomacy

A number of research projects within the social sciences and humanities deal with research problems concerning indigenous peoples in the circumpolar Arctic. As earlier mentioned, some of them deal with the impacts of climate change on the lives and economies of indigenous populations. However, there are other research problems addressed. In "Dynamic Social Strategies in Arctic Environments" (ID 6) – a Danish-led IPY project with Swedish participation – long-term changes in movement and communication among Arctic peoples are investigated. The project aims to be an internationally oriented comparative research programme to develop a new and integrated understanding of Arctic cultural history. From a long-term historical perspective, the project hopes to bring about an understanding of strategies of movement, communication, and other social actions which Arctic peoples create when interacting with their social, cultural, and natural environments. The Swedish sub-project within "Dynamic social strategies" is led by archaeologists from the University of Lund. With logistical support from Denmark, they will investigate steatite objects and steatite quarries, as well as Paleo-Eskimo sites in the Nuuk fiord on Greenland.

"Representations of Sami in the Arctic and Sub-Arctic" (ID 30), focuses on the image of the Sami in nineteenth-century polar literature (Umeå University, University of Tromsø, KTH). The objective of the project is to study how the picture of the Sami people in the nineteenth and twentieth centuries was created in travel writings by explorers and scientists. The research will be based on written sources, mostly in literature and scientific publications. This project builds on previous work by Karin Granqvist (2004).

Alongside, and partly overlapping, with the IPY projects there are a number of other research projects that occur concurrently. Some of those belong to a major EUROCORES program called BOREAS, initiated by the European Science Foundation and focusing on the humanities. Among a group of six projects three have Swedish participation, mostly in the historical sciences and archaeology. Another initiative is "Nordic Spaces," which is a programme conducted in cooperation between a range of funding agencies in the Nordic countries. Under this umbrella a project entitled "Arctic Norden: Science, Diplomacy and the Formation of a Post-War European North" has been started with participation in Sweden (KTH and Gothenburg University), Norway (University of Oslo and the Barents Institute), and Reykjavík, Iceland. Participants are historians, particularly of science and technology, and political scientists focusing on international relations and gender issues. Cornerstone works for this project are Friedman (2004), Helsvig (2007), Røberg (2001) and Shadian (2006). The Swedish Research Council, VR, is funding projects on literary and scientific travellers in the sub-Arctic parts of Scandinavia (Umeå University) and on Arctic glaciology and climate science (KTH).

Reaching out – policy, art, and the wider community

The International Polar Year is not only a coordinated effort for scientific polar research. It is also an international effort aiming to bring new knowledge and the pressing issues concerning the polar areas to the attention of policy-makers and the general public. Therefore, an important part of the Swedish IPY effort has been to initiate and support outreach projects, focusing on the polar areas in general and the Swedish polar area in particular. Financial support has been given that will generate exhibitions and video installations at museums and science centres across the country, book productions, public lecture series and web-portals on polar science within different fields. Art projects have also been supported and there is a significant workshop taking place at Bildmuseet, Umeå University, in September 2007, featuring a work by London-based artist Isaac Julien, *True North*, and with interventions on relations between art, science, and indigeneity in the Arctic.

Education has a central role in Swedish IPY outreach activities – in schools and in the broader public sense. One project financed by the Research Council, through the Swedish IPY committee, is a nation-wide lecture series – "Främmande Nord" ("Foreign North"). The lectures will focus on the image of the North in non-Scandinavian travel literature from the eighteenth and nineteenth centuries. Another significant project, co-financed by the Swedish and Norwegian IPY committees (and other funding agencies), is an educational school textbook on the history of the Barents region. This region, divided between Sweden, Norway, Finland and Russia, shares a common historical experience of life in the Arctic and existence on the periphery of nation states, that is typically absent in the history schoolbooks in the region. The book will fill that gap and will be published in several languages.

Building a northern legacy

Without doubt the IPY effort is the largest ever undertaken by the Swedish social sciences and humanities in and on the polar regions in such a short period of time. Within two years a total of about forty scholars will participate in some fifteen research projects. These have been funded, for the Swedish principal investigators and/or individual Swedish participants with a total of circa 20 MSEK (2.2 M€) to which should be added funds for outreach and education, museums, art, books, lecture tours and funds contributed by universities and institutes as part of researchers' regular salaries and research infrastructure. All figures should be treated with caution, however, since they are conspicuously hard to estimate and can never be precise. They are given here just as indications of a level of ambition and coordination. Further signs of the progress made are that Swedish scholars feature prominently as keynote speakers and contributors to a number of international conferences, and that Swedish scholars serve as principal investigators in several of the large international research projects mentioned above.

The situation as it stands in 2007 could interestingly be compared with the situation only one or two decades ago. By then, only scattered work was done on the polar regions by Swedish social scientists and humanists. In the middle of the 1990s the very first "polar" dissertation in the historical sciences was presented in Sweden, by Urban Wråkberg, then at the Centre for History of Science

at the Royal Swedish Academy of Sciences (Wråkberg 1995). At about the same time, the first ever multidisciplinary (and multinational) Swedish-led "Humanities Arctic Expedition" was being planned with the Swedish Polar Research Secretariat providing important logistics and infrastructure and, not least, their considerable field experience. The boat expedition, to western and northern Svalbard and North East Land, took place in August 1997 (Sörlin 1997), and was immediately followed by a commemorative workshop in Longyearbyen on the centennial of S. A. Andrée's balloon expedition (Wråkberg (ed.) 1999). During the following years expeditions and field visits were conducted as Swedish historians, archaeologists, anthropologists, and antiquarian specialists prepared and performed research on Arctic, and occasionally Antarctic, projects. The research results have been presented in several publications (Avango 2005, Elzinga 2004, Lewander 2004, Sörlin 2002, Bravo & Sörlin (eds.) 2002). There were also PhD courses and training that occurred in the field (Avango et al. 2005) and a gradually increasing interest in the polar region as a topic of interest.

Ten years later, with the IPY in full swing, it seems as if the social sciences and humanities have come of age as legitimate operators with significant voices when it comes to Arctic affairs. They can legitimately claim to have contributed to the strong interest in involving northern residents as participants and observers. They have also played a role in establishing respect for indigenous knowledge traditions and an integrated and participatory approach to northern research. Hopefully, this may go down in years to come as a distinct legacy – a part of the overall Swedish IPY legacy and one that will be useful for a variety of communities in research, policy, and among northern residents.

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Miscellanea: Notes/Notizen

Conference reports

Indigenous Identity in Demography

The Centre for Sami Research (CeSam) and the Centre for Population Studies (CPS) at Umeå University hosted the workshop *Indigenous Identity in Demographic Sources*, in September 29–30, 2006. The theme brought together 35 researchers from the circumpolar north and beyond.

Nation states and territories enumerate, categorize and differentiate indigenous people in highly variable ways which obviously has implications for research. During the two-day programme scholars from a number of subjects examined the ways different countries in the circumpolar north and beyond have dealt with and continue to deal with the statistical construct "indigenous people." It became evident that the situation differs substantially between for instance Canada, Australia and Norway. The 20 presented papers focused on the creation and validity of categories for enumerating indigenous populations, on the use and misuse of ethnic markers, on micro-demographic investigations, on demographic databases and indigenous identities. A publication based on the papers from the workshop is currently being prepared.

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Sami Prehistory and Early History in the Western Barents Region (SAMIARC)

In October 2006 the first meeting of the NordForsk network project Sami Prehistory and Early History in the Western Barents Region (SAMIARC) was held in Rovaniemi, Finland. The project is a collaboration between the universities of Umeå, Tromsø, Helsinki, and the Russian Academy of Sciences (St. Petersburg and Petrozavodsk), and the project leader is Professor Thomas Larsson, Department of Archaeology and Sami Studies, Umeå University. For more information, see http://www.umu.se/archaeology/SAMIARC/start.html.

More than 60 participants from Sweden, Norway, Finland and Russia engaged in Sami cultural issues attended the meeting. The conference papers will be published in 2007 in an anthology from the University of Helsinki.

An international PhD course on the theme "Environmental and Cultural Perspectives on the Western Barents Region 5000 BC to AD 1400" was held on the Kola Peninsula, June 4–14, 2007, financed by SAMIARC. Twelve students and seven teachers from the four countries were engaged in the course.

Within the framework of SAMIARC a workshop on "Prehistoric Identities, Cultures and Interaction in the North" is planned for October 2007 in Helsinki, and a PhD course on Sami Archaeology and Contemporary Society in Tromsø is scheduled for spring 2008. Another planned SAMIARC activity is an archaeological conference in St. Petersburg in the autumn of 2008.

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Regionernas estetiska uttryck och bilden av regionerna [Aesthetic expressions and images of the regions]

The conference *Regionernas estetiska uttryck och bilden av regionerna* was held at Umeå University, Sweden 30–31 March 2007. During these two days about 30 scholars from universities and museums in Sweden, Norway and Finland discussed questions concerning the representation of the regions, the role of landscape images and how the regions have been interpreted by foreign travellers and characterised in literature and art. The conference was organised by the area of excellence *Northern Studies* at Umeå University, the research programme *Foreign North*, Umeå University, Luleå University of Technology, The Royal Skyttean Society and the Swedish Research Council.

The speakers focused on how images of the North have been constructed, the role of literature in regional identification, how global and regional imaginaries have formed the history of art, nordicity as branding, the concepts of landscapes and places in a historical perspective, risk assessment in polar expeditions, how architecture has contributed to forming local identities and the landscape as a commercial resource. A public event in the form of an exhibition of art, maps, books and archives was held at the University library.

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North and Nordicity – Representations of the North

The international, interdisciplinary conference *North and Nordicity – Representations of the North* was held at the Munk Centre at the University of Toronto, Canada 17–19 May, 2007, with participants from various parts of Canada, Sweden, Germany, Japan, Ireland, USA, Finland and Norway, representing art and art history departments, literature studies, linguistics, political science, anthropology, Germanic studies, communication studies, environmental studies, history, sociology, geography and Scandinavian studies. In all, the programme included about 40 presentations. Five current projects or research programmes were also presented: the University of the Arctic, Tampere Peace Research Institute, the Germany-based *Imaginatio Borealis*, *Laboratoire international d'étude multidisciplinaire comparée des represéntations du Nord* based in Québec and *Foreign North: Outside Perspectives on the Nordic North*, Umeå University.

The panels on literary representations of the North(s), featured, for instance, presentations on how the North is figured in Spanish literature, on starvation narratives and on how intertextuality functions in the construction of North and nation. Specific novels were dealt with in presentations on Mikael

Niemi's *Populärmusik från Vittula* and J. L. Borges *Ulrica*. The importance of illustrations in relation to travelogues was discussed from various perspectives, and musical representations of the North were also discussed. Other panels dealt with gender issues in travelogues and fictional works. Discussions focused on how writers choose to present the Norths as exotic, emphasising adventures and dangers, but also on how the North is figured as a welcoming place and as a destination for Arctic tourism.

Several panels focused on politics, ideology and ethnicity in the North. The relationships between indigenous cultures and settlers were analysed from a number of different perspectives; historical, ethnographical and geographical. Issues concerning how the North is constructed both from within and from the outside were also addressed from as diverse starting points as consumption theory and linguistics.

The geographical diversity of the participants, the number of disciplines represented, and the different media used demonstrates the interdisciplinary nature of the conference. Thus, the North was analysed from different disciplinary and geographical perspectives which will greatly contribute to the ongoing work (both for the individual scholars attending the conference and for the various research programmes), and to the formulation of new theoretical paradigms concerning the construction of the North.

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Conference announcements and Calls for papers

POLAR: Fieldwork and Archive Fever, London, UK, 19–20 November 2007

The Fieldwork and Archive Fever symposium is interdisciplinary and will focus on the curation and production of climate change knowledge in the Polar Regions within the context of the International Polar Year. It will bring together scientists, writers, artists, historians, and social scientists with interests in knowledge about the polar landscape and its broader implications for global climate and society. Drawing together recent discussions in the arts, sciences and humanities on themes such as climate change, the polar landscape, data, time and technologies of inscription, the symposium will facilitate a broad conversation on the "archives" and "fields" of climate change.

Presentations and papers are invited around six themes: "The Core," dealing with Ice cores from polar areas, seen as time lines including pre-history (earth history) and human history. What does the core tell us about climate change and how do we get this knowledge from the core? How is the core extracted, curated, and interpreted within the discourse of climate change? What is the nature of "core" histories? A second theme is "Edge Spaces: Outer Space and Polar Space," with the purpose to chart the poles chronologically and thematically with refer-

ence to different kinds of charts: those of explorers, imaginative geographies of outer and inner space, geopolitical charts, resource charts and climate charts. A third theme is called "Exploration narratives and Images," and deals with how narratives gather and assemble assorted facts in the course of explorers' travels. How do explorers' narratives and artists' images interact with histories of science and to what extent do such narratives compensate for the nature of the polar experience? Another theme is labelled "Instruments and Spaces of Curation." Scientists and explorers measure, sample and bring back the poles to field stations, observatories, museums, and laboratories for comparison and analysis. How do instruments enable the curation of the polar landscape through methods of extraction, recording, and classification? How do the things that pass through the instruments of curation come to stand for the poles? A fifth theme – "Worlds of Data" – deals with numerical calculation in polar research. How does this numerical processing produce syntheses and trends from the disassembled experiences and extractions of polar exploration and science? What techniques of organisation and theoretical assumptions underpin the processing of data? How have these changed over time, and how has this changed our perception of the poles and informed our knowledge of climate change? Finally, a sixth theme focuses on "Polar Imaginations," dealing with the cultural productions that have always mediated popular interest in the polar areas and polar research – theatre, art and documentaries. How do these productions inform our images of the poles and how have they changed over time? Furthermore, how do such cultural outputs themselves support the willingness of the public to fund and engage in polar exploration and science? How do they help us to understand the complex science and cultural effects of climate change?

Information: http://www.open.ac.uk/socialsciences/about-the-faculty/events.php

Melting Boundaries: Carrying Out Effective Research in the Circumpolar World, Saskatoon, Saskatchewan, Canada, October 18–21, 2007

The 8th International ACUNS Student Conference on Northern Studies, entitled *Melting Boundaries: Carrying Out Effective Research in the Circumpolar World*, will be held in Saskatoon, Canada. Participants are expected from around the circumpolar world, including Canada, United States, Finland, Norway, Russia, and other countries. Additionally, an International Polar Year (IPY) themed workshop will be held on Thursday October 18, 2007 to provide an opportunity for students to interact with leading Arctic and Antarctic researchers. Students researching all disciplines within the natural and social sciences related to northern issues are invited to participate. Funds for travel for will be available to participating students.

The objective of this conference is to showcase student research that has a northern scope with a special emphasis on interdisciplinary research. The primary mandate of the conference is to provide students with effective ways to facilitate and communicate research objectives between the scientific community and northern residents. The organizers are committed to recognize, respect and promote the diversity and wealth of worldviews of all persons involved in

northern research. Their vision is for a spirit of openness, respect and sharing that will leave you with new inspiration and ways of thinking about northern research.

Information: http://www.dbakerproductions.com/acuns/main.htm

Arctic Discourses 2008, Tromsø, 21–23 February, 2008

Descriptions of the Arctic and Sub-Arctic provide a rich material produced both in the Arctic and in other parts of the world. The extent of this material has increased considerably since the Romantic period, hand in hand with the systematic scientific investigation of these regions. These descriptions will often correspond more or less to Arctic realities, but also constitute their own reality: the way in which the Arctic has been understood and imagined throughout history. Taken together, they make up a discourse on the Arctic, formed both by actual Arctic experiences and its own intertextual continuities – in addition to many other earlier and contemporaneous discourses, including the discourse of literature.

This conference will concentrate on Arctic discourses after Romanticism and up to the present day, using approaches to such discourses developed within literary studies. It will focus both on Arctic discourse in literary texts and literary discourse in non-literary descriptions of the Arctic. It will examine the development of Arctic discourses; the use of narrative, figurative and generic strategies in Arctic discourses; and the effect of changing communication technologies on Arctic discourses. It will also focus on contact zones between the European/American and the Arctic, and cultures which identify themselves as both Arctic and European/American.

Suggested themes for panels:
Romantic and post-Romantic sublimes in Arctic discourses
Arcticism, Arctic counter-discourses and Arctic indigenous literatures
Gendering the Arctic
Arctic, Antarctic, and Alpine discourses
From exploration to sport: the history of Arctic discourse
Arctic travel writing
Borders and limits in Arctic discourses
Living between the Arctic and the European/American
Subject positions and identities in Arctic discourse
The Arctic in art and film
Changing conceptions of Northernness and Arcticity
Nature's discourses in the Arctic
Arctic metaphors in fiction and poetry
Approaching the Arctic with literary, cultural, and discourse analysis
Changing technologies, changing media, changing Arctic discourses
Genre and the circulation of signs in Arctic discourse
Embodying/textualizing the Arctic in postmodern novels and popular fictions
Narrative in Arctic expedition reports, travel writing and reportage

The participation registration deadline will be 1 November 2007.
Information: http://uit.no/humfak/arkdisk/.

The Development of the Public Sector in the North, 1850–2000. An Interdisciplinary Conference at Umeå University, 6–7 March, 2008

Doctoral students and senior researchers from the Nordic countries, Russia, Canada and Europe are invited to participate in a conference aiming to illuminate the importance of the public sector for the northern parts of the Nordic countries, the Polar and the Barents regions. We invite researchers in the Humanities as well as the Social Sciences in order to stimulate interdisciplinary, comparative and historically oriented discussions about the importance, the expansion and the impact of government politics and administration on these regions. The main focus will be the welfare aspects of the public sector's expansion, especially for nomadic peoples and the small farmers connected to the inner colonization of the late nineteenth and early twentieth centuries. Historical perspectives make it possible to discern changes and processes over time.

The public sector is broadly defined to include areas such as Sami politics or government minority politics, education and school politics, farming and inner colonization, the military and total defence, health and medical care services, the building of new hospitals etc. These developments led to new forms of administration and bureaucratization, but also to infrastructural and technical expansion. Key questions are how this welfare expansion in the North can be evaluated and analysed and to what extent it affected people's living conditions, maintenance, mentalities, religion, and culture, how it changed the boundaries between the private and the public and how it correlated with the formation of new identities or identifications.

The conference languages will be Scandinavian languages and English. Revised and expanded conference papers may be submitted to the *Journal of Northern Studies*. Please send an abstract no longer than 1,600 characters to Susanne Haugen (susanne.haugen@nord.umu.se) before November 2007. If your abstract is accepted you will be asked to send in a paper not exceeding 20 pages including references, before 14 January, 2008. The conference will be limited to about 25 participants.

For further information, please contact Ann-Katrin Hatje (ann-katrin.hatje@historia.umu.se), Lars-Erik Edlund (lars-erik.edlund@nord.umu.se) or Susanne Haugen (susanne.haugen@nord.umu.se).

SASS 2008, 98th annual meeting, Fairbanks, Alaska, March 13–15, 2008

The University of Alaska Fairbanks welcomes the Society for the Advancement of Scandinavian Study to its 98th annual meeting, which will be held in Fairbanks, Alaska, March 13–15, 2008.

All fields related to Scandinavian Studies are open for presentations. However, since this conference falls during the International Polar Year, proposals related to IPY themes are particularly encouraged. For information on the social science component of IPY at UAF, see www.uaf.edu/anthro/iassa/ipyback.htm

Single paper submissions are welcome, but the organizers encourage participants to submit complete sessions with three or four related papers. Individ-

ual submissions should include a one page summary of the paper topic and a curriculum vitae of not more than two pages. Session proposals should include a cover statement, summaries of the individual papers and a CV for each participant.

Proposals should be submitted to Dr. Carol Gold, by e-mail at carol.gold@uaf.edu, or by hard copy to Dr. Carol Gold, Dept. of History, PO Box 6460, University of Alaska Fairbanks, Fairbanks, Alaska, 99775. Submissions must be received by November 15, 2007.

All presenters (except those from outside North America) must be SASS members in good standing. For membership information visit the SASS website http://www.scandinavianstudy.org or contact SASS at sass@byu.edu.

Information: http://www.scandinavianstudy.org.

International Polar Year: Human Dimensions, Umeå, Sweden, 8–10 October 2008

The international interdisciplinary IPY-conference *Human Dimensions* pays particular attention to human life and conditions in the North in the past, the present and the future. Questions that will be addressed are how the situation in the North has been depicted in science, art and literature and how the possibilities for various kinds of social and economical developments have been understood at various times. Other important questions are how climate, ecology and different types of resource use have influenced conditions for life in the North and the role of national and international politics for northern developments and conditions. A cultural programme including theatre, music and art illustrates some of the cultural expressions of life in the North.

Suggested themes:

- Indigenous peoples and national politics
- Cultural expressions of nordicity
- Traditional knowledges and the (post)modern world
- Identities and identifications
- Gendered discourses of the Polar regions
- Gender as a dimension in research and exploration
- Visual representations of the Polar world
- Tourism – past and present
- Polar politics
- Regime formation in the Arctic – science, environment, democratisation processes
- The impact of new technology in polar research – a historical perspective
- Natural resources and northern communities
- Resource management in polar areas
- Climate change

Other suggestions for panels and themes are welcome.

The themes all focus on the human dimension of the Arctic and invite an interdisciplinary approach, combining scientific investigations with other scholarly traditions such as historical studies or indigenous knowledge.

Students and undergraduates are especially encouraged to take part in the conference. Workshops will be organised especially for students and it is also possible for students to take part in poster exhibitions. Students may also apply for special travel grants.

The conference fee is 500 SEK for students/undergraduates and 1000 SEK for all other participants.

Please send short abstracts (250 words) for papers dealing with the Human Dimension of polar research by 1 February 2008 to: Pär Eliasson, Department of Historical Studies, Umeå University, 901 87 Umeå, Sweden, e-mail: par.eliasson @idehist.umu.se.. Registration deadline will be 15 June 2008.

For more information and updates on the conference, see http://www.umea-congress.se

Reviews / Comptes rendus / Besprechungen

Jenny Fossum Grønn ed., *Nordic Voices. Literature from the Nordic Countries*, Oslo: Nordbok 2005, ISBN 8299716500, 130 pp.

Nordic Voices is a collection of ten articles published in 2005 by Nordbok, The Nordic Literature and Library Committee. The common framework of the three introductory articles on cultural complexity and dynamics in the Nordic countries, as well as the following articles on the literature of particular ethnic and linguistic minorities problematise the idea of a homogenous national culture in the contemporary Nordic countries. A post-colonial sensitivity, as well as socio-economic and political changes due to the EU and globalization in a wider sense have seen the rise of ethnic mobilisation, intensified region-building and transnational flows of media, migrants, tourism, corporations and social movements. This has lead to a questioning and redefinition of collective identities, for example by the emergence of literature written by representatives of indigenous groups, national minorities and the multicultural population of the Nordic countries. The articles are part of a project informed by Nordbok's particular preoccupation with the small languages of the Nordic countries. The project was initiated in 2003 by Nordbok and the Nordic Museum Committee.

Describing cultural and linguistic pluralism in countries with ethnic and linguistic minorities requires a certain sensitivity to questions of point of view and power, for discourses of exclusion to be avoided. With this in mind Ingvar Svanberg's use in the first article of the pronoun "we", which indicates a common perspective, is somewhat surprising. Who are the "we" of phrases like "[t]he Nordic countries, as we see them today", "[w]e [who] have learnt to see the Nordic countries as homogenous nations, each with their individual predominant uniformity of culture" (8)? The pronoun can hardly refer to the representatives of the indigenous groups, the national minorities and the multicultural population who do not fit into the model of national identity and national culture theorized by Benedict Anderson. Svanberg's presentation of cultural and linguistic pluralism in the Nordic countries today is somewhat un-focussed and raises questions regarding for whom the article is intended.

In the following article, a survey of migration to the Nordic countries, Harald Runblom presents a concise and well written history of migration from prehistoric times until the present. "Migration to the Nordic Countries" is not a homogenous history, but one of ethnic and cultural diversity, contestations, and modifications of the relationship between majority culture and minority cultures.

In the last of the introductory articles, Ingeborg Kongslien's "Migrant or Multicultural Literature in the Nordic Countries," the concepts of migrant and multicultural literature are explored from the context of immigration and the introduction of new themes, referential fields and aesthetic and formal patterns in the

literature of the Nordic countries. The diversity of migrant or multicultural literature is exemplified with literary texts from Sweden, Norway and Denmark. Similarities as well as differences between the three countries are pointed out. Sweden for example, has a comparatively long tradition of writing which thematizes cultural encounters caused by immigration, Theodor Kallifatides being the obvious example, while it was not until the 1990s that literature written by immigrants began to be published and attract wider attention in Denmark. Taking into consideration that it is more or less the history of the present which Kongslien depicts, her survey is admirable, and the implications of the article are wider than that of presenting a literary survey. Kongslien's as well as the other contributions in *Nordic Voices* are part of a contemporary debate on acculturation, transculturation and the adjustment of the relationship between majority and minority cultures.

In the following articles the emergence of an indigenous literature and culture in Greenland are discussed from a post-colonial perspective by Kirsten Thisted in "Grey Areas", and by Birgit Kleist Pedersen in "Young Greenlandic Writers: In the Public Versus the Anonymous Space." In the latter the possibilities of anonymous writing on the Internet by youths are analysed through a discussion of real pieces of electronic texts produced by young people. In "Post-Colonial Poetry and Fiction in Faroese" Malan Marnerdóttir gives an account of the history of Faroese literature and its dependence on the teaching of the Faroese language. An important event was the change of legislation in 1938 which ended the primacy of Danish as a teaching language. The improvement of the status of indigenous languages or minority languages is a recurring theme in the articles, as part of processes characterising the present, after periods of colonisation and the construction of imagined communities based on the model of a homogenous nation-state.

The Swedish ratification of the Council of Europe's Conventions on Minorities receives special attention in Satu Gröndahl's "Kven, Tornedal and Sweden-Finnish Literature" which discusses the impact of the legislation which improved the status of Sami, Meänkieli and Finnish in Sweden as these became official minority languages. This new situation has inspired redefinitions of Swedishness and an assessment of present-day and future Sweden as a multicultural, multiethnic and multilingual country. In the article "'Stay Silent No Longer': Romanies, Travellers and Literature" Satu Gröndahl proceeds by depicting the status of the literature by Romanies and Travellers in the Nordic countries. As is the case of other groups who have lacked a standardised written language, the question of language standardisation is essential in the project of developing a modern literary language. Romani was one of the minority languages granted official status in 2000 when Sweden ratified the European Charter for Regional or Minority Languages and the Council of Europe Framework Convention for the Protection of National Minorities, which places special obligations on Swedish cultural politics to improve the conditions for Romani people.

Another minority in Sweden, the Sami, are discussed by Vuokko

Hirvonen, who stresses the particular "holistic" approach of Sami writers. According to Hirvonen Sami writers are not as restrained by boundaries between verbal, auditive and visual arts as writers from the majority culture, and she exemplifies with the work of Nils-Aslak Valkeapää and Synnøve Persen. As in her previous work on Sami women authors Hirvonen takes gender into consideration when mapping ethnicity and literary creation, an aspect also commented upon by Satu Gröndahl. A recurring theme in the articles on literature in minority languages is the importance of children's literature and the use of the minority language in training and education. Compared to earlier periods of colonisation and assimilation politics, the situation is obviously different today .

The final article, "In Two Worlds: Danish Jewish Literature in a Minority Perspective", by Tine Bach deals with the question of assimilation versus preservation of Jewish traditions in a Danish context by analysing the standpoints of the writers Mëir Goldschmidt, Georg Brandes, and Henri Nathansen. At the beginning of Bach's article there are a few surprising statements, such as "[a] minority I take to mean a group of people who have no right to or possibility of determining what is right for them" (120). Minorities are not homogenous groups, though the Jewish people undoubtedly have been exposed to processes of homogenisation and discrimination. Apart from this Bach arrives at some interesting results when comparing the attitudes of her three chosen authors to Jewishess and the question of preservation of Jewish culture or assimilation with Danish majority culture. Among the writers discussed Goldschmidt represents a person of Jewish origin who wishes to preserve Jewish traditions and a Jewish identity. Georg Brandes is today the most well-known of the writers, and his critique of Christian romanticism and nationalism have rendered him the reputation of being a modern, critical intellectual, representing cosmopolitanism, modernity and social change. In Bach's analysis this epitome of a modern Dane who renounces tradition and speaks for assimilation turns out to be a rather deluded man who does not realize, or does not want to realize until late in life, that no matter how much he renounces Jewish traditions and Jewishness, he will still be seen as a Jew by his contemporaries. Bach points out that Brandes' intellectualism, cosmopolitanism, anti-romanticism and anti-clericalism actually made people see him as a controversial, un-Danish Jew "trying to run away from his origin" (127). According to Bach it is Nathansen who insists on being Danish *as well as* a Jew who represents a more modern view on nationality and ethnic diversity. The three standpoints discussed have not lost their validity as the same positions are put forth in the debate today, not least in Danish debates on immigrants and Danishness. In theoretical analyses identities may be described as multiple and changing, but these ideas have apparently not been adopted by politicians advocating the idea of a common uniform national culture. Bach's article is a reminder that the question of assimilation of ethnic minorities versus multiple identities and cultural pluralism is not a new one.

The articles of *Nordic Voices. Literature From the Nordic Countries* give an initiated mapping of the complexity and diversity of literature written by indigenous, immigrant and multicultural writers in the Nordic countries. The articles are informed by theoretical perspectives from post-colonial theory and cultural studies. They provide broad historical surveys as well as comments on specific ethnic minorities, individual works and authorships. *Nordic Voices* fills in blank spaces in the mapping of contemporary Nordic literature and contributes to a more comprehensive account of contemporary culture by incorporating minority perspectives.

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O*ch tiden blir ett förunderligt ting. Fotografier av människor och landskap*, Umeå: Västerbottens läns hembygdsförbund 2007, ISBN 9789197382274, 175 Seiten.

Das Bild im Bild dominiert die Titelseite. Eine Auktionsbesucherin hält ein Gemälde in der Hand. Es handelt sich um eine Landschaftsmalerei, verziert mit einem edlen Rahmen. Damals schon, 1954, im Jahr der Auktion, ist das Bildmotiv Vorstellung einer vergangenen Zeit gewesen: Zustand einer ländlichen Idylle, verewigt auf der Leinwand – aber am Ende doch vergänglich. Heute blicken wir auf die Schwarzweißfotografie Sune Jonssons und sehen im Gesamtbild wiederum ein Dokument längst vergangener Zeit. Wie Sune Jonsson selbst einmal bemerkt hat: die Zeit wird ein sonderbares Ding.

Zeit ist für den Fotografen immer eine ausschlaggebende Dimension gewesen. Zum einen Hilfsmittel, zum anderen Gegenspieler. Sune Jonsson selbst hat manifestiert, wie wichtig Zeit für dokumentarisches Arbeiten sei. Es braucht Zeit, sich auf Fotoarbeiten vorzubereiten, Informationen über seine Thematiken zu sammeln, die Menschen kennen zu lernen und ihr Vertrauen zu gewinnen. Zum anderen war die Zeit nicht immer auf seiner Seite. Für Sune Jonssons Debütbuch, *Byn med det blå huset* ("Das Dorf mit dem blauen Haus") aus dem Jahre 1959 war eine reine Dokumentation des Dorflebens, so wie es der Fotograf aus seiner Kindheit kannte, nicht mehr möglich. Zu viel hatte sich bereits verändert. Aus einer Dokumentation wurde vielmehr eine Rekonstruktion.

Sune Jonsson, geboren 1930, hat sich über Jahrzehnte hinweg vor allem mit einem Themenkreis beschäftigt. Das ländliche Milieu in Nordschweden und wie es unweigerlich Veränderungen durch den agraren Strukturwandel ausgesetzt ist. Neben der Landwirtschaft dokumentierte er ausgiebig freikirchliche Formen von Religiosität in Västerbotten. Im Zentrum seiner Arbeiten stehen stets der Mensch und die Landschaft, aber auch der Einfluss und die Abhängigkeit beider Hauptakteure. Seinem Prinzip folgend sollte ein Fotograf jenes dokumentieren, was er am besten kennt.

Das vorliegende Buch zeigt

eine Auswahl von Sune Jonssons Schwarzweißfotografien, die er im Laufe seiner langen aktiven Karriere von den späten 1950er Jahren bis Mitte der 1990er gemacht hat. Es beinhaltet zahlreiche seiner klassischen und unverkennbaren Fotografien, aber auch viele bis jetzt noch unbekannte Bilder, die im Zuge der Übernahme und Archivierung von Sune Jonssons Bildern durch das Västerbotten Museum in Umeå ans Tageslicht gebracht wurden.

Eine weitere Novellierung ist das Erscheinen des Fotobuches in Englischer und Russischer Sprache. Zum ersten Mal kann der Hasselblad-Preisträger von 1993 ein viel breiteres und internationales Publikum erreichen.

Der internationale Kontext ist auch zentraler Gegenstand im Vorwort Gunnar Balgårds. Obwohl Sune Jonsson das ländliche Västerbotten zu seinem Arbeitsplatz gemacht hat und er über Jahrzehnte hinweg fast ausschließlich innerhalb Schwedens fotografiert hat, gibt es viele Verknüpfungen zum internationalen Schauplatz der Fotografie. Möchte man Sune Jonssons Bilder eingehend diskutieren, begegnet man bestimmt Walker Evans, August Sander und Roy De Carava.

In *Och tiden blir ett förunderligt ting* ("Und die Zeit wird ein sonderbares Ding") werden die einzelnen Fotografien besonders hervorgehoben. Dank modernem Druckverfahren liegen die Bilder in feiner Auflösung und sehr hohem Kontrastumfang vor. Sune Jonsson hat seine Schwarzweißbilder stets selbst sorgfältig vergrößert – für einen Fotografen nicht unbedingt eine Selbstverständlichkeit – und sehr großen Wert auf die Qualität gelegt.

Hauptteil bilden die 165 Schwarzweißfotografien. Zum ersten Mal stehen bei Sune Jonssons Fotobüchern – abgesehen von seinem Bildband über die Küstenlandschaften Västerbottens – die Bilder gänzlich im Vordergrund. Sie wurden losgelöst vom primären Kontext seiner originalen Fotobücher. Als Teil einer ursprünglichen Geschichte, wo sie in der schriftlichen Dokumentation eingebettet waren und begleitet wurden von teils sehr detailreichen Bildunterschriften, werden die Fotografien in diesem Buch, im Gegensatz dazu, unverhüllt – aber nicht minder vollkommen – mit nur knappen zeitlichen und räumlichen Stützen präsentiert. Der Betrachter ist mit seiner Rezeption und Interpretation zunächst auf sich gestellt. Im Anschluss an die fotografischen Werke schreibt Per-Uno Ågren im profunden Bildkommentar über den Entstehungshintergrund der Fotografien und legt genauere Personenangaben und Kommentare des Fotografen dar.

Die Anordnung der Bilder folgt nach Themenkreisen. Unter den bisher unveröffentlichten Bildern gibt es inhaltlich und formell gesehen kaum Überraschungen. Sie fügen sich eher lautlos an die bereits bekannten Ikonen Sune Jonssons an und komplementieren die visuellen Erzählungen. Sune Jonsson hat sich nicht nur von internationalen fotografischen Trends und Meistern inspirieren lassen, er war auch selbst im Ausland für seine dokumentarischen Arbeiten. Eine Auswahl wird gegen Ende des Buches präsentiert. Sie galten nie als seine zentralen Arbeiten, obwohl die Fotografien von Kongo beispielsweise durchaus bemerkenswert sind. Sune Jonssons Nähe zum Menschen, die Stille und

Andächtigkeit in den Bildern, all das sind Eigenschaften, die er auch bei der Dokumentation einer Missionsstation in (der heutigen Republik) Kongo mit derselben Qualität wiedergegeben hat, wie bei seinen Sujets zu Hause.

Nach dem im Jahre 2000 erschienenen Sammelfotobuch *Album*, das wie sämtliche anderen Fotobücher Sune Jonssons schon lange ausverkauft ist, ist es dringend notwendig geworden, die Werke Sune Jonsson wieder verfügbar zu machen. Gerade jetzt, nach Ausstellungen wie *Sune Jonsson Meets Walker Evans* in Stockholm oder *In the Face of History – European Photographers in the 20th Century* in London, wo Sune Jonsson endlich auf dem Weg ist, seinen verdienten internationalen Ruf zu erlangen.

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Gísli Pálsson, *Travelling Passions. The Hidden Life of Vilhjalmur Stefansson* (Transl. Keneva Kunz), Winnipeg: University of Manitoba Press 2005, ISBN 9781584655107, xviii +374 p.

When newly-independent Iceland was looking for its first president in the 1940s, many hoped it would turn out to be Vilhjalmur Stefansson who, although American, was of certified Icelandic origin. After his expeditions among the aboriginals of northern Canada – he himself coined the term *Inuit* – and particularly after having "discovered" the tall, blue-eyed, "blonde Eskimos," whom he traced to the Scandinavian colonization of Greenland – he had become a media celebrity and more or less honorary Icelander. However, Stefansson declined the candidacy.

This odd episode was in no way the oddest in one of the most enigmatic life stories in the fields of polar research and modern anthropology. Stefansson was born in 1879 near Winnipeg, Manitoba, son to immigrants from Iceland. The family soon moved to North Dakota, where he went to school and wrote poetry before arriving at Harvard via the University of Iowa. At Harvard he became interested in the physical anthropology of the day, with its skull measuring and racialism. He travelled to Iceland, where under suspicious circumstances he managed to abscond with some seventy craniums from an ancient graveyard. They can still be found at Harvard's Peabody Museum today. Then followed three polar expeditions, the last of which lasted five years, between 1913 and 1918, longer than any other in history.

There is no dearth of biographies of Stefansson – the most significant, William R. Hunt's "Stef" was published in 1986 – but only in recent years have love letters and documents which shed new light on his life surfaced. The title of Reykjavík anthropologist Gísli Pálsson's low-key, insightful *Travelling Passions* comprises two significant words. Stefansson is not only a passionate research traveller him-

self; his romantic streak and intense passions travel, too, but they don't always travel well.

Preparing for his second expedition leaving from the Mackenzie River delta, he hired Fanny Pannigabluk, an Inuit mother of two, as "seamstress," charged with outfitting the team with clothes made of seal and caribou hide. She also became Stefansson's lover and in March 1910 gave birth to a son named Alex. Stefansson lived with Fanny and Alex but did not bring them back to the US, where he was celebrated for his discoveries but remained controversial for his theory of the Nordic origins of the "blonde Eskimos."

During his third expedition, his ship the Karluk went down under the pack ice and eleven crew members perished. Stefansson himself was safely on land at the time, apparently gone hunting to supplement the ship's depleted stocks, but in the eyes of a judgemental world he was in the wrong place at the wrong time, which damaged his reputation. During most of the journey he lived with his family, teaching Alex to speak and read English.

Upon returning he once again left his family behind in the Arctic and this time settled in Greenwich Village, where he established himself as an author, lecturer and polar expert. His books *The Friendly Arctic* (1921) and *The Northward Course of Empire* (1922) describe a northern Eldorado, primed for the financial investments of civilized nations. Ports and airports will be built, the climate will warm up, wheat will be grown. He who possesses riches in the north will be in the forefront of global evolution, which according to Stefansson has progressed toward the northwest for thousands of years – from sweltering Babylon, via Europe and New York, to freezing Canada.

It has long been a public secret among specialists (and of course the Inuit) that the famed polar researcher had a son in the Arctic. But Stefansson never saw his family again. He concealed this domestic relationship, never openly acknowledging it, not even in his field notes. Why? Stefansson told the few who knew that his attorneys had advised him to do so. But primarily, according to Stefansson, the reason was a colonial custom. White men, be they reseachers or whalers, often took local lovers. Sometimes they had children, for whom they rarely assumed responsibility. Actually, Stefansson took more responsibility than was usual; he lived with his family for many years and continued to support them financially long after.

Among Alex's own four children, all of whom still live in the Inuvik region and with whom Pálsson has spoken, opinions are divided. Some are critical, others rather proud of their famous grandfather. Did he let them down? Pálsson does not defend Stefansson, but he does point out that the Inuit had a different way of regarding paternity. "Father" was the man who took care of the children, regardless of whether he was the biological father, an uncle or mother's new husband. Family networks were tight and extensive; the father's actual physical presence unnecessary. The question is of course whether Stefansson was counting on such "cultural" understanding to excuse his behaviour. Pálsson has no clear answer.

On the other hand, he does not hide the fact that Stefansson had

other passions in his life. Newly discovered letters show that he had already fallen deeply in love with the young actress Orpha Cecil Smith before his first expedition. They were engaged to be married in 1906. Upon returning from his initial voyage and determined to immediately embark upon the next, he spoiled his chances of marrying Smith. She broke off their engagement and instead renewed her affair with an engineer from Toronto. But neither Smith nor Stefansson could let go of their feelings, continuing to write to one another, and deep down, perhaps Stefansson nourished the hope of being reunited with his love, despite the fact that she had married in 1911. An Inuit family would then, if not before, undeniably have been an encumbrance.

Among the most insightful aspects of Pálsson's biography is that he shows how Stefansson's private life is interwoven with both his scholarship and the political climate of the day. While living in Greenwich Village he socialized in radical circles. He met artists and intellectuals and became involved in innumerable political and philanthropic projects. Together with Albert Einstein, among others, he supported the so-called "Ambidjan Project," a committee dedicated to creating an alternative to Palestine in the form of a Jewish province in Birobidzian on the border between the Soviet Union and China.

One of the driving forces behind his Socialist inclinations was the primitive communism he believed he had observed among the Inuit, with their extended families (from which he as an absentee father benefitted) and a fair distribution of labour which saw that everyone received what he or she was entitled to while the welfare of the group as a whole was ensured. The Inuit way of life became the Utopian counterimage of his own, individualistic and eccentric lifestyle in frenetic, urban Manhattan. He earned more and more money from his books and lecture tours, became a book collector and autodidact, ate out all the time, rarely cleaned his apartment.

During a trip to the Amalfi Coast in 1922, he met Fannie Hurst, a best-selling author who wrote scripts for Hollywood and Broadway and whose short stories sold for $4,000 apiece in the 1920s, an enormous sum. Her novel *Lummox* (1923) was a literary success; at one point she was the best paid writer in America. This relationship too was kept secret, since Hurst was already married. She did not cohabit with her husband though, which as a committed feminist she rarely missed an opportunity to mention. The term "Fannie Hurst marriage" became a popular expression.

The two were without doubt in love, perhaps she more deeply than he. Pálsson hints that Stefansson may have been an unusually adept lover, a notion which may be based on his wife Evelyn's frank revelation (sixty years later) in her autobiography *Finding My Way: The Autobiography of an Optimist* (Washington DC: Francis Press, 2002) that, adult and married, she experienced the first orgasm of her life with Stefansson, and that he "guaranteed" her an orgasm "every time."

His and Hurst's political interests also coincided. Hurst was a regular guest at the White House during the New Deal era and a personal friend of Eleanor Roosevelt. Being Jewish she worked for the benefit of Jewish

immigrants from Eastern Europe, aided refugees from Nazi Germany and acted, not least through her very lifestyle, for the political and sexual liberty of women.

The couple even had anthropology in common, if only indirectly. Hurst's close friend Zora Neale Hurston had studied under Franz Boas at Columbia, a pioneering hub of Arctic anthropology in the US. Hurst herself considered studying the subject at Oxford. Stefansson subscribed to a different tradition; his field notes are more reminiscent of the self-reflective texts which would be written a decade later on the Trobriand Islands by Bronislaw Malinowski. But even for Boas, anthropology was a "battling" science fighting for intellectual freedom and respect for other cultures. Anthropology was one of several passions which kept Hurst and Stefansson a loving couple for seventeen years, although this did not deter Stefansson from continuing to correspond with Smith.

Stefansson does not seem to have finally ended all of his previous relationships until 1939, when he met Evelyn Schwartz Baird, a young woman of Hungarian-Jewish extraction. She was then married to the manager of a marionette theatre and Stefansson offered her a design commission for the Icelandic pavilion at the World's Fair in New York the same year. Two years later she was married to what everyone had presumed was the eternal bachelor Stefansson; virtually no one knew that he had a family in the Arctic. Aside from the first part of his affair with Smith, all of Stefansson's long-term relationships had been with women who either were currently or had been married. He himself had taken his time; he was now 62, she was 27.

After more than a quarter of a century he gave up his two Manhattan apartments (one housed his book collection) and the couple moved to Dartmouth College in Hanover, New Hampshire, where Stefansson had been offered a professor's chair. According to his contract, the university agreed to take care of Evelyn after his death in exchange for the donation of his books and manuscripts. But he need not have worried about Evelyn. After he passed away in 1962, and after having edited his posthumous autobiography, Evelyn married the financially-independent historian John U. Nef and lived the rest of her life in Washington as a psychotherapist, photographer, author and patron of the arts. Marc Chagall, one of the couple's close friends, made them a mosaic for their backyard. In *Finding My Way*, "Evvie" writes about Stefansson's affair with Fannie Hurst, but does not utter a word about his son Alex and the Inuit woman Fanny. Some passions do not travel.

In Dartmouth, Stefansson continued editing a planned twenty-volume "Arctic Encyclopaedia" with the support of the Office of Naval Research, one of the biggest research financiers of the Cold War era. However, after only a few years at the university, Stefansson was contacted by the attorney-general of New Hampshire on behalf of congressional commie-hunter Sen. Joseph McCarthy. Stefansson would not be the only anthropologist caught in McCarthy's net. In *Threatening Anthropology*, David H. Price charts a large number of other cases with the help of opened archives, includ-

ing Margaret Mead, Oscar Lewis and Cora Du Bois (*Threatening Anthropology. McCarthyism and the FBI's Surveillance of Activist Anthropologists*, Durham, NC & London: Duke University Press, 2004).

The FBI had been gathering material on Stefansson since 1922, when he took the initiative to a failed expedition to Wrangel Island, which the US claimed as its own but which Stefansson wanted to make Canadian to use as a field of experiment for his ideas on Arctic survival. His membership in what the FBI said amounted to "seventy-six Communist front organizations" – including the Committee of Fair Play for Puerto Rico and the Committee for the Protection of the Foreign Born – was another black mark against him.

The most serious charges levelled against him involved his association and close relationship with Owen and Eleanor Lattimore. The former was a specialist on Asia who had travelled to Afghanistan in 1950 and was suspected of being a Communist agent at the head of a US-based network of spies. Another link to Stefansson was that he had helped Lattimore sell his neighbouring estate in Vermont, whose buyer happened to have just run in the Alabama gubernatorial election on the Communist Party ticket. The FBI never did care for these kinds of coincidences.

That Stefansson was a favourite source of quotes for the Communist *Daily Worker* was hardly in his favour. He had lectured at the National Institute of American Soviet Friendship in Ottawa and the American Russian Institute in New York. He allowed the Boy Scouts to use his estate in Vermont, which made the patriotic *Journal American* suspect that he used the chance to indoctrinate "American youth". Evelyn, who studied Russian in the 1930s with the intent of teaching, was accused by the FBI of being a Communist agent misleading both the students of Dartmouth and her husband. The navy pulled out of the encyclopedia project and Stefansson was relieved of all his duties as advisor to, among others, the American military.

The backdrop to all this was naturally the burgeoning geopolitical significance of the polar region during the Cold War. Stefansson's weak grasp of political realities did not help. He insisted on Russian participation in his encyclopaedia and published articles in which he praised the Russians' development of technology and industry in the north while simultaneously bewailing the apathy of the United States and especially Canada, where he lobbied the government in vain. His sympathy for the Soviet Union can also be explained by the influence his own ideas had had there and the fact that his books always sold well in Russian translation.

However, in the final appraisal, there was in fact also an ideological affinity, even if it was paradoxical. Stefansson was an inflexible individualist, in his own bohemian life reluctant to commit himself permanently to just about anything. His political ideals were quite the opposite, valuing trustful communities like that of the Inuit, whereof his infatuation with Utopian projects, not the reality of Soviet Communism. Even his private life has Utopian elements, if only by default; incapable of making difficult choices, he sought to reconcile his many and sundry loves in incompatible

worlds. He dedicated his life to the most marginal people on earth, but in his encounter with people themselves he stood at the very fulcrum of the dilemma of modernism, stuck between Manhattan and the Mackenzie Valley.

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Michael F. Robinson, *The Coldest Crucible. Arctic Exploration and American Culture*, Chicago & London: The University of Chicago Press, 2006, ISBN 9780226721842, 206 pp.

In his study *The Coldest Crucible*, Michael F. Robinson analyses the era of American Arctic exploration in the second half of the nineteenth century from the perspective of the relationship between American public culture and the polar expeditions. His focus is on the public images of the explorers but important events during the expeditions are also discussed. Robinson's book may be read as a contribution to the history of ideas because it relates the explorers' images to widespread American ideas of the era such as the status of the United States as a civilized nation, possible threats to the nation's manly character, science as a mixed blessing and the dangers of modernity and progress.

Robinson explains how explorers shaped their "public personas" in response to these issues and ideals in order to meet the expectations of their audiences. "The Coldest Crucible" of the title, or the Arctic, moulded the explorers into men that could meet every difficult challenge of the time, it was believed. The authority of the expedition leader was dependent on how he was perceived by his men, by his patrons, and increasingly, by the public opinion.

The book is structured as a traditional exploration study and closely examines the biographies of the American Arctic explorers Elisha Kent Kane, Isaac Hayes, Charles Hall, Adolphus Greely, Walter Wellman, Robert Peary and Frederic Cook. But the actual life and letters of Kane or Peary are less interesting to Robinson than the history of the popular images of these men. A central question is how the explorers adapted to the changing American ideals of manliness in the second half of the nineteenth century. In Robinson's view, the Arctic presented a faraway stage on which explorers played out dramas that were unfolding very close to home. What business did these matters have on the decks of icebound ships? They gave meaning to the voyages. Men believed that Arctic exploration touched on issues so important that they were willing to die for the chance to say something about them. They were the threads that, for sixty years, held the fabric of Arctic exploration together (3).

Robinson argues that the prerequisites for conducting Arctic exploration in America were different than in Europe. The U.S. government or the American scientific institutions did not support Arctic

exploration on such a regular basis as it was done in Europe. Therefore American explorers had to get funding and support from elsewhere, from shipping merchants, such as the influential Henry Grinell who supported many expeditions, and later from newspaper tycoons. For that reason explorers had to appeal to the interests of popular audiences by addressing contemporary issues.

Many scholars who have written on polar exploration have focused on the scientific contributions of the expeditions. Among the geographical and scientific problems discussed in the nineteenth century was the possibility of a Passage north of the American Continent, the existence of an Open Polar Sea and oceanographic issues concerning the existence of warm and cold Arctic currents. These were not only scientific riddles but once solved they could also help to establish new trade routes in the North. Robinson also points out another important aspect of the scientific rhetoric of the era. Science was a means of self-improvement, it was considered to be an uplifting activity that edified the men and women who undertook it and built character. Thus merely talking about science signalled that the explorer was of "the right stuff." According to Robinson, science's most important function was as a rhetorical tool, a means of establishing social authority at home. In Europe, too, there was a great deal of talk about doing science on the expeditions, but many of the observations were never evaluated or published. Robinson's definition of science goes further than data-gathering in the field, and also includes practices such as popular lectures or lobbying scientific elites for support. He underlines that looking at its rhetoric is an important if often overlooked aspect of science itself. Even if rhetorical studies such as Robinson's book tell the reader very little about American polar research of the period, they may help us to understand how science was used in public debates.

Another way to establish authority and to show the explorer's good character was to use well-known religious metaphors, describing voyages as "quests," "crusades" and "pilgrimages" and depicting explorers as "knights," "pilgrims" and of course "martyrs." Using such language stressed that the voyages had a value in that they showed the manly conduct of American men fighting terrible conditions even if their other goals such as science or commerce often failed miserably. Robinson points out that stories or narratives was the real currency of the Arctic expeditions. It was these exciting stories of their personal experiences, made public in the form of writings and lectures, that was the most important asset of the explorers, an asset that could open the wallets of patrons and publishers. But Robinson also stresses that the explorers seem to have an almost instinctive feeling for what stories the public wanted at a specific time and place.

The standard story told by historians about Arctic exploration is the story about well-educated and strong-willed men who accomplished impossible deeds fighting a terrible environment. It was their scientific training and extraordinary stamina that enabled Arctic travellers to survive the ordeals and carry out their missions. Such heroic tales echo the official expedition reports of the nineteenth century and are

used even today to make not a few historical works more readable. Amazing things did indeed happen during the expeditions but the history of American Arctic exploration, as told by Robinson, is also a story about bad leadership, the breakdown of authority and, in a few cases even murder and cannibalism. But even these kinds of terrible stories were used both by the explorers themselves and by the popular press to maintain public interest in the Arctic. In many cases it seems that all press was good press, and scandal could also create interest for Arctic exploration.

Robinson's second chapter focuses on Elisha Kent Kane who soon became a kind of "role model" that other explorers tried to emulate since his Arctic voyages made him a national celebrity. According to Robinson, Kane's greatest success as an explorer was that he was able to provide himself with a public image that appealed to many Americans. He was charismatic and well-educated and impressed both laymen and scientists, and he presented himself as a refined and even fragile man of science, a man that had to fight his own bad health as well as the harsh environment of the Arctic. He also skilfully combined the interests of scientific institutions and the military that was responsible for the logistics.

Kane's first expedition of 1850–51, one of many search expeditions for the lost British expedition of Sir John Franklin, did not accomplish much even if it did find some remains from the Franklin party. But according to the *New York Daily Times*, the American explorers were "equal to any in the world; in toughness and capacity of endurance, – in energy and willingness to endure fatigue: and all kinds of privations for the sake of accomplishing their purpose" (35–36). It is primarily a story of moral conquest that is told by the press. Kane and his men had been put into "the coldest crucible," and had not only survived this ordeal but also successfully carried out their mission. Kane's second expedition of 1853–55 was in many ways even more of a failure that the first. Franklin was again not found, the polar sea was not explored, the ship was lost in the pack ice as were most of the scientific collections. Food became scarce and scurvy set in and even a mutiny took place. Had Kane's party not been given food by local Eskimo (Inuit) tribes they would not have survived. But Kane again received a hero's welcome on his return home. By showing that he was able to survive two winters in the Arctic, he had proved himself to be a man of character. Not much was said or written about Kane's contributions to science despite his frequent use of scientific arguments in launching the expeditions. When his scientific work was discussed commentators instead used it as means to understand his character and commitment to exploration. This was perhaps just as well for Kane, since he later admitted to the staff geodesist of the Coast Survey that the scientific field-work of his first expedition had been a disaster.

Isaac Hayes and Charles Hall represent two different kinds of American Arctic explorers. They both searched for Franklin as late as in the 1860s, or they at least used this argument to secure funding. Hayes appealed to scientific audiences as he fashioned himself in the image of Kane as a man of science and cul-

tivation. But his Arctic expedition of 1860–61 did not contribute much to science. One of the two scientists on the voyage, the surgeon William Longshaw stole specimens and books from two Danish naturalists living in Greenland and had to be sent home to avoid a scandal, while the other scientist died during the wintering.

Hayes's Arctic rival, the newspaperman Charles Hall was inspired by John Ray of the Hudson Bay Company, famous for his discovery of the remains of the Franklin expedition in 1854. Ray had travelled with the Eskimos and like him, Hall believed that the Eskimo's methods of travel was superior. Hall argued as late as in 1859 that some survivors of the Franklin expedition could still be found if local Eskimos were interviewed. Thus Hall "went native" in order to solve the Franklin riddle. Robinson comments that Hall could appeal to an interest for savage life among white Americans as the decline of the Indians became to be seen as a problem. Hall did not find any new facts about Franklin but two other goals were accomplished during his voyage. Hall adapted to Eskimo life by learning their language and customs and then proved that Eskimos could provide a lot of reliable information about the Arctic. He was astonished when the Nugumit Eskimos he lived with told him about Sir Martin Frobisher's voyage of 1576 and then showed him the remains of Frobisher's campsite. Hall then followed an old European tradition when he brought a Nugumit family back to America. The family he chose was not at all typical for the tribe, rather they can be called "go-betweens" as they had spent two years in Britain where they learned the language, etiquette and even met the Royal Family. Hall recognized that the family was rather too civilized to appeal to his audiences, and put them in sealskin suits when they were presented to the American Geographical Society.

Both Hayes's and Hall's expeditions can be described as failures. But according to Robinson, in the 1860s, they were not necessarily regarded as such even if neither explorer accomplished much. Hayes had succeeded in convincing his scientific supporters back home of his dedication to issues important to the men of science. Hall instead convinced popular audiences by addressing topics of interest to them while he largely ignored science. Robinson stresses that this proves that the Kane era was over by the late 1860s and 1870s. The relations between scientific elites and amateurs and the general public began to change in America as scientists increasingly became a professional class. Thus scientific societies grew less interested in supporting Arctic exploration and explorers had to look elsewhere for funding and support. New arguments for Arctic exploration now had to be invented. Perhaps Arctic voyages were not only scientific missions but also tests of character? Or perhaps they were flights from civilization?

Adolphus Greely's expedition, organized by the U.S. Army Signal Corps, was one of many scientific expeditions during the first International Polar Year of 1882–83. Greely's expedition was billed as the most ambitious American research expedition ever sent to the Arctic when it was launched. It carried out an ambitious programme of geo-

physical research as a participant in the global scientific network of the International Polar Year. The expedition established a station in 1881 at Lady Franklin Bay where the party made meteorological observations, took geomagnetic measurements and succeeded in bringing back a vast amount of systematic data from the Arctic. But in June 1884 Greely was found by a relief expedition at Cape Sabine and only seven of the original party of 25 men were then still alive.

Historians of science have argued that the rich results of Greelys' expedition proves that U.S. scientific exploration had come of age in the 1880s. Robinson however disagrees, instead suggesting that the role of science actually diminished as a result of Greely's expedition. Science fell victim to scandal when the newspapers began to investigate what had really happened during the expedition and why so many men had died. The scientific mission had suffered from bad instruments and an inexperienced crew, but even worse was Greely's ambition to also pursue geographical discovery. It was one of these record attempts that had led to the disaster at Cape Sabine. The newspapers found out that one man of the party, caught stealing food, had been executed on Greely's orders. And then came accusations of murder and cannibalism as signs had been found at the site that indicated that members of the party had been killed and eaten by their comrades. The *New York Times* wrote: "The facts hitherto concealed will make the record of the Greely colony – already full of horrors – the most dreadful and repulsive chapter in the long annals of Arctic exploration" (96). When the private diaries from the expedition were later made public, Greely's reputation was damaged even more as the diaries revealed the complete breakdown of command and moral order.

Robinson finally discusses Walter Wellman and Robert E. Peary, two men who attempted to reach the North Pole by very different methods. The journalist Wellman had in 1894 used dogs and sledges to try get to the Pole but failed and came to the conclusion that the failure was due to his obsolete means of transportation. In 1906 he returned to Spitsbergen for a new attempt, this time using the airship *America*. The use of an airship had many other merits, since flying machines were symbols of the modern age, harbingers of progress. *America* consequently made it easier for Wellman to attract the attention of the public and get support. But his several attempts to reach the North Pole by air all failed. Not until the 1920s did airships and airplanes become reliable enough for use in the Arctic.

In 1886 Robert Peary made his first Arctic journey. His party intended to man-haul sledges across the interior ice cap of Greenland, but they were beaten by the Norwegian Fridtjof Nansen who used skis, which made the hauling of the sledges much easier. Peary tried to use skis in his second attempt at crossing the ice cap in 1891 but failed again. Then he adopted the tools, clothing, housing and travel techniques of the Eskimos of the Etah tribe and the natives persuaded him to use sledge dogs. Back in the U.S., Peary began to draw attention to his use of Eskimo knowledge in his popular campaigns. As Hall had done, Peary displayed Eskimo equipment and even came on stage wear-

ing fur clothing followed by a pack of Eskimo dogs led by his black servant and dog expert Matthew Henson.

Eskimo equipment was indeed cheaper and more reliable in the harsh Arctic conditions than the modern technical inventions of the early 1900s. But Robinson stresses that Peary had other reasons for using native techniques. In the 1890s, the real value of polar exploration lay in its rejection of the modern world. In the North men could escape the constraints of civilization and return to an original state of nature. This argument is still used by many of the individuals who try to ski to the North or the South Pole – even if they use the most up-to-date equipment money can buy.

Robinson however notices an important difference between Hall's and Peary's view of the Eskimos. Hall stressed the civilized qualities of the natives because they had to be seen as credible witnesses to the fate of the Franklin expedition. Peary instead praised the Eskimos for their "primitive" traits, suggesting that they were able to survive and travel in the Arctic because they were uncivilized. The civilized devices and techniques of travel had more often than not failed miserably in the Arctic. And writers and social critics had for a long time warned Americans about the threats posed by an overly civilized urban culture.

In 1907 Peary met a challenge as Frederic A. Cook sailed to the Arctic. Cook returned two years later as a national hero as many Americans believed that he had reached the North Pole while Peary charged that Cook was lying. The controversy between Cook and Peary became an issue of character. Walter Wellman argued that there were three ways to determine if the Pole had been reached: through the character of the explorer, through his narrative and through astronomical observations. "If character and narrative be impeached," he commented, "a traveller's alleged astronomical observations are of no value, for the simple reason that, having concocted a story, such a man would not hesitate to concoct astronomical observations to match it" (145).

Both explorers lacked any reliable evidence that could confirm that they had reached the Pole. Depth soundings at the location of the Pole was one method, but neither Cook nor Peary took any reliable sound-ings. Photographs did not prove anything and estimations of travelled distances and even astronomical observations were not much better as Wellman had pointed out. Especially problematic was the fact that the testimonies of their travel companions, Eskimos and Peary's black servant Matthew Henson, were not to be trusted, because they were not white men. Thus, Robinson notes, "the press and the public gave greater scrutiny to the ways in which Cook and Peary comported themselves at home, searching for truthfulness in their actions, temperament and demeanor" (134). Both men however failed to live up to the public's expectations.

Robinson shows how the press depicted the two explorers as angry and ill-bred children or as natives – then regarded as the moral and developmental equivalents of white children. Finally Peary was celebrated as the discoverer of the North Pole, but he was denied

the popular acclaim he wanted by the controversy. And perhaps the end had come for the Arctic explorers who were increasingly seen as premodern figures representing a time past. The following contemporary remark neatly sums up the Cook–Peary controversy: "Cook is a liar and a gentleman, and Peary is neither."

Many books on the history of polar exploration only present the reader with abridged commented versions of expedition reports. Robinson does not fall into this trap. Instead he is interested in the wider context of American Arctic exploration, or what could be called "exploration culture." Thus it is actually the popular images of men like Elisha Kent Kane and Robert E. Peary that we meet in the book. Robinson shows that the history of polar exploration is more than a story about geographical discovery and scientific data-gathering. It is also an exciting story about enterprising entrepreneurs who had to adapt to the ideals and discussions of their time in order to sell their product, Arctic exploration.

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Klaus Böldl, Eigi einhamr. *Beiträge zum Weltbild der Eyrbyggja und anderer Isländersagas* (Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 48), Berlin & New York: Walter de Gruyter 2005 ISBN 3110185822, IX + 306 pp.

Eyrbyggja saga is the centre of Böldl's investigation, although other Icelandic sagas are drawn into the discussion. The introductory chapter about the structure, the sources and the much-discussed question of authorship of *Eyrbyggja* is followed by a comprehensive chapter (27–85) adopting anthropological and historical perspectives on the sagas. The worldview of *Eyrbyggja saga* is the object of a many-faceted treatment in chapter 3, and the following chapter deals with the description of the *landnam* (literally 'landtaking', referring to the settlement of Iceland), from the perspectives of the saga and of other medieval sources. Among other things, the role of naming in the *landnam* is discussed here. The last chapter is devoted to issues regarding sacrifices and other "religious" practices in the Old Norse tradition. What is interesting in Böldl's study is that questions concerning a possible historical "kernel" and the sagas as sources of religious-historical research are once again raised. Regarding the latter, it is said that "Ziel der vorliegenden Arbeit ist es nicht zuletzt aufzuzeigen, daß religiöse Motive nur an ihrem Ort im Erzählkosmos erkannt und verstanden werden können" (257).

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Claudia Bornholdt, *Engaging Moments. The Origins of Medieval Bridal-Quest Narrative* (Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 46), Berlin & New

York: Walter de Gruyter 2005, ISBN 3110184508, VII + 237 pp.

This supplementary volume of *Reallexikon der Germanischen Altertumskunde* deals with the medieval Germanic and Nordic stories where a "hero's" quest for a bride is the fundamental, structural element (English *Bridal-quest*, German *Brautwerbung*). The earliest written story in the Germanic region is the story of Attalus found in Gregorius' *Historia Francorum* (ca 575–590), and in the Scandinavian region there are stories of this kind in the *Poetic Edda*, in Snorri's *Edda* and in Saxo Grammaticus' *Gesta Danorum*. A problem brought up in the study is whether the oldest written Germanic stories are offshoots of other traditions or may be founded on an oral tradition based on real events. It is however impossible to say anything with certainty in this matter. The division of stories into a medieval Germanic type and a Mediterranean type is difficult to maintain, and it is probably also difficult to make a case for the view that the Scandinavian stories should reflect an older "stage of development" of these stories. It is a wise assertion in the summarizing chapter that "[t]he German bridal-quest epics must be understood as part of a mainly oral and partly written bridal-quest tradition that is documented in Franconia [...]. It is quite possible that, in connection with the crusades and with the growing interest in the Orient, this narrative pattern was revived in the twelfth century to relate the adventures of a hero abroad" (219). The monograph also illustrates the relation between oral and written transmission. In this part of the investigation the reader is referred to articles by Hans Kuhn and Walter Haug, which, according to the author, "allow for oral influence on the literary corpus and acknowledge a diverse non-linear oral and written transmission of literary works, stories, and tales" (218–219).

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Patricia Pires Boulhosa, *Icelanders and the Kings of Norway. Mediaeval Sagas and Legal Texts* (The Northern World. North Europe and the Baltic c. 400–1700 AD. Peoples, Economies and Cultures, 17), Leiden & Boston: Brill 2005 ISBN 9004145168, XV + 256 pp.

The author of this well-documented monograph – the bibliography contains over fifteen closely printed pages, and there are plenty of interesting footnotes – is a PhD in Mediaeval Icelandic Literature and History at Cambridge. Here she makes an analysis of the relation between the Norwegian crown and the Icelandic people, and the way the relation is described in different sources from the first centuries of the Nordic Medieval period. The analysis of the law texts indicates that the Icelandic people were not as independent of the Norwegian crown in the thirteenth century as we sometimes think, and we can see that the Norwegian kings had administrative and legal power in Iceland. It was actually a question of a continuous process of negotiation between the parts. The first chapter discusses the source value of the medieval Icelandic sagas. The author claims that it is almost anachronistic to maintain a distinction between history and fiction when it comes to these

medieval texts. "They are complex social products of a manuscript culture, not merely the works of a single individual," it is said in summary (210). Chapter 2 and 3 deal with *Ólafslög* and *Gizurarsáttmáli* and *Gamli sáttmáli*. The latter are agreements made between the Icelandic people and the Norwegian king in the 1260s. In the last chapter, the main theme of the book is treated through a study of *Möðruvallabók*. As it turns out, this is a good methodological approach. The author appropriately quotes Már Jónsson, who claimed in an important essay (2000) that "we have an abundance of excellent orthographic, palaeographic and morphological descriptions of single manuscripts, more or less from a linguistic point of view and the goal is always to illuminate some aspect of the text and transmission. An overview of the knowledge provided by these studies is badly needed, but there is an even greater need to supplement them with research on the manuscripts as such from a historical point of view, concentrating on the concepts inherent in the work of the persons involved in making, preparing, writing and illuminating them" (211). Such research may shed interesting light on medieval texts.

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Margaret Clunies Ross, *A History of Old Norse Poetry and Poetics*, Cambridge: D.S. Brewer 2005, ISBN 1843840340, X + 283 pp.

This book provides an introduction to Old Norse poetry and a description of its literary, cultural and historical context from the mid-1100s until the fourteenth century. After having, presented "Eddic-Type Poetry," "Skaldic-Style Poetry" and metric runic inscriptions, the author discusses the domestic Old Norse typology with regard to terminology and genres, and in a separate chapter she also treats "Old Norse Poetic Aesthetics." The influence of Christianity on Old Norse poetry is treated in another chapter. Subsequently, in the chapters that are probably the most rewarding (chapters 7–11), poetry in relation to the "grammatical" literature in Iceland in the Middle Ages is discussed. To different extents these "grammatical" writings deal with orthography, phonology, rhetoric and metrics, and point to foreign influence, "but also have independent value" (150). Snorri's *Edda* and the third and fourth grammatical dissertations are discussed here as well as the earliest grammatical works. Throughout the whole of Clunies Ross' monograph, the cultural and literary context, where poetry was created with the help of domestic handbooks produced in Iceland, is emphasized. These handbooks were created by practising poets "thereby confirming the status of their native poetry not only to themselves but in comparison with the rhetorical and grammatical tradition of medieval European Latinity" (233). The concluding chapter's last sentence asserts that "the Old Icelandic grammatical literature needs to be made more accessible to scholars of medieval European poetics and grammatical rhetoric generally, so that the undoubted importance of this corpus of texts may be recognised more widely" (235). Clunies Ross' monograph gives an account of the research situation and offers

interesting challenges for those who want to continue their research into this field.

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Inger Ekrem † and Lars Boje Mortensen eds., *Historia Norwegie, translated by Peter Fischer*, København: Museum Tusculanum Press 2003, ISBN 8772898135, 245 pp.

This edition of *Historia Norwegie* is the first one since Gustav Storm's edition in 1880. Inger Ekrem, who passed away a couple of years ago, and Lars Boje Mortensen are responsible for the editing and the commentary, while Peter Fischer has made the translation. This is a tremendously competent trio: Ekrem worked as a classical scholar at the University of Oslo, Mortensen is a professor of Medieval Latin at the University of Bergen, Fischer is a lecturer at Anglia Polytechnic University, Cambridge, and has previously published translations of Saxo's *Gesta Danorum* and Olaus Magnus' *Historia de gentibus septentrionalibus*. The introduction outlines the content and the structure of *Historia Norwegie*, and the dating of the text, its style and narrative features are discussed, whereupon the manuscript situation, the relationship of the different manuscripts and the editorial principals are discussed. After this follows the edition itself with the Latin text on the right and the English translation on the left. A detailed commentary is also given on pp. 107–153. Under the heading "Essay on date and purpose," Inger Ekrem's thoughts on *Historia Norwegie* and the possible historical context in which the work was written are explained. A bibliography and an index of names conclude the edition. *Historia Norwegie* is an important source text, not least because it contains important descriptions of Sami people as well as an interesting story about shamanism, but also because it gives a detailed account of the history of the Norwegian rulers from the mythical Ynglings until Olav Haraldsson. It is valuable that such an early and important source text has been made available for researchers.

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Pernille Hermann (ed.), *Literacy in Medieval and Early Modern Scandinavian Culture* (The Viking Collection. Studies in Northern civilization 16), Odense: Syddansk Universitetsforlag 2005 ISBN 8776740404, 355 pp.

In the last decades, literacy has gained a lot of attention, not least in medieval research. In April 2002, a literacy conference was held at the University of Aarhus, and the papers presented there constitute the framework of this volume. The aim of the book is to present a wide spectrum of studies in Scandinavian literacy to an international audience. Some research themes are unique to Scandinavian circumstances, such as studies relating to runes and skaldic verse. Investigations regarding literacy from 500 until 1600 are also presented. Studies of "visual literacy" are included. In the first section of the book, "Literacy and Vision," there is an article by Michael Clanchy called "An Icon of Literacy: The Depiction at Tuse of Jesus Going to School," where, not least, the importance of women as mediators

of literacy is emphasized. Pictures and texts in the Anglo-Saxon area are discussed by Leslie Webster. In the following section, "Literacy, Orality and 'Runacy'," there is a long article by Stefan Brink, who gives an analysis based on a considerable empirical material, consisting of runes, Icelandic sagas and provincial laws, focusing on circumstances in an "Early Scandinavian Oral Society." The question about whether the rune stones really manifest literacy is discussed by Terje Spurkland, and he suggests a new term for rune literacy, namely *runacy*. Runes are also the focus of Jakob Povl Holck's article about Danish literacy until 1300. A group of lectures have been collected under the heading "Literacy and Poetry" with contributions by Karl G. Johansson ("On Orality and the *Verschriftlichung* of *Skírnismál*"), Judith Jesch ("Skaldic Verse, a Case of Literacy *Avant la Lettre*?") and Guðrún Nordal ("Attraction of Opposites: Skaldic Verse in *Njáls Saga*). In a fourth section about literacy and communication, Wolfert S. van Egmond discusses hagiography as a source of early medieval literacy, and Marco Mostert discusses literacy as an aspect of social history, placing literacy in relation to other forms of communication. Arnved Nedkvitne examines Scandinavian literacy between 1000 and 1350, and demonstrates that Scandinavian empiricism indeed has something to contribute from a wider medieval historical perspective. The last section deals with some more recent circumstances. Klaus-J. Lorenzen-Schmidt writes about Late Medieval and Early Modern Literacy in Schleswig-Holstein with early literacy in the rural society, and Charlotte Appel discusses literacy in seventeenth-century Denmark. The book is a natural starting-point for future research in this area.

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Alexandre Huot, *L'impératrice de l'Ungava*, Montréal: Presses de l'Université du Québec 2006, ISBN 9782923385051, 244 p.

Remy de Gourmont, *Chez les Lapons*, Montréal: Presses de l'Université du Québec 2006, ISBN 9782923385044, 146 p.

Le laboratoire international et pluridisciplinaire "Imaginaire du Nord" publie des œuvres sur l'Imaginaire du Nord, soit dans le cadre de ses propres collections, sois chez d'autres éditeurs.

Une des collections du laboratoire porte le nom "Jardin de Givre". Dans cette collection on publie des œuvres importantes qui ont été épuisées. Ces œuvres traitent surtout l'imaginaire du nord circumpolaire et québecois. Elles sont destinées à la recherche et à l'enseignement.

Les livres sont distribués par les Presses de l'Université du Québec et disponibles à la page d'accueil http://www.puq.ca.

Un des livres actuels publié en 2006 porte le titre *L'impératrice de l'Ungava*. C'est un roman d'Alexandre Huot, publié pour la première fois en 1927. Le roman raconte l'histoire d'un voyage dans le Grand Nord, entrepris par l'ingénieur Jacques Normand, un Canadien-Français, dans le but d'établir la souveraineté économique du Québec. Il sera accompagné par Edith, une jeune Américaine orpheline, et le père Boulianne, régistrateur de

la ville de Tadoussac. Ils se dirigent vers l'Ungava, endroit mystérieux "d'où personne n'est jamais revenu". Malgré le contenu fantaisiste (un elixir secret, une ville utopique, la constructrice de cette ville qui n'est rien moins que l'Impératrice de l'Ungava), le roman se préoccupe de questions sociales, politiques et environnementales. La nouvelle publication contient une introduction de Daniel Chartier, ainsi que des notes et une chronologie. Daniel Chartier est professeur à l'Université du Québec à Montréal et directeur du Laboratoire Imaginaire du Nord.

Chez les lapons, également republié par le laboratoire (Collection "Jardin de Givre") en 2006, n'est pas un roman, mais un ouvrage sur les Lapons. Ce livre, écrit et illustré par Remy de Gourmont (et publié en 1890), entreprend à décrire des sujets bien divers sur la Laponie et les Lapons; comment s'y rendre, leur caractère général, costumes, nourriture, les rennes et même, comme le dit le sous-titre du livre "Mœurs, coutumes et légendes de la Laponie norvégienne". Ce qui étonne peut-être le plus, c'est que l'auteur du livre n'est pas allé chez les Lapons en Norvège, mais s'est arrêté en Hollande. L'information du livre est donc fournie à partir d'autre récits de voyages (de l'époque ou plus anciens). La publication contient une introduction, des notes et une chronologie d'Éric Trudel, professeur au Collège universitaire Bard aux États-Unis.

Pendant l'an 2007 on va aussi publier *Récits du Labrador* (1894), de Henry de Puyjalon et *Deux émigrés en Suède* (1849), de Xavier Marmier. La collection "Jardin du Givre", qui rend accessible ce genre de publications est une bonne initiative du laboratoire. Pour plus d'information, voir la page d'accueil, www.imaginairedunord.uqam.ca.

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John McKinnell, *Meeting the Other in Norse Myth and Legend*, Cambridge: D.S. Brewer 2005, ISBN 1843840421, IX + 291 pp.

There are several examples of Old Norse stories where relations between gods or men on the one hand, and, for instance, giantesses and prophetesses on the other, are described, something which in this monograph is characterized as "cross-gender encounters." In chapters 4–14, a number of concrete examples of this phenomenon are described. A god or a king could consult a hostile prophetess; a man could have a relation with a giantess who bore him a son etc. It is quite obvious in many of these stories that the gods and the men represent the rational world, while the giantesses signify the chaotic and irrational elements in life. The texts where these stories are included were almost certainly written down by Christian scribes, who were probably not interested in maintaining heathen traditions. The texts must therefore have had other functions. It is possible to read them psychologically, and the field is also open for social explanations. The texts serve, according to the author, as patterns meant "to function as open-ended investigations of human problems" (234). It is also asserted that: "Myth is about problems and contradictions, and it has no 'right answers'; often, it does not even have any 'right' questions, and the problems

it seemed to address may have varied from one hearer to another" (234). The introductory chapters deal with methods and sources, and serve as valuable starting-points for the study of these myths. A bibliography and a comprehensive name and term index conclude the book, which in some places has a very personal tone.

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Juha Pentikäinen and Péter Simoncsics (eds.), *Shamanhood – an endangered language* (The Institute for Comparative Research in Human Culture, B 117), Oslo: Novus Forlag 2005 ISBN 8270993913, ISBN 9788270993918, 251 pp.

Shamanhood as a concept was created under the influence of a Christian worldview, but in the northerly (the circumpolar and subarctic) areas where we come across this phenomenon, it is not perceived as a religion in the western sense. The study of shamanhood also focuses on the oral knowledge which encompasses a whole concept system, folklore, mythology and music. There are seventeen essays in this book, together with an "Introduction" by Juha Pentikäinen and Péter Simoncsics. The essays illustrate shamanhood in different environments which draws attention to the importance of geographical context. Linguistic perspectives are discussed in several essays, e.g. in Juha Janhunen's article about linguistic perspectives on Euro-Asian shamanhood, which also demonstrates the importance of language for the reconstruction and dating of shamanhood and for its survival. Juha Pentikäinen's essay "Northern Ethnography – Research on the Forgotten Paradigm in Fieldwork on Shamanhood" is interesting from the point of view of the history of science, and discusses important anthropological studies among the Finno-Ugrian peoples made by M. A. Castrén and Lars Levi Læstadius long before anthropological field pioneers such as Franz Boas, Bronislaw Malinowski and A. R. Radcliffe-Brown were active.

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Hilde Sollid, *Språkdannelse og -stabilisering i møtet mellom kvensk og norsk* (Tromsø-studier i språkvitenskap, 24), Oslo: Novus Forlag 2005 ISBN 8270994103, 9788270994106, XV + 302 pp.

In this monograph, which is based on her doctoral dissertation, Hilde Sollid studies the origin and development of the new Norwegian dialect in Sappen in Nordreisa northern Norway, against a background of theories about creole languages and language learning. Nordreisa has been the meeting-place of three languages, Finnish, Norwegian and Sami, and here some syntactic features that originated when the Finnish-speaking population learnt Norwegian as a second language are studied. The linguistic material has been collected using a list of questions, asking for four selected syntactic features, as well as follow-up interviews consisting of structured conversations with a number of informants. The first section presents previous research in Scandinavian, particularly Norwegian, contact dialects, Sappen as a language commu-

nity and the theoretical framework within which the author works. The writer also discusses dialect syntax and various methodological problems concerning the use of lists of questions. The new Northern dialect is studied during what is called "the creation phase" as well as during the "stabilization phase." Throughout the stabilizing process some of the variation that was present during the first phase is levelled out. Gradually Norwegian becomes more and more central in Sappen, due to teaching or because more and more Norwegian-speaking people settle in the region. Transfer features disappear during the stabilization phase, and such features are not established as a part of the language users' internalised grammar. Even so, transfer features are known in the linguistic environments, for example through a grandmother or an uncle, and younger informants may have a positive attitude to the dialect syntax even if they do not necessarily use it themselves (274). The study is, not least, of methodological interest.

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Einar Ólafur Sveinsson, *The folk-stories of Iceland* [Revised by Einar G. Pétursson, translated by Benedikt Benedikz, edited by Anthony Faulkes] (Viking Society for Northern Research. Text series. Vol. XVI), London: Viking Society for Northern Research 2003, ISBN 0903521539, 319 pp.

The folk-stories of Iceland is an English translation of Einar Ólafur Sveinsson's book *Um íslenzkar þjóðsögur*, published in 1940. First an outline is given, where a folk-story is defined and where categories of folk-stories are treated according to different principles. The origin of folk-stories is discussed and the role of the narrator is also explained. This first chapter takes us, not unexpectedly, far away from Scandinavia. It is worth noting that a folk-story must be narrated, and when a written story is the basis of a folk-story, it must "circulate orally, not necessarily through many tellers, though if it is to be effective in its oral version, the narrator should have lost sight of the book" (14). The second chapter deals with the sources of folk-stories, and it also contains a valuable overview (141 ff.) of collections of Icelandic folk-stories. The third chapter gives a detailed description of "folk-belief and folk-legends" (149 ff.). Here are stories about trolls and giants, ghosts, elves, hidden people etc., and here (188 ff.) you may learn the difference between *ófreski* 'ability to see and sense supernatural beings' and *fjölkynngi* 'knowing many things' (i.e. knowledge of magic). Comparisons with notions in other types of Nordic folk belief are also made. The fourth chapter deals with wonder-tales. The theme of the fifth and last chapter – taking its starting-point in a story (267–269), rendered by Eiríkur Ólafsson of Brúnir (1826–1900) – is "the world of men and the hidden world." There are of course plenty of indications that the book was produced a couple of generations ago, and it must be interpreted within the framework of the research paradigm of the 1930s and 1940s. Some work has been done – in connection with the translation work which began more than thirty years ago – to supplement the bibliography and add later results; Jan Wall's investigations of milk-thieving beings are mentioned

in connection with *tilberi*, a milk-stealing magic performed only by woman. A more thorough revision has not been made, however, and it is a pity that the book has not been provided with an index.

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Heiko Uecker, *Geschichte der altnordischen Literatur*, Stuttgart: Reclam 2004, ISBN 3150176476, 309 pp.

This book provides an overview of primarily medieval Icelandic literature. Heiko Uecker, professor of Scandinavian philology at the University of Bonn, with a wide scientific production on Scandinavian literature, first sketches a background and then gives relatively concentrated accounts of religious literature, Snorri's *Edda*, the different grammatical dissertations and medieval itineraria and computistics, the historiographic literature, the Icelandic sagas, fornaldarsögur, riddarasögur, the *Poetic Edda* and the skaldic verses as well as many other things. There are also contributions from the other Nordic countries, such as Birgitta's revelations, *Siælinna thrøst*, *Um styrilsi konunga ok höfdhinga*, *Erikskrönikan*, Saxo Grammaticus' *Gesta Danorum* and *Eufemiavisorna*. Perhaps these latter parts of the book could have been somewhat extended. An extensive bibliography and several valuable indexes conclude the book. The writer mentions two starting-points for his overview in the preface: "die Anschauung, dass die gesamte altnordische Literatur ein Teil der europäischen Literatur ist, der sie viel zu verdanken hat: Schrift, Christentum, Gelehrsamkeit, Bildungswesen und kontinentaler und englisch-irischer Import," as well as the idea that where Icelandic literature is concerned, one "mit der Herausbildung und Konstruktion einer nationalen, kulturellen Identität zu tun hat" (7). It is important to bear these perspectives in mind when reading Heiko Uecker's overview.

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Manuscripts should be double-spaced with wide margins, all pages numbered consecutively. Three hard copies of the manuscript should be submitted to the editor-in-chief, and the full text should also be submitted in the format of a major word processing program for Windows or Macintosh, RTF or plain text format, either on CD or via e-mail to the e-mail address lars-erik.edlund@nord.umu.se.

The manuscript should be accompanied by a separate sheet with a brief note on the contributor (50 words), institutional address, e-mail address, telephone and fax numbers and an abstract of no more than 200 words plus 10 or fewer keywords.

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Articles may be divided into sections if necessary. Each section should be numbered, using Arabic numerals with up to three decimals: 3.2.1. , 3.2.2 etc. or provided with section headings.

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Commas, full stops etc. should be placed inside the closing quotation mark.

References should be given immediately after the quotation, stating author, date and page as follows (Paasi 1996: 23). In reviews of a single work, only the page number needs to be given as follows (14). Place the reference before the end of the sentence when is integrated in the text but after the end of a block quotation. Separate the references with a comma when two or more works are referred to in the same parenthesis. Avoid abbreviations such as *ibid.*, *op. cit.*, *i. e.* and *e. g.* Instead of *vide*, write *see*, instead of *viz.*, write *namely*.

Use indentation instead of a skipped line to mark the beginning of a new paragraph.

Notes should be numbered consecutively through the text and collected at the end of the article as endnotes.

3. References

Book
Paasi, A. (1996). *Territories, Boundaries and Consciousness. The Changing Geographies of the Finnish-Russian Border*, Chichester: John Wiley & Sons.

Edited book
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Grace, S. (2003). "Performing the Auto/Biographical Pact: Towards a Theory of Identity in Performance [paper delivered to ACTR conference, May 2003]," http://www.english.ubc.ca/faculty/grace/THTR_AB.HTM#paper, and access date.

Unpublished dissertation
Smith, J. (1998). "Social Work Education in Scotland," diss., University of Glasgow.

References to several works by the same author, published the same year, should be numbered 2007a, 2007b, 2007c etc.:

Simmons, I. G. & Innes, J. B. (1996a). "An episode of prehistoric canopy manipulation at North Gill, North Yorkshire, England," *Journal of Archaeological Science*, 23, pp. 337–341.

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ISSN 1654–5915