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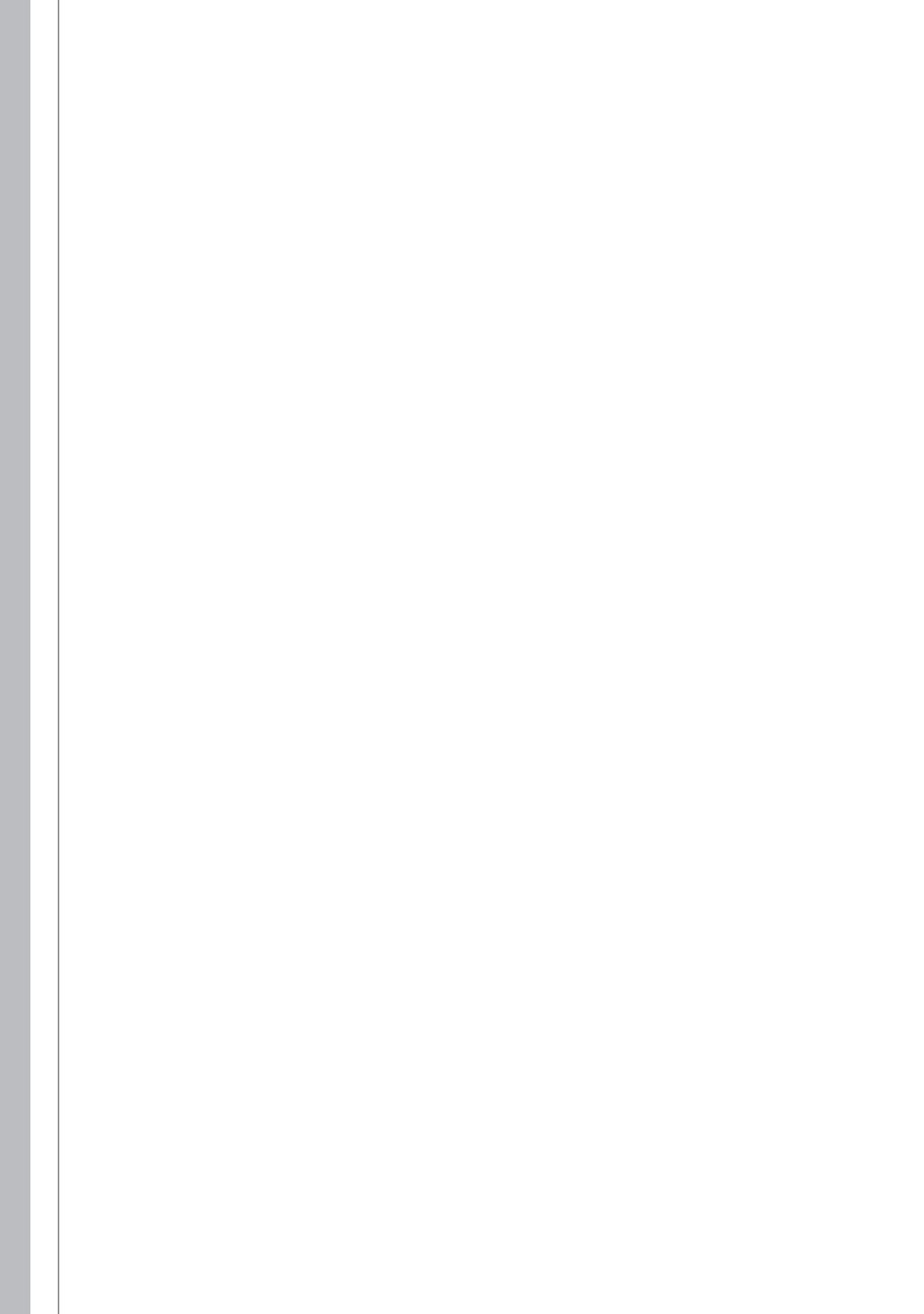
LOUWRENS HACQUEBORD

Back to the Future

The Past, Present and Future of Resource Development in a Changing Arctic

ABSTRACT In 2007 a Russian flag was placed on the seafloor at the North Pole to mark the Russian United Nation Convention on the Law of the Sea (UNC-LOS) territorial claim on the slope of the continental shelf in the Arctic Ocean. This activity drew the attention of the world to the North Pole region and the resources expected to be found there. It also made clear that a new race for the natural resources in the North Pole region was at the point of beginning. This article will discuss the relation between climate change, resource development and geopolitics. It will place recent political events in a historical context and will finish by considering some future political developments.

Introduction

On 28 July 2007 on television all over the world, the Russian politician Artur Chilingarov could be seen holding a photograph of a Russian flag.[1] This flag was placed on the sea floor at the North Pole to mark the Russian United Nations Convention on the Law of the Sea (UNCLOS) territorial claim on the slope of the continental shelf in the Arctic Ocean. By doing this, he continued a tradition of more than four hundred years and showed that not so much has changed in the global political arena since the heyday of Western European exploration and exploitation of the Arctic. As early as the end of the sixteenth century, flags and arms were planted to mark the possession of a place. In this way, Dutch and English explorers marked their discoveries in the Arctic in order to claim potential resources, but they did more. They also mapped and named characteristic parts of the newly discovered land. Two seventeenth century paintings are known depicting the same

whaling station and the same geography but different flags.[2] Together with many geographical maps and names, these two paintings are indicators of a large-scale historical process of European expansion in which exploration, colonization, resource exploitation and nationalism all played a role.

In their expansion period, the Americans used the same methods to mark their discoveries. In 1909 Robert Peary claimed that he was the first human being to have been on the North Pole. Later he telegraphed that he had the "Stars and Stripes nailed to the North Pole" to show the power of the United States of America and his nationalistic feelings (Peary 1910). In addition, when in 1969 the American Neil Armstrong landed on the moon one of the first things he did was to plant a flag.[3]

Although not new, the act of planting the Russian flag in 2007 awakened the world and drew attention to the North Pole region and the resources expected to be found there. It also made clear that a new race for the natural resources in the North Pole region was at the point of beginning. It places similar flag planting incidents by two other coastal states Denmark (2002) and Canada (2005) on Hans Island in the Nares Strait in a different perspective. The Russian action also explains the significance of the Danish geological North Pole expedition,[4] which was carried out two weeks after the Russian expedition.

This article will refer to the relation between resource development and climate and will place recent events in a historical context. It will discuss the future of the relation between resource development and climate change in a frontier region that produces raw materials for the industrial centres of the world (Hacquebord & Avango 2009). The subject of this article approaches very closely the research subject of the project Large Scale Historical Exploitation of Polar Areas (LASHIPA) endorsed by the IPY.

This article will begin with a description of the Arctic, continue with a discussion of the present geopolitical situation and resource development taking place, then examine its history, including historical exploitation activities, and it will finish by considering some possible future developments.

The Arctic

The Arctic Ocean is an ocean covered with sea-ice and surrounded by continents. Generally speaking, it is limited by the Arctic Circle but other borders are also used: meteorologists use the 10°C isotherm of the warmest month, biologists use the tree line and physical geographers use the southern limit of permafrost as marking the borders of the Arctic. All borders however, demarcate more or less the same area. A large part of the Arctic consists of an ocean, which is composed on a 30/70 basis of a deep-sea and a continental shelf. This ocean is called the Arctic Ocean and its surface area

is 9.5 million km² or four times the Mediterranean Sea (Sugden 1982: 23–24). Compared with the other world oceans the Arctic Ocean is not large; it constitutes approximately 3 percent of the world's total ocean area but it has all the characteristics of an ocean. The presence of the Arctic Ocean is the reason why the lowest temperature in the Arctic is not found on or near the geographical North Pole but on the surrounding continents of North America and Eurasia. In this respect, it is the opposite of the other frozen part of the world, because Antarctica is a continent surrounded by oceans with the lowest temperature on or near the South Pole. Another important difference is that Antarctica is uninhabited while the Arctic is home for ca 4 million people.

There is no treaty system governing the Arctic as there is in Antarctica. The only international legal regimes are the United Nations Convention on the Law of the Sea (UNCLOS) and the Spitsbergen Treaty. In addition to these, legal regimes such as the convention for the Prevention of Pollution from Ships and the United Nations Fish Stocks Agreement are also applicable to the Arctic. In principle, no state has jurisdiction over the Arctic Ocean and until recently, no country has been really interested in claiming the Arctic Ocean. However, the situation is now different, mostly because of climate change and especially because of the changing sea-ice situation in the Arctic Ocean.

The Arctic Climate Impact Assessment (ACIA 2004) to model future sea-ice coverage of the Arctic Ocean made use of recent sea-ice observation figures (1979–2003). According to ACIA the Arctic Ocean will be free of ice during the summer months in around 2050. The IPCC (Intergovernmental Panel on Climate Change) models confirmed that conclusion in 2007.

However, new observations suggest an acceleration of the melting of the sea-ice. From 1979 to 2007, the sea-ice surface area decreased from 7,000,000 to 4,300,000 km², which is approximately 40 percent. Besides in surface, the sea-ice also decreased in thickness by ca 50 percent.[5] In 2008 it became clear that although in extent the sea-ice was slightly larger than in 2007 there was less multi-year sea-ice in 2008 than in 2007, which means that the ice became thinner again in that year. The expectations are that, if this development continues, the Arctic Ocean will be free of ice in the summer before 2020 instead of only in 2050.[6] Some reports even predict an ice-free Arctic Ocean before 2015.

This means that at least in the summer the Arctic Ocean will become open for the exploitation of natural resources and for new, shorter shipping routes within a reasonable period. These challenges have attracted the attention of both Arctic and non-Arctic countries and have placed the Arctic on the global political agenda.

The Present Geopolitical Situation

This increasing interest in the Arctic has led to action by the five Arctic coastal states. In May 2008, the five coastal states organized a meeting in Ilulisat in Greenland to discuss their sovereign rights and jurisdiction in the Arctic Ocean. In the Ilulisat declaration of May 2008, the five claimed the main stewardship role in protecting the Arctic Ocean based on the existing legal framework offered by UNCLOS, which they consider to be a solid foundation for responsible management by the five states.[7] This attitude has however caused a division within the Arctic Council, which consists of five claimant and three non-claimant states, which does not strengthen the political position of the council. Although the Arctic states work together in many projects, it looks as if all the states are following a very individual strategy. Most of the states have formulated their own strategy on Arctic policy.

For example, the USA formulated its Arctic policy in the *White House paper* in January 2009 as one of the last directives of the Bush administration. Russia "highlighted its commitment to its obligations under the international treaties and agreements related to the Arctic" in the document "Fundamentals of the State Policy of the Russian Federation in the Arctic up to 2020 and Beyond," which was adopted in September 2008 and published in March 2009.[8] Most recently Norway and Iceland have also formulated an Arctic strategy and Canada, Sweden and Finland already did so some time ago.

The non-Arctic states are trying to strengthen their position firstly by increasing their scientific presence in the Arctic and secondly by formulating their own strategy on Arctic policy. An increasing number of countries have recently established a research station in Ny Ålesund on Spitsbergen (Svalbard). There Norway, Germany, France, the Netherlands, Japan, South Korea, China, Italy, the UK and India are waving their flags and the European Union is financing many of the research activities in the settlement. In the framework of the International Polar Year, more expeditions to the Arctic were organized than ever before. Ice core drillings in the Greenland ice sheet, sea-ice research in the Arctic Ocean, ecological research on the continents around the ocean, geological research in the rocks in and around the Arctic Ocean and human and social research on the surrounding continents are being carried out with an increasing intensity. Drillings were also conducted in the middle of the Arctic Ocean to collect information about the geological consistency of the bottom.

Besides the individual states, the European Union has also shown its interest. The Union presented and discussed its Arctic ambitions at the Arctic Conference of the Nordic Council of Ministers in Ilulisat in Green-

land in 9–10 September 2008 (Airoldi 2008). According to the conclusions of that meeting, the Union was to "get deeply involved in matters relating to the Arctic" but it is very debatable if all Arctic countries will share this conclusion.[9] On 9 October 2008 a Resolution on Arctic Governance was adopted by the European Parliament.[10] On 9–10 November 2008 the European Union organized a conference in Monaco to discuss Arctic strategy, and in Brussels on 20 November the European Commission's Communication proceeded with its strategy, which finally in December 2008 led to a formulation of some conclusions concerning its Arctic policy.[11] At this conference, it became clear that, to play a role in the Arctic political arena, the EU has to develop an Arctic Policy that takes away all doubt about the interest of the EU in the Arctic. Such a policy should be based on recognition of the indigenous rights to hunt seals, on scientific research and on the protection of the vulnerable Arctic environment.[12] The European Union has asked to become an observer at the Arctic Council but without success so far. At the beginning of April 2009, the European Parliament approved a resolution in which the Parliament asks the European Council and the European Commission to start negotiations to realize an Arctic Treaty. However, on April 29 at the Ministerial meeting of the Arctic Council in Tromsø, Norway, no readiness to talk about an Arctic Treaty could be perceived among the eight Arctic Countries.[13]

The Historical Framework

The North Pole region has a long history as a Resource Frontier Region. Some decades after the Europeans discovered it at the end of the sixteenth century, the exploitation of the resources in the region began. This exploitation has continued for more than four hundred years. The raw materials produced were transported to the harbours in Western Europe where they were used to satisfy the increasing demands of the developing industries.

As early as the sixteenth and seventeenth centuries Willem Barentsz and Henry Hudson planted flags and arms in the North Pole region to claim the newly discovered lands for their investors. This was important because in those days in the Dutch Republic, the government gave a monopoly to the investing merchants to trade with newly discovered lands for four years. Therefore, the explorers were successful not only when they discovered a northern sea route, but also when they found new lands that were commercially interesting to them (Hacquebord 1984: 42 ff.).

The interest in a northern sailing route was awakened by the revolutionary ideas of the Dutch cartographer Petrus Plancius (1552–1622). He believed in an open Arctic Ocean and not in the traditional image of the North Pole region. In the traditional image, the North Pole was composed

of four islands around a sea and in the middle of that sea the North Pole on a rock. The famous mapmaker Gerard Mercator (1569) created this image. Willem Barentsz was the explorer who in 1594, 1595 and 1596 was sent to sail to the north to search for a northern passage to the other side of the world. On his last trip (1596–1597), he discovered on 80° north an arctic archipelago, which he named *Spitsbergen*. He placed the colours and arms of the States General of the Government of the Dutch Republic on one of the small islands near the north coast of Spitsbergen. Soon after his discovery and Henry Hudson's voyages of discovery in 1607, the exploitation of the living marine resources of Spitsbergen began. The Englishman Jonas Poole sailed to Spitsbergen to hunt reindeer and walruses in 1609 and 1610. He reported many whales in the bays of Spitsbergen and English whaling started in 1611. In 1612, one year after the English, the Dutch appeared on the scene. Whaling captain Willem van Muyden hunted whales in the bays of Spitsbergen and although he was not very successful, he returned to Spitsbergen the following year. This time he hired Basque whalers to harpoon and process the whales and despite the English obstruction, he returned home with a small cargo of whale oil (Hart 1957).

Soon there was very strong competition going on between the English and Dutch whalers. When a little later the King of Denmark Christian IV also started to participate in whaling, the competition became stronger. The English whaling company did not accept any competition in their whaling activities and it used its greater number of ships and cannon to chase the competitors away (Hacquebord 1984: 50).

The first claims on the no-man's land of Spitsbergen were made by the English and the Danish kings. Colours and arms were planted to show everybody that the land had been claimed. The Danish king claimed it because he was of the opinion that Spitsbergen was a part of Greenland and the English king claimed it because he was convinced that the English were the first to start whaling in the region (Muller 1874).

Based on the ideas of Hugo de Groot,[14] the Dutch whalers initially did not claim the land but claimed free use of the Spitsbergen waters and of the living resources in those waters. Later on they understood that they had to claim the land in order to process the whales at their whaling stations. The Dutch whalers asked the States General for men-of-war to protect their fleet and the Dutch interest in whaling. They received this protection and to mark their claim Dutch whalers built houses in the bays used by the English whalers, which the English mostly demolished and then used the material to build their own facilities in another place (Hacquebord *et al.* 2003).

Later on the Dutch even built a fortress to protect their main station of Smeerenburg (Hacquebord & Vroom eds. 1988). The two paintings men-

tioned in the introduction representing the same scenery but with different flags show the competition that existed between the Danes and the Dutch. These paintings by Abraham Speeck (1634) and Cornelis de Man (1639) are perfect examples of the seventeenth century competition on the no-man's land of Spitsbergen.

In this competitive way, whaling began in the bays of Spitsbergen in the second decade of the seventeenth century. It was a market-driven international activity with the English Muscovy Company and the Dutch Noordse Compagnie as the most important actors. These two companies controlled the catch. The Dutch company made agreements about catches and prices. They functioned as a cartel *avant la lettre*. Temporary whaling stations were built mostly near the place where the whale was killed, and because of competition between whalers of the different nations, especially the English and the Dutch, many conflicts arose which led to decreases in the profits of the companies. In 1623 after many conflicts, an agreement was finally made between the English and Dutch whaling companies to end this useless competition. It worked because the Dutch concentrated their activities in the north and the English stayed in the southern bays of Spitsbergen (Hacquebord *et al.* 2003: 122).

In this way, the Dutch had occupied the best hunting ground because the edge of the ice pack was mostly near the northwest corner of Spitsbergen and the bowhead whale was always to be found near the edge of the ice pack. During its migration, the bowhead whale travels alone or in small groups. Large groups of bowheads are only found in areas with a dense biomass in the feeding grounds, in places where movement to the north is impeded by the ice pack and in their breeding grounds. Based on written sources, the migration routes of the bowhead in the North Atlantic Ocean have been reconstructed. The breeding grounds were found near Jan Mayen and the feeding and mating grounds near the edge of the ice pack and in the bays of Spitsbergen (Hacquebord 2008b).

In the beginning of the seventeenth century, there were many bowheads in the bays of Spitsbergen because of the vicinity of the ice pack. Not the killing but the processing of the whale formed the bottleneck for the industry: flensing and cooking were the weak parts of the process. It made the whalers dependent on the land for their cooking activities. Claims on the no-man's land of Spitsbergen were the consequence of this dependency on the land.

Around 1650 the situation changed because ice blocked the bays and shortened the working season on Spitsbergen. The whalers reacted to the new situation by moving the flensing and cooking of the blubber out of the bays of Spitsbergen. They flensed the whales alongside the ship again

or pulled them onto an ice floe. The blubber was put into barrels, and then transported to the homelands where it was cooked in newly built try-works. The stations on land were abandoned, as no land was needed anymore and there were no land claims either. For the Europeans Spitsbergen was no longer important. It was not until the second half of the nineteenth century that the resources in the Arctic Archipelago once more became interesting to the Europeans.

The whaling trade became open to everyone. There were no limits. It was not possible to control the catch, so that the companies were no longer able to function. During the whaling period there was a strong relation between the exploitation of natural resources and the location of the sea-ice in the Atlantic Arctic. The edge of the ice pack steered the location of the whale and hence also the activities of the whalers and thus determined the success of the trade. This resulted in open competition among whalers from different nations. The consequence of this development was an almost total extermination of the Atlantic population of the bowhead (Hacquebord 2008b: 95).

Oil and Gas

Because of the unlimited whale hunt, which took place in the past, there are now almost no bowheads anymore in the Atlantic Arctic. At the end of the whaling period, the North Pole region became attractive again as a region supplying raw materials. This time coal attracted the attention of southern investors. At the beginning of the twentieth century, the great demand and high prices paid for coal made the region interesting for coal mining (Avango 2005). Later on other minerals like iron were found and mined as well. In recent years, the region has been becoming more and more important as an energy producing area. The expectations concerning resource development in the Arctic are very high: 13 percent of the potential world oil reserves and 30 percent of the potential world gas reserves are expected to be found there, according to the US Geological Survey.[15]

At the moment oil and gas exploitation is concentrated in two areas with enormous potential development: the Barents Sea/Kara Sea region and the Beaufort Sea region. In the Barents Sea region, oil and gas exploitation is very promising. The biggest offshore gas field in the world is to be found in the Barents Sea. It is called the *Shtockman field*. This field is estimated to contain 23 billion cubic meters of gas and 37 million tonnes of gas condensate. Although the Russian gas company Gazprom has signed an agreement with Total, Statoil, and Norsk Hydro to develop the field, the work is proceeding very slowly, partly because of the slackened Russian governmental policy and partly because of the Russian lack of technological capacity (Nicoll ed. 2008).

However, the preparations for the exploitation of the resources in the

Barents Sea have started and will continue in the near future. Gazprom has a lot of experience on land but needs the assistance of Western oil and gas companies and contractors for offshore drilling. The company needs assistance to build an offshore infrastructure to transport the oil and gas to the existing pipelines to the European market in the south. The infrastructure needed consists of pipeline connections with the already existing pipeline system and a LNG loading platform near Murmansk. In cooperation with the Russian company MRTS,[16] Dutch firms such as Royal Boskalis Westminster NV are now already dredging to prepare the construction of pipelines (Baydaratskaya Bay) and an oil terminal in the Pechora region in Northern Russia called *Varanday oil termina*l, which was launched in 2008.[17]

The expectation is that Murmansk will develop into the offshore harbour for the prospecting and exploitation of the resources in the Russian part of the Barents Sea. At present government-to-government discussions are taking place between some European countries and Russia to create a local knowledge environment necessary for offshore industry. The discussions between the Russian authorities and the Norwegian and Dutch governments are focused on setting up an expertise centre at the local Technical University in Murmansk linked with the Gubkin University in Moscow. The Russian authorities are concentrating on scientific cooperation, transfer of technical knowledge, business support and education. The ties between the twinned cities of Murmansk and Groningen are being used to build up the transfer of knowledge. Within the twenty-year-old framework of the relation of friendship between the two cities, Groningen University and technical high schools there are working with their Russian partners to build up technical capacity in Murmansk.[18]

Russia needs safety and health regulations (search and rescue) and trained technical staff and that takes time. Another delaying aspect is the fact that subdivisions of Gazprom are making the rules (Uniigaz) for drilling and the environmental impact assessments (Firega). These aspects have to be solved before the exploitation of the Shtockman gas field can begin. The expectation is that the first flow will come out of this field around 2014. The first oil from the Barents Sea will come from the Prirazlomnoye oil field in 2011 (Bambulyak & Frantzen 2009).

On land, the current Russian oil and gas exploitation is concentrated to the Nenets Autonomous District of the Archangelsk region, in the Komi Republic along the Pechora River and in the Yamal-Nenets Autonomous District in Western Siberia (AMAP 1998: 666). The estimated yearly production in these three regions is 93 million tonnes of crude oil and 742 trillion cubic meters of natural gas. Most of this oil and gas is transported to the European market by pipelines. Since 2008, when the oil terminal Varanday was

completed, tankers have transported large quantities of oil to Rotterdam and this transport will certainly become more intense in the end. However, because of the drop in oil prices, the Russian economy is suffering under the global financial crisis at the moment and so is their investment activity in energy production.

Recently considerable oil and gas reserves have been identified in the Canadian Arctic. They are located both on land and on the continental shelves. In the 1960s, substantial reserves of gas and some small oil fields were discovered in the Sverdrup Basin, and in the following decades new discoveries were made in the Mackenzie/Beaufort Basin. Especially the gas deposits discovered in the Mackenzie were huge. An economic exploitation of these gas deposits needs however stable oil prices over a relatively long period. In the Mackenzie delta and the Arctic Islands in total 1,665 million barrels of oil and 1,157 billion cubic meters of natural gas were discovered. This quantity of oil is found in 45 fields and the gas is spread over 84 fields (AMAP 1998: 664). Because of the costs for both oil and gas, the extraction is currently small scale. The exploitation of many of these fields was considered to be uneconomical in the 1990s market conditions, but the increases in the oil and gas prices in the first years in the twenty-first century have made it attractive. The 2008 financial crisis has however decreased the attraction again. It will take some time before attention is once more focused on these oil and gas deposits.

The Prudhoe Bay Oil Fields were discovered at the end of the 1960s. These oil fields were assessed as containing 20 billion barrels of oil. In 1977, when the construction of the Trans Alaska Pipeline System (TAPS) was finished, the Prudhoe Bay oil fields were connected with Port Valdez in South Alaska. In 1989, when the production of these fields declined, plans were made to exploit the small fields in the neighbourhood including the oil fields in the Arctic National Wildlife Refuge (ANWR) (AMAP 1998: 664 f.). The decision to start exploration drillings in the ANWR raised much discussion in and outside the USA. However, the exploration continued and three offshore drillings were successful, one of them located 12 miles offshore of the ANWR. Consequently, the state authorities of Alaska have recently given permission to explore within the 3-mile zone along the coast of the ANWR.[19]

The energy production in this part of the Arctic is unlikely to cause a significant increase in transport in the Arctic waters because much oil and gas are transported by the TAPS. Owing to all the resistance by the local people, the Mackenzie Pipeline has not yet been constructed (Bone 2003: 149–151). This lack of a pipeline might cause an increase in LNG transport from the Canadian Arctic gas fields in the long term.

Other Resources

Besides oil and gas, there are more minerals to be exploited in the Arctic. Iron, lead/zinc and diamond mines are under development in several Arctic regions. Transportation by ship is often the only way to transport the products from the mines to the market. At this moment transport of minerals in the Arctic is small but this might increase soon. Year-round transport of nickel, palladium, copper and platinum has taken place from Norilsk/Dudinka to Murmansk from 1978–1979 onwards (Arctic Council 2009: 82 f.). Plans have been made to develop a high-grade iron-ore mine in Mary River in Nunavut, Canada and a zinc/lead mine, the Black Angel Mine, in Greenland. The expectations for both mines are high, the feasibility studies promising and the environmental impact assessments acceptable.[20]

The ore will be shipped on a year-round basis in ice-strength cargo carriers which have been proven cost effective and reliable for well over 20 years at Arctic mines such as Polaris in Resolute and Nanisivik in Arctic Bay. The ore from both new mines will be shipped to Europe, which makes it very competitive because of the shorter distance between the mines and the market. The distance between Rotterdam and Steensby (Mary River) is 3,100 nautical miles and the distance between Rotterdam and the alternative production region Brazil is 5,000 nautical miles. The same is true of the Greenland Black Angel mine and Rotterdam. This mine is owned by a British firm and the products are meant for the European market.[21] In Scandinavia, a re-opening of the Sør-Varanger iron-ore mine in Kirkenes is expected. The production of this mine will increase the number of bulk carriers in the Norwegian Sea.

The changes in the Arctic did not introduce the region to tourists because the region and its attractions were already known a century ago. However, the current events have put the Arctic on the agenda and in the tourist brochures. Climate change has taken the tourists to places not visited by ships before. The economic growth and the changing circumstances in the Arctic have stimulated a greater number of people to travel north. Every summer large cruise ships sail to Spitsbergen, Greenland, Canada and Alaska. The Bering Sea, Beaufort Sea, Davis Strait, Greenland Sea, Norwegian Sea and Barents Sea are the targets of the modern tourist and an increasing number of ships have been counted in the last five years. Between 2003 and 2008 the number of cruise ships making port calls in Greenland increased from 164 to 375 bringing 22,000 passengers ashore (Artic Council 2009: 27). The same development is to be seen in Spitsbergen. There the number of tourist landings increased from 40,000 to 80,000 between 1996 and 2006 (Roura 2007). The financial crisis will however have a negative effect on this

development and will soon lead to a decrease in the number of ships and the number of tourists.

Conclusions

At present the Arctic is on the threshold of a new era, an era with almost no sea-ice anymore and unlimited economic challenges. History teaches us that the unlimited, market-driven exploitation of natural resources will have an enormous impact on the natural environment and lead to exhaustion of the resources. It also tells us that market-driven exploitation activities will very often be accompanied by politically driven activities and territorial claims. Some processes seem to be repeated, because the Arctic is undergoing a claiming and an exploitation process again. To protect the fragile Arctic environment, to consolidate the rights of the indigenous peoples and to continue scientific research, a management plan should be made for the Arctic Ocean. Such a plan should include areas in the Arctic Ocean closed to all economic activities for reasons of nature conservation and comparative study. Such a management plan needs however an Arctic Ocean Treaty signed by all states active in the Arctic.

If such an Arctic Ocean Treaty is not possible, an extension of the Arctic Council with non-Arctic countries as full members instead of observers should be considered. At the moment there is no international organization strong enough to regulate the presently emerging and possible future maritime activities and the long-term exploitation of natural resources. The Arctic Council is a high-level forum, but not an international governance organization. According to the USA, the Arctic Council has a limited mandate for the protection of the environment and sustainable development. It is therefore unlikely that the Arctic Council will be able to deal with events resulting from increasing economic activity in the Arctic. Furthermore, the members of the Arctic Council do not hold the same position politically vis-à-vis the coastal states compared with the non-coastal states (Hacquebord 2008a). Some non-Arctic states are observers with the same weak position as NGOs like IFRC and WWF. They may give their opinion at the end of the meeting but participate neither in the discussions nor in the decision-making process in the Arctic Council.[22] Although the Arctic Council provides a useful platform for interaction with indigenous peoples, it is not likely that the council will be transformed into a formal governance organization (*White House Paper* 2009).

However, under the leadership of Norway (2007–2008) and under the pressure of a greater interest from the rest of the world, the Arctic Council is becoming more political. It is emerging into *the* body for Arctic affairs. It still has a limited mandate, but in the long term it might develop into a

political body with an extended state membership based on scientific endeavour in the Arctic. Through its Arctic members (Denmark, Sweden and Finland) the European Union should play a role in the establishment of such a political body.

NOTES

[1] The expedition was made possible by the financial support of Fredrik Poulsen, a millionaire from Sweden. He paid for it because he wanted to be the first man on the real North Pole under the sea ice and the Russians had the technology to take him there.

[2] Abraham Speeck (1634), painting of a Danish whaling station, Skokloster, Stockholm. Cornelis de Man (1639), painting of a Dutch whaling station in the Arctic Ocean, Rijksmuseum, Amsterdam.

[3] www.nasm.si.edu; access date 21 May 2009.

[4] The name of this Danish expedition was the *Lomonosov Ridge off Greenland 2007* or *LOMROG expedition.* It was carried out with the Swedish icebreaker Oden, supported by the new Russian nuclear icebreaker 50 Let Pobedy.

[5] National Sea Ice Documentation Centre (NSIDC), Boulder USA.

[6] Arctic Climate Impact Assessment (ACIA), Intergovernmental Panel on Climate Change (IPCC) and NSIDC.

[7] Ilulissat declaration, Actic Ocean Conference in Ilulissat, Greenland, on 28 May 2008.

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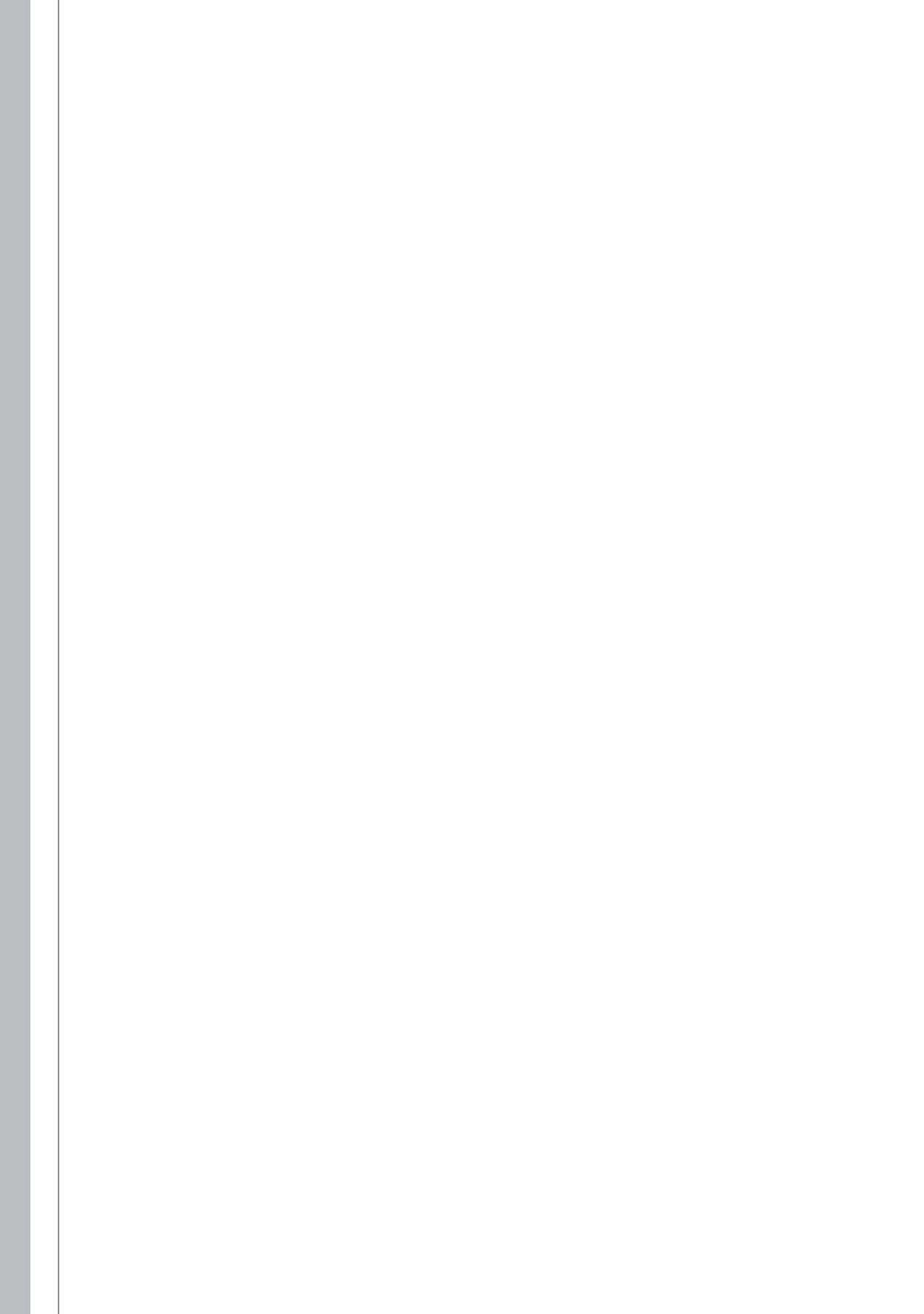
ELSE MUNDAL

The Relationship between Sami and Nordic Peoples Expressed in Terms of Family Associations

ABSTRACT The article investigates motifs from medieval sources and sources from early modern times in which the relationship between the Sami people and their Nordic neighbours is expressed in terms of family associations. During Romanticism it became a custom among Scandinavians to speak about each other as *broderfolk*, which in English is *sister nations*. In Old Norse sources it was the Sami people who were spoken of as "family," but of a slightly more distant type than siblings. Haraldr hárfagri, who united Norway, married a Sami girl, Snæfríðr. Their marriage, which was a complicated one, may be seen as a symbolic expression of the problematic and loving relationship between two peoples. The king was the foster-son of the Sami people. To express the relationship between two peoples in terms of foster-child/foster-parent relations creates a picture with a very clear symbolic meaning. The kings of Norway from Haraldr harðráði on traced their family back to a Sami girl, and the earls of Hlaðir traced their family back to Sæmingr, probably the Proto-Sami. It may have been important, at least as a symbolic expression of community, that the princely houses of Norway had family roots in both peoples of the kingdom.

In the Old Norse written sources Sami people are often mentioned. The picture of them and their culture in these sources is, of course, pre-

sented from their Scandinavian neighbour's point of view. However, these sources are interesting from both points of view, because they provide a picture of the relationship between two peoples with different cultures who lived in close proximity and partly within the same geographical area.

How we think of the relationship between Nordic people and Sami in the past is to a large extent based on historical events and conditions in recent centuries: The Sami people were the minority who were suppressed by the Scandinavian majority who looked down on their Sami neighbours. I have tried to show in previous works that this unhappy situation lasted for a relatively short period that began long after the Reformation (see Mundal 1996; Mundal 2007; Mundal forthcoming). If we go back to the sources from the Middle Ages, the attitude towards the Sami is far less negative than, for instance, in the eighteenth and nineteenth centuries. I cannot go into the whole material that forms the basis for this conclusion here. In this article I will focus on a few sources in which the relationship between the Sami people and their Nordic neighbours is expressed in terms of family associations of different types: marriage, foster-child/foster-parent relations and descent.

It is not uncommon to express the relationship between nations in terms of family relations. During Romanticism it became a custom among Scandinavians, on state occasions at least, to speak about each other as *broderfolk* ['brother nations,' which in English is *sister nations*], and in Norway today, Swedes are—with a certain sense of humour—spoken of a *søta bror*, ['sweet brother']. Behind such expressions there is—or at least was—a strong feeling of community, even in the cases where the expression is not used in a very serious context. A group of people spoken of in terms of family relations are people whom you can trust. You are supposed to support and protect them and you can expect the same form of help from them. It is worth noting that in the Middle Ages it was the Sami people who were spoken of as "family" in the Old Norse sources, but family of a slightly more distant type than brothers and sisters.

There are not many motifs in the Old Norse sources in which Sami are depicted in terms of family relations. Interestingly enough, these motifs are to be found in mythic and semi-mythic stories, and among them are the stories that can be described as foundation myths of the Norwegian nation.

The first group of sources I will discuss here is the Old Norse myth about the marriage between the giantess Skaði and two of the Old Norse gods—first Njǫrðr and thereafter Óðinn. The marriage between Skaði and Óðinn resulted in offspring. One of their sons was Sæmingr, the forefather of the earls of Hlaðir. The second source is the story found in several sagas of kings about King Haraldr hárfagri, the king who united Norway

into one kingdom, and his marriage to the Sami girl Snæfríðr. This story may be regarded as a foundation myth for the Norwegian kingdom. The third group of texts I will examine is another foundation myth. According to this myth Norway was united many generations before the time of King Haraldr hárfagri by a mythic king, Nórr, who came from the extreme North. Finally, I will draw attention to a text—or rather a group of texts that are related—from the time after the Reformation, in which the Sami, or the *finnar*, which is the Old Norse word for Sami, are said to be descended from a certain Norwegian chieftain called *Finnr*.

Skaði and her Son Sæmingr

The giantess Skaði is never called a Sami in Old Norse sources. She is a mythological figure. According to *Gylfaginning*, chapter 23, in Snorri's *Edda* she lived in the mountains, went skiing and hunted animals, and thus behaved like a Sami woman. In my opinion, the picture of her is meant to call forth associations to Sami women.[1]

The beginning of *Skáldskaparmál* in Snorri's *Edda* tells the myth of how Skaði, dressed up as a warrior, arrived in *Ásgarðr*, the home of the gods, to avenge her father who had been killed by the gods. The gods wanted, however, to compensate her to obtain peace, and they offered her to choose herself a spouse among them, but she was not allowed to see more than their feet and legs. Skaði chose the one with the most beautiful legs, whom she thought was Baldr, but it turned out to be Njǫrðr. Skaði accepted a peace settlement with the gods only on condition that the gods made her laugh. Loki then tied a cord round his testicles and the other end to a nanny goat's beard, and they pulled each other back and forth and both squealed loudly. When Loki at last fell into Skaði's lap, she laughed. These two strange scenes are interesting in themselves,[2] but seen in connection with the topic of this article, it is the establishment of family associations between the two groups that deserves attention.

In the case of Skaði and Njǫrðr, the marriage was very unhappy—she wanted to live in the mountains, while he wanted to live by the sea—and they divorced. However, according to Old Norse myths, after the divorce from Njǫrðr, Skaði married another of the Old Norse gods, Óðinn, the god with the highest rank. The interpretation of the new marriage could be that it was unthinkable to break up the relationship with the people Skaði represented, be they giants or Sami.

Óðinn and Skaði had many sons. The source for this information is the Old Norse poem *Háleygjatal* from the late tenth century by the skald Eyvindr Finnsson (Finnur Jónsson ed. 1912–15, B1: 60–62).The poem traces the

family of the earls of Hlaðir back to a mythic origin and was composed in honour of Earl Hákon. The name of Óðinn's and Skaði's son Sæmingr is not mentioned in the poem as we have it, but it is mentioned in the prose text of Snorri's *Ynglinga saga*, chapter 8, in *Heimskringla* where Snorri quotes a stanza which he says Eyvindr had composed about Sæmingr. It is therefore likely that Snorri knew the name *Sæmingr* from a stanza of the poem that he did not quote. In the prologues of both *Heimskringla* and *Saga Óláfs konungs hins helga*, Snorri on the contrary says that Sæmingr was the son of Yngvifreyr. To trace the princely houses back to the god Freyr may have been the tradition Snorri was most familiar with, which may explain the inconsistency in Snorri's texts.

We do not know whether the genealogy that traces the family of the earls of Hlaðir back to Óðinn and Skaði through their son Sæmingr is older than Eyvindr's poem or not. Eyvindr Finnsson, who was of royal descent himself, had fallen out with King Haraldr gráfellr and later in his old age he supported Earl Hákon. By tracing the Earl's family back to Óðinn and Skaði, Eyvindr may have wanted to give Earl Hákon, who also was his second cousin, an even more impressive genealogy than the royal house whose members traced their family back to the god Freyr and the giantess Gerðr.[3]

It has been suggested that the name *Sæmingr* is derived from a name that the Sami people used about themselves, and that Sæmingr, according to this myth, is to be understood as the proto-Sami (see Müllenhoff 1906: 55; Kusmenko 2006: 20). It is, however, a misunderstanding to see this interpretation as dependent on a phonetically correct derivation of the name *Sæmingr* from a word for the Sami. In folk etymology, which was the type of etymology known in the Middle Ages, *Sæmingr* would have functioned as a name derived from a word for the Sami people if that was what (learned) people believed. We can see from a story in *Vatnsdœla saga*, chapter 12, that a word for the Sami people phonetically equivalent to the first part of the compound name *Sæmingr* was known among the Scandinavians. In this saga Sami men speak of themselves as *semsveinar*. The last part of the compound word, *sveinar*, is an Old Norse word for 'young men,' but the first part of the compound word must, however, be a Sami word that the Sami used about themselves.

Whether the name *Sæmingr* was made up to make associations to the Sami, whether the name existed first and the associations to the Sami were caused by the first part of the compound name, or whether the name *Sæmingr* in the Middle Ages was associated with the Sami at all, is impossible to say with certainty. We do not know whether the genealogy back to Óðinn's and Skaði's son Sæmingr was Eyvindr Finnsson's invention, but it is worth noting that Eyvindr himself was from Northern Norway. The family of the

earls of Hlaðir originated, according to all sources, from Northern Norway and lived there for many generations before they arrived in Trøndelag. Eyvindr may have wanted to underline the northern connections by a name that awoke associations to the Sami people, which the first part of the compound name *Sæmingr* probably did. The choice of Skaði as Sæmingr's mother should also be seen in this connection. The skiing and hunting Skaði calls forth clearer associations to the Sami culture than any other mythic figure.

This means, however, that if Sæmingr is the proto-Sami, then this princely Norwegian family has its origin in the Sami society; and since Sæmingr, the Sami, and the Norwegians in this poem are found in the same genealogy, they are family.

Skaði is a mythological figure and her son may be considered a half-mythological figure. Their connection with the Sami world cannot be read out of the texts directly and becomes visible only after an interpretation in a wider context. There is reason to believe that the Nordic people's coexistence with the Sami people is reflected in their myths and that the function—or one of the functions—of some myths could have been to explain the relationship between two different peoples living in close contact. It is a fact that Sami people in some texts—texts of a mythic or half-mythic type—are spoken of as *jǫtnar*, 'giants,' or called by the name of other mythic figures, and Sami in these texts can replace giants in literary motifs where giants would normally appear.

A good example of a Sami spoken of as a giant is found in Snorri's rendering of the story about the first meeting between King Haraldr hárfagri and the Sami girl Snæfríðr.[4] Snorri copied this story nearly word for word from an older text, the Norwegian saga of kings from around 1190 called *Ágrip af Nóregskonunga sǫgum*. Both in *Ágrip* and in Snorri's text, *Haralds saga hárfagra*, chapter 25, in *Heimskringla*, Snæfríðr's father is spoken of as a *finnr*, 'a Sami.' But Snorri—or a later scribe—put in the chapter heading: *Frá Svása jǫtni*, 'About the giant Svási.' In a late variant of the story found in the two *þættir*, 'short stories', *Háldanar þáttr svarta* and *Haralds þáttr hárfagra*, preserved in *Flateyjarbók*, Svási is also called *dvergr*, 'dwarf' (*Flateyjarbók* 1, 1860–68: 582). A good example of Sami and giants being described as members belonging to the same family is found in *Ketils saga hœngs*. The hero of this saga, Ketill hœngr, has an affair with the daughter of the giant Brúni. Brúni has, however, a brother called *Gusir* who is the king of the Sami (see *Ketils saga hœngs*, chapter 3).

In Old Norse mythology the world is divided into *Miðgarðr* and *Útgarðr*. In *Miðgarðr*, 'the central areas of the world,' the gods and the humans live. In *Útgarðr*, which is situated outside *Miðgarðr*, in the outskirts of the world, especially in the East and the North, are the places of the giants. This myth-

ological map could easily be adjusted to the geography of the real world, and the Sami became the *Útgarðr* people. The fact that the Sami people fit into Old Norse mythic patterns explains why they can be called *jǫtnar*, 'giants.' However, this mythical pattern works both ways, and therefore it should be expected that the picture of the giants is also influenced by what was known in the Nordic culture—or rather by Nordic stereotypes—about Sami people and their culture, especially in cases where one of the myth's functions may have been to explain the relationship between the Nordic and the Sami peoples.

When Sami replace giants in Old Norse mythical patterns, this could at first glance indicate a negative attitude towards the Sami, but the giants also represented positive values. Their women were attractive to the gods, partly because they were beautiful and partly because they seem to have been able to produce sons with qualities desirable to the gods—Magni, the strong son of Þórr, Váli, Óðinn's son who was born to avenge Baldr, and Viðarr who avenged his father, Óðinn, in the *Ragnarǫk* battle, were all sons of giant-esses. The world of giants also possessed objects, and especially knowledge, which the gods wanted. When Sami replace giants in mythic patterns, it seems that they represent the aspects of the mythic world that are desirable to the gods, and therefore it may not be so derogatory as it may seem at first glance to be called a giant. However, there is tension between the giants and the gods, and the fusion of giants and Sami—as in the case of Skaði—there-fore clearly demonstrates an ambiguity felt towards the Sami. We should also remember that the background for Skaði's arrival was that the gods had killed her father, something that indicates unfriendly relations. The interesting thing is, however, how this conflict was solved: namely by of-fering her marriage. In Old Norse society marriage was often used to settle conflicts and achieve peace. Marriage was not necessarily a symbol of love between the two parties, but it was at least a symbol of the necessity of peace between two groups of people.

King Haraldr and Snæfríðr and the King's Relationship with the Sami People

The story about King Haraldr and Snæfríðr is well known. The story of how King Haraldr hárfagri came to marry a Sami girl is first told in *Ágrip*, chap-ter 3, and later copied by Snorri in *Heimskringla*. These sagas tell that many years after King Haraldr had conquered the whole of Norway, a Sami, Svási, arrived at the king's court during the mid-winter celebration and asked the king to go with him to his hut.

King Haraldr had united Norway partly by fighting all other petty kings

and other enemies and partly by establishing family relations all over the country by marrying daughters of the mightiest chieftains. But there was one tribe from which he had not chosen a wife, and that was the Sami people. When Svási, the father of Snæfríðr, arrived at the king's court and invited the king to his hut, it is obvious that Svási wanted the king to meet and to marry his daughter. He wanted to be treated like other chieftains and have a woman of his tribe married to the king. His plan succeeded. The king fell in love with the Sami girl and married her, and he loved her so madly that for three years after she was dead he sat by her side. Then he was advised to move her and change the bedding, and when he did, snakes, toads and other ugly creatures came out of the dead body. The king understood that the Sami had fooled him by means of their sorcery, and he became so angry that he wanted to drive away the sons he had with Snæfríðr, something he was told that he could not do.

The story about King Harald hárfagri who fell madly in love with the beautiful Sami girl, Snæfríðr, is no doubt told with the myth of Freyr and Gerðr as a model. Freyr's love for the beautiful giant daughter Gerðr, as described in *Gylfaginning*, chapter 37, in Snorri's *Edda*, and in Snorri's source, the Eddic poem *Skírnismál* (Bugge ed. 1965 [1867]: 90–96) has the same character of madness as in the case of King Haraldr. In a later anonymous skaldic poem, *Málsháttakvæði*, which most likely was composed by the Orcadian skald and bishop Bjarni Kolbeinsson around 1200 (Finnur Jónsson ed. 1912–15, B2: 138–145), the Sami girl Snæfríðr is depicted by a standard formulation, *sólbjǫrt*, 'bright as the sun,' used to describe beautiful young giantesses.[5] While the myths about Skaði, as I see it, are meant to call forth associations to Sami culture, the story about King Haraldr and the Sami girl Snæfríðr must be read in the light of Old Norse myths. However, both stories demonstrate that giants and Sami can replace each other in mythic and literary patterns.

I regard the story about King Haraldr and Snæfríðr as the "last chapter" of a foundation myth of the Norwegian kingdom, which describes how the Sami became part of this kingdom. The beginning of the story—or of the foundation myth—is also very interesting regarding the relationship between the Sami and the Norwegian peoples. According to *Ágrip*, which was later used by Snorri in his sagas of kings, something very strange happened at the court of King Halfdanr, the father of King Haraldr, during the celebration of mid-winter: all the food disappeared from the table. King Halfdanr sent for a Sami skilled in magic and tortured him to make him tell the truth. The Sami turned to the young Haraldr for help, and Haraldr ran away with the Sami. The Sami took Haraldr to a chieftain who turned out to be the same person who had stolen King Halvdanr's food. Haraldr stayed with this chieftain until spring. Then the host told young Haraldr that he

had good news for him. He told him that his father had drowned, and Haraldr would become king of the whole of Norway.

A more detailed variant of the same story is found in the Icelandic *Flateyarbók* from the 1380s.[6] In this variant of the story the chieftain who stole King Halfdanr's food sent Haraldr home before his father had drowned, because Haraldr, according to this chieftain, was to be present at his father's house to help the person who would later secure his luck in life. When Haraldr arrived at King Halfdanr's farm, he found that his father had captured a giant who had stolen gold and precious things from him. Haraldr set the giant free, and the giant ran away. When King Halfdanr understood what Haraldr had done, he drove his son away—who in this variant of the story, was only five years old. After five nights in the wilderness, the giant whom Haraldr had set free came to the exhausted young boy and took him to his cave. The giant, whose name was *Dovri*, became Haraldr's foster-father, and the young prince stayed with him for five years. Then one day Dovri told him that his father had drowned and that Haraldr was going to become king, and Dovri promised to be an invisible helper in all of his battles.

The only person who is called a *finnr*, 'a Sami,' in this story is the man who was tortured by King Halfdanr, but this man, the chieftain who had stolen King Halfdanr's food, and the giant Dovri operate together, and may all be seen as representatives of the Sami people. The relationship between Haraldr and the Sami is, according to this story, that the king became the foster-son of the Sami people. In Old Norse culture, foster-parents normally had lower social status than the family of the foster-child. The foster-parent/foster-child relations were, however, very important in Old Norse society. The institution of fostering created bonds of love and affection. Normally the bonds between foster-children and foster-parents and other members of the foster-family would last for life. When the foster-son grew up, foster-parents and foster-brothers and -sisters, who normally had lower social status, could expect protection and help. The foster-son's obligations to members of his foster-family are in some cases mentioned in the laws, and are in fact very similar to the obligations to relatives by blood. To express the relationship between two peoples in terms of foster-child/foster-parent relations creates a picture with a very strong and clear symbolic meaning. The marriage between the Norwegian king and the Sami girl was a problematic marriage—just as the marriage between Skaði and Njǫrðr. I am inclined to see these problematic marriages as symbolic expressions of the relationship between two peoples. The relationship between the two parties may have been problematic, but marriage is a strong and clear symbol of a life together—for better and for worse.

In the case of Haraldr hárfagri, his relations with the Sami people are

expressed in the symbolic language of family relations in more than one way. He is the Sami people's foster-child. His marriage to Snæfríðr is a love-hate relationship, but it is, after all, a marriage. Finally, Snæfríðr became the foremother of all Norwegian kings from Haraldr Harðráði onwards. She may be a real person, or she may be fictional. If the latter, the reason for her place in the genealogy of the royal house must have been that it was important, at least as a symbolic expression of community, that the kings of Norway had family roots in both peoples of their kingdom.

King Nórr who United Norway from the North

There is another version of the foundation myth of the Norwegian kingdom. This version is found in three slightly different variants: at the beginning of *Orkneyinga saga* and in two texts, *Hvertsu Noregr bygðist* and *Fundinn Noregr*, which both are preserved in *Flateyjarbók* from the 1380s. According to this myth, Norway was united many generations before the time of Haraldr hárfagri. The land was united by a mythical king called *Nórr* who lived in the far North. His forefathers ruled over Finland and Kvenland. Together with his brother, Górr, he went south searching for their sister, Gói, who had disappeared. Górr went by ship along the cost, Nórr went south skiing, and on his way he conquered the people called *Lappar* and the whole of Norway. It turned out that the sister, Gói, had been carried off by Hrólfr í Bergr, the son of King Svaði in the mountain of Dovri. Nórr and Hrólfr made peace. Hrólfr kept Gói as his wife, and Nórr obtained Hrólfr's sister Hadda, the daughter of King Svaði, in marriage.

There is an obvious parallel between Svási and Svaði in the two foundation myths: they are both connected to the mountain of Dovri, and they both marry off a daughter to the victorious king. No one in the story about King Nórr, Górr and Gói is said to be a Sami, but the fact that the king comes from the extreme North on skis, and that many of the names in the three variants of this myth have associations with giants and Sami (names which mean 'frost' or 'snow,' for example), point to the Sami culture.[7] The union of the family from the North and the family from Dovri seems more to symbolize a union of North Sami and South Sami than a union of Sami and Norwegians. If that is the meaning expressed in this myth, the role of the Sami in both the foundation myths of the kingdom of Norway—as found in Old Norse texts—is very important. In many ways the union of Norway is described as a Sami project. This may express the Norwegian policy in the Middle Ages. It may have been important not to depict the Sami as a conquered people, but as a people who wanted to be part of the kingdom, and who, according to both the foundation myths, had taken the initiative to unite Norway themselves. In the last variant of the foundation

myth of the kingdom, the relationship between Sami and Nordic peoples, as expressed in terms of family relations, is not as visible as in the myth in which King Haraldr was the main figure; but as in the poem *Háleygjatal*, princely houses, both the earls of Mœrir and the earls of the Orkneys, grew out of a genealogy which started among giants or Sami in the far North.

A Crazy and Informative Theory about the Descent of the Sami

The last source I want to discuss is an interpretation from the time after the Reformation of a now lost runic inscription from Giske in Sunnmøre. This interpretation exists in different versions from the seventeenth and eighteenth centuries, and there are references to the inscription in many sources, even in a poem written in quite another part of the country (Kragerø), which indicates that this interpretation of the runic inscription must have been well known and popular (see *Norges innskrifter med de yngre runer* 4 ['Norway's inscriptions with the younger runes']: 262). According to this source—or sources—the relationship between Norwegians and Sami is expressed in terms of family relationships and descent.

In notes Bishop Niels Paaske mentions in 1626 that a stone cross with a runic inscription had previously existed on the island of Giske. The stone cross was in poor condition, and the local clergyman Claus Nilssøn Gaas (priest 1589–1625) had replaced the stone cross with a wooden cross, which included a replacement of the old runic inscription with an inscription in Latin letters and modern language. According to Bishop Paaske the inscription said: "One brother killed the other [brother] because of [a disagreement about] a road. From there descend all the *finder* [the Sami]: They regard themselves today as members of the family from Giske."[8]

The old runic inscription may have been very difficult to read, and the local priest was probably not a great expert, and so the interpretation is absolute nonsense. It is, nevertheless—whatever the original meaning may have been—a very interesting source for the perception of and attitude towards the Sami. In the Middle Ages the family from Giske was one of the most influential and mighty families in Norway. One member of this family was Finnr Árnason. His wife was a niece of King Haraldr harðráði, and one of Finnr's nieces, Þóra, was married to the king; a daughter of Finnr was also married to an Orcadian earl. This family was, in other words, as close to high nobility as was possible in Norway in the Middle Ages. Bishop Paaske's rendering of the old runic inscription does not say directly that it was from this Finnr that all the Sami descended, but it must have been implied and probably was—or became—part of the local tradition. A later rendering of

the inscription, found in Jonas Ramus' *Norriges Beskrivelse* ['Description of Norway'] (1735)[9] and in Hans Strøm's *Sundmørs Beskrivelse* ['Description of Sunnmøre'] (1766), explicitly says that the brother who killed another brother was Finnr. He ran away to the far North, and there his descendents multiplied and all the people from the North who call themselves *finner* ('Sami') are descended from him.

The idea that the Sami descended from Finnr Árnason seems to have become both popular and widespread and is also found in a poem about the island of Jomfruland written by a certain Roland Knudsen from Kragerø in 1696. There he says that the wild *Find* who lives in the mountains of *Kjølen* descends from the island of Giske.[10]

It is of course difficult to say whether learned people in the seventeenth and eighteenth centuries really believed that the Sami descended from a Norwegian noble family in the early Middle Ages. Perhaps the local priest who first struggled with the runic inscription and tried to obtain some meaning from it, believed in his own interpretation. To have derived the name of the people, *finner*, from the male name *Finnr*—and not the other way round, which would be correct—seems to be one of the many folk etymologies typical of the time. Some people may have believed in it, others not. The whole idea that the Sami descended from Finnr Árnason may have become popular in the district from where Finnr Árnason's family originated, because the story was so fantastic and exotic, and later spread from there. It is also very difficult to say whether the description of the relationship between Sami and Norwegians in terms of family relations in the texts from the time after the Reformation has any connection with the same pattern found in medieval texts. What we probably can say is that as long as learned people and authors belonging to the Nordic culture expressed their view of the relationship between Sami and Nordic people in terms of family relations, whether they believed the stories or not, their attitude towards the Sami must have been predominantly positive.

NOTES

[1] This is an old idea, see Müllenhoff 1906: 55.

[2] An analysis of these two peculiar scenes is found in Mundal 2000: 353–355.

[3] The geneology of the Norwegian royal house, the *ynglingar*, is found in the skaldic poem *Ynglingatal* which according to Old Norse sources was composed by the Norwegian *skáld* Þjóðólfr ór Hvini in the ninth century (Finnur Jónsson ed. 1912–15, 1: 7–14). The first king mentioned in this poem, as we have it, is Fjǫlnir. In *Ynglinga saga*, chapter 11, in *Heimskringla* Snorri says that Fjǫlnir is the son of the god Freyr and the giantess Gerðr. And later in the poem the kings are spoken of as Freyr's offspring (st. 11), and relative of

Týr (st. 17), of Freyr (st. 21), and of Þrór/Óðinn (st. 35).

[4] The story is found in *Haraldz saga ins hárfagra* in *Heimskringla* (Snorri Sturluson 1911: 56–57).

[5] For a discussion of these parallels, see Mundal 2000: 352.

[6] This variant of the story is found in the two *þættir*, 'short stories', in *Flateyjarbók* 1–3 (1860–68): *Hálfdanar þáttr svarta* and *Haralds þáttr hárfagra*.

[7] More on the texts which contain this myth is found in Mundal forthcoming.

[8] The poem reads: "den ene broder slog den anden vdi hiell/og det for denne vey skyld. der aff kom de finder alle: De paa denne dag aff Gidske slect lader sig kalde:" This translation of the runic inscription, the versions mentioned below from 1735 and 1766, and a poem in which there are references to the translation, are printed in *Norges innskrifter med de yngre runer* 4: 262–266.

[9] The poem reads: "Find slog sin Broder ihiel,/For de om Veien ei forligtes vel;/Thi rømte han hen i Landet langt Nord,/Hvor hans Slægt blev meget stor./Af hannem ere de Nordfarer alle,/Som lader sig Finner kalde." According to Jonas Ramus the translation into modern language was made by a certain Hr. Jacob, priest in Selje (1647–1659). Not all renderings of the runic inscription mention the last lines with the references to the Sami and their descent from Giske. In "Innberetninger som svar på 43 spørsmål fra Danske Kanselli," a list of questions which included questions about antiquities that was sent to all priests in the country in 1743, the local priest of Borgund—of which Giske was a part—mentions the old runic inscription which could no longer be read, but which, the priest said, had been transcribed as: "Her slog den ene broder den anden ihiel, thi de begge om veyen forligtes ey vel" (*Norge i 1743*: 79).

[10] The poem reads: "Den Søndmørs Gjedskøe er til Søster dig udkaaret;/Der findes paa et Kaars i Runeskrift udskaaret,/Hvordan den vilde Find, som Kjølens Fjeld beboer/ Fra Gjedskøe regne vil sin Æt og Slægtesnor." An overview of authors from the period who mention this source is found in *Norges innskrifter med de yngre runer* 4: 262.

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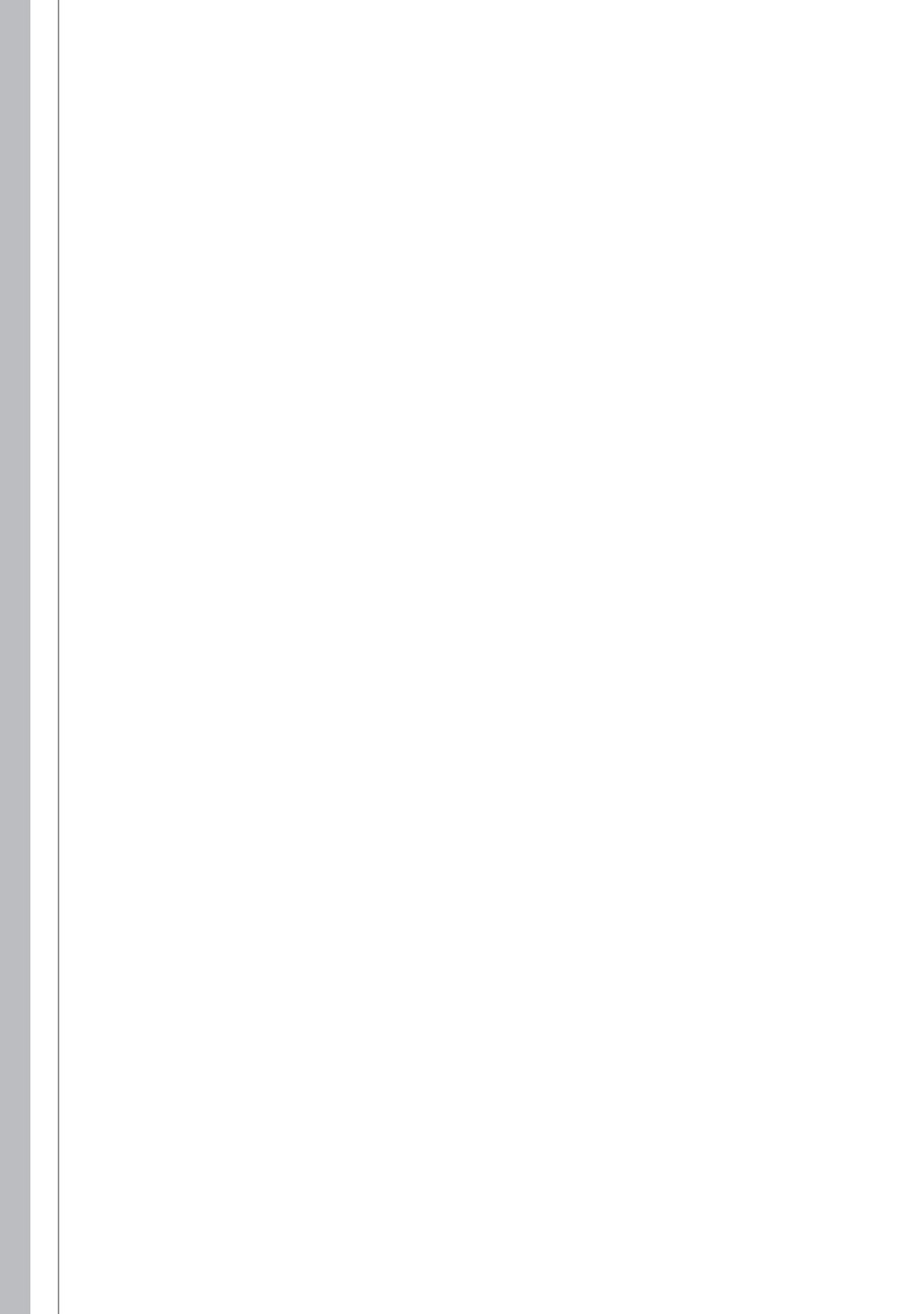
ÅSA NILSSON DAHLSTRÖM

The Two-Way Appropriation of Indigenous Knowledge

Environmental Management Policies and the Laponia Process

ABSTRACT In the face of climatic changes and environmental problems, indigenous knowledge is increasingly being accepted as an alternative to Western science in conservation policies. While indigenous knowledge may help indigenous empowerment, it is also placed under the control of the authorities whose science and structures it is meant to challenge. Indigenous knowledge is therefore the subject of a two-way appropriation by indigenous peoples as well as environmental authorities. This process is illustrated by the Sami reindeer herders in the World Heritage site of Laponia in Arctic Sweden, who are negotiating a new joint management scheme with Swedish authorities, including a Sami majority on the park board. Sami indigenous knowledge will form the basis for the new management policies, but with minimal changes to existing national legislation. While the Sami will gain some political control, Swedish authorities will also gain access to and control over Sami indigenous knowledge, hence a two-way appropriation.

KEYWORDS Sami, Laponia, reindeer herding, Sweden, indigenous knowledge, indigenous peoples, appropriation, sustainable development, environment, Arctic

Because conventional conservation methods have been relatively inefficient in dealing with climatic changes and environmental problems and securing a sustainable development,[1] conservation authorities worldwide are looking for alternative approaches. Of increasing interest is the use and usefulness of indigenous peoples' knowledge. The connection between indigenous knowledge and sustainable development has become increasingly accepted within the international environmental discourse, and is recognised in most conventions and national policy documents on environmental issues. In response to the interest in indigenous knowledge, many indigenous peoples have themselves actively promoted their knowledge as pivotal for sustainable development, and are now gaining more control over the management of their traditional areas and resources.

However, the appropriation of indigenous knowledge in conservation may be seen as a two-way process, in which the knowledge is promoted both by indigenous peoples as a better alternative to Western conservation methods, and as part of an indigenous empowerment process more generally. Environmental authorities are also gaining access to and more control over that knowledge through a process of incapacitation, in which indigenous knowledge is politically neutralised and incorporated into existing management structures. The promotion and use of indigenous knowledge in conservation is therefore a risky business for indigenous peoples, because it poses a potential threat to the integrity of the knowledge, and the way it is used. With the promotion of indigenous knowledge therefore follows a need for indigenous peoples to protect their knowledge by ensuring that there is sufficient indigenous influence on conservation boards and in joint management structures to avoid misuse of their knowledge.

In order to illustrate the global processes of involving indigenous peoples and their knowledge in environmental management, and why it is possible to talk about a two-way appropriation of indigenous knowledge, the article will discuss different views of what roles indigenous peoples and their knowledge have, or ought to have, in environmental management, and what consequences these views have for management policies and for the indigenous peoples involved, as illustrated by the Laponia Process in the Swedish Arctic.

This paper is based on extensive research carried out by the author about issues of indigenous peoples' participation in environmental management, and includes fieldwork among the Sami in Sweden, Maori in New Zealand, Aboriginal peoples in Australia and ni-Vanuatu in Vanuatu. This research has been sponsored by the Swedish Research Council (*Vetenskapsrådet*) for three consecutive projects, 2000–2003, 2004–2006 and 2007–2009.

The Promotion of Sami Knowledge

Up until recently, few governments have been willing to actually negotiate with indigenous peoples about using their knowledge and formalising their participation in environmental management, and authorities are often referring to lack of previous experience or supporting legislation for such a development. However, the Swedish government has recently endorsed a proposal to develop a local management model with formal indigenous Sami involvement in the management of Laponia.

The World Heritage site of Laponia covers a vast area of 9,400 square kilometres in the Swedish Arctic, including the national parks of Stora Sjöfallet, Sarek, Padjelanta and Muddus, the nature reserves of Sjaunja and Stubba and the areas of Sulidälbmáamassivet, Tjouldavágge and the Lájtávrre delta within the County of Norrbotten. Laponia has an alpine mountain area in the west, where the summer grazing areas for the reindeer are situated, and lowland forests, mires and bogs in the east, which the Sami use as winter grazing lands for their reindeer.

Laponia has been populated for at least 7,000 years, and the intensive form of Sami reindeer herding, including full nomadism, developed in the seventeenth century (Mulk 2000). Since the 1950s, there has been a gradual shift towards a more extensive form of reindeer herding with less regular tending to the reindeer, and with increasing use of modern technology, including motor vehicles, helicopters and GPS, in herding. However Sami traditional knowledge of the environment and of reindeer herding remains crucial. Only Sami people who are also members of a *sameby*[2] can herd reindeer in Sweden, which means that reindeer herding is a strong ethnic marker and an important component of Sami culture in Sweden (Nilsson Dahlström 2003: 31 f.).

The indigenous Sami in Norway, Sweden, Finland and Russia number around 50,000 to 70,000 individuals; out of these around 20,000 Sami live in Sweden. Only 10–15 percent of the Swedish Sami population is involved in reindeer herding, but despite the relatively small number of herders, reindeer herding is carried out in an area covering about 40 percent of the Swedish surface area in the north-west. Reindeer herding in Laponia, as elsewhere in the reindeer herding area in Sweden, is carried out on the basis of Sami immemorial rights, including the right to let their reindeer graze in the area. However, most of the land in Laponia is allegedly Swedish Crown land,[3] and in other parts of Sweden there are ongoing conflicts between private landowners and Sami reindeer herders over grazing rights (Nilsson Dahlström 2003).

The World Heritage site of Laponia has become increasingly important

as an ethno-political arena for negotiations between local Sami reindeer herders and Swedish authorities, and has become a pan-Sami symbol for Sami claims for greater influence over their traditional areas and resources. Because Laponia in the Swedish Arctic is a World Heritage site protected for its nature as well as its Sami reindeer herding culture, local herders have since the appointment of Laponia in 1996 insisted on joint management of the area, including the Sami as equal partners and with a majority representation in the management body (*Mijá ednam* 2000: 73). The *sameby*s in Laponia, that is Luokta-Mavas, Tuorpon, Jåhkågasska, Sirges, Unna Cearus, Báste, Udtjá, Sierri and Gällivare, organize around 300 Sami reindeer herding businesses and 60,000 reindeer and have become increasingly important as a party in the negotiations over Laponia. After the appointment of Laponia in 1996, the *sameby* members initiated an Agenda 21 process to discuss and present their own view of how Laponia should best be managed. The initiative resulted in the *Mijá ednam*[4] report (2000), which presented a Sami view of an appropriate management of Laponia, supported by a majority of *sameby* members. In the report, it is argued that the Sami have unique and important knowledge of Laponia, that this knowledge is largely undocumented and unknown outside of the local Sami context, but that it ought to be a great resource for the development of Laponia (*Mijá ednam* 2000: 66).

Despite long time historical Sami presence and immemorial rights in the area, Laponia has been managed by Swedish authorities for hundreds of years, while the local Sami have had virtually no say in its management. Swedish authorities have prioritized certain problems before others, and have for instance been able, by virtue of authorities' usual rights to interpretation, to target the area as suitable for hydroelectric power development, and to identify alleged problems with local over-grazing, the use of motor vehicles in herding and illegal poaching of predators, with few opportunities for local Sami reindeer herders to provide their own views of the situation (Nilsson Dahlström 2003). The local herders have expressed great frustration over their lack of control of their traditional lands and ventures and have therefore insisted on joint management between the Sami and Swedish authorities of the area. Laponia is perceived by the local Sami as an acknowledgement of the importance of Sami culture in the area and it is argued that Laponia may "be a step into a new era, into a time period when also their history, lives and ambitions are worth something" (*Mijá ednam* 2000: foreword).[5]

However, it was not until 2006 when the local municipality administrations, the county administration and national environmental and culture protection agencies together with the *sameby*s finally agreed to a Sami majority representation on a future management board, in order to meet

Sami demands for greater influence. The parties also agreed to integrate Sami indigenous knowledge in the management policies for Laponia, in line with the international conventions signed by the Swedish government. The "Laponia Process" was formed, including the *sameby*s and the local, regional and national administrative bodies, with official support and with an assignment to develop an entirely new management structure for Laponia to be launched in 2010.

Although the introduction of Sami indigenous knowledge as the basis for environmental management policies represents a paradigm shift in Sweden, it has been pointed out from the beginning of the negotiations by the *sameby*s that it

> is hardly revolutionary from an international perspective. Rather it reflects an existing trend. A solution that accommodates (Sami) viewpoints would place Sweden among the nations that lead the current development towards new and functional forms for nature and culture protection (*Mijá ednam* 2000: 76).

Indeed, the promotion of indigenous knowledge in conservation is very much a part of a global discourse about indigenous peoples and their roles in societies worldwide. The way "indigenous knowledge" is used in connection with environmental negotiations and sustainable development is also a modernist and highly political social construction, developed within the frameworks of postcolonial and indigenous empowerment processes. The postcolonial discourses also coincide with discourses about possible solutions of global environmental problems and create powerful connections between ideas of the usefulness of indigenous knowledge and a more sustainable development. Within the continuous worldwide decolonisation process, the focus on indigenous knowledge in connection with sustainable development has therefore become an important part of indigenous empowerment strategies.

The notion of indigenous knowledge as traditional and therefore essentially different from Western science is promoted by environmentalists as well as indigenous peoples themselves, but for different reasons, and with different expectations. For many indigenous peoples, including the Sami in Laponia, the concept of "indigenous knowledge" as a rhetorical asset has become a tool in important negotiations over rights to land and access to resources. Indigenous knowledge has been used by indigenous peoples in negotiating acceptable difference vis-à-vis representatives of Western science, that is by claiming traditionalism in order to be accepted in discussions about modernity. The acceptable difference between indigenous knowledge

and Western science must balance between "too different" with no hope of mutual integration, or "too similar" which would undermine indigenous claims for special treatment based on cultural difference. However, in the process of integrating indigenous knowledge with Western science in management policies and making indigenous knowledge "operational," there is also a risk of indigenous knowledge being transformed beyond recognition so that it loses its purpose as well as usefulness for indigenous empowerment, hence a two-way appropriation of indigenous knowledge.

I would argue that there are three major reasons for indigenous peoples to engage in the work of bringing indigenous knowledge into the official debate on sustainable development. Firstly, there is a need among indigenous peoples to save and record practices and traditions that risk disappearing. In line with several international documents and strategies for cultural diversity (the World Heritage Convention, Convention for the Safeguarding of the Intangible Cultural Heritage, Declaration on the Rights of Indigenous Peoples, Convention on the Protection and Promotion of the Diversity of Cultural Expressions, International Labour Organization Convention 169, etc.), non-indigenous peoples are also interested in documenting indigenous knowledge in an effort to secure that the knowledge (but not necessarily its holders) is not lost. In *Mijá ednam*, it is argued that:

> It is important that the existing traditional Sami knowledge of the area is valued more. It is unique, does mostly not exist in books or archives, but can only be transmitted by the people who have lived and worked in the area. It is therefore of particular importance that it is documented before it disappears with the generations that best can transmit it (*Mijá ednam* 2000: 70).

Secondly, there is a sincere belief among indigenous peoples that indigenous knowledge can help combat environmental degradation and create the preconditions for sustainable development. In Laponia, the local herders are positioning themselves as the best managers of their lands and resources, arguing that they "have managed Laponia for thousands of years" and have "the knowledge, tradition and motivation to continue to manage Laponia" (*Mijá ednam* 2000: 9).

And thirdly, indigenous knowledge may help improve the political position of indigenous peoples via greater management control over their traditional areas. The Sami are firmly determined to take their responsibility for the preservation of nature and biodiversity and argue that they are "particularly well suited to preserve the Sami culture in the area," but also "welcome equal co-operation with other parties" (*Mijá ednam* 2000: 9).

These three reasons, to save precious knowledge, to contribute to a

sustainable development and to engage in indigenous empowerment, are often interrelated and have become part and parcel of indigenous claims for greater control over traditional lands and resources.

By positioning themselves as the best (co-)managers of Laponia, the local Sami are joining the current trend among indigenous peoples worldwide to promote themselves and their knowledge as useful for environmental management and sustainable development. But because of the connection between the promotion of indigenous knowledge and indigenous peoples' political claims, environmental authorities have often been reluctant to formalise their participation in environmental management structures, for fear of opening a Pandora's box of indigenous claims for self-determination and control over traditional lands and resources. The current trend of including indigenous peoples in joint management schemes is however organized and administered in such a way as to minimise political issues while maximising the extraction of what is perceived as useful indigenous knowledge.

Towards Definitions of Knowledge

The academic community has been talking about indigenous/traditional/local knowledge since the mid-1960s, but up until the 1970s, development planning and conservation policies were usually based on very negative assumptions about traditional rural societies, and poor rural peoples were generally perceived as backward and unable to change. Many of their livelihood practices, including shifting cultivation, nomadism and small-scale agriculture were seen as inefficient at best, and at worst environmentally destructive (Dutfield 2000: 5; cf. Nilsson Dahlström 2003). Strategies under the parole of "development" were designed to remove traditional environmental practices in favour of scientifically based methods for increased agricultural production and poverty alleviation, in order to bring indigenous and local people from a disadvantageous and backward position into mainstream society. However, in the 1970s there was a shift among academics and environmentalists in the perception of how indigenous peoples interacted with the environment, towards a belief that these peoples often lived "in harmony with nature" and a realisation that their knowledge had been undervalued for too long. Instead, indigenous knowledge was now discussed in relation to social justice and sustainable development as an alternative to more centralised and technically oriented strategies for creating economic growth in poor areas (Ellen & Harris 2000: 12 f.).

With time, there has been an increasing institutionalisation of indigenous knowledge through conferences, in development plans and within development institutions, and the use of indigenous knowledge in sustain-

able development has become a kind of mantra that promises useful information and a feasible alternative to conventional development strategies (Briggs 2005: 99 f., Dutfield 2000: 5). However, despite its current popularity, there is no general agreement on what indigenous knowledge is, and what concepts should be used; *TK/TEK* (traditional/ecological knowledge), *IK* (indigenous knowledge), *indigenous science*, *local knowledge*, *local and traditional "wisdom"* and various permutations of these, and also terms specific to certain groups of people such as *Inuit qaujimajatuqangit* are used (Huntington 2005: 29 f.).

There have also been debates among scholars concerning indigenous peoples' rights and whether they are entitled to privileged and sometimes exclusive rights at all. Kuper (2003: 395) has argued that the indigenous peoples' movement rests on dubious ideas of true citizenship and rights as connected to blood and soil, that is an essentialisation of identity and culture in line with right-wing extremist politics of Western Europe. However, Kuper has been severely criticised for not making a distinction between global movements and discourses and the reality of indigenous peoples, thereby ignoring Western colonisation and expansion and the need to recognise past wrongs committed against indigenous peoples, including severe discrimination and dispossession (Kenrick & Lewis 2004: 4 f.). The failure to make the necessary distinction between indigenous peoples' movements and the everyday lives of specific peoples also accounts for the difficulties of integrating indigenous knowledge systems and management policies based on Western science.

There is however no standard definition of "indigenous peoples," but there is a general agreement internationally that the definition includes some or all of these elements: self-identification as indigenous; descent from the occupants of a territory prior to an act of conquest; possession of a common history; language and culture regulated by customary laws that are distinct from national cultures; possession of a common land; exclusion or marginalisation of political decision-making; and claims for collective and sovereign rights that are unrecognised by the dominating and governing groups of the state. The element of self-identification is socially and culturally important, but recognition by state governments is important in a political sense. Even though a group of people can claim an indigenous identity based on some or all of the widely accepted criteria, their access to negotiations over their rights and protection ultimately depends on official approval of their status as indigenous peoples by state authorities. Based on the political aspects of indigenous identity, it is also possible to make a distinction between "traditional" and "indigenous" knowledge, because "indigenous knowledge" belongs to peoples who have claims of prior ter-

ritorial occupancy, while holders of "traditional knowledge" do not necessarily have those claims. All indigenous knowledge is however also traditional knowledge. There is no official or agreed definition of "traditional knowledge," but the definition in the Convention on Biological Diversity is perhaps the best known:

> Traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, forestry and environmental management in general.

This definition covers shorter definitions provided by for example Berkes (1999: 8), Huntington (1998: 237), and Pierotti & Wildcat (2000: 1335). There are objections to the use of the concept as well as its definition, and it has been argued that it would be a simplification to say that traditional knowledge has its roots only in tradition, when in fact it is not isolated from globalisation processes. In its essence, traditional knowledge is contemporary, because it is continually updated and revised in response to political, environmental and social processes (Fitzmaurice 2008: 256).

"Traditional knowledge" often serves as concept that provides a contrast to Western science but is less operationally useful because it defies any simple categorisation (Agrawal 1995a). The idea that there is such a unity as "traditional knowledge" reflects perspectives and interests from outside of these knowledge systems (Huntington 2005: 29, 32; Pierotti & Wildcat 2000: 1335), but it is used in international discussions as though there is consensus on its definition, and as though it can be immediately transferred and translated into knowledge systems among specific indigenous peoples. However, the way "traditional" or "indigenous knowledge" is perceived and used as part of global environmental discourse may in fact say very little about real situations in specific locations.

In Search of Differences
Western science and indigenous knowledge are often perceived as two different, opposite and competing knowledge systems, based on the epistemological foundations of the two systems. The systems are therefore often regarded as inhabiting different spaces, which leads to communication

problems (Mohan & Stokke 2000). Western views of indigenous knowledge include notions that it is diachronic, qualitative, spiritual, holistic, historical, oral, closed, subjective, unintellectual, primitive, emotional and intuitive, while Western knowledge is said to be synchronic, quantitative, mechanistic, reductionist, abstract, literate, open, systematic, rational, intelligent, objective and analytical (Agrawal 1995b; Dutfield 2000: 4; Ingold 2000; Nadasdy 1999: 2, 9; Schanche 2000). As a result, Western knowledge systems are associated with modernity, whereas indigenous knowledge is connected to a traditional and backward way of life, which nevertheless may correlate with current ideas of sustainable development. According to Briggs (2005: 102 f.), the introduction of the term "indigenous" before "knowledge" therefore invites us to an "us and them" scenario between the two knowledge systems.

Some scholars have warned against overemphasising the differences between Western science and indigenous knowledge and are questioning whether the dichotomy is real (Berkes *et al*. 2000: 1251). Often, the dichotomy between the two knowledge systems is brought forward by people who advocate more of indigenous knowledge and less of Western science when solving various environmental problems. The distinction has also been dismissed by several commentators on the basis that it is hardly possible to define a precise number of characteristics of the elements within each category to make that distinction. The attempt to do so will inevitably fail on substantive, methodological and contextual grounds because, according to Agrawal (1995a), there is no epistemological distinction between "traditional knowledge" and "Western scientific knowledge."

In the search for aspects that make indigenous knowledge different from Western science it has been argued that indigenous peoples have a particular conservation ethic; that they are "original ecologists" living in harmony with the environment and possessing valuable ecological wisdom, and that they therefore can serve as inspiration in the search for alternative ecological strategies (Nadasdy 2005: 292). However, there is no evidence that indigenous peoples everywhere have a particular conservation ethic (Kalland 2000; Ellen 1986, Redford & Stearman 1993; Schanche 2000), and the idea has placed unfair expectations on these peoples to behave accordingly. The idea also denies the realities and particular strategies of indigenous peoples and reduces their cultures to rather one-dimensional ecologically oriented entities (Banerjee & Linstead 2004; Kalland 2000; Nadasdy 2005: 293; Redford 1991).

An important question to ask, says Nadasdy (2005: 311 f.), is why some indigenous peoples themselves make use of the "ecologically noble savage" stereotype, if it is only a Western (and false) construction of them? Is it

because indigenous peoples passively engage in false consciousness, or is it because they are actively using their image as part of an opportunistic political strategy? Krech (1999: 26) argues that the image of the noble savage has been adopted by some indigenous peoples as an integrated part of their self-image, which has contributed to their own exploitation, while others argue that the image is useful and appealing, and can be used by indigenous peoples to gain wider support in political struggles for self-determination and land rights via references to sustainable development (Conklin & Graham 1995). Some have also argued that indigenous peoples are not using their symbolic capital as eco-saints to say something about themselves at all, but to say something (negative) about Western society (Beuge 1996; Krech 1999). For the same reasons as Western scientists may emphasize the perceived differences between "modern" and "traditional" knowledge in order to legitimize their own strategies for efficient environmental management, then, indigenous peoples are embracing that difference in order to legitimize theirs.

Critics of the promotion of the "noble savage stereotype" argue that even though it may be of short-term use, it is bound to backfire on indigenous peoples in a long-term perspective on the basis of "false marketing" and misrepresentation (Beuge 1996; Cruikshank 1998; Krech 1999). Environmentalists who subscribe to the image of the ecologically noble savage are often surprised and disappointed to find out that indigenous peoples do not live up to their ascribed standards, and frequently accuse them of engaging in hypocrisy, greed, or of having lost their "original character" through cultural assimilation (Beuge 1996; Conklin & Graham 1995; Cruikshank 1998; Nadasdy 1999: 3 f.). However, indigenous peoples are often "excused" for their alleged shortcomings, but these excuses say more about environmentalists' expectations of them than an actual "failure" on the part of indigenous peoples, who often may have other goals and standards (Nadasdy 2005: 317). Whether or not indigenous peoples have embraced their image as ecologically noble savages, then, this "permissible image" has often been imposed on them from outside. And regardless of how environmentalists categorize indigenous peoples, if and when indigenous peoples "fail," they are, depending on one's preferences, going to end up being perceived either as environmental villains unable to live up the standards for ecological nobility, or as inauthentic opportunists who are using positive images for their own political purposes (Nadasdy 2005: 322). Swedes unable to accept the modernization of Sami reindeer herding have also often been unwilling to grant them the rights that follow with their status as an indigenous people, with reference to how "primitive people of nature" like the Sami really should behave (Nilsson Dahlström 2003; Green, forthcoming).

Indigenous peoples are also not the only ones to be accused of political opportunism; many environmentalists are quite happy to exploit the image of ecologically noble savages for their own political purposes and in a way that fits their own agenda for environmental politics, that is indigenous peoples are placed close to themselves on a possible ecological spectrum. Indigenous peoples are however not necessarily concerned with placing themselves on an ecological spectrum or calling themselves "environmentalists" at all. In the *Mijá ednam* (2000: 36) report, it is stated that developing separate environmental programs is not a traditional Sami way of approaching sustainable environmental development. This does not mean that they disqualify themselves as environmentally friendly, it is just that the "environment" as a separate entity and the concept of being an "environmentalist" are not labels or ideals that they have chosen themselves, and therefore find difficult to relate to (Nadasdy 2005: 314 f., 322; *Mijá ednam* 2000: 36).

The use of the image of noble savages must be seen in a particular colonial context, where indigenous peoples have negotiated, often in vain, with environmental authorities and conservation managers over access to natural resources and land. In fact, Nadasdy (2005: 315) argues, with the new opportunities for claiming local stewardship that have presented themselves, indigenous peoples in these negotiations have no choice but to claim the position of ecologically noble savages, or else their claims for rights will be ignored, again.

The Depoliticising of Indigenous Knowledge

The holders of indigenous knowledge insist on not being treated as merely "stakeholders" in environmental management, but on taking part in negotiations on all levels of decision-making and management, including formal representation on steering committees and planning boards (Mauro & Hardison 2000: 1267; Nilsson Dahlström 2003; *Mijá ednam* 2000). However, the integration of indigenous knowledge, political dimensions and all, with Western science would challenge the hegemony of Western development discourses (Briggs 2005: 106; Coombes 2007: 189; Ellis 2005: 67; Huntington 2005: 29). Because Western science, like indigenous knowledge, is not just knowledge but an instrument of power, it is not likely that the holders of this knowledge will give up easily in favour of a knowledge system that they have no control over (Novellino 2003).

Indigenous thinkers have increasingly promoted the use of indigenous knowledge systems in environmental management as an important part of a decolonising strategy (Simpson 2004: 373). Indigenous peoples are hoping that the integration of their knowledge with Western science will not

only improve environmental management strategies but also help empower
indigenous peoples and their knowledge more generally (Nadasdy 1999: 1;
Nuttall 1998: 167; Simpson 2004: 374). Despite the importance placed by
indigenous peoples on the connection among indigenous knowledge, self-
determination, land rights and access to natural resources, this connection
is absent from most academic literature on indigenous knowledge (Simp-
son 2004: 375). The connection is also often ignored by resource managers,
because of the inconveniences it may cause for environmental agencies and
state authorities (Simpson 2004: 377), who may neither have the mandate
nor the political will to deal with issues outside of their immediate assign-
ment.

Before the introduction of the Laponia Process in 2006, representatives
of Swedish authorities were often puzzled about the way the local Sami
insisted on perceiving Laponia as a "political" instead of merely a "cultur-
al" issue, whereas for the Sami, Laponia was nothing but political (Green,
forthcoming). The separation of indigenous knowledge from its holders
and social and political context may however have serious implications for
its usefulness as a tool for decolonisation. By "depoliticizing" and "sanitiz-
ing" indigenous knowledge from the "ugliness of colonisation and injustice"
(Simpson 2004: 376), scientists can engage with the knowledge without hav-
ing to bother about the indigenous peoples who own and live that knowl-
edge, and who may have other hopes for its usage. The disconnection of
knowledge from its holders also frees academics from their responsibilities
to analyse the discourse on indigenous knowledge in its colonial and post-
colonial context (Simpson 2004: 378).

Indigenous peoples are increasingly becoming aware of the dangers of
disconnecting them from their knowledge in the integration process, and
insist on remaining in control of their knowledge. The herders in Laponia
argue that they themselves must be given the formal responsibility for the
protection and development of Sami culture (*Mijá ednam* 2000: 71) and that
"information and education about the Sami and Sami conditions should be
transmitted by Sami people or in cooperation with Sami people" (*Mijá ed-
nam* 2000: 66).

The Sami herders are talking about the need for sufficient control, but
much more attention has usually been given to difficulties in getting access
to and collecting Sami and other indigenous knowledge or to the problem
of translating it into forms that are useful for resource managers. By reduc-
ing the integrating process to a technical problem, its political dimensions
are however effectively ignored (cf. Nadasdy 1999: 2). The documentation
or digitization of indigenous knowledge is a seemingly benign way of ap-
pearing to recover the knowledge (Simpson 2004: 380), but in fact, argues

Nadasdy (1999: 2), research into indigenous knowledge and the efforts to integrate it with Western science may reinforce, rather than break down, Western cultural perceptions and biases.

In Laponia, the local Sami herders have worked hard to gain acceptance by building and maintaining "credibility" in the eyes of Swedish authorities, that is by complying with the ascribed images of themselves as ecological nobility and investing in a terminology suitable for important negotiations about sustainable development (Nilsson Dahlström 2003: 285; *Mijá ednam* 2000). This is because indigenous knowledge, unless properly "translated," often is questioned as being too local and place-specific to be of any general and theoretical use for the advancement of development. Indigenous knowledge, in order to be "useful," must relate to Western science and must be formally tested in order to get acceptance (Briggs 2005: 101), or else it will be accused of being "methodologically weak or unproven" and "populist or politically naïve," or of including findings that are too complex or subjective to be of use to outsiders (Leach & Mearns eds. 1996: 32).

The reason for the current political dominance of Western science over indigenous knowledge is that Western knowledge rests on a foundation of reason as the only means of understanding the world, and presents particular cultural presuppositions that elevate it above other kinds of knowledge. Western knowledge has therefore placed itself in the privileged position of a fiduciary that has the authority to authenticate other knowledge systems (or not) (Doxtater 2004: 618 f.; Escobar 1995: 13) by being able not only to define the problems, but also to provide the solutions of them. Despite the recent challenge from non-Western knowledge systems, there is therefore a persistent belief among many people that Western scientific paradigms are intrinsically better and more effective than indigenous knowledge systems (Cox & Elmqvist 1997: 88). The privileged position of Western science as the basis for legitimate knowledge is also backed up by infrastructure and resources, in the form of a legal framework, available scientific expertise, technology and financial means to engage in large-scale development projects and targeted research.

In a process of integration (or rather assimilation), indigenous knowledge is first polarised against Western knowledge and is then "enrolled into the latter's domain" (Noble 2007: 342), but its scientization and professionalization do not occur without significant alterations of its cultural content and purpose (Agrawal 2002; Coombes 2007; Simpson 2004). The strength of indigenous knowledge lies in its relevance and applicability in the local contexts, and when indigenous knowledge becomes generalised and depersonalised it loses its source and meaning (Briggs 2005: 109; Simpson 2004: 380). When knowledge in oral traditions is made into a text and is trans-

lated from indigenous languages into dominating languages of the West, its interpretation is locked in a cognitive box that reflects the structure of ideas and language of the Western world (Simpson 2004: 380). And when indigenous knowledge is spoken through these foreign knowledge systems, its holders are often excluded from real participation in decision-making processes and scientific projects (Stevenson 2006). Through the integration processes, then, much of the richness in details and culture-specific indigenous knowledge is inevitably lost in translation and its usefulness as a means of political empowerment is effectively undermined. The Sami herders in Laponia are aware that their claims for greater Sami control "can seem drastic and foreign in a Swedish perspective," but argue, in order to avoid unnecessary provocations, that the suggestions "would most likely be doable within the frameworks of existing legislation" (*Mijá ednam* 2000: 76). So when the local Sami in Laponia say that, despite their new opportunities as equal partners in management, they will not be able to change existing legislation, they have not gained control but have been deprived of their most promising political tools.

Discussion

The positive connection between indigenous knowledge and sustainable development is recognised in most conventions and national policy documents on environmental issues, and many indigenous peoples have themselves actively promoted their knowledge as useful for the creation of a sustainable development. As a result of the recent interest in indigenous knowledge and its use, indigenous peoples are now gaining more control over the management of their traditional areas and resources and over indigenous societies more generally. The use and promotion of "eco-friendly" indigenous knowledge in environmental management systems comes, however, at a price. Whereas many indigenous peoples perceive the concept of 'ecological nobility' as a politically useful tool to enter important negotiations with and gain acceptance from environmental authorities, the concept may say more or less about the specific environmental agendas or knowledge systems of different indigenous peoples. However, the political and analytical fields of usage are often confused, which leads to misunderstandings or even conflicts between indigenous peoples and other actors.

Who is to blame: indigenous peoples for their populism or non-indigenous actors for their misconceptions? Or vice versa: indigenous peoples for their misconceptions and non-indigenous actors for their populism? But perhaps indigenous peoples' exploitation of their image as ecologically noble savages should not primarily be seen as populism, but as a rare opportunity to make a difference? If claiming ecological nobility is the only

acceptable niche from which to enter important negotiations over their future, who can blame indigenous peoples for at least trying? Instead of only criticising indigenous peoples for their involvement in the production and reproduction of ecological nobility on their part, there should be a critical analysis of the political framework for the image production and with whose permission and encouragement it is at all possible to make claims for ecological nobility.

Once indigenous knowledge is accepted as a potentially useful part of environmental management, new challenges appear. Despite their acceptance of indigenous knowledge as an alternative to Western science, few state authorities and NGOs would agree to let indigenous peoples develop whatever systems and strategies for environmental management that they would like. The inclusion of indigenous knowledge in environmental management policies often means an integration of this knowledge with Western science in a process of "picking the cherries out of the (indigenous) cake." In the process of integrating indigenous knowledge with environmental management systems based on Western science, environmental authorities often focus only on pieces of knowledge that are deemed useful for existing management systems. In this process, a lot of what makes indigenous knowledge useful for indigenous peoples is lost. In fact, much of what is perceived to make indigenous knowledge distinct from Western science is taken out of the process as too culture-specific to be of any use. In Laponia, Sami indigenous knowledge will be integrated with Swedish environmental management policies, but with minimal changes in existing legislation. By necessity, then, Sami indigenous knowledge will have to undergo significant changes in order to "fit" and become legitimate knowledge.

Despite the official proclamations of being interested in saving, using and protecting indigenous knowledge, state authorities may also be accused of setting narrow terms for the involvement of indigenous peoples and their knowledge in environmental management; so narrow that the opportunities for indigenous peoples to engage in their own empowerment processes are severely circumscribed. The contemporary process of integrating indigenous knowledge in Western scientific management systems may therefore be seen as just another form of colonialism, only less obvious.

It is possible to talk about a simultaneous empowerment and taming of indigenous knowledge, including that of the Sami, in the sense that it does help local indigenous peoples to gain some control over their lands, resources and societies, but that it also helps environmental authorities to put indigenous knowledge in a safe place, where it does minimal harm to existing structures. It is therefore also possible to talk about a two-way appropriation of indigenous knowledge in environmental management policies.

NOTES

1 The short version of the definition by the Brundtland Commission says, "a development is sustainable, if it meets the needs of the present without compromising the ability of future generations to meet their own needs."

2 Within Laponia, there are seven *sameby*s, that is the economic corporations as well as geographical entities that organize Sami reindeer herding in Sweden.

3 The alleged Crown ownership of Sami traditional lands is contested by many Sami, who argue that the lands have been illegally taken by the Swedish Crown, and without proper compensation.

4 *Mijá ednam* means 'Our land.'

5 All texts in Swedish have been translated by the author into English.

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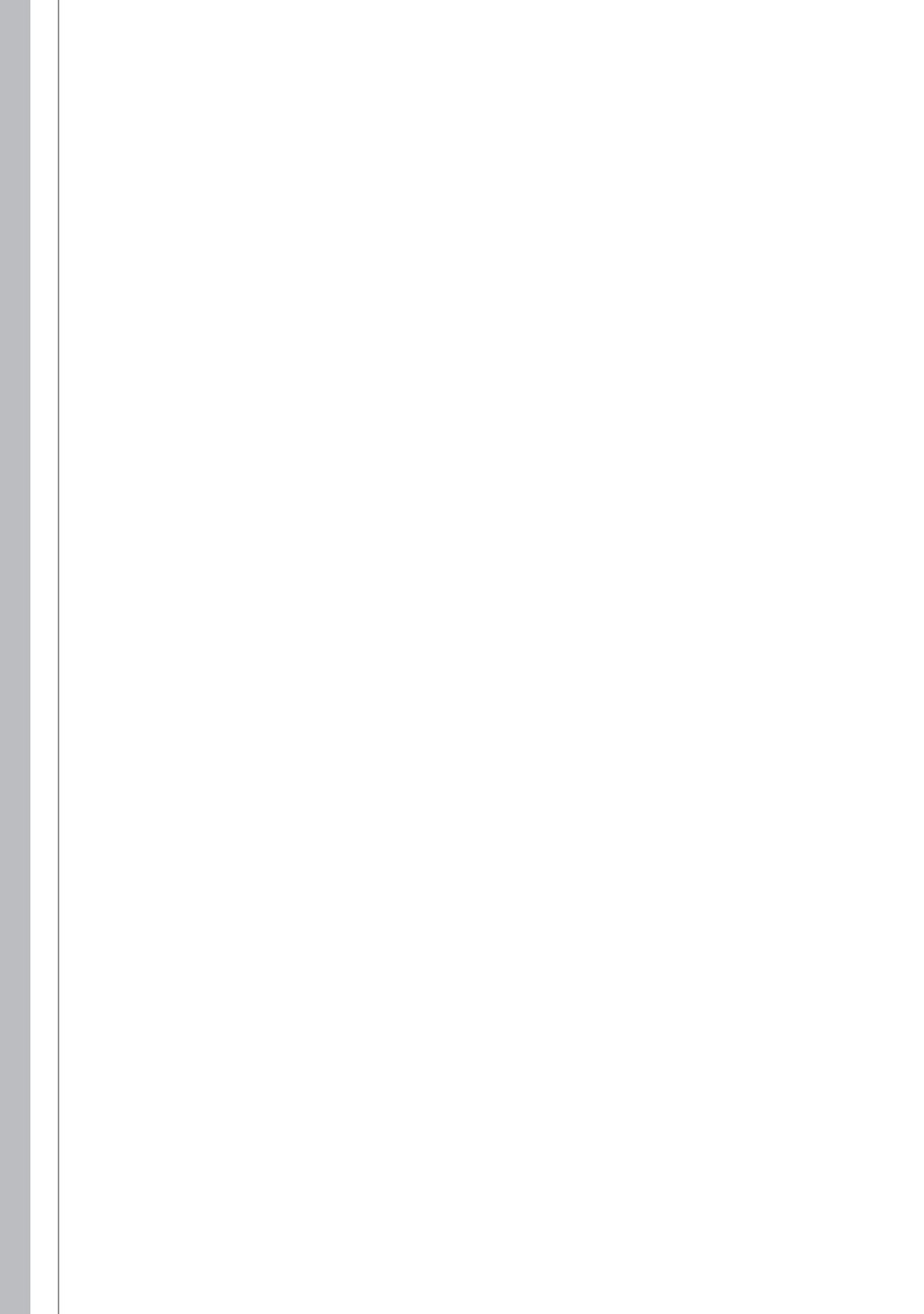
TATIANA BULGAKOVA

Collective Clan Disease among the Nanay

ABSTRACT According to Nanay emic ideas, shamanic disease, which affects a shaman in the period of his or her formation, also affects his or her relatives, who begin to suffer from nervous disorders and other problems but recover at their new shaman's incarnation. A similar spiritual correlation within the group of relatives becomes apparent also when a shaman is involved in a situation which connects him or her with the spiritual world (murder, death, incest, etc.), so that the consequences of such events influence not only the shaman, but also his or her kin.

From the emic perspective, relations with the spirits have not only spiritual, but also biological components (emerging for instance, in the idea about the possibility of human-spiritual cohabitation), which opens up possibilities for spirituality to be inherited by descendants. These circumstances suggest that the social factors that unite the clan (exogamy etc.), are secondary to the religious factors, and probably used as a means to adapt to the spiritual problems that shamanists face. Running the danger of collective clan disease, people have to remember their clan peculiarity and exclusiveness and undertake common efforts for its avoidance. Being aware of their patrilineal descent and of their own place in it, people can define the circle of possible persons who are subject to similar mental and other troubles and who should look together for the means of a cure. The wish to ensure spiritual security results in the social prescriptions and taboos that form the patrilineal clan.[1]

KEYWORDS shamanism, kinship, collective mental disorders, exogamy, incest

Clan relationships and clan beliefs are still topical for the Nanay elders who have been my informants for a long time. They have lost most of their traditional culture. Their clans have neither territorial nor eco-

nomic unity any more, but they remember their clan descent, in some cases in connection with shamanic or non-shamanic spiritual practice, which helps them to explain much of human contacts with the world of spirits. The native understanding of social and religious aspects of clan relationships differs considerably from accepted scholarly ideas in Russian ethnology. Following some of their foreign colleagues, Russian researchers consider that the social basis of clanship is primary and clan religious ideas are needed only to mark and emphasize this basis.[2] To explain, for example, the prevalence of unilineal descent and the division of relatives into agnates and cognates, researchers call attention to some social advantages of this classification of relatives.[3] From their viewpoint, the advantages consist of the fact that because of unilineal descent, each member of the group gets a clear idea of who of his or her relatives belong to his group, and to whom he or she is connected with mutual aid duty. From this perspective, ideas about common spirits belonging to a certain lineage (totemic name and so on), are only needed to identify the members of the group and to consolidate those agnates who live far apart from each other. In other words, from this perspective, religious principles are secondary and derive from social principles.

The bearers of Nanay tradition adhere to a different opinion. They believe that it is the religious needs and problems which are primary and most important. From their viewpoint, social clan rules of behaviour do not originate from the necessity to distribute rights and duties among the relatives, but are merely a means to adapt to the fact that clan spirits (*sewens*, *ambans* and others) influence the group of agnates in the same way. It is mainly common spiritual problems that force them to unite into lineages and clans to be able to resist the negative spiritual influence (or to use the benefits of dependence on their clan spirits) together.

This perspective, which so far has been very much neglected in research, can be revealed as a result of an emic approach. The emic approach here is based on research into material recorded from the informants in their native language and on the ideas elaborated by the bearers of the tradition themselves. This helps us to see the phenomena studied in the light of the native people's understanding. But the advantages of an emic approach are nevertheless limited. The Nanay way of describing the phenomenon is not the same thing as the phenomenon itself, it is just their interpretation of it. It is this interpretation that I try to describe, however: not the fact itself, but how the natives understand it is my object here.

Even so, the Nanay mostly relate concrete facts and situations and do not summarize the abstract concepts that correspond to them. They do not have, for example, a word for 'clan disease,' which I introduce here, or even for such

a well-known phenomenon as 'shamanic disease.' Formulating abstract concepts, I have had to step back from the emic approach, and my concern was only that any abstract idea should be derived from and based on my informants' ideas and as often as possible verified with them in additional field work.

Collective Shamanic Clan Disease. Acute Condition

Collective shamanic disease, which affects a group of clanspeople among the Evenks,[4] was first described by the Russian scholar Sergey M. Shirokogorov. According to his description, the symptoms of the disease are the following:

> Some of the young men would lose normal sleep, would sit on their beds, speak and sing in half-sleeping state. [...] They would be distracted, and absent-minded; they would neglect or miss their work duties and would gradually be completely disabled. Some other clanspeople might run to the rocks or into the forests where they would remain for days without food and some of them would even perish. Others, who are inclined to 'olonism', might become dangerous during momentary uncontrolled states; they might throw various utensils, burning wood or hot water. [...] Other clanspeople would have 'nervous attacks' at moments of great responsibility, e.g. during the crossing of rivers, holding children, handling hot water and fire. Accident after accident would follow and several people might perish. This would be a case of a real mass psychosis which might put the clan into a state of complete social and economic paralysis threatening the very existence of the clan (Shirokogoroff 1999: 264).

In another book he describes the symptoms of the collective disease in this way: "People might become nervous, commit acts of inexplicable rudeness and even crimes. Common irritation and inclination to hysterical fits spread and the death-rate increases" (Shirokogorov 1919: 44; transl. T. B.). According to Shirokogorov, when the disease attacks the entire clan, the normal life of that clan ends which has fatal consequences for the clan's existence. The consequences of clan disease consist in malnourishment, decrease of the birth rate, and increase of the death rate (Shirokogorov 1919: 61). The collective disease can develop to such an extent that the entire clan, as Shirokogorov writes, may risk death. All the proceedings of normal clan life are interrupted, sometimes for a long time; and this condition may last for several years (Shirokogorov 1919: 44).

Siberian people's susceptibility to different mental and nervous illnesses, to periodical mass hysteria, to mass visual and acoustic hallucinations and to depression had repeatedly been noticed by other scholars.[5] What was new in Shirokogorov's writings was that he was the first to notice that the mass disease embraces not any group of people, but the kinship group of

the patrilineal clan. My own field material was collected among the Nanay, a people of the Tungus-Manchurian group related to the Evenks.[6] It confirms that the collective disease usually attacks a consanguineous patrilineal group including all the men sharing a common male ancestor, as well as the women born within that patrilineal group, that is, the men's sisters and daughters married to members of other clans. The group subject to collective disease usually excludes women taken as wives from the other clans. But in some cases, the married women, especially those who have some shaman-like abilities, may also suffer from collective disease in their husbands' clans in addition to being affected by spiritual troubles in their fathers' clan. As a result, they remain in an in-between position between the two clans, although women's dependence on their fathers' clan's spirituality is considered to be much stronger.[7] My informants told me that as a rule a woman-shaman travels in her shamanic trips along her father's clan's invisible spiritual 'roads.' She has access to her husband's shamanic spirits only in some exclusive situations, for example, if she secretly steals them from her husband or if her husband lends them to her of his own accord.

Shirokogorov was not only the first to show that the Evenks who suffer from collective hysteria belong to the same kinship group. He was also the first to point out the connection between the mass mental illnesses and the emergence of a new clan shaman. He drew attention to the connection between the individual call for shamanic practice and the mass mental diseases and even mass failures of business, which strike the whole group of the neophyte-shaman's relatives (Shirokogorov 1919: 48). The collective disease symptoms cited from Shirokogorov above are the typical symptoms of shamanic initiation disease. The only specificity is that not only a neophyte has them, but also several of his or her clanspeople. Not only are these symptoms typical of shamanic disease, but the situation when they appear also reveals their shamanic nature. The collective clan disease emerges when the clan is without a shaman, and continues during the entire initiation period of a new shaman. "Terrible inexplicable disease appears when the clan is without a shaman, that is, after the previous shaman's death and before the initiation of the next shaman" (Shirokogorov 1919: 43; transl. T. B.). Shirokogorov describes a case where there were two candidates for shamanship within a clan, and only one of them could eventually become the clan shaman. Both candidates suffered from shamanic disease, but, as Shirokogorov writes:

> At the same time there were also fits among the other members of the clan, and misfortune, in business and in private life, struck the members of the entire clan. The common opinion of the clanspeople inclined to the idea that a shaman was really needed (Shirokogorov 1919: 45; transl. T. B.).

If none of the sufferers became a shaman, the disease among the clan intensified, exhibited new modifications and spread, embracing more and more clanspeople (Shirokogorov 1919: 61). Another argument supporting the idea that collective clan disease may be of a shamanic nature is that, understood from the emic perspective, it is caused by spirits which, having been released after the clan shaman's death, try to find a new 'master:'

> Looking for a new 'master' among the clanspeople, urging them to sacrifices or trying merely to draw the clanspeople's attention to themselves, maybe even revenging themselves, the clan spirits prevent the clanspeople from earning their living in the hunt; as a result, mass failures of business threaten the clan with starvation and mortal danger. (Shirokogorov 1919: 48; transl. T. B.).

The collective disease should be also called *shamanic* since it can only be cured by setting up a new shaman.

The fact that not only a man, but also a woman can become a shaman and can pass her father's clan's spirits to, for instance, her son complicates the spiritual situation of the clan since not only paternal but also maternal clan spirits can influence the clanspeople. It does not abolish the domination of paternal clan spirits and of patrilineal descent, however (Smolyak 1991: 35). Firstly, patrilineal descent prevails; secondly, matrilineal descent often joins the main patrilineal one. However, women's participation in shamanizing breaks the spiritual homogeneity of the clan and complicates the measures of spiritual security against collective clan disease. Different Siberian indigenous peoples guarded against this in different ways. Thus, in the past, Buryat parents, as Matvey Khangalov wrote, killed their daughters and brothers killed their sisters in order to retain shamanic inheritance within the paternal line (Khangalov 2004: 126). Tungus-Manchurian and other indigenous peoples permitted female shamanism, but to secure against its possible negative consequences they used the double or threefold clan exogamic system, which is based on the mutual exchange of women between two or three clans. I suppose that such a system helped them to limit the number of spirits that may influence people of the clans involved and make it easier to manage them.

It is important to highlight the fact that not only the disease itself, but also recovery from it are collective in nature. The group hysteria can only be cured if the spirits choose one of the affected people and make him or her a shaman (Shirokogorov 1919: 43). As soon as one of the afflicted becomes a shaman she or he recovers, together with all the rest of the clanspeople. In the clan, as Shirokogorov writes, the illness ceases simultaneously at the moment when the spirits enter one of the clan members. Thus the shaman is,

one might say, a safety valve which alleviates the mental illness of the whole clan (Shirokogorov 1919: 61). Seen from the emic perspective, this synchronous convalescence of all the sick clanspeople is the result of the spirits having achieved their object by moving into one of them.

Collective Shamanic Clan Disease. Chronic Condition

Shamanic disease precedes shamanic initiation and is considered to leave the neophyte right after he or she has been initiated as a shaman. My field material however shows that the state of being a full-fledged shaman can hardly be determined as a state of enjoying full health as well. It would be more correct to assert that shamanic disease as such remains, only changed from an acute condition into a chronic one and with exacerbation transformed to remission. The dependence on the spirits continues to keep the shaman in the peculiar world of night- and day-dreams and visions. It makes him or her especially vulnerable and predisposed to a relapse, which can be caused by mistakes in ritual practice, careless words or the spirits' own groundless temporary disinclination towards their master. "If a shaman was to say something wrong in his ritual or if his patient would not keep the promise to sacrifice [the shamanic spirit] would send disease back to him," says my informant Pyotr. "If you mistakenly said even one or two wrong words," the shamaness Lidiya says, "you will die. I am not able to talk a lot. I can let any number of words go out of my mouth, but if some of them are wrong, I will die." She confesses that sometimes it is not easy to please the spirits in order to remain safe from the shamanic disease. "However hard a shaman might try, whatever he might do, if he will say something or sit silently; in any case he will fall ill." People become shamans to get a release from the torture of shamanic disease. Shamanic initiation indeed relieves the shaman's suffering, but it is not necessarily a case of complete recovery. "When people become shamans, do they really want to die?" the shaman Lidiya asks. "On the contrary, they hope to live for a long time, but sometimes it does not turn out like that. Someone has become a shaman, but in spite of that (in spite of recovery) he may not even be able to live." She gives as an example women belonging to the Soyan lineage of the Beldy clan and asserts that not one of them survived after they had become shamans.

> All of them died. They died young because they became shamans. They died despite the fact that they were young. What is that? What a *sewen* is that? It is a *sewen* which crushes people! It is a *sewen* which murders people! Such a being! I do not know how to live![8]

Lidiya is not of the Soyan lineage, and became a shaman long ago, so according to widespread opinion she must be healthy and completely free of

shamanic disease, but actually this is not the case. Telling me about one of her spirit-helpers, she says:

> She [the *sewen*] torments me. They are such creatures on my shamanic road, which constantly torment me. I must overcome her (the *sewen's*) obstinacy and drown out her voice. All the time she begs for food and torments me. I cannot find the proper food to feed her. They [the *sewens*] cannot find any food at my place and leave me. I feel as if someone has been hitting me with a stick, I am not able to do anything. I am like a piece of wood with a hammer beating against me. Such a person I became. I am not capable of anything.

Some of the full-fledged shamans have plenty of problems with their *sewens*, others encounter fewer troubles. Their dependence on the spirits and the possible recurrence of shamanic disease does not completely leave them after the initiation, although the disease is transformed into a remission state. The dependence on spirits lasts, however, and produces special dreams and abilities and sometimes (especially in a shaman's old age) it may exacerbate the disease in new ways. The same changes may affect the entire clan. A time of crisis, when the clan does not have a shaman, leads to an acute condition of the collective disease. But even at a more peaceful time, when the clan has received its shaman, the clan's condition can hardly be described as one of perfect health and wellbeing. It is rather a regressive, remissive stage of the same chronic ailment with temporarily slowed-down symptoms. The collective convalescence is only the lull. The clan remains dependent on its clan spirits and exists as if within a common spiritual 'electric field.' The clan spirits influence both the clan shaman and the ordinary clanspeople, although in different ways. The relationship between a shaman and his spirits is active and in certain periods of his life the shaman is able to possess and rule his spirits. The ordinary clanspeople, on the other hand, are passive and submissive in relation to the same spirits. They experience their pressure, but have only limited influence on them.

This passive nature of their dependence on the spirits becomes apparent in dreams and visions. It is considered that through their dreams and visions clanspeople can visit the same space of the invisible spiritual world, they can watch the same phenomena there and even meet each other. Yefrosiniya, for example, told me about a dream she had that was also shared by some of her relatives on her husband's side. The day before the dream Yefrosiniya visited the funeral of her aunt on her mother's side who was a shaman. From the funeral she brought home a photograph and some rags. That very night, after she returned home, she dreamt that she was searching for something in a box of photos. There was also an old man, her hus-

band's paternal grandfather, whom she regularly has been dreaming about since she was married. Her husband's grandfather was standing near her in her dream, watching all her movements. Yefrosiniya also dreamt about her husband who was also there looking at her angrily. "I was wondering," says Yefrosiniya, "why he was looking so angrily at me and what I was doing wrong." Then in her dream, Yefrosiniya found the photograph that she had brought home from the funeral. The moment when she finally found the photograph, the departed shaman-woman (who had been interred at the funeral) came into the room singing and dancing in a shamanic way. "She passed by me over there," said Yefrosiniya and pointed at the corner of her room where, as she said, the shaman-woman was dancing in her dream. "She passed by me and stayed over there as if she was begging for something." At the end of her vision, Yefrosiniya dreamt that Mariya (her husband's aunt, who was staying in another room) also came into her room, stood motionless and watched the shaman. As soon as the shaman left her room, Yefrosiniya woke up and turned on the light. That very moment Mariya indeed came into her room with the words: "What have you brought here from the funeral? What did you pick up there? The [departed] woman is shamanizing round the house. She is begging for something!" "Ouch! I answered, [said Yefrosiniya], I have picked up a photograph and some rags there!" Yefrosiniya believes that the departed shamaness came to her home looking for the photograph she took away from her place. "She was probably searching for the photograph," says Yefrosiniya.

> Then I told her: 'A-a!' I said, I said it aloud: 'Aunt, I said, in the morning I will get up and give it back to you!' In the morning I got up and threw everything away. 'Have your possession!' I called to her. 'Have it!' And I threw away [the photograph and the rags]. I threw them over there, into the ravine! That was all! Since then nothing happened any more! Nobody came to me again to beg for that photograph

Yefrosiniya affirms that both her husband, who slept in the same room, and Mariya, her husband's aunt (his father's sister), who spent the night in another room, had the same dream as she did. "An outsider would not be able to see it," Yefrosiniya says. "Mariya does not live in our house, but she is my husband's relative." That is why, as Yefrosiniya interprets it, she was among those who shared the same night vision.

Yefrosiniya is not a shaman, but she has some shaman-like abilities which make her sensitive to both her father's and her husband's clan spirituality. In other dreams she penetrates the spiritual space of her original clan. For instance, before marriage, she and two of her sisters dreamt about a tiger that was believed to be their fourth unmarried sister Zoya's spirit-

Zinaida Nikolaevna Beldy in her wedding dress. There are clan trees on the skirt of the dress and birds representing the clanspeople who are not yet born. Under the trees there are tigers, the clan spirits. Photo: Tatiana Bulgakova.

husband and some tiger cubs that were supposed to be Zoya's spirit-children.[9] "All of us dreamt about them," Yefrosiniya says. "We watched them! The tiger was mostly sitting and lying outside, under the window. All of us dreamt that it was outside."

Query: "It was not only Zoya who saw it, but all of you?"

Yefrosiniya: "Yes, all of us saw, that they [her 'husband,' the tiger, and her 'children,' the tiger cubs] approached us and watched us. They were probably interested in how we lived. Maybe they thought we were sick or something! That's most likely why they visited us!"

As all these sisters later acquired some shaman-like abilities (although none of them actually became a shaman), they were able to visit in their dreams both their husbands' clans' and their father's clan's spiritual lands and roads, as they describe it. When Yuliana, one of the sisters, fell ill, the shaman woman Komo healed her. After the séance, the patient's sister Yefrosiniya dreamt that she was looking for Yuliana. At last she found the place where her sick sister was. At the same time Yuliana had a night vision that their sister Vera, whose shaman-like abilities were stronger than hers, came to them and led them out. Vera, for her part, affirmed that she also dreamt about the same event.[10]

The space of dreams (the same spiritual space the shaman is believed to penetrate in his or her ceremonies) is believed to be collective and to belong to the clan, or rather to a certain lineage. Ordinary people enter this space as passive observers (mostly in their night dreams) and have no ability to change anything there. It is only the shaman (or rather his or her spirits) that can operate and act within the spiritual zone.

The clan roads, where people 'travel' in their dreams, are also called the roads of words and tunes. It is believed that the spirits give the people who belong to the same lineage the ability not only to dream similar dreams but also to improvise songs using similar clan melodies. The content of the night visions, on the one hand, and the melodic type of the song improvisations, on the other, can sometimes give people information enough to define exactly to which clan a person belongs. For example, when the future shaman Komo, as a little girl, began to sing in a shaman-like way and tell people about her night dreams, her father began to suspect that she did not belong to his clan and was not his real daughter. Then he made his wife confess that he indeed was not Komo's biological father, because Komo was born as a consequence of incest and her biological father was her mother's brother.

Collective Clan Disease Caused by a Clan Member's Death

The spiritual unity of the clan manifests itself, as we saw, even in the regular quiet time, when nothing special happens. When some events draw the clanspeople closer to the clan spirits it becomes much more obvious. Such events affecting one of the clanspeople open her or him to the clan's spiritual world, and may harmfully affect the rest of the clan.

One of the obvious situations that bring people closer to the spiritual world is death. The Nanay consider that every person dies because the spirits finally possess her or his soul. In addition, the departed people are themselves believed to become harmful spirits dangerous especially to their clanspeople. The departed ones are supposed to come to their living relatives in dreams and visions to frighten them, to be in the way of their business in order to force them to sacrifice. "After a person dies, he becomes an *amban* [evil spirit]. It is certainly bad! *Amban* will come to frighten somebody" (Marina). The death of each member of the clan is like an additional 'window' to the spiritual world which connects the whole clan to it. The living feel it to a greater or lesser extent, but all are connected to their departed clanspeople. Some of the departed clanspeople can be tamed and used for worship; in this case they become benevolent spirits. Most of them are considered to be dangerous and must be driven away with the help of special rituals. Marina describes one such ritual conducted in order to heal a woman from an illness which was believed to be caused by a departed clansman. "I came when they tried to frighten an *amban*," Marina remembers.

> "Now it seems funny of course. But then I was scared to hear it. They frightened the *ambans*! They were the deceased people who were hanging around! One [of the dead persons] even looked in through the window!"
> Query: "Were they departed relatives?"
>   Marina: "Right! They [people, who were in the room] shouted that such and such [a deceased woman] is looking in [from the street] through the window! It was really horrible! They shouted this way! Did they actually see [the deceased woman] or what? But why would they have shouted in vain? Why would they have shouted in vain, that such a woman was looking in through the window? She has become an *amban*. Well, the deceased woman! She has already become an *amban*! Her *panyan* [soul]! It is scared! I covered myself with the blanket. I even sweated! I did not shout myself! Why would I shout? I only listened. They even said the name of the woman [who looked through the window]. She was their relative."
>   Query: "Do only departed relatives come?"
>   Marina: "Yes. They also come to be in the way of their business. They come to their clanspeople. [...] Strangers would certainly not come!"
>   Query: "So, they come to their own?"
>   Marina: "Right, sure! Their own people are familiar to them."

The shamaness Nura Sergeevna Kile in the village Achan, Khabarovsky krai.
Photo: Tatiana Bulgakova.

The maximum closeness to the spiritual world is believed to occur between someone's death and funeral. These days are the most dangerous especially for the closest clanspeople. The shamaness Yelena says that departed people are unsafe for their grandchildren and children. The dead people would not be able to harm strangers or unrelated people; they only crush some of their relatives and take them (their souls) along with them into their graves. The person whose soul is taken away by a dead one is supposed to fall ill and will also die soon. "The departed woman embraces her living husband. The dead man gives a hug to his living wife, to his daughters and sons," Yelena explains. According to the informants' opinion, men are threatened by the dead of his patriclan, but for women, the dead people of both her husband's and her father's clans may be dangerous. "Both my husband's and my father's dead relatives become evil *kochali* and *amban* [evil spirits] for me," Marina explains. But unrelated deceased people surely won't come to me." The shamaness Yelena says that she has first-hand knowledge, having chanced to watch how her departed neighbour tried to take a daughter with her to the grave. Coming to the funeral, Yelena sat on the sofa in the corridor and looked through the open door into the room where the coffin was. "Larisa was her [the departed woman's] youngest daughter," Yelena says.

> She [the deceased woman] loved that daughter Larisa... I looked and watched. ... I saw it with my own eyes! The [dead] mother rose up [from her coffin] and was about to catch [Larisa]. I shouted once and [the deceased] fell down back into the coffin. I was sitting in the corridor, when she [the deceased] got up. I uttered a scream, and everybody [those who were present at the funeral] leaped to their feet. I saw it with my open eyes! Well, now it is okay, [Larisa] is still alive. She works in Komsomolsk.

Yelena considers that in her time her own deceased mother also tried to take her away into her grave.

> My [deceased] mother embraced me, I watched it in a night dream. [...] After that on the third day, when we went to bury her, they had already hammered the coffin shut and begun to lower it into the grave. I felt that they buried me together with my mother. I once uttered a scream. I screamed! It was unbearable! Then my brother Semyon told me: 'What? Should I open the coffin?' Semyon said. 'Open it!' I answered. They opened it slightly with the axe. Only for such space [about 30 cm]! That is from there ...! I twice uttered a scream and I [my soul] climbed out [of the coffin]. I said: 'Hammer it shut again, I have already gotten out of it!' And they hammered it shut. If I had been an ordinary person [not a shaman] they would have buried me together [with my mother]. [...] We have a lot of cases like that. [The deceased one] embraces the living ones.

The deceased or dying people do not only approach the spiritual world themselves, but also draw their clanspeople closer to it and thereby put them in danger. According to Vladimir K. Arseniev's field data, collected among the Udege, another Tungus-Manchurian people, shortly before someone's death not only the strangers, but even the closest relatives went out of the room and left the dying person alone in order to prevent her or him from looking at the relatives. If they nevertheless stayed in the room, they covered the face of the dying person, who was however still alive, with a towel. The reason was that the dying one should not be able to draw the other people into the beyond by means of his or her gaze (Startsev 2005). The Nanay tried to save living people from their deceased relatives by means of a similar ritual. They tied one end of a thread to the dead person's hand and another end to the hand of one of his or her relatives. Then the shaman uttered a scream and tore the thread. At that very moment the relative would move away without glancing back at the coffin. Then the same action was repeated with each of the relatives present at the funeral. In this way, the living tried to separate themselves from the dead relative.

It was not possible to determine exactly what relatives would be endangered in the case of an ordinary death. It probably does not endanger the whole clan, but only the closest relatives who live in the same home as the departed person. But in the case of an extraordinary death (violent death, attacks by tiger or bear, drowning or death by fire), the entire clan of the dead person was undoubtedly believed to be endangered. Tiger or bear attack was considered to be not just an accident; the spirits are thought to enter these animals and when the spirit-animals attack someone, they mark not only their victim, but the entire clan.

> If people are drowned *galigda* or torn by a tiger or a bear, they are believed to be marked by a taiga or water spirit, and fate hangs over their entire clan. People from the other clans cannot borrow hunting and fishing-tackle from this clan (*galigdako gurun*; people with a drowned one) because misfortune will be passed on with these things (Gayer 1991: 109, transl. T. B.) .

If they nevertheless took something from the clan where somebody had drowned or been attacked by a tiger or a bear, they would perform a special ritual.

> To prevent the negative impact of it [...] they made a toy bow and a small arrow. The person who had borrowed something from the forbidden people should break off, pinch off or cut off a small piece of the borrowed thing and tie it to an arrow. Then he was to shoot the arrow from the bow toward the place where the forbidden people live with the words: 'Go to your owner! Take your entire bad fate away with you!' (Gayer 1991: 109, transl. T. B.).

The clan spirits *diulins*, which are usually placed at home. Photo: Tatiana Bulgakova.

Clan blood revenge may probably also be explained by means of the unit of living and dead clanspeople, forming a collective by sharing the same spiritual invisible space. Evidently blood revenge is needed not to "pacify the soul of the murdered person" and not to "defend the safety of the living people," as scholars sometimes affirm. It is surely not the manifestation of "a healthy highly developed person of integrity with a whole-hearted religious-social world view, which creates the harmony of personal and public benefit," as Lev Ya. Shternberg writes (1933: 113, transl. T. B.). It is rather, as the same author asserts in another place, "a burden, weighing upon the clan" (Shternberg 1904: 38, transl. T. B.). The 'window' to the spiritual world is opened each time even in connection with a clan member's ordinary death, but the spiritual world becomes particularly close and dangerous for the clan when somebody is murdered. One clan member's misfortune can spread to the other clanspeople. Clan spirits become especially close and harmful and

misfortune increases. So after somebody has been murdered, some of his or her clanspeople must also suffer and shed their blood. E. A. Kreinovich, who collected his materials among the Nivkhs, witnessed the following case:

> Red blood was squirting from Kurchuk's mouth. The Nivkhs were staying around him as powerless as he was, and kept silent. It was pulmonary bleeding. In the intervals between the coughing fits, Kurchuk repeated: 'It is *takht* that is doing it!' The people who were standing around confirmed: 'That is true! *Takht* is doing that! It is drinking his blood' (Kreinovich 1973: 389, transl. T. B.).

The Nivkhs explained to Kreinovich that in Kurchuk's clan somebody had been murdered, but his clanspeople did not exact any revenge. The spiritual regulation was, however, that "for the murdered victim, the victim's kin should give more blood, because *takht* needs blood." If the victim's clan did not shed the blood of someone from the murderer's clan, the spirits themselves would shed the blood of someone from the victim's clan instead. In other words, some of the victim's clanspeople would begin to suffer from throat bleeding or from bronchial hemorrhage, etc. Kreinovich writes: "Never and nowhere else among the other Nivkhs did I see so many people seriously ill with tuberculosis as in this clan in the village Chaivo. They explain the disease as a result of their failure to revenge their murdered clansman" (Kreinovich 1973: 389, transl. T. B.). Kreinovich considers that blood is needed for the "unavenged soul of the victim," but he does not explain why this "unavenged soul" revenges itself not upon its offender and his clan, but punishes its own clanspeople instead. From the point of view of the emic approach, the very fact of having somebody murdered in the clan establishes a strong connection with the spiritual world for this clan and the consequences of this connection are imitations of the event that has already happened. Blood was shed and the spirit-bird "*takht* gains access to the clanspeople and drinks their blood" (Kreinovich 1973: 389, transl. T. B.).

Collective Clan Disease Caused by its Members Excessively Approaching the Spirits

There are many other critical situations that draw the whole clan towards the spirits as the result of the deeds of one clansperson. The essence of any taboo is to keep people at a safe distance from the spirits. K. M. Rychkov considers that community of 'sin' is of high profile for the unity of a clan. By 'sin' the scholar means breaking taboos and different prohibitions in the religious and social domain. Not to follow taboos and prohibitions, as Rychkov writes, means not to worry about self-preservation and the wellbeing of the entire clan (Rychkov 1922: 137). The entire clan is endangered

when its individual members do not refrain from deeds which may draw them towards the world of the clan spirits. If an individual commits a 'sin,' it affects not only him alone, but all his clanspeople. For example, an unnecessary dangerous connection with the spiritual world is established when animals are killed in too cruel a manner. Yevdokiya A. Gayer relates the following story narrated by her informant:

> A hunter from the Malki village caught a hare. The hare was alive. He brought the hare home. He skinned it while the hare was alive. Then he let it go, without its skin. As a bloody dot the hare ran into the nearest forest. For long time people could hear its cry '*Singmal! Singmal! Mal! Mal!*' Crying like that the hare disappeared. The man jeered at his game. There were many people in the village, but soon all of them died (Gayer 1991: 17–18, transl. T. B.).

Gayer does not write that the inhabitants of Malki belonged to the same clan. But we can suppose that it was so, because of her conclusion: "For cruel behaviour towards animals, the person might pay with his own life as well as with the life of his clanspeople" (Gayer 1991: 17–18, transl. T. B.).

In the case of a murder, it is logical to expect that the spirits would also punish the guilty party and their clanspeople with some misfortune and would feel sorry for the victim's clanspeople. But as a matter of fact, it is the reverse. Paradoxically, as already mentioned, it is the clan of the victim, which is 'punished' with illnesses and misfortune. The murderer's clan is also affected, but differently. The violence once committed has a tendency to continue, the situation has a tendency to repeat and multiply, and the murderer's clan becomes inclined to violence. The informants explain it in the following way: having committed an act of violence, a person communicates with the spirits of violence, *ochiki*, and gives them access to his or her entire clan. The murderer's clanspeople become inclined to aggression and this becomes apparent in increasing numbers of suicides and quarrels. Increasing violence is even directed against their own clanspeople.

> If a man has murdered someone [Komo says] *ochiki* will be transmitted to his children. His child will become evil and will be able to kill someone! [...] I remember [...] It even flashes my eyes right now. At first they tried to keep it back, they did not tell anybody anything about it. But then people nevertheless learned about it. [A boy] was an orphan and lived with his grandmother. They took him on a hunt as a cook. Then they noticed that when he was cooking [...] [The hunters thought that] he fed them porridge, but he himself secretly ate something different. He had put on weight. He was a good boy. [A hunter] said [to another one]: 'Do you not notice it? Why does he give us bad food while he him-

self eats something better? Let us kill him!' Another [hunter] answered: 'I am not able to kill him.' Then the first one murdered the boy, ripped open his stomach and examined it: 'No, there is nothing except some flakes of leather!' Then they buried him and returned home. We lost [that boy]. His grandmother cried. She went to a powerful shaman. She related what had happened. He [the shaman performed a ritual and] learned everything about it. All the men went [to those hunters to ask]. They came in. The younger [hunter] said: 'I did not do it.' The older man said: 'That was me, I did it. I thought that he offended us, fed us poorly and so forth. We killed him and ripped open his stomach to see what he had eaten'. They forced them to go there [to the *taiga*] and to point out the place where they had buried [the boy].

As the people learned about their clansman's crime, they did not punish him, but instead took some measures to prevent increasing violence within their clan. "They shamanized to drive away *ochiki* [from their clan] so that his [the murderer's] sons and daughters should not become like him" (Komo). "*Ochiki* is like a man, but invisible," Irina explains. "It forces people to kill each other. In the past it was also like that. People drank vodka and attacked each other with knives. *Ochiki* did it. When someone murders another person, *ochiki* appears. It inspires other people to do the same." *Ochiki*, as our informants assert, cannot pass to unrelated people, but it easily passes to the clanspeople of the murderer. Despite the fact that the Nanay have paternal affiliation, some signs of dual descent can be noticed. So, *ochiki* can be inherited not only through the father's but sometimes also through the mother's line and be transmitted not only from husband to wife but also from wife to husband. The shamaness Yelena's daughter knifed her first husband. Her second husband knifed himself in the presence of all the family. Commenting on this event, Marina states that *ochiki* have dwelt in Yelena's family. In Marina's opinion, they originated not from violence as such, but from Yelena's shamanic spirits.[11] These spirits came, as she explains, to Yelena's daughter and forced her to commit a crime. Then they passed through the daughter to the daughter's husband. "That old woman's [Yelena's] *sewens* [spirit-helpers] have been passing on [to the next generation]," Marina says.

> You think what? Have they not been passing on? Everything is passing on through blood! Now my granddaughter makes a row and she does badly at school. My granddaughter or my grandson! It is my blood! Everything has been passing on! If I am a drunkard, my granddaughter is also a drunkard. My son is a drunkard too; it is going on that way! It has been transmitted through blood!

So the idea of clan blood revenge probably arises as a result of some efforts of the victim's clanspeople to choose the lesser of two evils. An inclination

towards violence is considered to be a less evil kind of misfortune compared with the fate of constantly being exposed to the risk of losing the blood of their clanspeople. In other words, clan blood revenge is probably nothing but an attempt by the victim's relatives to avoid the dependence on spirits that can multiply the number of sick and murdered clanspeople.

Dangerous intimacy with spirits also happens as a consequence of breaking exogamy. The Nanay consider that sexual intercourse usually entails a woman's communion with her partner's clan spirits. But when a woman joins spirits which are both her partner's and her own clan's spirits, she doubles her dependence on them. As a result, her closeness to the spiritual world affects her entire clan. Incest creates an unsafe intimacy with the spirits not only for the direct participants, but for the rest of the clanspeople as well. The clan spirits acquire the means to influence this clan more strongly and more dangerously than usual. The Nanay say that the participants in incest even 'give birth' to some new clan spirits belonging to the category *sajka/sadka*, which are "blood-thirsty" and carry out great devastation. I. Kozminsky wrote that almost any death that happens after a short illness people explain as the result of the interference by spirits born as a result of incest. These spirits are also believed to cause destructive epidemics (Kozminsky 1927: 44). The shamaness Yelena says that if someone commits incest, even secretly, all the clanspeople may gain numerous *ambans* (evil spirits). "A great number of such small *burkhans* [spirits] will appear. One [shaman] will not have time enough to kill them. [...] Children will fall ill, grow thin, just skin and bones!" Not only the children whose parent was a participant in incest suffer, but all the other children within the clan as well.

> Brother and sister give birth to lots of *ambans*, which attack their clanspeople. [...] They [*ambans*] will disturb their clanspeople's children. The children will suffer from diarrhea. [...] Small children soon die from dehydration caused by diarrhea. There are such persons [spirits] that disturb them and come out of the genitals of those who committed incest, the *ambans* come out of their genitals. They also kill the old people Yelena.

Because the entire clan suffers from the consequences of incest, the clan court is usually harsh. "The old people met and discussed what to do with them. This one would say to kill them, another one would say to kill. So they killed them with lances" (Yelena).

From the emic point of view, it is explained that the entire clan depends on the deeds of any one member, since all the members of the clan are connected to the same clan spirits, which, in addition, are considered to be their relatives. Kinship with spirits is, as the Nanay see it, the result

of the spirits' ability to enter into sexual relationships with people which causes a close connection between the clanspeople and the clan spirits, not only for the shamans, but for all the clanspeople to a greater or lesser degree depending on their spirit-relatives. "Do all the ordinary people, who are not shamans, have *ambans*?" the shamaness Yelena was asked. "Sure," she answered. "It is so because they have *ambans* in their clan."

S. M. Shirokogorov noticed that one of the decisive characteristics of the clan was their common clan spirits. He wrote: "The clan is a secluded group of relatives on the paternal line. Besides being aware of their common origins, they consider that they depend on the common clan spirits" (Shirokogorov 1919: 47). Clan spirits affect relatives with a common male ancestor and with rare exceptions do not pass to other clans. "The Oninka clan has its own *ambans*. Kile have their *ambans*," Roza says. "Khodger have their *ambans*, Beldy have their *ambans*. [...] Each [clan] has their own *ambans*." "An alien *amban* will never approach a person," the shaman Tamara says. Being so, it is probably not the social differentiation which makes people look for certain identifying marks such as totem spirits, in order to fix the differentiation. On the contrary, their connection to the different zones of spiritual reality leads people to troubles that can only be solved by the collective efforts of the people who share the same troubles. This causes people to establish the given social units.

Common clan spirituality is expressed in the Nanay mythology by the clan's collective line (road) of life. The Ulchs (another people of the Tungus-Manchurian group) call this line *musu*. "*Musu* is the united line of the close relatives' life. Each clan and family has its own *musu*" (Smolyak 1991: 173). Anna V. Smolyak reports that sometimes "the Ulchs invited a shaman for a special ritual to correct their *musu*:"

> If there is a good *musu* in the clan, all the people are healthy; they live in peace and friendship, have successful businesses, all of them think and act together. [...] *Musunchu* is a lucky person who has a good *musu* inherent in one clan, family. But when misfortune, quarrel or disease appears in the clan and the family, the old people said: 'It is time to correct *musu*' (Smolyak 1991: 173, transl. T. B.).

It is important to emphasize that using the idea of *musu*, the Nanay express shared good fortune as well as misfortune, which, they believe, really exists and unites all the clanspeople.

Conclusion

Shirokogorov's discovery of a collective shamanic disease was unjustly forgotten in Russian anthropology, and this resulted in decreasing the chance

of success in examining kinship in traditional Tungus-Manchurian society.

To explain the prevalence of unilineal descent scholars mostly accentuate its social profit because it helps to unambiguously assign each individual to a certain group of relatives. Murdoch supposed that division into unilineal groups is needed to avoid confusion when it comes to the distribution of rights and duties in society. Differentiation and classification of the kin into agnates and cognates is needed, as he wrote, to define juridical relationships with each relative, to know what relatives to help, who is good for a marriage alliance, whom to leave inheritance (Murdoch 2003: 69–70). The social side of clanship is interpreted in this explanation as primary and basic. In contrast, the religious characteristics of the clan (the idea of common clan spirits, the totemic name of the clan) are described as necessary only for the identification of members of the kin group who live separately, because the religious specificity helps to maintain the knowledge of membership in the group (Murdoch 2003: 76). In other words, the religious order is considered to be secondary and derived from the social order.

This version leaves some models of traditional behaviour with no real explanation, such as why people neglect the close territorial connection with their close cognates and choose distant agnates they have perhaps never met when they decide whom to help and whom to refuse aid, whom to avenge and whom not. It also does not explain why, in some cases, the purity of the clan may be more important than saving the life of their children and why they prefer to kill a child whose mother conceals his or her father's name and whose membership in the clan is unclear. According to A. F. Startsev's materials, the Udege killed a child to avoid possible future breach of exogamy, which might happen when the child becomes an adult and searches for a spouse. If the child was not killed, "he was deprived of his rights and duties, he could not attend clan meetings, did not enjoy its support, could not take part in blood revenge. Being deprived of his rights and duties, he was forced to commit suicide later when he became adult" (Startsev 2005: 224, transl. T. B.).

It is quite another matter if we take into consideration collective clan disease in its acute and chronic condition, and the entire clan's dependence on spiritual events which affect its individual members. In connection with collective clan disease, the cases listed above can be explained. Unlike distant agnates, close cognates are excluded from those who are prone to collective disease which is why they are excluded from help and obligatory revenge. Also it would be dangerous to bring up a child who might belong to an alien clan and suffer from a different, alien clan collective disease, because one of the symptoms of such disease is unmotivated hostility towards the alien clan people. The Nanay say that they kill the illegitimate child because he

is considered to be an *amban*, a bearer of the alien, that is, evil spirit. After the adopted children become adults, the Nanay assert, they quarrel with their adopted parents and their clanspeople and sometimes even kill them. Running the danger of collective disease, the clan looks for a means of defense, which entails religious instructions and prohibitions. Being aware of unilineal descent and of their own place in it, people may define the circle of possible persons who could be subject to the similar mental and other troubles and who should look together for the means of a cure. If it is so, not social, but religious signs of clan are primary and determinant. The spiritual harmony of the unilineal clan assists people to realise their social unity. Social characteristics are secondary and derivative.

Even in exogamy the social side might be secondary, because religious ideas and religious experience underlie it. Lev Ya. Shternberg wrote that "there should be a powerful stimulus for creating such a strong and long-lived unit as a clan" (Shternberg 1933: 159, transl. T. B.). He considered that such a powerful stimulus was "commonness of sexual rights" (1933: 159, transl. T. B.), that people were united into clans to get the guarantee and mutual control of observance of clan rules. At the same time it is hard to imagine that order is kept for the sake of order and nothing else, that there are not more real dangers in the breaking of rules than mere social disapproval. Generalizing the field materials it could be presumed that exogamy is not an end in itself. It might be merely a means and a way of adaptation to the dangerous spiritual reality, which can stir to activity in cases of disorderly incestual relationships. The real stimulus which does not allow people to forget about their clan belonging is their spiritual unity instead, some common spiritual invisible space, which is available only to them and not to outsiders, which involves them in shared night dreams and visions and which constantly threatens them with common troubles. The stimulus to remember their clan peculiarity and exclusiveness is their collective clan shamanic disease, which demands common efforts and actions for its avoidance. Exogamy is but one of such means and actions. Despite the fact that clan spirits can help, they are potentially harmful. Therefore there is a system of taboos and prohibitions which keeps people at a distance from their clan spirits, and a system of rituals is needed to appease the spirits. There is also a danger caused by alien clan spirits which are considered to be evil just because they are outsiders. The system of taboos and rituals ensures that the clanspeople do not lose their main social and religious guidelines, their awareness of their clan belonging, which is important even when they live separately and take up residence far from each other.

Field materials collected in Siberia by Russian anthropologists at the beginning of the twentieth century were at some variance with the socio-

logical theory of the origin of clanship. Generalizing from their materials S. Brailovsky wrote that Tungus-Manchurian clans "represented congeneric-religious units" (Brailovsky 1901: 355, transl. T. B.), emphasising the religious components. S. M. Shirokogorov also wrote that not only one shaman is chosen by the spirits, but the entire clan is the spirits' elected representative. According to his ideas, shamanism is not a matter for an individual, but a function of the entire clan (1919: 50). Shirokogorov asserted that the clan is needed as a means of adaptation to the dangers of the spiritual world, as a way to defend people from the harmful influence of both the clan spirits and the alien ones (Shirokogorov 1919: 48), and my field materials, collected almost a century later, completely confirm his ideas.

NOTES

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[2] S. A. Tokarev, I. S. Vdovin, and others.

[3] This is, for instance, the position of George Peter Murdoch.

[4] The Evenks belong to the northern branch of the Tungus-Manchurian group of peoples. They live in the Evenk autonomous district and some other districts of Eastern Siberia. There are 29,900 of the Evenks in the Russian Federation (information from 1992) and 35,000 in China. In addition to the Evenks, there are the Evens, who live on the shores of the Sea of Okhotsk and in Northern Yakutia and who are also included in the northern branch of the Tungus-Manchurian group of peoples. In this article I use the materials on the culture of the southern branch of the Tungus-Manchurian group of peoples. They are the Nanay (12,000), the Ulchi (3,173), the Udege (1,902), the Negidals (587), the Orok (200), and the Orochi (883), who live in the Far-East of Russia in the basin of the Amur river, in the Khabarovsk region, in the Primorye region and on Sakhalin Island (Russia).

[5] The phenomenon of mass hysteria is mentioned by, for example, Mitskevich (1929) and Vitashevsky (1911).

[6] In this article I use field materials collected since 1980 in the Nanay villages in Khabarovsk region. I do not mention here the real names of the informants, but replace them with false ones. My informants are mostly representatives of the generation that preserved the traditional shamanic culture. Most of them could hardly speak Russian and we communicated in the Nanay language.

[7] Using obsolete terminology, it would be possible to say that the group predisposed to collective sickness should be more precisely determined as 'sib.' But because of the ambiguity of women's position, on the one hand, and trying to follow both the contemporary terminology and that of the tradition to which Shirokogorov belongs, on the other hand, I refer to the kinship group attacked by the collective sickness as 'clan.'

[8] *Sewen* (in Nanay) is a spirit helper.

[9] Zoya died young on the eve of her wedding. Her sisters believe that the tiger, her spirit husband, was jealous and killed Zoya to prevent her wedding.

[10] Healing a person, the shaman travels within the spiritual world looking for his or her soul, finds it and returns to the patient. In their dreams two of Yuliana's sisters performed the shamanic healing ceremony. They confessed that they did not actually trust the shaman Komo's ability.

[11] The Nanay word *ochiki* is probably a variant of the Manchurian word *vochko* which means spirits of the departed shamans that became the spirit-helpers of their descendants, the living shamans.

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WAYNE EDWARDS & TARA NATARAJAN

Rural Society and Barriers to Well-Being

ABSTRACT Service availability, access, and delivery are universal problems every society faces. Invariably, some members of any society are unable to access all of the services they need. This article identifies crucial factors that create service access barriers by using a modified Social Fabric Matrix (SFM) methodology. The components of the matrix go to the core of the question of well-being and are ideally suited to clarifying access rigidities. The primary result of the described research is that, while measures of service access rigidities are broadly consistent with other measures in explaining geographical variation in well-being, access rigidity measures also reveal differences not seen in other analyses.

Introduction

Service availability, access, and delivery are universal problems every society faces. Resource constraints are sometimes the cause (and often the blame) for the absence or poor provision of services. However, service rigidities do not arise solely from a lack of resources. Access rigidities do include obvious barriers like the absence of physical facilities (e.g., health clinics) and low incomes of citizens, but they also include less obvious barriers like social and family dynamics. Additionally, rigidities are often more severe in rural areas, sometimes to the extent that rural community sustainability is jeopardized by severe service access rigidities (Edwards 2007; Edwards & Natarajan 2008).

This article collects and summarizes recent research by Edwards (2007; 2009a–d) and Edwards & Natarajan (2007; 2008) on the well-being of at-risk groups in Alaska. The primary focus in this paper is

how the well-being of individuals is affected by barriers to services. First, the concept of well-being is used to codify the effects on at-risk groups in Alaska of barriers to vital services. This contextual question of well-being is formalized in terms of Amartya Sen's work on entitlements and capabilities. Second, the Social Fabric Matrix (SFM) is used to organize the analysis of service access questions. The SFM helps to make Sen's concepts more process oriented. Specifically, the matrix helps to identify existing entitlements, specify the basic capabilities that are expected to flow from the entitlements, and identify the individual and societal institutions that create or inhibit flows. Based on actual and desired achievements, rigidities that prevent the creation of functionings at the individual and societal level can be identified in context. Finally, numerical representations of service access rigidities are compared to other measures of well-being. The primary result is that while measures of service access rigidities are broadly consistent with other measures in explaining geographical variation in well-being, they also reveal differences not seen in other analyses.

Linkages. Services and Capabilities

As noted in Edwards & Natarajan (2008), the literature on entitlements and capabilities represents a shift away from the preoccupation with income and commodities as an explanation of poverty (Dreze & Sen 1989). The concept of entitlements and capabilities provides a rich and suitable paradigm to explain the function of services in the achievement of well-being at the individual level. In their introductory chapter, Stewart *et al*. (2007) explain that the capability approach assesses well-being as the freedom to live lives that are valued (i.e., the realization of human potential). The emphasis of the capabilities approach is on outcomes rather than just the means to enhancing income, which is the focus of monetary approaches:

> [...] monetary resources may not be a reliable indicator of capability outcomes because of differences individuals face in transforming those resources into valuable achievements (*functionings*), differences which depend on varying individual characteristics, [...] [and] differences in the contexts in which individuals live (e.g., between living in areas where basic public services are provided and areas where those services are absent) (Stewart *et al*. 2007: 15, original emphasis).

Furthermore, the authors argue that there is an element of arbitrariness in the choice of capabilities and that they are problematic to identify empirically, especially because they represent a set of potential rather than actual outcomes. Stewart *et al*. assert that if capabilities are considered basic, then individuals will not be willing to forgo them and therefore assessing their

actual achievements, or functionings, should reveal the constraints they face. Therefore, following the example of Stewart *et al.*, capability outcomes and functionings are used here interchangeably. The basic capabilities that are identified by individual researchers differ based on the examined case. The most prominent studies on basic capabilities and respective indicators—Doyal & Gough (1991), Qizilbash (1998), Desai (1995), Nussbaum (1995), and the basic needs approach (Streeten *et al.* 1981)—all vastly differ from one another (Stewart *et al.* 2007). It should be no surprise, then, that capabilities and functionings identified in circumpolar arctic cases are different from capabilities and functionings identified elsewhere.

In Alaska the lack of access to basic services is caused not only by an inability to pay for the service but is due additionally to a gamut of complex factors. Identifying service access rigidities points not only to specific entitlements and capabilities but also to actual achievements (functionings). Some functionings, such as health indicated by longevity and education indicated by literacy, can be measured at various levels of aggregation while others cannot. Sen developed his ideas in the context of developing and underdeveloped regions of the world to help capture non-income and institutional factors that contribute to creating and deepening conditions of poverty. Even so, Sen's work is not regionally restricted because the central aim is to develop a viable framework for poverty analysis. It is therefore applicable to Alaska and virtually any other place (Edwards & Natarajan 2008). Alaska, with its unusual characteristics, presents unique rigidities that have differential impacts on groups of people, particularly Native Alaskans (Edwards & Natarajan 2007). The elementary concepts of entitlements, capabilities, and functionings provide direct insights into examining well-being among Natives. Employing Sen's ideas expands the number of factors to consider when evaluating service access rigidities. For example, if services are absent or difficult to access for some people, then the capabilities of those individuals might not be fully realized.

The major criticism of Sen's capabilities approach is the difficulty in applying it to specific situations. Attempts to operationalize the concept often end in simply redefining the ideas slightly and creating new categories of capability types that are equally difficult to operationalize (Alkire 2002). The concepts of entitlements and capabilities are specifically delineated and operationalized in identifying factors that contribute to service access rigidities (see Table 1 for a summary). Beginning with the ideas of entitlements and capabilities informs the specific way in which Hayden's Social Fabric Matrix will later be constructed and populated.

Alaska as an Example

Alaska is the largest state in the United States by area, but has one of the smallest populations. Even today, vast expanses of land remain undefined by political boundaries (see Fig. 1; the white areas of the map indicate unorganized territory). The state is quite remote—only Hawai'i is more geographically isolated than Alaska—and yet the flow of migration to and from this far away place occurs at one of the highest rates of any state (Edwards 2007; Edwards & Huskey 2008).

Fig. 1. Alaska boroughs. Map by Meghan Wilson, Institute of Social and Economic Research, University of Alaska Anchorage.

Poverty, as measured by a deprivation of income, is less widespread in Alaska than in other states. For example, Alaska has the most equitable distribution of income of any state. Alaska's Gini coefficient in 1999 was only 0.39, compared to the national average of about 0.43. Other income-based measures reveal similar results: Alaska, compared to most other states, displays less poverty by aggregated income measures (Howe 2004a; Howe 2004b). This overarching characteristic can be found in Alaska for the several past decades (Edwards & Natarajan 2007).

There are stark differences between life in rural communities and life in population centers. Rural residents and especially Alaska Natives face service access rigidities that urban residents do not face, and these rigidities surely reduce well-being. After all, theoretically available services have no

value if they are not, in reality, available for consumption (Edwards & Natarajan 2008). The argument is sometimes made that people who choose to live in rural communities are aware that access to services might be limited due to the remote nature of their residence and that, therefore, the people living there are implicitly choosing fewer services. Even if true, this does not mean that people living in rural areas have a preference for limited services. Ultimately, questions about service delivery are social questions that must be addressed by communities and government. What services will be delivered? How will the services be delivered? Where will the services be delivered? To whom will the services be delivered? These questions are inescapable matters of public policy (Edwards & Natarajan 2007).

The following discussion (adapted from Edwards & Natarajan 2007) briefly summarizes three specific categories of service access rigidities that exist in Alaska, highlighting some of the unique features of the place. These examples, while not exhaustive, are nevertheless instructive.

Health (Healthcare Access). Access rigidities reduce healthcare consumption. In rural Alaska, the general absence of connected roads, the scarcity of physicians and nurses, and the multi-level approval procedure for statute-provided care among many Natives all make service delivery difficult. Even if money is available to purchase healthcare, if the healthcare service itself is absent (or diminished), then the expected transaction cannot take place.

Alaskans experience high morbidity rates for terminal disease, especially rural residents and Natives, indicating an apparent unfilled need for healthcare services (Statewide Library Electronic Doorway 2005). Alaskans experience high suicide rates, especially among young adult male Natives (Einarsson *et al.* 2004). Non-terminal morbidities, such as Fetal Alcohol Spectrum Disorder, are also very high in Alaska, especially in the rural population (*State of Alaska* 2002; 2004). Clearly, the unmet need for healthcare services is great (Edwards 2009b).

Safety (Crime Exposure). Access rigidities to police protection increase exposure to crime (Edwards 2009a). In rural Alaska, there is a shortage of professional police officers in many places. Frequently, the only law enforcement official in a rural place is a Village Public Safety Officer. Reduced police protection leads to greater violent crime (Anderson 2003). Victims of violent crime experience negative health outcomes (both physical and emotional) and therefore reduced well-being.

Alaska has the highest crime rates in some categories, including the highest rate of forcible rape in the country, year after year. A reduction in access rigidities to police protection might reduce crime, especially violent crime, in rural places (Edwards & Natarajan 2007).

Justice (Access to Justice). Access rigidities to legal professionals and the court system impede resolution of disputes. Some examples include filing of restraining orders in connection with domestic abuse and violence toward women, divorce proceedings, and child support settlement enforcement (Edwards 2009c). Incidence of child abuse and neglect are often investigated and resolved through "non-police" agencies and personnel (social services, for example). Lack of non-police social service professionals makes more difficult the task of receiving justice through the court system, especially for at-risk groups who cannot adequately protect themselves.

If affordable legal advice is not available locally, some people will make uninformed decisions about legal matters or might remain outside the legal system altogether. In Alaska, the majority of the people live near population centers and can therefore access the justice system with relative ease. Rural residents, on the other hand, are sometimes isolated from the justice system due to the literal absence of courthouses and legal professionals in rural communities. Binding rigidities remain in many rural Alaska places (Edwards & Natarajan 2007).

While every place has unique characteristics, most places have some characteristics in common as well. As discussed in Edwards (2009d), the distinction is often a matter of the level of analysis. Consider Table 1. The first column is labeled "Global Category," and the second column is labeled "Local Factor." The Global Categories are general characteristics that are relevant to most places in the world. The Local Factors are narrower characteristics and are the particular instantiations of the broader Global Category. For example, the Global Category "Availability of the service" refers literally to whether the service is available to people in the area under consideration. This category is a relevant issue for every place in the world. If we consider a particular place, the availability of the service depends on the level of analysis, or, the Local Factor. In the Alaska case, we have identified three levels in the Local Factor column: Local, Regional, and Central. The relevance of the Global Category might be different depending on the Local Factor.

Table 1 shows the relevance of Local Factors for each of the three Service categories, Health, Justice (court system), and Safety (police protection). An "X" in a cell indicates that the Local Factor is a relevant consideration in the barrier or rigidity of the service category. Looking at the Global Category "Availability of the service," the Local Factor "Local" is relevant for all three service categories. This indicates that service access rigidities exist at the local level in Alaska for Health, Justice, and Safety. Therefore, in some places, especially rural ones, individuals face systematic barriers to services. At the regional level, systematic barriers to the Global Category exist only for Health, but not Justice and Safety. In other words, if an individual can

Table 1. Alaska Service Access Rigidities

Rigidity		**Service**		
Global Category	*Local Factor*	*Health*	*Justice*	*Safety*
Availability of the service	Local	X	X	X
	Regional	X	X	
	Central (Anchorage, Fairbanks, Juneau)	BASELINE	BASELINE	BASELINE
Cost	Nominal Explicit	X	X	
Length of queue to receive service	Population density	X	X	X
	Administrative (In)efficiency	X	X	X
Secondary costs	Travel	X	X	
	Overnight or extended stay	X	X	
	Child care	X	X	
	Loss of work income	X	X	
	Intangibles	X	X	X
Public funding provision	Political posture of administration	X	X	X
	Group dependent	X		
Assistance available	Political posture of administration	X	X	
	Group dependent	X	X	
Qualifications to receive assistance	Income tested	X		
	Group dependent	X		
Social factors	Race	X	X	X
	Gender	X		
	Class	X		
Community factors	Political will of local government	X		X
	Effectiveness of local administration	X	X	X
	Local leadership	X		X
Family factors	Family dynamic	X	X	X
Personal factors	Personal factors	X	X	X
Jurisdiction	Jurisdiction	X		X

reach a regional center then they will generally have access to police protection and the court system, but they might still not have access to health services. If individuals can reach Central locations, they face no systematic barriers to the Global Category.

It is important to observe that Safety is assumed to be a quasi-public

Table 2. Alaska Rural Rigidities in the Social Fabrik Matrix

		Local service availability 1	Local service availability 2	Regional service availability 1	Regional service availability 2	Central service availability	Nominal explicit cost	Population density queue	Administrative (In)efficiency queue	Travel cost	Cost of extended stay	Child care cost
		D01	E01	D02	E02	D03	D04	F01	D05	D06	D07	D08
Local service availability 1	D01						X	X	X	X	X	X
Local service availability 2	E01	X					X					
Regional service availability 1	D02	X							X	X	X	X
Regional service availability 2	E02			X								
Central service availability	D03	X		X					X	X	X	X
Nominal explicit cost	D04											
Population density queue	F01	X		X		X						
Administrative (In)efficiency queue	D05									X	X	X
Travel cost	D06											
Cost of extended stay	D07											
Child care cost	D08											
Loss of work income	D09											
Intangible costs	D10											
Political willingness to fund service	B01	X								X	X	X
Group dependent service funding	D11	X		X								
Political willingness to fund assistance programs	B02	X										
Group dependent assistance	D12	X		X								
Income tested assistance	D13	X										
Race	F02	X										
Gender	F03	X										
Class	D14	X										
Political will of local government	D15	X										
Effectiveness of local administration	D16	X										
Local leadership	C01	X										
Family dynamic	A01											
Individual dynamic	C02											
Jurisdiction	D17	X	X	X	X	X						

Legend: A: Cultural Values, B: Societal Beliefs, C: Personal Attitudes, D: Social Institutions, E: Technology, F: The Natural Environment

Loss of work income	Intangible costs	Political willingness to fund service	Group dependent service funding	Political willingness to fund assistance programs	Group dependent assistance	Income tested assistance	Race	Gender	Class	Political will of local government	Effectiveness of local administration	Local leadership	Family dynamic	Individual dynamic	Jurisdiction
D09	D10	B01	D11	B02	D12	D13	F02	F03	D14	D15	D16	C01	A01	C02	D17
X	X														X
											X				
X	X														X
X	X														
													X	X	
X	X														
	X														
	X														
	X														
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						X									
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	X														
	X														
	X														
		X		X											
		X		X						X	X				
	X														
	X														

good (because of the possibility of exhaustion of the good), Justice to be a quasi-public good (because of explicit exclusion barriers like filing fees), and Health to be a (mostly) private good. From Table 1, it is clear that access barriers are more plentiful for the private good than they are for the quasi-public goods. As argued elsewhere, barriers are also more severe for private goods (Edwards & Natarajan 2007; 2008; Edwards 2007; 2009d).

Finally, because the ultimate goal is to quantify information identified in the table, it is important to note that numerical values will be difficult indeed to assign for some categories and factors. This is particularly true of family and social factors. Some information can be gleaned from surveys conducted in Alaska, such as the Survey of Living Conditions in the Arctic (Martin 2006), and from existing databases like the Alaska Division of Community Advocacy (www.commerce.state.ak.us/dca/commdb/CF_COMDB. htm). In some cases, proxies must be employed to approximate how family and personal factors create barriers to service access.

The Social Fabric Matrix

Before operationalizing the content into a measure, it is imperative to organize it. Gregory F. Hayden's Social Fabric Matrix (Hayden 2006) is well suited to the material and issues presented so far and provides greater structure than the description offered in Table 1 alone. Concerned with the narrow and superficial analysis sometimes used in economic inquiry, Hayden developed a cross-disciplinary methodology to "allow for the convergence and integration of conceptual frameworks in instrumental philosophy, general systems analysis, Boolean algebra, social system analysis, ecology, policy analysis, and geobased data systems" (Hayden 2006: 73). Hayden suggested six main components that must be identified and integrated in order to understand a problem, including Cultural Values, Societal Beliefs, Personal Attitudes, Social Institutions, Technology, and The Natural Environment. Table 2 presents a reorganizing of the content of Table 1 into the Social Fabric Matrix (SFM) framework.

Where an "X" appears in the SFM of Table 2 a "delivery" is indicated. According to Hayden's methodology, goods, services, funds, people, etc. flow through the system described by the SFM. The categories listed in the rows of the matrix deliver what flows through the system to the category in the column. For example, there is an "X" in the cell located at [D02, D01] in the matrix. This indicates that the row category, Regional service availability, makes a delivery to, or affects, the column category, Local service availability. While every cell indicating a delivery has unique and valuable information, there are two groups that are of particular interest. The first is the differences

in how service availability is affected by social institutions versus technology. The second is the vast array of deliveries into intangible costs.

Even though many rural places in Alaska do not have physical health-care facilities, most do have high-speed Internet service via satellite communications. Technology, then, has made a dramatic difference in health-care delivery in rural Alaska (Berman & Fenaughty 2005). This technology allows for teleconferencing between patients and medical professionals in different locations, expediting some services. Local service availability as a technology factor (E01), therefore, delivers into local service availability as a social institution (D01) in the SFM. The technology aspect of service availability also delivers into the nominal explicit cost of the service (D04) where a physical facility might not exist, whereas the social institution aspect of service availability does not. These sorts of distinctions are made abundantly clear by use of the SFM.

Of the twenty-seven characteristics analyzed in the SFM, seventeen of them make deliveries into intangible costs (D10), making that category a dominant force in the SFM. Intangible costs are often neglected in empirical analysis because objective measures for them are absent. The SFM indicates that it would be a serious mistake not to take into account the non-monetary costs of service access barriers. In the indices that are created from the information in the SFM, proxies should be sought to represent intangible costs because they are such a large part of the total social cost of service access rigidities.

The SFM informs the creation of service access barrier indices. Following Hayden's paradigm, the data points and weights afforded individual components of an index are determined by the interrelation of the categories in the matrix. The final information included in an index is somewhat limited by the availability of data. Nevertheless, the SFM helps to identify which data are relevant.

Access Rigidity Indices

Condensing information on access rigidities into a singular expression is convenient and useful for empirical analysis. Following the example of the Human Development Index (Fukuda-Parr & Shiva Kumar 2003: 245–253), access rigidity indices for regions (Census Areas) in Alaska are created. There are two broad categories of indexes: those measuring the *absence* or *deprivation* of a characteristic and those measuring the *presence* or *capability* of a characteristic. In the former case, the general equation is,

$$Z_j = \left(\frac{1}{I} (\sum_i^I X_i^\alpha) \right)^{\frac{1}{I}}$$

and the latter equation is,

$$Z_j = \left(\sum_i (\omega_i)(X_i)^{1-\varepsilon} \right)^{\frac{1}{1-\varepsilon}}$$

In equation (1), Z is the measured index calculated over "I" components (X) for a particular place "j." The weighting factor, α, gives larger importance in the index to larger numbers. Therefore, this index is useful in measuring a rigidity that exists—the absence of access. A higher index number indicates more difficulty in receiving the service.

In equation (2), Z is the measured index calculated over "I" components (X) for a particular place "j." The nominal weighting factor is ω for each component. In addition to ω, each component is also weighted by "1-ε," effectively penalizing smaller numbers. In equation (2), therefore, a smaller index number indicates a greater difficulty (barrier) in receiving the service in question.

Each component, X, is calculated either as an incidence percentage or as a deviation from goalpost boundaries. As in Fukuda-Parr and Shiva Kumar (2003: 247), deviation calculations are,

$$X_i^{calc} = \left[\frac{X_i - X^{low}}{X^{high} - X^{low}} \right]$$

The high and low goalpost values are determined on a case-by-case basis and usually reflect observed maximum and minimum values.

Following the basic guidelines provided by the Human Development Index and the indications of the Social Fabric Matrix, preliminary estimates of service access rigidity indices for each Census Area in Alaska were calculated. Because the indices are preliminary estimates, the numbers themselves are not shown (detailed discussions of the creation and calculation of the indices can be found in Edwards 2009a–c). Instead, Table 3 presents the ranks of the indices by Census Area. Each of these numbers measures the presence of a rigidity, so a higher number indicates greater difficulty in receiving the service. In addition to the service access rigidities indices, Table 3 also includes median income, the poverty rate, and ranks of two migration

preference indices for comparison. Fig. 2 is a map of census areas to help position geographically the index rankings.

Table 3. Ranks of Access Rigidities Indices (c. 2000)

Region (Census Area)	Median Income*	Composite Index‡	Health Index‡	Justice Index‡	Safety Index‡	Percent in Poverty†	Migration Preference+	Migration Out+
Aleutians East	13	26	24	26	26	13	11	4
Aleutians West	3	27	26	27	27	18	26	8
Anchorage	4	1	1	2.5	2.5	4	1	1
Bethel	25	8	6	12	13.5	5	27	15
Bristol Bay	7	16	7	19	16	26	16	26
Denali	6	17	8	19	19	3	15	16
Dillingham	18	22	15	19	21.5	1	9	11
Fairbanks North Star	11	5	5	2.5	5.5	24	7	2
Haines	21	14	16	19	10.5	7	4	13
Juneau	2	3	4	1.5	2.5	17	5	5
Kenai Peninsula	16	4	3	7.5	2.5	2	3	3
Ketchikan Gateway	9	9	17	19	5.5	16	18	7
Kodiak Island	5	11	25	7.5	8	8	23	19
Lake and Peninsula	24	23	23	19	21.5	23	10	27
Matanuska-Susitna	10	2	2	2.5	2.5	15	2	6
Nome	19	7	11	7.5	10.5	21	21	18
North Slope	1	18	13	7.5	24	9	12	21
Northwest Arctic	17	21	18	7.5	25	20	20	17
Prince of Wales-Outer Ketchikan	22	12	14	19	10.5	19	8	20
Sitka	8	6	10	7.5	7	6	22	10
Skagway-Hoonah-Angoon	20	19	9	19	20	11	25	25
Southeast Fairbanks	23	15	19	19	10.5	22	6	14
Valdez-Cordova	12	10	20	12	13.5	10	13	22
Wade Hampton	26	20	21	19	15	27	24	12
Wrangell-Petersburg	15	13	12	12	18	12	19	9
Yakutat	14	24	27	25	17	14	17	24
Yukon-Koyukuk	27	25	22	19	23	25	14	23

*Ranks based on real (99) dollars household income, source: US Bureau of the Census; Alaska Economic Trends; ISER; †Edwards and Natarajan (2008); ‡Edwards (2009a–d); +based on data in Edwards (2007).

In Table 3, Median Income is ranked from the highest income to the lowest, Percent in Poverty is ranked from the lowest to the highest poverty level, and the indices are ranked from the lowest measured rigidity to the highest. In each case, a lower rank number is preferred (less measured poverty, higher measured income, less measured service access rigidity, greater tendency to migrate toward a place, less tendency to migrate out). North Slope is ranked first for median income and ninth for poverty, but eighteenth for service access rigidity by the composite measure. Conversely, Fairbanks North Star is ranked fifth for the composite service access rigidity but twenty-fourth for poverty and eleventh for median income. In other areas, the rankings are more even. Sitka, for example, is ranked in the top half of the rankings by all measures and Wade Hampton is in the bottom half of the rankings by all measures (for more discussion, see Edwards 2009d).

A closer look at the individual service access indices shows that, for the

Fig. 2. Alaska census areas. Source: Alaska Bureau of Vital Statistics, 1999 Annual Report.

most part, they move together. At the same time, there is enough variation to demonstrate that a separate accounting for specific service access rigidities is productive. These differences in the separate indices might prove useful in explaining the complex dynamics of some observed economic decisions in Alaska. For example, there are extremely high rates of both in- and out-migration in some of the Census Areas in Alaska that are difficult to account for on the basis of common economic measures such as jobs, poverty, and income (Edwards 2007). Perhaps part of the explanation is due to regional amenities, or barriers to some amenities, like healthcare, justice, and safety (Edwards 2009d).

Conclusion

No single measure or approach to examining well-being will offer a complete picture. Simply because income-based measures conceal other important elements of well-being does not mean that they should be ignored entirely. At the same time, other information, like service access rigidities, should not be ignored simply because they are difficult to quantify or because they are not exhaustive. Integrating all relevant information gives the best overall picture. Beginning with Sen's conceptualization of well-being and then employing Hayden's Social Fabric Matrix, non-income factors directly relevant to service access rigidities are identified that are not otherwise nominally obvious. In this way, the indices created from the analysis contribute to further understanding of place-level well-being in Alaska, at least at the Census Area level.

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DAVIN HOLEN

A Resilient Subsistence Salmon Fishery in Southwest Alaska
A Case Study of Fish Camps in Nondalton

ABSTRACT Harvesting and processing salmon is a significant subsistence activity for the residents of Nondalton, a predominantly Dena'ina Athabaskan community in Southwest Alaska. The Nondalton fishery, as a resilient social-ecological system, has had to adapt to change in order to maintain continuity over time. This paper will explore adaptation in a resilient salmon fishery through an ethnographic research project that documents the socio-cultural, economic, and environmental circumstances of fishing, mainly sockeye salmon (*Oncorhynchus nerka*), in the Kvichak Watershed of Southwest Alaska.

Introduction

Harvesting and processing salmon is a significant subsistence activity for the residents of Nondalton, a predominantly Dena'ina Athabaskan community in southwest Alaska. The Nondalton salmon fishery is a complex social-ecological system; a system that involves humans as part of the natural system. The fishermen in Nondalton must negotiate socio-cultural, economic, and environmental circumstances in order to continue summer fishing activities. The Nondalton fishery, as a resilient social-ecological system, has the ability to adapt to change and maintain continuity over time, while maintaining ecological, economic, and social sustainability (Berkes *et al.* 2003: 15). The fishermen have adapted fisheries technologies and harvest strategies so that the fishery is self-

managed and they meet their harvest goals, while ensuring the sustainability of the salmon resource.

This paper will explore adaptation in a resilient salmon fishery through an ethnographic research project that documents the socio-cultural, economic, and environmental circumstances of fishing, mainly sockeye salmon (*Oncorhynchus nerka*), in the Kvichak Watershed of Southwest Alaska (see Fig. 1).[1] This paper will focus only on one of the study communities, Nondalton.

Following a short summary of Nondalton and the fishery, as well as the study methods used in this project, the discussion will center on the major socio-cultural, economic, and environmental circumstances that the residents negotiate during subsistence salmon fishing activities. The residents' adaptation of an efficient fish technology, seining, will also be discussed. The goal of the project was to document information that could help researchers understand how the residents use their knowledge of salmon and the environment to make decisions about when to harvest, where to harvest, and how much to harvest. Much of this knowledge sharing occurs at fish camps.
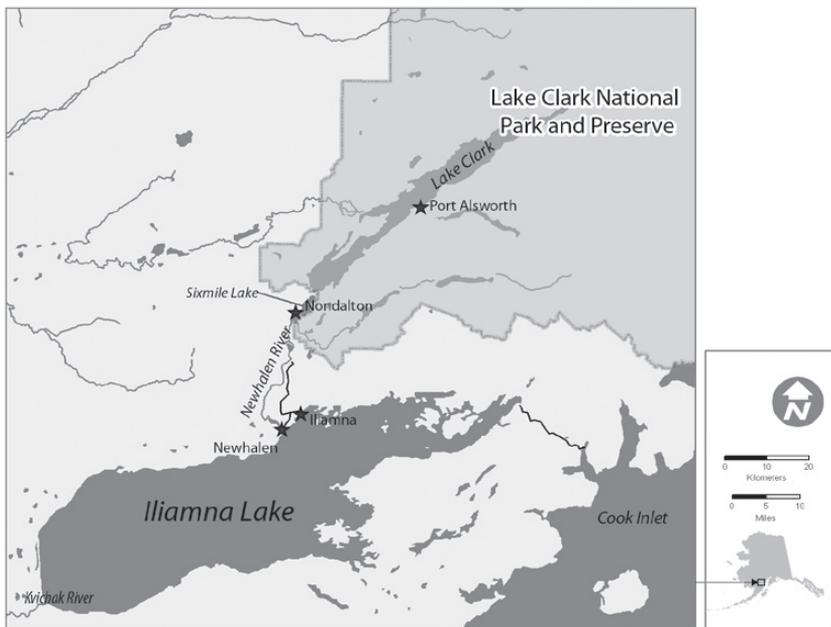

Fig. 1. Communities in Southwest Alaska that are part of the Kvichak Fish Camp Ethnographic Project. Map by Davin Holen.

The Community of Nondalton and the Kvichak Salmon

Nondalton is a predominantly Dena'ina Athabaskan community of 151 people (see Table 1). Alaska's Athabaskan people inhabit the sub-Arctic interior and many communities are situated on streams and rivers where large runs of salmon occur. Nondalton is located on the northern shore of Sixmile Lake, a small lake near the outlet of Lake Clark (Fig. 1). Sixmile Lake flows downstream into the Newhalen River, which flows into Iliamna Lake, Alaska's largest lake, which then empties into Bristol Bay through the Kvichak River. Kvichak River sockeye salmon returns are thought to be the largest in the world and the watershed acts as a nursery for Bristol Bay anadromous fish. The salmon resource is a major contributor to the area's subsistence economy. In Nondalton, salmon accounts for over 60 percent of the wild food harvest by the community in terms of pounds of usable weight (Fall *et al*. 2006). The majority of Nondalton residents spend most of the month of July fishing for sockeye salmon in Sixmile Lake.

The fish camps used by the Nondalton residents are located at the mouth of Sixmile Lake where it empties into the Newhalen River (see Fig. 1). Maps label this place "Fish Village." The residents simply call it "fish camp."

Table 1. Demographic characteristics of households in Nondalton
Salmon harvest surveys, 2007 & 2008 study years.

Characteristics	2007	2008
Number of Households		
Total	36	39
Household Size		
Mean	3,62	3,9
Sample Population	94	124
% Sampled	72,22%	82,1%
Estimated Community Population	129,72	151
Age		
Mean	32,30	31
Alaska Native		
Estimated Households (Either Head)		
Number	34,50	38
Percentage	96,15%	96,9%
Estimated Population		
Number	110,40	132
Percentage	85,11%	87,1%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2008 & 2009.

[1] Minimum household age of 0 indicates newborn in study year.

Study Methods

The principal social science research methods used in this project were participant observation, key respondent interviews, and in-person household surveys. (1) Participant observation was the primary method used. The research team helped the residents of each community to retrieve nets, process fish, or do other jobs as instructed by fishermen during the salmon harvest. The researchers experienced the fishery firsthand, making observations while asking questions. The researchers were present throughout the Nondalton subsistence sockeye salmon fishery in July 2007. (2) Key respondent interviews were conducted with knowledgeable fishermen in each of the study communities, with eight key respondent interviews conducted in Nondalton. The respondents were chosen by the researchers during participant observation. The researchers met to discuss potential respondents and decided on respondents that represented a wide range of ages and participation in the fishery. The researchers also used recommendations from local residents and community leaders. These post-season interviews occurred in October 2007. (3) Systematic household surveys were conducted to document demographic information and salmon harvests in Nondalton in February–March of both 2007 and 2008. In-person household surveys were conducted and there was an attempt to interview every household in the community (see Table 1 for sample size). In addition to recording the basic demographics of each household, as well as its amount of salmon harvested, the respondents were asked about gear types, harvest locations, and offered the opportunity to express their comments and concerns.

Adaptive Strategies for Negotiating Socio-cultural, Economic, and Environmental Circumstances Related to Subsistence Salmon Fishing

Every summer Nondalton families must make decisions about salmon fishing, including when to harvest, where to harvest, and how much to harvest, while taking into account socio-cultural, economic, and environmental circumstances. This discussion will present some circumstances that the residents must negotiate when making important decisions every summer.

There are two major socio-cultural factors, noted by both residents and resource managers, that could potentially affect the long-term resilience of the subsistence fishery: children and young adults are not actively participating in subsistence salmon fishing as they have in the past, and, since summer is often the time when seasonal employment is available, some residents miss the subsistence fishing season due to work obligations. During

the summer school break youth participate in activities from work, various camps, and family visits to urban areas, to a range of other activities. The researchers found that although youths' free time is sometimes limited, some do participate in salmon fishing, as was observed during participant observation. The researchers visited each camp in Nondalton; many had children or young adults present. Children told the researchers that that they do enjoy going to the fish camps. In Nondalton, the parents of one family said that it was their children who gave the impetus to travel early to the fish camp every summer. The entire family stays at the fish camp until the salmon harvest is finished; the father uses a boat to commute to the village every day to work.

But the researchers overall noted that there are fewer children at the fish camps each year. The ancestors of the Nondalton residents have been subsistence fishing in the area for about 1500 years (Kari in Townsend 1981; Kari & Fall 2003). In order for the fishery to continue a new generation must take over. A growing number of salmon fish camps are comprised of older couples or single adults. This is perhaps due in part to a gradual decline in the number of children in the community. Fig. 2 illustrates a gradual decline in the number of children enrolled in school in Nondalton over the past 10 years, based on records from the Lake and Peninsula School District. This data supports local observations that there are fewer children in the community, and therefore fewer children attending the fish camps each summer. This trend in school enrollment in Nondalton has been occurring for some time, according to the Lake and Peninsula School District, although school enrollment in the neighboring communities of Iliamna and Newhalen is flat, and in Port Alsworth school enrollment has been steadily increasing.

Fishing time may also be limited due to work obligations for adults and teenagers. Many residents have part time jobs or summer seasonal jobs. These types of jobs include commercial fishing in Bristol Bay, fighting fires in the interior of Alaska, or construction work (Fall *et al.* 2006). However, the researchers noted that many residents of Nondalton do make an effort to spend at least some time every summer harvesting subsistence salmon as a family, even if this time is limited. In addition, even if some family members are working outside the community, those who are able to go to a fishing camp throughout the subsistence salmon harvest season often harvest enough fish to share with those who are unable to fish due to work obligations.

Financial factors play a large part in the decision-making process of Nondalton families. Salmon harvest goals are affected by two related factors: (1) the necessity of harvesting enough salmon to last until the following salmon season, and (2) the cost of fishing. The first factor means that

Fig. 2. School enrollment, preschool & K-12, 1999 to 2008
Nondalton compared to neighboring communities.
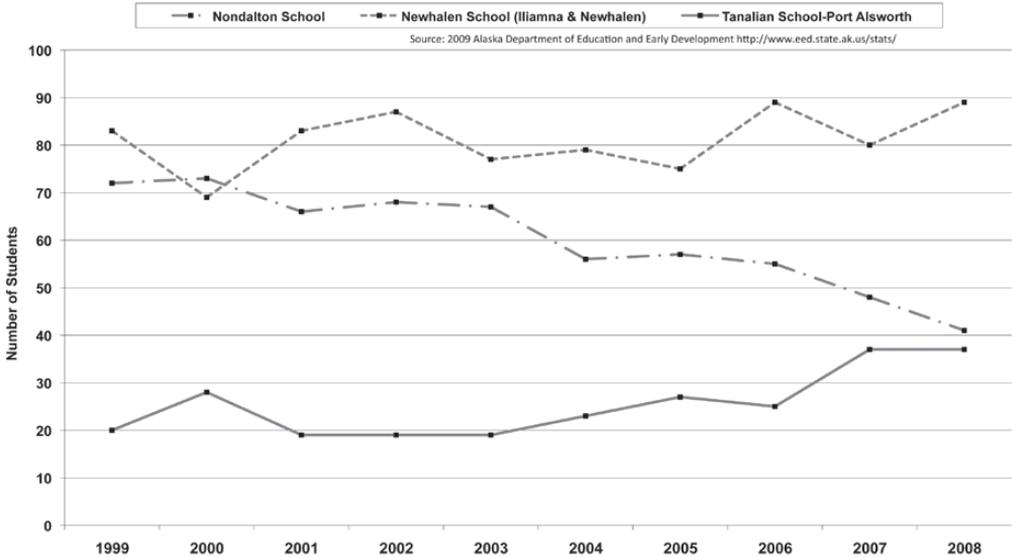
families have enough salmon to eat without buying the majority of their meat from a store, which may be very expensive in rural Alaska due mainly to freight costs. This economic factor is also related to environmental circumstances, such as fewer caribou (*Rangifer tarandus)* and moose (*Alces*

Table 2. Salmon harvest per capita, Nondalton, 2007 and 2008.

	2007				2008		
		Per capita				Per capita	
Population	Total Salmon Harvest	Salmon Harvest	Pounds per capita[1]	Population	Total Salmon Harvest	Salmon Harvest	Pounds per capita[1]
130	9 612	74	346,8	151	10 241	68	317,1

[1]Conversion factor = 4.68 pounds usable weight

alces) in the area. In this study residents related that fewer caribou and moose in the area prompted them to set their salmon harvest goals a bit higher than in recent years.

To answer the question "Do residents in Nondalton have enough salmon to last throughout the winter?" the in-person harvest survey asked whether the household's salmon harvest during the study year met its needs. During the 2007 fishery, 88.5 percent of Nondalton households related that their needs were met, and in 2008 (although the harvest was lower than in 2007 [see Table 2]), 90.6 percent said the harvest met their needs. Both during the

surveys and during the key respondent interviews, the Nondalton residents said that they had to adapt to environmental circumstances, namely the absence of moose and caribou, and as a result, they had set their salmon harvest goals higher. In recent years, moose and caribou have been scarce. Caribou, especially, have not been readily close for several years (Holen *et al.* 2005; Fall *et al.* 2006; Krieg *et al.* 2009). Hunting caribou takes a tremendous investment in time and money, not to mention faith: hunters must have faith that once they arrive at the caribou hunting grounds, the caribou will still be present. The residents often travel long distances by all-terrain vehicle ("four-wheeler") or snow machine to areas where caribou have been seen. For example, Nondalton residents will travel to Lime Village, a 5-hour journey by snow machine directly north of the community, if they hear from their Lime Village kin relations that caribou are in the area. The residents thus must negotiate the expenditures of time and money with the possibility of harvesting a caribou. The residents say that moose have also been scarce in recent years; however, the residents say that they will not travel as far from home to look for a moose. After the recent increase in gasoline prices (Fig. 3), many residents said that it was "too costly" to travel to caribou hunting grounds or to search for a moose. As a result, households apparently focus their harvest efforts on salmon.


Fig. 3. Fuel price per gallon in US$ at a station in neighboring Iliamna. Residents often travel the 18 miles by road to buy fuel at this station. Prices rose so quickly in 2007 that the dollar amount was often replaced. Photo: Theodore Krieg.

The second factor is the cost of fishing. Families need cash income in order to pay for boats, gasoline, fishing-nets, and the general upkeep of fish camps. Some households may have one or several adult family members who work full-time all the year round, and who receive little summer vacation time. Or, some family members may work long hours in the summer commercial fisheries in Bristol Bay or in wildfire control efforts. The summer months, besides being an important time for harvesting and processing a large part of the household's annual subsistence needs, are also the months when cash income opportunities are more numerous.

Families involved in commercial fishing in Bristol Bay usually miss the peak of the subsistence salmon fishery in their own communities. Due to the cost of shipping salmon to the village, few households in Nondalton retain a portion of their commercial catch for subsistence uses, as do many commercial fishermen who live nearer the fisheries. Nondalton residents also say that they prefer the taste of locally caught salmon and that they would rather subsistence fish the end of the salmon run in Nondalton after the commercial fishery has ended in Bristol Bay.

Having time to deal with shifts in seasonal salmon run timing and abundance is a factor that influences a household's achievement of harvest goals. Households that can set aside late June in order to prepare for fishing, all of July in order to fish and process salmon, and, if the salmon run is late,

Fig. 4. Salmon harvest by gear type, Nondalton.
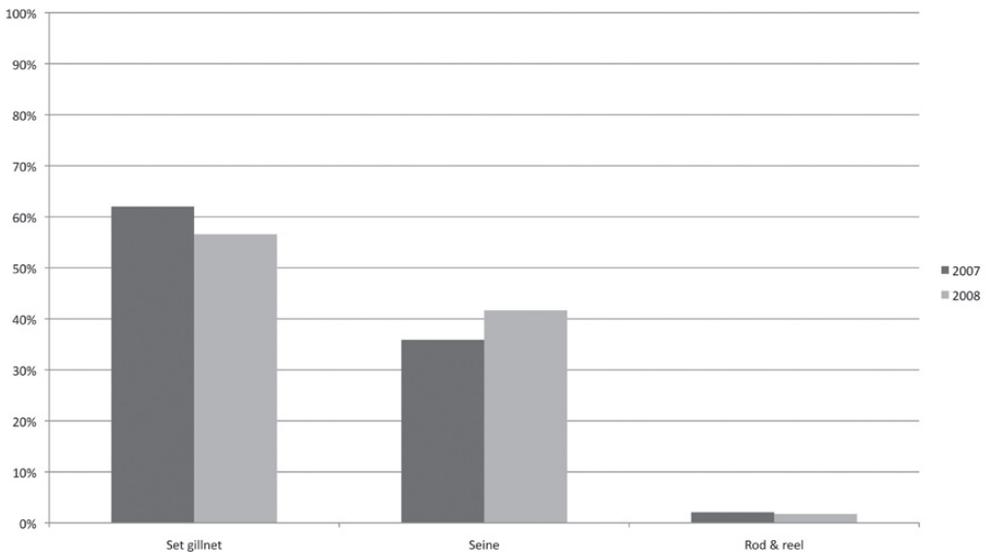
sometimes early August in order to fish and process salmon, are able to meet their harvest goals. However, if a household is able to fish for only a short period of time, or only during weekends due to work obligations, which is common in neighboring Port Alsworth for example, it may not be able to reasonably meet its harvest goals. In addition, households are able to harvest only the amount that matches their mode of fish processing.

Environmental circumstances, such as inclement weather, may also be a major factor affecting a household's ability to adequately process salmon. The processing method observed in Nondalton, which includes hanging fish to dry out-of-doors prior to canning them, facilitates the processing of larger batches of salmon all at one time. This method, however, may not be the best method for a household with minimal time, especially if there is inclement weather. During inclement weather and extended periods of rain, more frequent and smaller batches of salmon had to be harvested and processed by sending freshly cut salmon directly to the smokehouse, in contrast to the methods employed during dry weather, in which larger harvests are slowly dried outdoors on numerous racks before placement into much smaller smokehouses. This salmon processing adaptation allows fishermen to meet their harvest goals. In addition, residents have also adapted to inclement weather by using a seine net, as discussed below, which provides selectivity in harvest amounts. Those who can spend more time in camp are able to wait for weather more conducive to seining, harvest smaller amounts of salmon, and then finish the processing of these small batches in the smokehouse. The summer of 2008, for example, was described by respondents as being wetter and colder than the summer of 2007 (the harvest was also smaller, as demonstrated in Table 2). However, as discussed above, most residents related that they were still able to meet their harvest goals. The residents had to spend more time at fish camp processing their salmon harvest in smaller batches. Even though the residents were also affected by weather in 2008, according to the salmon harvest survey, 90.6 percent of households were again able to meet their requirements. Extended kin networks in Nondalton ensured that residents who were unable to harvest enough salmon received from family members what they needed until the next year's salmon season. During the household harvest survey, 75 percent of households reported giving away salmon; the same percentage reported receiving salmon.

Seining

Seining for sockeye salmon may be considered an adaptive strategy for negotiating socio-cultural, economic, and environmental circumstances, as well as an adaptation of technology that has led to the resilience of the

Nondalton salmon fishery. As will be discussed later, it is also an example of a sustainably self-managed fishery. The results in this section are based on all three research methods listed in the methods section, above.

Briefly, the Nondalton residents use three methods for harvesting salmon in Sixmile Lake: gill nets, rod and reel, and seine nets (Fig. 4). Gill nets are still the most common method. A 10-fathom net is anchored to the shore, a buoy is attached to the far end, and this end anchored in the lake. As the fish migrate, they try to swim through the net. They cannot swim backward, so they are usually caught by their gills. Residents also use rod and reel to harvest sockeye salmon; however, this method is classified by resource managers as "sport fishing" and by most residents as recreation.

Seining, as a fishing method, is an example of adapting fishing gear to a particular environmental situation or context. Although illegal until 2007, a few families in Nondalton had participated in seining for over twenty years. According to many Nondalton residents interviewed for this project, seining is the best way to fish.

A gill net left overnight might catch too few fish or too many fish. In addition, the fish can be cut or bruised by the net mesh. The damaged sections of the fish must be removed before the fish are dried, or the fish will spoil. A seine net, with its smaller mesh size and thicker net material enables fishermen to take only what they need and minimizes damage to the fish. Fish are captured by the net, not caught in the net. In addition, fishermen can select which fish they would like and let the rest go. Fish that look ready to spawn, small fish, or fish that are thought to be extremely healthy "large breeders" are often released.

Although seining as a method was illegal in the Kvichak Watershed until 2007, when regulations were changed to allow its use, one family has used a seine net since 1985. Presently, this family has the only seine net in Nondalton. Respondents said that there used to be a second net, owned by the village, used as a cooperative community net. However, seine nets require frequent maintenance and their use extreme care. Because of the smaller mesh, the net captures more debris, and holes must be repaired often. Respondents said that no one took care of the community seine, so it fell into disrepair. The net owned by the family is well maintained. The family takes the net out to fish for and with other families who request help in harvesting salmon. This family said that the only difference between the time seining was illegal and now is that they can now use the seine during the day, instead of using it in stealth at night.

Seining is also a community activity, one that takes many people to ensure that it is done properly. Gill nets are stationary nets, requiring the labor

Fig. 5. Seining on Sixmile Lake, 2007. Photo: Davin Holen.

of only one or two people to set and then remove fish. Seining takes many people. In the cases observed by the researchers, no fewer than six people were involved (see Fig. 5). In the Nondalton community with its relatively small household size (see Table 1), this means that cooperation across more than one nuclear family is needed.

As observed by researchers, in order to harvest salmon with the seine net, one end is pulled into shore by a skiff and given to at least two people to hold. The boat driver then moves into the water accompanied by at least one other person whose job it is to make sure that the net is deployed smoothly. The fish are circled, and the net handed off to at least two additional people on shore. The number of people needed to deploy the net and the distance the net is deployed from shore depends on the number of fish present. In one case, the researchers observed that there were so many fish that the net was taken out only a few feet before the other end was returned to shore and handed off. One person at each end makes sure the lead lines, dragging on the bottom, stay on the bottom to ensure a complete capture of the fish. The second fisher at each end holds the top of the net above water. Both sides then pull the net to bring the fish close to shore (see Fig. 5). The boat

is stationed alongside the outside edge of the net and serves as a third anchor with a small portion of the net ideally caught by the oarlocks. Several people then step into the water, grab the thrashing salmon, and throw them into the boat. The fishermen holding the net at each end slowly pull the excess net toward shore in order to maintain a tight seal as the fish try to push outward to get away. During the activities observed by the researchers, the boat driver counted the fish as they were being loaded, and when the desired amount had been taken, the net was dropped to the bottom and the rest were released. If a salmon looked as if it was not going to swim away, it was added to the boat. In this way, accurate record keeping occurred, which ensured that no more fish were taken than could be processed.

Seining is an example of how residents use the best available technology, even though it was, until recently, illegal. The residents of Nondalton, even those that do not use a seine net, say that it is the best method for subsistence fishing because it ensures minimal waste.

Seining is also a method that necessitates considerable knowledge of the environment. The residents know the best location for using a seine net, taking into account such factors as fish behavior, changes in water levels, and changes in lake topography, or bathymetry. The Nondalton residents seem to prefer places where fish school, where a boat can be easily landed, and where the water is shallow enough for people to stand in. Annual changes in lake water levels must be accounted for. In 2007, for example, respondents said that the water levels were several feet below normal: their boat docks at the fish camps were dry. Reduced water levels and changing water flow also appear to affect the locations of fish schools. The residents must also adapt their harvest strategies based on bathymetry. The glaciers at the headwaters of the Kvichak watershed deposit silt into Lake Clark and Sixmile Lake. Residents say that the amount and composition of the silt have changed over the past 50 years because many glaciers have completely melted and no longer deposit silt into the streams. One resident who has fished a location for over 50 years noted that areas which used to have lots of grasses and weeds, in which fish schooled, are no longer present because the nutrient-rich silt has dissipated. Strong currents move silt deposits from year to year and thus the residents must adjust their fishing efforts based on these changing water levels and lake bathymetry.

Discussion

Observing fishing activity in Nondalton contributes insights about traditional ecological knowledge (TEK)—living knowledge based on the actions and activities of a group during their experiences and traditions of engaging the social and natural worlds (Usher 2000: 185). In the case of the Nondal-

ton fishery, there is a way to include TEK into a management strategy by requiring that local values and practices be included in management (Nadasdy 1999: 13). Both local fishermen and resource managers share the same goal: sustainable fishery. Seining supports sustainable fishery because the residents harvest only what they need and the seine nets do not damage the salmon. By self-managing the fishery, the fishermen ensure that the fishery is resilient and the resource remains sustainable.

Self-management is a strategy that manages resources with respect for the land and wildlife. According to Feit (1988: 74), self-management systems "are determined at the local level by reference to community-based systems of knowledge, values, and practices." Self-management is presently not a recognized Alaska management practice; rather it is part of the local culture. The Nondalton residents use best practices to meet their harvest goals without taking more than can be processed by small family and kin related groups. Self-management decisions are made in a changing social and natural environment and the residents must continuously adapt. By negotiating these changes from year to year, residents are able to adapt their actions and decisions to ensure resilient fishery (Manseau *et al.* 2005: 153). Residents also reaffirm the importance of fishing in accordance with their cultural tradition and collective environmental knowledge.

Conclusion

The subsistence economy of Nondalton has changed over time, adapting to circumstances such as the varying abundance of salmon and the changes in weather, both of which affect the ability of fishermen to adequately process their harvest. Salmon fishing remains a large part of the harvest of wild foods in this predominantly Dena'ina Athabaskan community (Fall *et al.* 2006).

As in other parts of the Arctic, Nondalton youth have expressed frustration at being excluded from subsistence activities, during which they would learn the skills necessary to fully participate (Myers *et al.* 2005: 35). However, young adults with new families in Nondalton relate that as their children get older, they participate more each year in fish camps. Families, especially those with school-aged children, are important for the continuity and resilience of the Nondalton salmon fishery, and the community as a whole.

The seine is an example of an adaptation of technology that has supported self-management of, and therefore the sustainability of, the salmon resource. Cultural norms of right conduct in this predominantly indigenous community necessitate taking only what one needs and using all of the resource. As discussed above, effective seining requires considerable knowl-

edge of the environment and the resource. In this case TEK is crucial for the success of using this adapted technology for harvesting salmon.

The sockeye salmon fishery of Nondalton is a complex social-ecological system that is shaped by sociocultural, economic, and environmental circumstances where adaptation is necessary to maintain a resilient system. Some residents have adapted the technology for its efficiency and for its conformance with cultural norms of right conduct in taking only what is needed. Nondalton fishermen who are currently not using the seine relate in interviews that they are interested in adapting this technology. Summer subsistence salmon fishing allows residents from all parts of the community to participate in a continuing cultural activity and fosters a sense of belonging to the community.

NOTES

[1] This project was funded by the Office of Subsistence Management, U.S. Fish and Wildlife Service. The Division of Subsistence, Alaska Department of Fish and Game acted as Principal Investigator and partnered with researchers from the Bristol Bay Native Association and Lake Clark National Park and Preserve.

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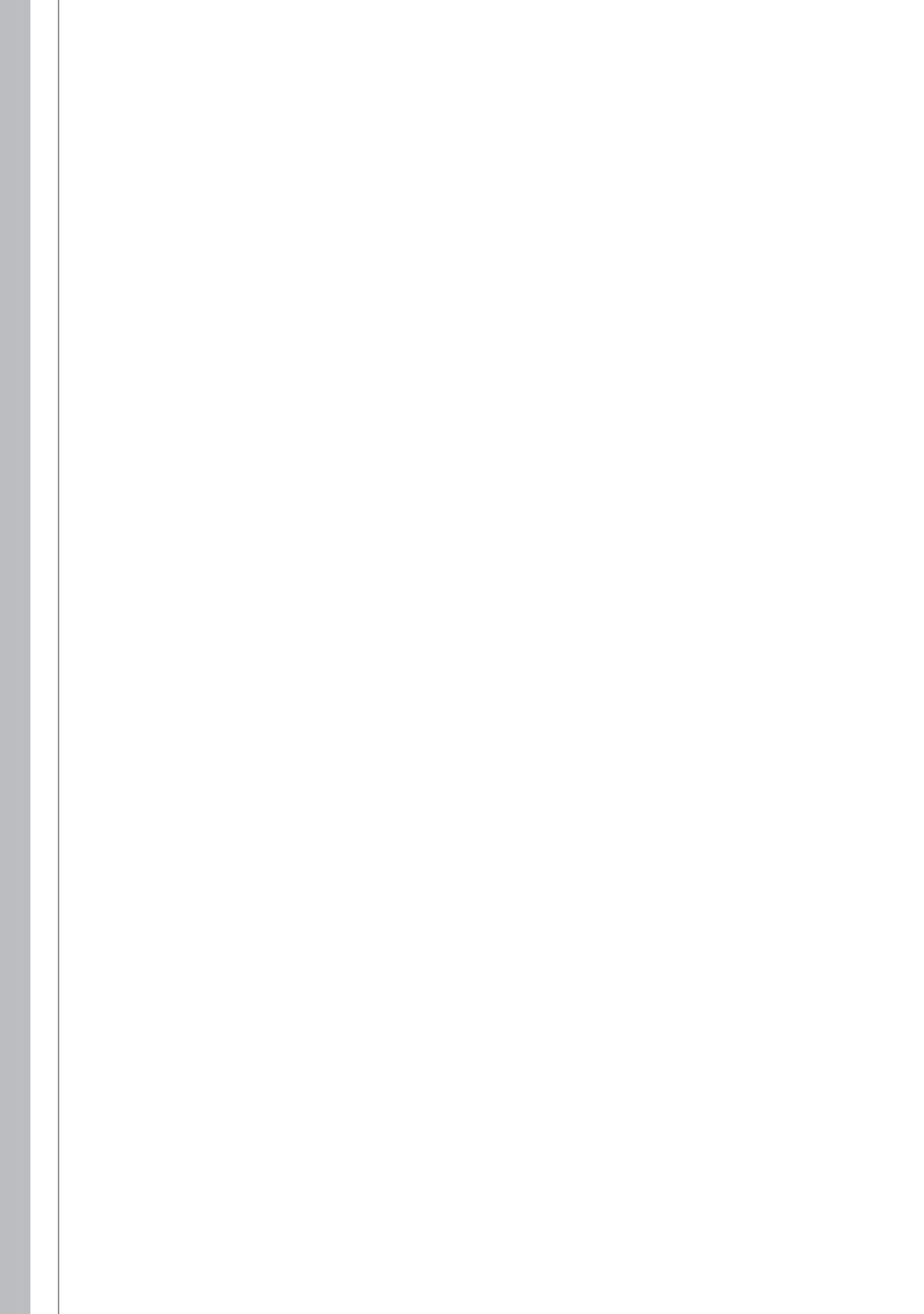
Miscellanea: Notes / Notizen

Footprints on the Edge of Thule: Landscapes of Norse-Indigenous Interaction
A Major New Research Programme

Introduction

In 2001 in response to a call for proposals on the topic of "Long-term settlement in the Ancient World" under The Leverhulme Trust Research Programmes Scheme, several of the current authors submitted a successful application for a project "Landscapes circum-*Landnám*: Viking settlement in the North Atlantic and its human and ecological consequences." Fundamental to this was the examination of the nature of human impacts on the landscapes of what were then essentially unoccupied North Atlantic islands (the Faroe Islands, Iceland and southern Greenland, see Fig. 1), and the use of a suite of interdisciplinary palaeoenvironmental techniques to address questions of change. The project had a 5-year currency (June 2002–May 2007); papers relating to that project are still being published, and more than 80 refereed publications have already appeared.

Following a review by The Leverhulme Trust, we were invited to submit a proposal for further support with the recommendation that while a new award, if granted, should be "related" to the first, it should *inter alia* consider new questions in different geographical and thematic areas. Consequently, a proposal submitted by the first four authors of this paper sought to develop the notion of Norse impacts *via* not simply the signal deriving from the Norse period *sensu stricto*, but also any subtle indications of Norse-indigenous interactions in peripheral areas of the near-Arctic North Atlantic region, including Greenland and northern Scandinavia. We aimed to build upon and develop further the lessons and understanding acquired from the initial *Landnám* project to:

- examine the landscapes of interaction between incoming and indigenous groups around the Atlantic Arctic periphery;
- investigate the human and environmental interactions prior to, and set in motion by, successive colonization events;
- assess local interactions between environment, settlement, economy and subsistence within the context of medieval and later climate change;
- consider the impact of European demand for commodities on the biota of the near-Arctic North Atlantic, and the resulting adaptation of subsistence hunter-fisher and herding systems;
- foster international and interdisciplinary collaboration, including the encouragement of a new generation of researchers.

The proposal was successful and support for the new project, "Footprints on the edge of Thule: Landscapes of Norse-indigenous interaction," was granted for a 4-year period (September 2007–August 2011). Within our own institutions, the project involves most directly 14 researchers (including 5 post-doctoral fellows and 5 PhD students). In addition to this, there is valuable cooperation from within the UK and internationally.
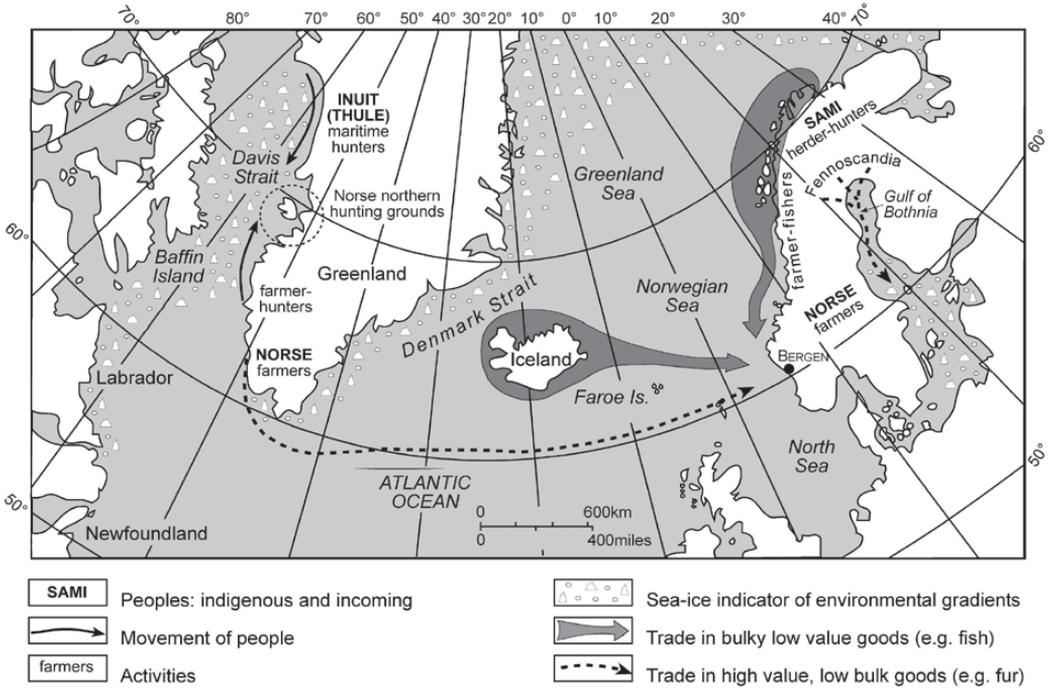

Fig. 1. The North Atlantic and adjacent areas showing the location of selected peoples, places and activities.

Background

The term *Thule* (Θούλη) is deeply engrained in the history of the Arctic. Its originator, the Massilliot Pytheas, writing in the fourth century BC, refers to a "congealed" ocean beyond it. The Arctic explorer Fridtjof Nansen took this to be the pack-ice off the coast of east Greenland, placing Thule, as several medieval scholars had done previously, in Iceland. As a metaphor, from Seneca's *Ultima Thule* onwards, it has become synonymous with the northernmost inhabited lands, usually the Arctic fringes of the North Atlantic World, from the northern Baltic to northwest Greenland. In Greenland, Knud Rasmussen applied the name to the base he founded in 1910 amongst the Polar Eskimo around Cape York, and he adopted the name for his "Thule expeditions" across the Arctic. The principal archaeologist accompanying him, Therkel Mathiassen, attached the name *Thule* to the material culture from sites that he excavated and the term is generally applied to sites of the precursors of the modern Inuit in Greenland and beyond. We use *Thule* in its widest sense to encompass medieval European expansion towards and within the Arctic.

Around the Gulf of Bothnia the lure was furs, whilst along the Atlantic seaboard of Norway the core commodity was dried cod, which provided the underpinning protein for the process of urbanisation further south. Across the Atlantic, Norse Greenland was settled by subsistence farmers, whose hunting grounds on the west coast across the Arctic Circle provided such prestige goods as furs and walrus ivory for Europe. In all these places, the Norse encountered other peoples. In northern Scandinavia, the landscapes largely lay in the hands of Sami hunters, who, with their few domesticated reindeer, enter history through Ohthere's (Ottar's) account of his journey to the White Sea. Through the medieval period, Sami groups were drawn progressively into the European economic system, adopting crops and extending their hunting economy to include larger herds of reindeer; native religion was replaced by Christianity and the boundaries between indigene and incomer became more blurred, as Russians, Swedes and Norwegians vied for control of the Scandinavian Arctic.

In Greenland the situation was different initially. The first documented archaeology in the Arctic lies in Erik the Red's recognition of the remains of palaeo-Eskimo (Old Norse *skræling*) artefacts in the southwest. Norse settlers moved into an abandoned landscape and early contacts with the Dorset peoples are enigmatic, as are those that came some time after AD 1150, as the bearers of the Thule Culture expanded southwards out of the High Arctic. With the demise of the Greenland settlements ca AD 1500, relations with Europe became intermittent, largely maintained through Basque, Dutch and English whalers, until Hans Egede arrived in the early eighteenth century and found only the ancestors of the modern Inuit.

Aspects of the Research Design and Methods

In exploring Norse-indigenous interactions on the Arctic fringe, examining the period of expansion and either abandonment (Greenland) or accommodation (Scandinavia) from ca AD 1000–1500 through new palaeoecological records, we are involved in attempts to define new climatic and economic constraints on environmental resource exploitation and to identify successful and failed patterns of resource exploitation in landscapes of interaction. European expansion into the Arctic, largely led by Scandinavians, began late in the first millennium AD and faltered with the climatic decline or the epidemics of the fourteenth century.

Among the hypotheses being tested are:

- the changing nature of land and marine resource use by the interaction of indigenous people and the "Norse" incomers will be evident in several of the palaeoecological indicators employed in this research;
- climate and environmental change will have influenced environmental resource availability and management;

and/or:

- trade in furs, skins, ivory, fish, and cereals will have significant impact on the way both indigenous and incoming societies develop;
- new patterns of resource exploitation emerged as a result of contact and assimilation.

Sites. Background and Selection

Southwest Greenland

The Eastern Settlement was the principal area of Norse activity in Greenland, where colonization endured the longest and where the final acts of Norse-Inuit interaction were perhaps played out. Although Norse and Thule archaeological sites in this region are largely non-complementary in their distributions—Norse farms are generally found in the interior, towards the heads of the fjords, whilst Thule camps occur in coastal areas—a "landscape of interaction" seems plausible for (at least) the region around Sandhavn (less than 2 km from the iconic Norse site of Herjolfsnes) where the ruins of both Norse buildings and Thule summer houses can be found. Results from Sandhavn will be compared with Norse "control" sites (for example farms from the inland region of Vatnahverfi, Eastern Settlement) and indigenous sites found amongst the skerries of the Western Settlement (for example Kangeq near Nuuk), in order to determine whether discrete environmental signatures can be assigned to each culture, and whether it is possible to separate these where both occur together.

The Gulf of Bothnia. Norrland, Northern Sweden

The problems of Norse and other group contact in the Swedish Arctic and contiguous areas of Norway, Finland and Russia are much more complex than the Greenlandic situation. The survival of many groups provides continuity but also poses a problem in disentangling interrelationships. This amalgamation has a long history extending back into the Bronze Age. At this stage, study sites are being selected from the region between Umeå and Jokkmokk. They will include Norse sites for which there is also an archaeological or historical record for a Sami presence, and areas of Sami occupation where there is evidence for key subsistence activities such as reindeer herding.

Atlantic Seaboard of Norway. Northern Norway and Finnmark

Two possible study areas will be examined in northern Norway and Finnmark. The first area consists of the hinterland of Vågen, Lofoten. Here there are ample marine and forage resources together with opportunities for marginal cereal production, allowing a range of integrated economic strategies. The introduction of commercial fishing operations during the twelfth century transformed the coastal landscape and led to increased cultural interaction with the indigenous Sami population. The demand for prestige items such as furs, and walrus tusks and hides, led to further integration. The second study area will be in Finnmark in the area around Berlevåg—a region of complex social and economic interaction among Norse, Sami and Russian, driving dynamic transitions in little understood patterns of environmental resource exploitation and change.

Summary of Principal Analytical Approaches

Chronology

This will primarily involve radiocarbon dating and associated modelling procedures (for example Bayesian statistics). Funding for 300 AMS ^{14}C dates is provided within the project budget.

Geomorphology
The geomorphological record contains an integrated signal of both natural and anthropogenic changes. This is being used to provide key constraints on models of changing climate as well as providing contextual information for detailed palaeoecological investigation.

Soils
In cultural landscapes the identification and analysis of relict soil properties makes a considerable contribution to understanding human activities on land surfaces. Soil thin sections are being used as the foundation for soil investigations.

Insects
Fossil insect faunas including components of the Diptera and Coleoptera are being examined with their modern counterparts. These data will inform reconstruction of anthropogenic and natural habitats.

Pollen and Spores
High resolution studies of pollen and associated environmental proxies (microscopic charcoal, loss-on-ignition, and fungal spores) found preserved in peat, lake and soil deposits are providing detailed palaeovegetational data and act as proxies for climatic and anthropogenic change.

Peat Geochemistry
The determination and quantification of lithogenic elements in peat is being used to identify different sources of soil erosion (which may be local or regional in origin) in response to vegetation change.

Climate, Environmental and Land Use Modelling
Modelling is being used to assess the implications of climate change for issues such as boat travel and the distribution of marine mammals. It is also contributing to the development of land use models that permit investigation of historical grazing management and productivities under variable environmental conditions. A scenario-based approach will also allow the development of agent-based modelling to the evaluation of landscapes of interaction, and different possibilities for subsistence, trade, conflict, and resource denial.

Concluding Points

We are less than half way into the "Footsteps on the edge of Thule" project, and its outcomes lie in the future. At this stage it is hoped that, through new, substantial, regional palaeoenvironmental records and numerical models, the study will provide better understanding of the historical ecology of incoming and indigenous populations in Arctic Fennoscandia and Greenland, independent of the often slight archaeological record. The multidisciplinary approach is intended to throw light on ways in which co-existing nomadic and farming groups interacted with available resources, and how such communities reacted to environmental and economic change. It will add to debates about the factors

contributing to societal success or failure in marginal environments. As land-scapes inherit the past, the development of a deeper knowledge of human inter-actions and evolving environments in sensitive Arctic and sub-Arctic systems has particular relevance to modern polar communities facing the challenges of conservation in a changing world.

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Integrating the Human Dimension in IPY 2007–2009
Reflections on the Achievements in Sweden

IPY 2007–2008 is the first International Polar Year where the human dimensions of the polar areas were integrated as a theme, thereby including the humanities and social sciences into the program. It is beyond doubt that this is a very important achievement, as it happens at a time when the people living in the polar areas, as well as globally, are becoming increasingly affected by the processes and phenomena that polar scientists are studying. The objective of this article is to describe and reflect on the work the Swedish Committee for the International Polar Year (SC-IPY) did to bring the human dimension into the Swedish IPY effort. What did the SC-IPY do and what were the results? My point of departure will be the conference Human Dimensions in the Circumpolar Arctic, which took place in Umeå 8–10 October 2008.

Historically, the international polar years, as well as polar research in general, have been dominated by the natural sciences. Thus, the decision of the ICSU/WMO joint committee for the IPY to include the human dimension in the current polar year was something new. On one hand it meant that the humanities and social sciences would be an integrated part of the scientific research efforts. On the other hand it meant that the IPY research would involve not only scientists coming from outside of the polar areas, but also the peoples living in the Arctic, in particular the indigenous peoples. This was a challenge and the SC-IPY took on that challenge by forming a working committee for culture, society and humanities. As the chair of that committee, the Human Dimensions in the Circumpolar Arctic Conference in Umeå offers a good opportunity to reflect on some of the achievements within the field of "the human dimension" in Sweden during the IPY.

Acting on instructions from the Swedish government, the Swedish Research Council formed the SC-IPY in early 2006. The committee consisted of researchers from different disciplines and institutions involved in polar research and of representatives from funding agencies, government bodies and Sami organisations. In order to achieve its mission to promote and coordinate the Swedish research efforts in the IPY, the committee formed different working committees. One of them was the Working Committee for Culture, Society and Humanities.

What we experienced during the Human Dimensions Conference in Umeå was more than we would have dared to hope for when we—a group of human and social scientists—started our work back in 2006.[1] The mission of our group was formulated in a very broad manner: to initiate, promote and coordinate activities within polar research in the human and social sciences during the IPY, as well as other polar-oriented activities within the domain of culture and society. The human dimension of the Swedish IPY project portfolio was to be broad and deep and our task was to stimulate that. In doing so we were to cooperate with organisations and individuals internationally and in Sweden, especially to the north of the sixtieth parallel. The task seemed enormous and the start of our work was somewhat difficult. There were many actors with ideas and agendas for the IPY and the funding that was available to us in the beginning was a

limited part of a 10 million SEK budget. And not everyone was convinced that money should be spent on the human dimension.

In order to accomplish our task, we followed two partly overlapping strategies. One was oriented towards the university world and academic research. The other strategy was aimed at IPY-related actors and activities outside of the university world. Our mission turned out to be far less difficult than we had expected, because there were many enthusiastic actors out there. Some of them were already a part of the IPY and many others were waiting for opportunities to become involved.

To begin with, on the university side of our mission, our group tried to assemble a complete picture of the contents of the Swedish social science-humanities project portfolio. The ICSU/WMO joint committee for the IPY had endorsed a fairly large number of social science-humanities projects with Swedish participants. Our question was which of these research projects were actually going to be implemented? Which of the projects had received funding from the major science funding agencies in Sweden and abroad? Which ones had not received funding and thus could be removed from the list of IPY projects with Swedish participants? Another issue was the needs for additional resources. What were the financial needs of the projects? What were their logistical needs for field research in the Arctic and Antarctica? In November 2006 our group presented a list at a SC-IPY meeting. On this list we had eleven social science-humanities polar research projects with active involvement of Swedish researchers. The list included disciplines like general history and subcategories such as history of technology, history of science and environmental history, as well as archaeology, political science, anthropology, linguistics and gender research. The projects had received funding in stiff competition with all other funding applicants in Sweden, since there was no money earmarked for IPY research in this arctic nation. The projects were funded by the several funding agencies—FORMAS, The Swedish Research Council, ESF and The Tercentenary Fund of the Swedish National Bank—and in one or two cases by the ordinary salaries for university employees. Universities from Lund in the south to Luleå in the north were on the list, as integrated parts of international research programs.

The ongoing research of some of these projects was presented at the Human dimensions conference in Umeå, in some cases by their Swedish participants and in some by researchers from other countries. The research problems that these research projects deal with are of great significance for our understanding of the social, cultural and political aspects of the polar regions—today as well as in the past—and their role globally.

One such research problem concerns the adaptation of human environment systems to climate change. What are the impacts of climate change on governance systems and on societies in the Arctic? What are the impacts of climate change on everyday life in northern communities—on work and on economic activities? How is climate change affecting policy making? Some of the projects dealing with these problems have been carried out in close cooperation among researchers from outside of the polar areas and people living there, often indigenous peoples. Some projects can be mentioned specifically—Community Adaptation and Vulnerability in Arctic Regions (CAVIAR), The Capability of International Governance Systems in the Arctic to Contribute to the Mitiga-

tion of Climate Change and Adjust to its Consequences (CIGSAC) and Reindeer Herding and Climate Change (EALAT).

Another important field of research concerns the political aspects and implications of science and industry in the polar areas—in the past and the present. These problems are addressed within the disciplines of history of science, history of technology and industrial heritage research. One example is the new and important research results coming out of the research projects "History of the international polar years" and "Field stations." These projects have revealed many linkages between scientific research during the IPY and the Cold War military strategies at the time. These results are paving the way for posing questions regarding the linkages between the present IPY and the present polar politics, particularly in the high Arctic. Of importance for understanding the present quest for natural resources in the Arctic are also the research results from the LASHIPA project. In this project, historians and archaeologists from the Netherlands cooperate with Swedes, Americans, Norwegians, British and Russians in exploring natural resource exploitation and its impacts on geo-politics over the last 400 years. There have also been important research projects without official IPY status, but intimately linked to the IPY effort. One of these projects is the ESF EUROCORE program BOREAS, whose participants made important contributions at the Human Dimensions Conference in Umeå, within history of science and environment.

Last but not least, research within human and social sciences is increasingly becoming involved in the efforts to build international cooperation within data management and monitoring—activities that used to be the exclusive domain of the natural sciences. During the IPY, this took place in the preparations of the Sustained Arctic Observation Network (SAON).

All of these important research problems were discussed at the Human Dimensions Conference in Umeå and out of these discussions it also became clear that there are several fields of research in which we need to deepen our knowledge. The Umeå conference did not mark the end of polar research within the human and social sciences. It marked the beginning of important research efforts within this field in the future.

The second strategy of the SC-IPY Working Committee for Culture, Society and Humanities was to promote projects and initiatives outside of academia—by artists, filmmakers, writers, municipalities and museums. People and organisations from Umeå were particularly active and visible in these efforts. In the early autumn of 2006, we organized a workshop at Umeå University with the objective of collecting good ideas and perspectives on what we should do to bring forward the human dimension in the IPY in the field of information and outreach. We invited different actors to come and present their ideas and a large number of people showed up, from museums and cultural associations in different parts of northern Sweden. The ideas behind many of the outreach projects that the SC-IPY sponsored were born at this workshop. One of these projects was a lecture series, initiated at Umeå University, called "Främmande Nord" ['Foreign North']. The lecturers focused on the way foreign travellers depicted arctic Sweden in the past—in other words how they constructed and re-constructed the picture of Norrland. Another project was the film True North, made by the internationally recognized filmmaker and artist

Isaac Julien. The film elaborated on the diary of the Afro-American Matthew Henson from Robert E. Peary's Arctic expedition in 1909. Another important project that we partly financed was the production of a multinational history book, in several languages, about the history of the Barents region. Another outreach project, initiated in Gothenburg and presented at the Umeå meeting, was a travelling exhibition about the role of the city of Gothenburg in the history of Swedish polar science. The exhibition, named *Icy Missions*, placed polar science in its social, political and cultural contexts. This exhibition was presented by its makers at the Human Dimensions Conference in Umeå. On the suggestion of our working committee, the Swedish IPY committee also supported the project "Samiskt levnadssätt och klimatförändringar" which dealt with the Sami way of life and climate changes. The end result will be publications and web presentations. The project was initiated and accomplished by Sami organizations and was very much based on the knowledge and observations on climate change among Sami people.

The conference Human Dimensions in the Circumpolar Arctic was a powerful manifestation of all these efforts to bring research about people into the agenda of the International Polar Year. Researchers from a wide range of disciplines, from many different countries, had the opportunity to discuss various aspects of their research problems, exchange ideas and build networks for post-IPY research projects. We also saw splendid examples of how the human dimension of the polar areas can be dealt with in museum exhibitions and in other cultural expressions outside the universities. Last but not least, the panel discussions during the conference pointed to the continued and increasing importance of the polar areas for various aspects of politics and policy making.

The Umeå conference was one out of several IPY conferences with human dimension content. The humanities and social sciences also held a prominent place on the program of high-level conferences like the SCAR/IASC open science conference in St Petersburg in the summer of 2008, at the large ICASS conference in Nuuk, Greenland, in August the same year, and will be an important part of the large IPY conference in Oslo in June 2010. However, we believe that so far the Umeå conference was the largest and most well visited manifestation of the humanities disciplines within polar research during the IPY. Therefore, we can safely say that the social sciences and the humanities have found their place on the agenda of polar science. This, no doubt, will be an important part of the legacy of this IPY.[2]

NOTES

[1] The Working Committee for Culture, Society and Humanities consisted of Dag Avango (History of Science & Technology, Royal Institute of Technology, Stockholm), Lars-Erik Edlund (Dept. of Language Studies, Umeå University), Aant Elzinga (Philosophy, Linguistics and Theory of Science, Göteborg University), Stefan Källman (Ministry of Agriculture), Lisbeth Lewander (Dept. of Cultural Sciences, Göteborg University) and Inga-Lill Norlin (Swedish Institute).

[2] The Swedish IPY committee wishes to express their deepest gratitude to the individuals and organisations that made this conference possible. First and foremost we want to

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Northern Studies Research at Umeå University

The research environment Northern Studies is long established at Umeå University, encompassing a range of research projects applying northern perspectives and investigating specifically northern issues. The research body comprises distinguished scholars that are leading actors on the national arena and occupy central positions in the international research community. Indigenous research is a vital concern, with the Centre for Sami Research constituting a central part of the environment. Other foci are ecology and environmental research, social organization and economic development issues and research from historical, cultural and linguistic perspectives. Solid multi-disciplinary foundations, international potential and high societal relevance characterise the environment. The research agenda has been given direction with joint projects organised around the cornerstones Conflict & Collaboration, People & Identity, and Resources & Competitiveness.

Since its establishment 40 years ago, a focus on northern issues has been a distinguishing mark of Umeå University. Over the years a great number of scientific and scholarly projects have originated from the research environment, which has created a firm basis for international collaboration involving all the university faculties. The strength of the environment has benefited from this increased precision, and Northern Studies is now one of the key areas for international cooperation at Umeå University.

Conditions in the northern regions are receiving intensified research attention, in Sweden as well as internationally. The pressing global issue of rapid climate changes and the consequences involved has a research focus in the cir-

cumpolar area. The human dimension has more recently become an important field of northern research, and Umeå University is one of the key actors in the field, making "the human dimension" the general theme when Northern Studies hosted the final international conference of the International Polar Year (IPY); see pp. 123-127. The research environment Northern Studies has strategically developed a concept that provides a multi-disciplinary response to present and future demands of research-based knowledge for a sustainable development in the north. The researchers within Northern Studies are partners in some of the most prominent international research projects, like Histories of the North— Environments, Movements, Narratives (BOREAS), North Atlantic Population Project (NAPP), Community Adaptation and Vulnerability in Arctic Regions (CAVIAR), and The Capability of International Governance Systems in the Arctic to Contribute to the Mitigation of Climate Change and Adjust to its Consequences (CIGSAC).
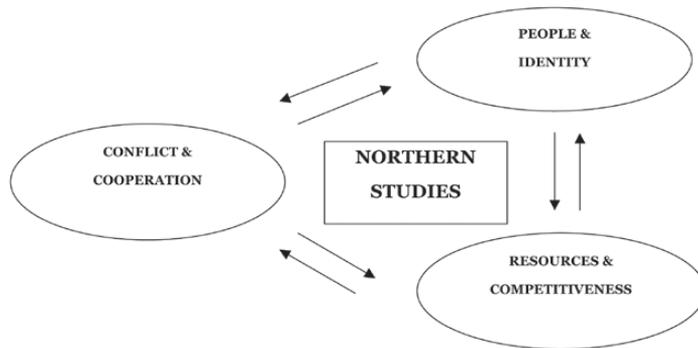
The Centre for Sami Research (CeSam) is a core environment within Northern Studies. Since the interrelations between Sami history and the contemporary situation form complicated, and to a great extent unknown, processes of successful cooperation and conflict, research has an enormous responsibility to contribute here, and the indigenous field offers important opportunities to combine societal utility with theoretical and scholarly development, as well as taking part in extensive international collaboration. CeSam is a driving force in the Nordic context, and the hub of a scientific network including the Sami Centre (Tromsø, Norway), Sami University College (Kautokeino, Norway) and Giellagas Institute (Oulu, Finland). CeSam is also the organizer of major conferences and workshops. The research environment is internationally attractive for PhD students and senior guest researchers. Apart from constituting an important foundation for the strategic partnership between Umeå University and the University of Manitoba, the indigenous field opens up for collaboration with universities outside the northern hemisphere, such as Australia, New Zealand and Brazil. CeSam is part of Umeå University's fundraising campaign, with the aim to become a national centre for Sami research.

The planned research structure of the Northern studies environment is designed around the three thematic areas Conflict & Collaboration, People & Identity, and Resources & Competitiveness. Each area includes at least ten externally financed projects, and the considerable critical mass of research efforts produces favourable conditions for multi-disciplinary development and strate-

gic progress. Northern Studies has access to exceptional source infrastructures, for example the world unique Population Data Base Sápmi, registered and kept by the Demographic Data Base, where the entire traditional area of the Sami is covered, allowing the construction of complete life biographies for all the people in the region during the time of colonization (1750–1900). Northern Studies is also responsible for the Digitized Sami Media Archive with 70,000 articles. The Environmental Archaeology Lab has been successful in northern research for 25 years; it is sponsored by the Swedish Research Council and acts as Sweden's only national resource lab for the field and region. In addition, there is solid publication experience, including the peer-reviewed *Journal of Northern Studies*.

The development in the northern area might be described in terms of both successful cooperation and prevailing conflicts. The research within Northern Studies includes in-depth analyses of the background and development of the situation. The indigenous issues are strong profiles of each theme. Distinguished areas are land use and natural resources that comprise the complex systems of forestry, agriculture, mining and reindeer herding. Cultural and identity formative processes are together with social, legal, political, demographic, and health perspectives of great importance. Competitiveness is also essential, and production, productivity, tourism and regional development are critical issues in relation to climate change, sustainable development and globalization.

Research within the framework of Northern Studies is of great relevance for society and responds to the demand for research-based knowledge. Interaction is accordingly of great importance. Northern Studies has an ambitious collaborative agenda that includes a great number of Swedish and foreign universities. Outreach activities involve communities, organizations, institutions, companies, and administrations on different societal levels. Parliamentarians, ministries, NGOs, bureaucrats, lawyers, and entrepreneurs in the north all need research-based knowledge. The Sami society urges more research into matters of relevance for the indigenous population. Northern Studies is a strategic and valuable platform where various types of interaction can take place.

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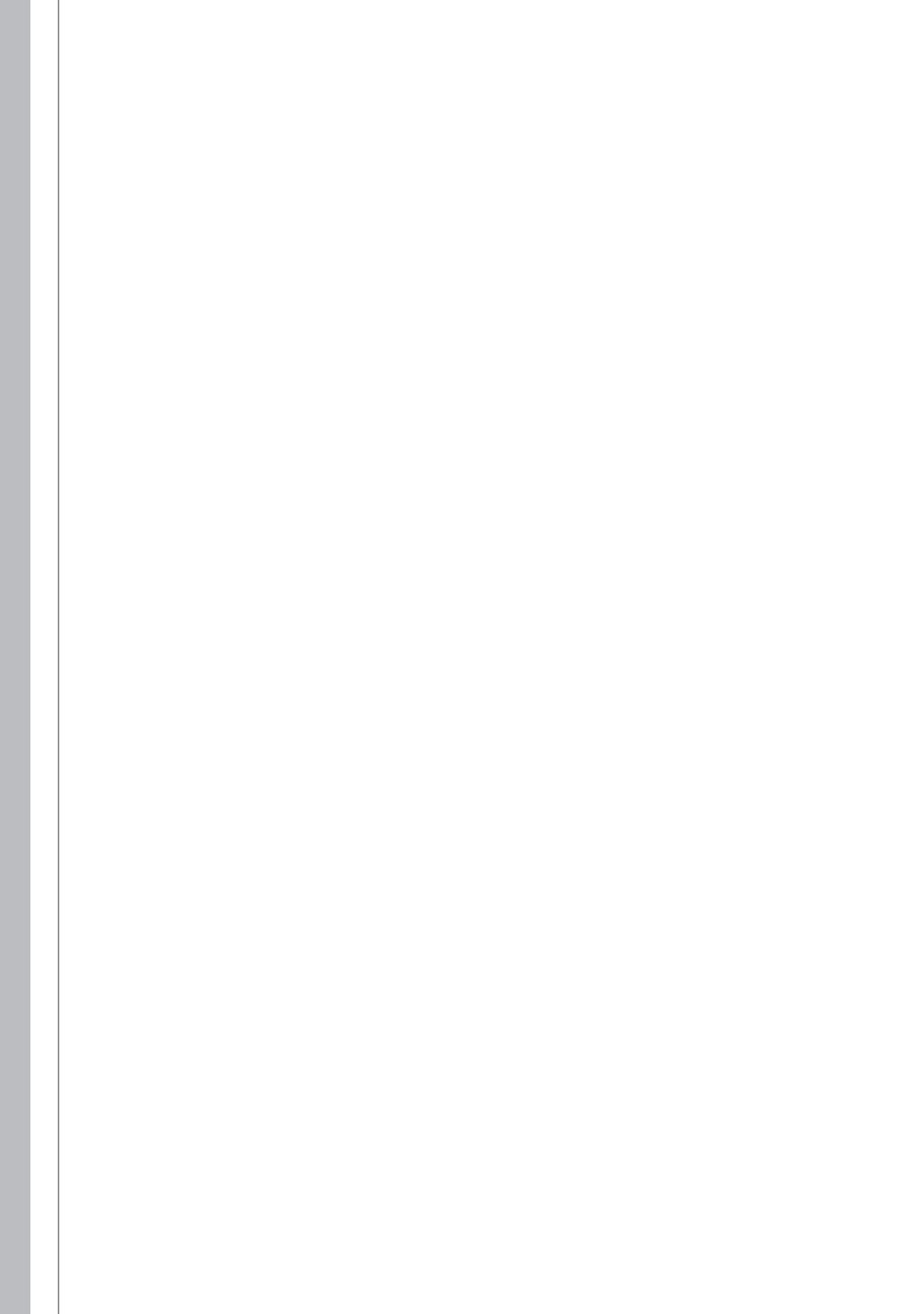
Reviews/Comptes rendus/Besprechungen

Thorsten Andersson & Eva Nyman eds., *Suffixbildungen in alten Ortsnamen. Akten eines internationalen Symposiums in Uppsala 14.–16. Mai 2004*, Uppsala: Kungl. Gustav Adolfs Akademien för svensk folkkultur 2004 (Acta Academiae Regiae Gustavi Adolphi LXXXVIII), ISBN 9185352578, 220 pp.

It is a very central topic in place-name research that is in focus in this symposium volume, namely the use of suffixes in the formation of older types of toponyms. Old toponyms in North-Western Europe are dealt with, more specifically toponyms in areas where Germanic as well as Slavic and Celtic languages are or have been spoken. As regards the Germanic names, at any rate, this is in terms of time about formations that arose from the middle of the first millennium BC up to the middle, and at the latest the end, of the first millennium AD, with the exception of some later, analogically formed names that are also touched on in a couple of the contributions. In my opinion, the most worthwhile contributions are the articles in the volume that discuss individual names in great detail, since the interpretation problem is most clearly demonstrated in these. Even so, the articles providing surveys are also highly valuable.

The volume contains the published proceedings of a symposium that was arranged by Kungl. Gustav Adolfs Akademien för svensk folkkultur in May 2004. Name researchers from five countries participated in the symposium and made presentations in German (10 papers) and English (two papers).

Thorsten Andersson's contribution, entitled "Die Suffixbildungen in der altgermanischen Toponymie" provides a useful survey concerning toponym formation, in particular suffix formation, in the Germanic area. One theme is about primary and secondary toponym formation, another one *alteuropäische Hydronymie*. As regards the hydronyms, Andersson advocates the view, at least concerning the Germanic area, that "[e]ine indogermanische Schicht von Namen mit einer bestimmten Struktur im Sinne Krahes, ein voreinzelsprachliches Gewässernamensystem, lässt sich aber schwerlich ermitteln, und wenn wir von einem Netz sprechen wollen (um die beiden üblichen Termini zu verwenden), dann ist es weniger ein Netz von Namen als ein Netz von Wörtern, sowohl Namen als auch nichtproprialen Wörtern" (p. 23). This conclusion seems well-founded both in what is dealt with in this short article and what Andersson has previously published in this area.

In his article on dehydronymic toponym formation, Svante Strandberg gives a broad exemplification of toponyms formed with hydronyms as their basis. Differences concerning the dehydronymic name formation between Scandinavia and the European continent are brought out in an interesting way. The important question of what is primary when there are adjacent names of water-courses and lakes is also dealt with, and Strandberg shows here that, on the basis of the state of things, it is possible in some cases to

determine which is primary with great probability. In conclusion he emphasises something that is self-evident, but not unimportant, "[d]ehydronymische Ableitungen haben den großen Vorteil, dass man in diesen mit sekundärer Namenbildung nicht rechnen kann […]. Sie können damit für die Suffixforschung von großem Belang sein" (p. 40).

Lennart Elmevik deals with the -n- and -sn-suffixes in the Nordic appellative and toponym formation. He discusses instructively and critically different examples of the use of these suffixes in Nordic toponym formations, makes useful corrections of previous research and also presents some new, interesting derivatives, for example concerning the Gotland *Sysne* (p. 56). He takes up the relevant question of whether the items discussed are cases of primary or secondary name formation. Regarding a postulated Old Swedish *Barkn*, to be kept together with Old Norse *barki* 'throat', which has been assumed to be the basis of the Västergötland county district name *Barne*, he says that the name "kann eine primäre Namenbildung sein, kann aber auch ein Appellativ *barkn* mit der Grundbedeutung 'Landschaftsformation, die einer Kehle ähnelt' enthalten" (p. 57). The possible existence of corresponding names in other places in Scandinavia might be adduced as an argument for the existence of an appellative formation as the basis of the mentioned name formations, but this is of course not completely imperative.

Eva Nyman discusses the *s*-suffix. This suffix is found in a number of Nordic nature names—chiefly names of islands and water-courses, as in *Samsø* (older *Sams*) and in the numerous Norwegian names containing *Troms-* (Old West Norse *Trums-*)—and it seems that this is not an entirely uniform group of names. There are most likely different types of formations, and in addition there are, as far as can be judged, different age strata among the names. The article is sketchy, the reason for which is that it is preliminary work for a larger suffix study. Besides name formation problems and chronology, it remains to be shown "inwieweit Schweden an diesem suffixalen Ortsnamentyp beteiligt ist" (p. 71).

In his article "Zur Frage eines hydronymbildenden -*t*-Suffixes im Norden," Jan Paul Strid discusses the -*t*-suffix in the hydronym formation postulated by Elof Hellquist (in the monograph *Studier öfver de svenska sjönamnen, deras härledning ock historia*, 1–6, Stockholm 1903–06; chiefly vol. 2, pp. 38 f.) and by subsequent researchers, according to Hellquist represented in names such as *Filten*, *Gulten*, *Järten*, *Smälten* etc. Strid discusses the issue on the basis of the rich material provided by the Norwegian hydronyms, and he also discusses in greater detail some ten Swedish names of lakes also assumed to contain the -*t*-suffix. Strid sums up his study by stating that, since his investigation has not been able to show any unambiguous example of a suffixed name of the type postulated by Hellquist in his monograph on hydronyms, "muss ich den Schluss ziehen, dass Hellquists hydronymbildendes -*t*-Suffix eine Täuschung ist" (p. 90).

Suffix formations among the toponyms in a Germanic-Slavic area constitute the topic of Ernst Eichler's contribution, where morphological aspects are in focus. The reader recognises the perspectives that Eichler and other researchers close to him in the "Leipzig school" have previously brought out from this language-contact area.

Another language contact area is focused on by W. F. H. Nicolaisen in his article, in which the Scottish hydronymy is dealt with. After starting by accounting for the complicated and clearly regionalised language strata that exist in the Scottish area, Nicolaisen discusses the possible traces of an Old European hydronymy in Scotland. Nicolaisen thinks that there is no concept that can convincingly compete with Krahe's and his followers' *alteuropäische Hydronymie*, which

> does not mean that there has been no need for certain reshapings or for innovative thinking. I have myself argued, without questioning the basic tenets, that a more dynamic approach to the notion of 'Old European' is called for; one that addresses its perceived rigidity, both in time and space (p. 113).

He goes on and makes a more concrete statement:

> Postulation of the existence of, let us say, for the sake of argument, sequential early, middle and late phases, of geographically distant dialectal differentiation, and potentially even of discernible social registers, is inevitable, a vision which is perhaps easier to accept in Scotland and in the British Isles than in other parts of Europe, including the north (p. 113).

In the discussion of Krahe's model concerning *alteuropäische Hydronymie* —which recognised researchers such as Wolfgang P. Schmid and Jürgen Udolph have adopted—feelings ran high for some years, and a discussion started between Gottfried Schramm and the above-mentioned Udolph. Both Schramm and Udolph are represented in the present omnibus. In Schramm's article the reader is thrown into *medias res*. His position is clear on a couple of points. Schramm argues that compound hydronyms "schon im ältesten Stratum vertreten gewesen sein muß" (p. 131). He also emphasises the following principle:

> [i]n dem Augenblick, wo wir die unmögliche Vorstellung einer gesamt-alteuropäischen, einheitlichen Flußnamenschicht über Bord werfen, wird der Blick frei für die Einsicht, daß Alteuropa von vornherein regional untergliedert war. Diese Untergliederung entsprach offenbar keineswegs durchgängig den späteren Sprachräumen wie Germanisch, Baltisch und Slawisch (p. 135).

A priori these positions seem fully defensible.

Udolph presents the volume's most extensive contribution. In its first (and completely dominant) main part, he accounts in fourteen sections (-*d-/-t*-suffix, -*k*-suffix, -*l*-suffix etc.) for a large number of toponyms in Northern and Middle Germany containing such suffixes that are found in the older stratum of toponyms. Most of the sections contain both a group of toponyms that can be explained by means of Germanic appellatives and a group of "Bildungen ohne sicheren Anschluß im germanischen Wortschatz."

The names are shown in lists where the degree of argumentation and documentation varies among the sections. Udolph's article demonstrates the type of argumentation that is more traditionally associated with *alteuropäische Hydronymie*, but on the other hand the article does not carry the discussion with Schramm any further, in any case not very explicitly.

Botolv Helleland studies the hydronyms in a part of Western Norway. Derivatives of appellatives are for example names such as *Bjørno*, *Sendo* and *Grøno*, and names based on verbs and other types of suffix formations are also accounted for. Some special cases are examined more thoroughly, for example the name *Opo*. Without denying the possibility that some of the area's hydronyms might derive from Indo-European times, Helleland seems inclined to try to explain them in the first place from a more immediate North Germanic perspective. This is in all likelihood a sensible strategy.

Albrecht Greule shows in his article how different derivative suffixes have been used for the three Germanic stems **mari-* (cf. Old Norse *marr*, Swedish dialectal *mar* etc.), **har-u-* (Swedish dial*ectal har*, *hare*, *hara* etc.) and **hweita-* 'white.' Greule summarises his contribution as follows: "meine Ausführungen dürften gezeigt haben, dass die altgermanischen Hydronyme sich restlos mit den Mitteln der germanischen appellativischen Wortbildung erklären lassen och dass sich Appellative und Toponyme geradezu zu einem morphologischen Netzwerk ergänzen" (p. 210). His concluding exhortation is: "Es ist unsere Aufgabe, diesem Netzwerk im Eizelnen noch genauer nachzuspüren" (ibid.).

Most of the contributions dwell on the formation of older nature names. Bent Jørgensen's article focuses, however, on the Danish *-inge* names. He discusses how the formation of these derived toponyms can be understood. Based on the reasoning in Carl Ivar Ståhle's doctoral thesis (*Studier över de svenska ortnamnen på -inge på grundval av undersökningar i Stockholms län*, Uppsala 1946), it has been assumed that these settlement names were formed by the name-givers first forming an ethnonymic derivation in *-ing*, to which a toponymic suffix *-ia* was then added. According to Bent Jørgensen, the question is whether a middle stage in the form of an ethnonym should be postulated at all. Jørgensen regards this middle stage as unnecessary, and the *-inge* names are instead seen as being formed according to two lines:

> (1) old masculine or feminine *-ing* derivatives, secondarily derived by the addition of *-ia* and with a (new) place-denoting meaning, and (2) new formations with the combined suffix *-ingia*, productive by analogy with names arising according to (1) (p. 106).

The author's attempt to put the older interpretation under debate is likely to give rise to further contributions concerning this important group of toponyms.

*

Individual suffixes are dealt with in great detail in the symposium volume *Suffixbildungen in alten Ortsnamen* (chiefly by Elmevik och Nyman), and in some cases suffixes are questioned or reconsidered (chiefly by Strid and Jør-

gensen). Regional surveys are also made (chiefly by Helleland, Nicolaisen and Udolph), and the role of suffixes in older toponyms formation is brought out (chiefly by Andersson and Greule). There are also interesting contributions by Eichler, Schramm and Strandberg. This multitude of aspects makes it an important book, whose strength consists not least in different naming systems in a large North-West European area being so clearly demonstrated.

At the same time it is obvious that the individual researchers, in the main at any rate, analyse more country specific naming systems to a high degree. This has its advantages, since through such analyses the reader is made aware that the names can in many cases be convincingly interpreted on the basis of the words and formation patterns of later language stages.

Some themes naturally recur in different articles. As we have already seen, a pervasive theme concerns *alteuropäische Hydronymie*, where the volume throws the reader into an interesting discussion. The researchers who work with non-Nordic names and who are represented in the volume are in general not as sceptical of the assumption of *alteuropäische Hydronymie* as the Nordic colleagues. On the other hand important nuances and specifications of the view of this ancient hydronymy are revealed in Schramm's, Greule's and Nicolaisen's contributions.

Another theme, which is however only touched on but is naturally relevant in the context, is interference onomastics, which is dealt with by two contributors, namely Eichler and Nicolaisen.

A general reflection made after reading the twelve contributions is that the suffixes often have a more complicated background than they seem to have at a first glance—it is thus not the case that there is a simple relationship between for example a suffix appearing in the Germanic names and an initial Indo-European form. These circumstances ought to have a greater impact on the researchers' judgements of functions, semantic relations etc. than appears to be the case.

The meanings carried by the individual suffixes are touched on in several of the contributions, but here the authors are markedly cautious in drawing their conclusions. The sense descriptions are usually very general ("Zuhörigkeit," "Zusammanhang," "Diminutivfunktion" etc.). In his introduction Andersson says, "[d]ie Vielfalt der alten Suffixe lässt aber eine feinere Nuancierung vermuten, die wir wohl allerdings nur ahnen können" (p. 10). It is perhaps not possible to get any further, but here a study of the kind outlined by Nyman is likely to be of great interest.

The productivity period of the suffixes is also touched on in several of the articles, but here too it is difficult to draw safe conclusions, since a suffix might come to be used later on in an analogical context in connection with established names. Such "revitalisation" of a suffix must probably be conceived as a more general process that is likely to be able to keep a formation pattern alive for a long time, perhaps with new functions and meanings as a consequence. Such conditions also require further analysis.

At the same time as these later developments require attention, the need for deeper cooperation between researchers in the area of Indo-European studies and for example Germanists must be stressed. This is necessary in order to be able to analyse ancient toponyms of the kind dealt with in this

volume with some degree of success. Andersson emphasises this in his contribution, and such research perspectives are highly concretely demonstrated in some places in Udolph's article.

Yet another theme that is brought to the fore in the volume concerns primary and secondary name formation respectively, where the question is thus whether a certain suffix primarily belongs to the toponym formation or belongs to an appellative formation preceding the formation of the toponym.

As may be seen from the above, the symposium volume *Suffixbildungen in alten Ortsnamen* discusses several fundamentally important issues in the area of onomastics, where the questions are numerous and difficult and there are few firm answers for this very reason. This is natural within a field such as this, where names are discussed that are so extremely difficult to interpret. On the other hand, there are good opportunities to formulate new and exciting research assignments in this area. It is to be hoped that not least a younger generation of toponyms researchers will be inspired by the volume's interesting problems and try to find answers to some of the still remaining questions at any rate.

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Staffan Fridell, *Ortnamn i stilistisk variation*, Uppsala: Kungl. Gustav Adolfs Akademien för svensk folkkultur 2006 (Acta Academiae Regiae Gustavi Adolphi XCV), ISBN 9789185352678, 166 pp.

All toponym researchers are well aware that toponyms may have two or more co-existing, morphologically completely different variants existing over time. How have these variants arisen, and why are the variants preserved in the language community? Staffan Fridell's monograph *Ortnamn i stilistisk variation* ['Place-names in stylistic variation'] seeks to provide answers to such questions.

The varying forms are regarded by the author as the result of *stylistic variation*. This is made clear early on in the monograph, where a theoretical association is made to what according to the sociolinguists Edward Finnegan and Douglas Biber might be called *register variation*. Without devoting too much attention to the theoretical issues, Fridell maintains that the names can be referred to three levels of style, high-style (acrolect; Sw. *högstil*), middle-style (mesolect; Sw. *mellanstil*) and low-style (basilect: Sw. *lågstil*). One might ask how it possible to determine on the basis of old source material which level of style the names belong to. The author briefly states, "[i] vissa enstaka fall kan det vara svårt att göra det, men källmaterialet ger ändå oftast någon form av vägledning och de val jag har gjort är nog i allmänhet okontroversiella" ['in a few cases it may be difficult to do so, but most often the source material still gives some guidance, and the choices I have made are probably uncontroversial in general'] (p. 13). In my opinion the author

could have discussed the performed style differentiation more exhaustively, but Fridell is obviously eager to deal with his empirical findings without too lengthy preliminaries.

The main part of the study consists of his survey of the names, which is made in chapter 2 of about 110 pages. Toponyms in Småland were chosen as the empirical material, and to obtain long sequences of name instances he chose such names as are recorded in the sixteenth century at the latest and that have later recorded forms. Names that exhibit an interesting variation have been included; in the first place "gäller det namn där uttal och nutida skriftform skiljer sig väsentligt och oförutsebart" ['this concerns names whose pronunciation and present-day written form differ substantially and unpredictably'] (p. 19). As the author points out, this means that an empirical material was s e l e c t e d "för att illustrera och konfrontera mina teorier och hypoteser, snarare än att dra slutsatser utifrån ett insamlat empiriskt material" ['in order to illustrate and confront my theories and hypotheses, rather than drawing conclusions based on a collected empirical material'] (p. 19). As I see it, an investigation where conclusions had been drawn in a more unbiased way on the basis of a concrete empirical material could to a great degree have been justified as an alternative approach.

In the individual analyses written forms and pronunciation forms as well as (mostly briefly) derivation are accounted for, whereupon the author schematically shows which forms are, in his view, high-style, middle-style and low-style forms in the cases studied. Generally, I think that the establishment of what might be middle-style forms appears most problematic. As regards individual analyses other judgements can be made. Once and for all it must be said, however, that this is not a matter of very serious objections, but rather of marginal notes made by a curious reader.

I am more sceptical, however, about a couple of other, more fundamental circumstances. Should we, for example, as the author seems to think, assume that the language system has a need to differentiate styles in some automatic way? Fridell maintains e x p l i c i t l y, "det förefaller finnas ett generellt behov av att stildifferentiera ortnamnsformer" ['there seems to be a general need to differentiate the styles of toponym forms'] (p. 128). There are however some cases where for example the high-style form has taken over and the low-style form has disappeared, as in *Ljuder* (p. 87), so the style differentiation cannot be c o m p u l s o r y at any rate.

A question associated with this that is not really discussed by the author is how many style variants of a toponym that can have existed at the same time, and what the different circles of name users looked like c o n c r e t e l y. In connection with *Algutboda* (pp. 19 f.) it is explicitly stated that five style variants have probably existed in parallel with one another since the fifteenth century. And for *Rudu* the records show four different levels of style, according to the author (p. 97). And how many style variants are conceivable concerning the complicated *Skvagerfall* with its many forms (p. 104)? Fridell says initially about the stylistic variation that it is

funktionellt styrd och beror på kommunikationssituationen i vid bemärkelse (syfte, ämne, relation mellan sändare och mottagare, grad av

gemensam kontext, möjlighet att planera språkproduktionen, formali-
tetsgrad). Vissa typer av situationer favoriserar (eller kräver) ett tydli-
gare uttryck, vilket gynnar språkvarianter som är utförligare och mer
explicita, medan andra kommunikativa situationer tvärtom favorise-
rar (eller kräver) ett snabbare och därmed enklare språk. Inte minst är
graden av gemensam kontext mellan sändare och mottagare viktig här.
Finns det en gemensam referensram kan det språkliga uttrycket vara
kortare och enklare. [---] Saknas gemensam kontext måste det språkliga
uttrycket vara tydligt och därmed explicit och mer komplext (p. 10)

['functionally governed and is dependent on the communication situ-
ation in a wide sense (aim, topic, the relation between the sender and
the recipient, the degree of shared context, the opportunity to plan the
language production, the degree of formality). Some types of situations
favour (or require) a clearer expression, which favours language vari-
ants that are more detailed and explicit, while, on the contrary, other
communicative situations favour (or require) a faster and hence simpler
language. Not least is the degree of shared context between the sender
and the recipient important here. If there is a shared frame of refer-
ence, the linguistic expression can be shorter and simpler [---] If there
is no shared context, the linguistic expression must be clear and hence
explicit and more complex']

In my reading of the book I fail unfortunately to grasp the four or five differ-
ent communicative situations that have existed c o n c r e t e l y, and that thus,
according to the author, should have given cause for the need for stylistic
variation with four or five simultaneously existing, morphologically differ-
ent, variants of the toponym. What were really the circles of language users
like that needed this extensive register? In this respect I do not find any fully
elucidatory discussions in the monograph.

Interesting, and important, issues such as that concerning different
scribes' (external scribes', local scribes') knowledge of the "style variation
code" and how this is reflected in the source material are touched on in the
concluding discussion (pp. 147 f.), as well as the issue of the possible precon-
dition of the style differentiation in a literate culture (p. 149). Regarding
these questions too, the author could have expanded the discussions.

Even though some both theoretical and methodological interesting
questions remain unanswered also after reading Staffan Fridell's mono-
graph *Ortnamn i stilistisk variation*, it must be emphasised that the author of
the book has elucidated important issues concerning how and why several
co-existing variants of a toponym are preserved for centuries in a language
community.

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Thomas Thornton, *Being and Place among the Tlingit*, Seattle: University of Washington Press in association with Sealaska Heritage Institute 2008, ISBN 1000295987499, 247 pp.

Thomas Thornton's *Being and Place Among the Tlingit* is an exploration of Tlingit relationships with place and how these relationships shape Tlingit identity. The book is a wonderfully detailed ethnographic document that is also broad in its applicability. While certainly an anthropological text, it should also find an audience among cultural geographers, environmental scientists, sociologists, psychologists, historians, as well as anyone with an interest in Southeast Alaska. Thornton has been working with the Tlingit in this region since the late 1980s and his depth of knowledge comes through clearly in his research, as does the strength of his local relationships.

The book is organized around four "key cultural structures that are fundamental in mediating human relationships to place" (p. 8): social organization, language and cognitive structures, material production, and ritual processes. The author situates his work within the context of recent literature on place and, to a lesser extent, space (for example, see especially the works of Keith Basso, Edward Casey, Steven Feld, Setha Lowe and Yi-Fu Tuan). In considering the future of the anthropology of place, Thornton argues that place is our most basic geographic unit, something that is "concrete and particular" (p. 11), and thus is a vital gateway into the understanding of group and individual identities.

The book is in many senses about Tlingit cultural perseverance in the face of post-contact changes. Thornton notes that when people are "decoupled" from place, places can "lose a vital part of their meaning and wholeness" (p. 7). There are a variety of ways in which such decoupling can happen, but Thornton argues that it has occurred in Southeast Alaska mainly as a result of Tlingit participation in the market economy and other cultural changes resulting from Euro-American contact. Despite such changes, deep-rooted connections to places have helped the Tlingit maintain a distinct cultural identity.

Thornton argues that the combination of individual and collective experience is critical for developing these vital attachments to place: "[w]ithout our individual and collective frames of experience, space would remain boundless and indeterminate" (p. 11). He also maintains that individuals perceive and experience places in unique ways that are mediated by the body as well as by knowledge that is passed on by other members of one's cultural group (pp. 23, 189). The personal and "synesthetic" connections to landscape created by experiences within it are critical to the development of a sense of self; for example, these connections work to meld stories and traditional knowledge to place and ensure their enduring ecological and cultural value to individuals (p. 171).

While *Being and Place among the Tlingit* acknowledges the importance of individual experiences in mediating the meaning attached to places, it would have benefited from additional discussion of the relationship between individual Tlingit identity and social standing. Traditional Tlingit society was 'rigid' in the sense that personal names assigned at birth connected people with particular places, clans, and other social indicators, and did not associate them with other individuals. One's place and mobility within Tlingit society was

highly structured from the moment of birth and clan membership and an understanding of clan history (and geography) were (and are) seen as essential in understanding oneself (pp. 51–53). While Thornton acknowledges these realities by defining the Tlingit "person" as a sociopolitical unit unto himself (pp. 42–43, 55–57), some readers may be left wondering what would happen if an individual's experience at a place were somehow contradictory to clan history or protocols and how such an experience might be resolved and shape identity.

It is through an engagement with a proscribed set of histories and associations, rather than via an autonomous and self-directed process, that Tlingit identity is constructed. Biehl, Good and Kleinman's recent observation that the subject is "at once a product and agent of history" (2007: 14) is persuasive and relevant to Thornton's argument. If Thornton had incorporated this theoretical perspective into his work, the discussion of the relationship between the Tlingit individual and society would have been enhanced. For, as the anthropologist Anthony Cohen has noted, the relationship between the individual and society requires interrogation and explication (1994: 21). While Thornton certainly offers insights into the relationship between the Tlingit individual and Tlingit society in his book, the text would have benefited if these insights had been fleshed out to a greater degree.

Anthropologists Arthur Kleinman and Erin Fitz-Henry noted in a recent essay on subjectivity that "[a]s our worlds change, so do we" (2007: 55). One might ask whether this comment is relevant for the Tlingit. While acknowledging that Euro-American contact and language loss have made it more difficult for the Tlingit to understand their relationships to places, Thornton tends to present a static view of Tlingit 'being' through time, as though access to clan history and symbols in the present allows individuals to develop a sense of being and topophilia as it did for past generations. This may or may not be the case. But it is an issue that needs to be addressed more explicitly in the book. Indeed, a richer analysis of temporal considerations in general would have been valuable.

One of the most important things that people may obtain from a place is food. Thornton's discussion of the role that food often plays in cementing attachments to particular places is widely applicable to other Alaska Native groups as well as to non-indigenous peoples in the North. It is certainly relevant to the vigorous contemporary debate over subsistence policy in Alaska, particularly to conflicts that pit rural against urban interests. While indigenous and non-indigenous resource users both require an intimate familiarity with the land and particular resources in order to harvest them, stark differences frequently exist in the ways these groups incorporate such practices into their broader cosmological systems. On the Tlingit relationship with salmon, Thornton notes: "[t]his involves not only observing salmon but also learning to think and sense like a salmon—to develop an appreciation of their worldview" (p. 79). Furthermore, he argues that salmon and other resources are incorporated into Tlingit identity through the act of eating, and that the Tlingit thus gain "sustenance and 'real being'" from particular places (p. 119). Perhaps a deeper appreciation of both the intimacy of such connections between the land and user groups, and the very diverse ways in which lands and resources are crucially tied to a sense of being for many

people, will allow for more productive dialogue in subsistence policy debates.

Because of the critical importance of food for sustenance and indeed *being*, Tlingit peoples engage in purposeful acts of conservation—"taking care"—to ensure the maintenance of environmental resources. On this basis Thornton intercedes into the debate over the concept of "the ecological Indian"—a notion famously examined by Shephard Krech III in his book of the same name (Krech 1999: 167–170; see also Harkin & Lewis eds. 2007). Thornton notes that recent criticisms of the controversial concept have often served as a justification for dismissing longstanding Native American conservation efforts. It is worth considering, in a climate of increasing federal and state management of resources, how particular conceptualizations of indigenous relationships to the environment are taken up by state actors and thereby impact indigenous activities on the land and ultimately senses of self. It is perhaps here that the examples Thornton provides of such indigenous conservation practices will serve to ground any uptake of theory in management in empirical validity.

Thornton concludes that "Tlingit geography and sense of place, particularly knowledge and experience of named places and the stories behind them, form an important basis for the development and interpretation of Tlingit individual and social character and identity" (p. 190). This fundamental insight makes *Being and Place among the Tlingit* an inspired example of cultural ecology and an important contribution to the anthropology of place.

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Gustav Adolf Beckmann, *Die Karlamagnús-Saga I und ihre altfranzösische Vorlage*, Tübingen: Max Niemeyer Verlag 2008 (Beihefte zur Zeitschrift für Romanische Philologie 344), ISBN 9783484523449, 260 pp.

The medieval tale of Charlemagne ['Charles the Great'] and his knights is preserved in the Old Norse, Old Swedish and Old Danish languages. The first-mentioned version is the oldest as well as the most detailed one. Of the Old Norse version there are editions compiled by C. R. Unger (1860), Agnete Loth (1980) and Eyvind Fjeld Halvorsen (1989), of the Swedish one there is an edition by David Kornhall (1957), and of the Danish one an edition by Poul Lindegård Hjort (1960). The editors mentioned and not least Povl Skårup have presented important studies of the tale. The first of the tale's "books" (German: *Branche*), which is about Charlemagne's youth, is based on a now lost Old French original. Gustav Adolf Beckmann, who is a Romanist, starts his study by stating "[ü]ber die erste Branche der altnordischen *Karlamagnús saga* ist viel geschrieben, auch viel gestritten worden, zu einem guten Teil von Romanisten" (p. 1). Concerning the geographical data in this part of the *Karlamagnús saga*, it has been said that it is supposed to be "flou oder gar bizarr" and "deshalb spricht man davon nur nebenbei, leicht herablassend oder apologetisch" (p. 2), but Beckmann's investigation shows that the geography is neither vague nor contradictory but instead demonstrates "liebevoller Genauigkeit." According to Beckmann, the story is supposed to take place in Westeifel in the German language area but close to the Francophone area. (A map of the area in question provided with important toponyms would have facilitated the orientation.) The author emphasises the importance that one of the Prince-Bishops of the house of Pierrepont in Liège had in the early thirteenth century for the origin of the first of the tale's books (pp. 25 ff.). It is also underlined in the brief third chapter (pp. 39 ff.) that there are several "Erzählelementen, die erst aus dem Bewusstsein eines romanopohonen [sic!] Reichsfürsten, speziell eines Lütticher Bischofs als Suffragans des Kölner Erzbischofs, verständlich werden" (p. 39). The main part of Beckmann's book, about 150 pages, consists of a running commentary concerning places, persons and events in *Karlamagnús-Saga* I. Here we meet the thief Basin, who has an important role to play when it comes to eliminating the plots against young Karl's life, the traitors Reinfræi and Helldri, furthermore Reimballdr friski and Boui hinn skegglausi, the swords Kurt (cf. Old French *Courte* 'short') and Dyrumdali, the peoples *Lvngbaurdum* and *Burguniar menn* and a large number of other names. All this is described in detail by Beckmann, whose wide reading is very clearly manifested in his account. On the basis of Beckmann's investigation, the discussion of "Karlamagnús-Saga I und ihre altfranzösische Vorlage" should be able to go on among medievalists based on a far better state of knowledge than before.

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Arnold Dalen, Jan Ragnar Hagland, Stian Hårstad, Håkan Rydving & Ola Stemshaug, *Trøndersk språkhistorie. Språkforhold i ein region*, Trondheim: Tapir akademisk forlag 2008 (Det Kongelige Norske Videnskabers Selskab. Skrifter 2008 nr. 3), ISBN 9788251923309, 442 pp.

This is a work on language history that applies a broad approach to describing conditions in the area of Trøndelag in Norway. In the same way as in Barbara M. H. Strang's book *A History of English* (1970), a retrospective perspective is taken here in the sense that the description of the history of the language moves backwards from the present time. In the first part of the book Arnold Dalen thus describes the tendencies that have characterised the development of the dialects of Trøndelag from our time back to the Reformation. Vowel balance and apocope, changes in sound and inflection systems and the urban dialect are described here, and information is also given about sources of the language development of earlier periods. One noteworthy example is the description of Hans Olufsen Nystedt's manuscript, which provides a picture of the dialect of Trondheim in the seventeenth century. The relations to other Norwegian dialects and the dialect of Jämtland and other Swedish dialects are also described, albeit rather briefly. A special section, also written by Arnold Dalen, accounts for geodialectal patterns with the dialects of Trøndelag at the centre. Ola Stemshaug makes a broad and well-informed description of names, that is different types of personal names including inhabitant names and toponyms. One section is about the onomastic controversy *Trond-hjem–Nidaros–Trondheim*. A short section by Jan Ragnar Hagland deals with language in education and language ideology. In the second part the development from the time of the Reformation and back in time is described. Hagland here describes the development of the spoken and written language, and Stemshaug proceeds with his description of names. There is a wealth of detailed information here concerning patterns of change in the medieval language and the background to these patterns. Basing the description on concrete texts is a successful approach. One section deals with the testimony of runes. As regards the vocabulary, it is naturally more difficult to establish with certainty whether a certain lexeme in this period had a more regional main focus or not; the source situation is seldom such that definite conclusions can be drawn. In spite of his fairly brief account, Ola Stemshaug makes a valuable description of the toponyms and personal names. As for the toponyms, he shows for example that old types of suffixes are represented, maybe even in hydronyms within the same water system that belong together through ablaut (**Ver—*Værir*), which thus are "dei eldste namna vi kan datere från Trøndelagsområdet" ['the oldest names we can date from the Trøndelag area'] (p. 337). Two sections are about names for ships and weapons. The third part, written in its entirety by Håkan Rydving, deals with the South Sami language in Trøndelag. The language development of the South Sami dialects is described from the same perspective as for the Nordic dialects, and there is also a section on different types of names and on the vocabulary. The fourth

part, written by Stian Hårstad, is entitled "Kva skjer i dag?" ['What is happening today?']. It contains sections on present-day language tendencies—where features also found in other Nordic dialects and regional varieties may be recognised—on the modern, multilingual Trøndelag, on Trøndelag dialects in writing and on the possible language development in the future. A cohesive bibliography concludes the book. *Trøndersk språkhistorie* is the result of a research project within the framework of Det Kongelige Norske Videnskabers Selskab ['The Royal Norwegian Society of Sciences and Letters'] conducted in the years 2005–2007. That the researchers were able to finish the project in such a short time is an impressive achievement, although it is skilled scholars with a great deal of experience that were responsible. In essential parts this is a first-class work. The book's language maps and the colour photographs in the sections on toponyms are especially praiseworthy. On occasion one would however have liked to see, in both the texts and on the maps, linguistic phenomena placed in more extensive Nordic contexts or at any rate in relation to the most neighbouring—Norwegian and Swedish—dialects. If there is a new edition, the works referred to should be more consistently included in the cohesive bibliography. Anyhow, the design of the volume is worthy of imitation for other regions too.

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Leiv Heggstad, Finn Hødnebø & Erik Simensen, *Norrøn ordbok*, *5. utgåva av Gamalnorsk ordbok ved Hægstad & Torp*, Oslo: Det norske samlaget 2008, ISBN 9788252171501, 755 pp.

This is a new edition of a classical dictionary that also contains a great number of names, which generations of philologists have used in their studies of Old Norse texts and which covers the vocabulary up to about 1350. The first edition of what was then called *Gamalnorsk ordbok* was published by Marius Hægstad and Alf Torp as early as 1909; a second edition was published by Leiv Heggstad in 1930. Finn Hødnebø and Erik Simensen were responsible for the third edition of *Norrøn ordbok* in 1975, as well as for the fourth in 1990. Erik Simensen is now solely responsible for the fifth edition. The dictionary contains more than 40,000 entries and names. In accordance with current practice in dictionaries and grammars, the sign $\acute{\phi}$ is used instead of œ to mark long ø—in this way all vowel lengths are marked in the same way. Some completions of the material have been made in connection with *Ordbog over det norrøne prosasprog* (København 1995–) up to the word *eptir*. In some cases information about toponymics has been corrected on the basis of the latest edition of *Norsk stadnamnleksikon* (Oslo 2005). Just as previously, there is very little information about paradigms, which is unfortunate since the dictionary is to be used in teaching. But the well worked-out semantic data and not least the brief but adequate literature references—which could have been more numerous, something to be wished for in future

editions—make this a really very good dictionary of the Old Norse language.

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Janne Bondi Johannessen & Kristin Hagen (eds.), *Språk i Oslo. Ny forskning omkring talespråk*, Oslo: Novus Forlag 2008, ISBN 9788270994717, 245 pp.

The NoTa Corpus (Norsk Talespråkskorpus—Oslodelen) ['Norwegian Spoken language Corpus—the Oslo Part'], where the material has been transcribed, lemmatised and grammatically tagged, consists of spoken language from 166 informants and comprises 900,000 words. In November 2006 a seminar was arranged on the language in Oslo and research on spoken language, in which researchers that had used the corpus took part. Nineteen contributions have been collected here. The introductory part contains seven papers on lexicography, sociolinguistics, grammar and phonetics, where for example Ruth Vatvedt Fjeld demonstrates the importance of a corpus of this kind for lexicography, Toril Opsahl, Unn Røyneland & Bente Ailin Svendsen deal with "unormerte ord" ['non-standardised words'] in the Oslo Corpus, Kjell Ivar Vannebo discusses numerals, for example the distribution between *treogtredve* och *trettitre* ['thirty-three'], and Gjert Kristoffersen & Hanne Gram Simonsen investigate the sound sequence *sl* in the NoTa Corpus under the heading "Osjlo!" Some of the contributions focus on conversation analysis. Thus Elisabeth Engdahl analyses different interrogative constructions and Jan Svennevig the response phrase *ikke sant*, while Inger Margrethe Hvenekilde Seim deals with the content of one of the conversations in the corpus. Syntactic perspectives are taken in some of the contributions, for example in Lars-Olof Delsing's study of exclamatives (or expressive clauses) and reflections, where the perspective is widened in an interesting way towards the Nordic area, and in Mariet Julien's study of the word order in subordinate clauses, which deals with main clause word order in *at*-clauses in the corpus. The approach is language technological in some of the contributions, where for example Peter Juel Henrichsen describes how a Norwegian phonetic transcription can be created based on the transcription in NoTa by passing via Danish. In Janne Bondi Johannessen's concluding contribution some differences are described that are found in the spoken language of Oslo. As is common in an omnibus of this kind, the articles show different levels of ambitions. This very fact makes it stimulating reading, however.

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Kormaks saga. Historik och översättning av Ingegerd Fries, Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien (Filologiskt arkiv 48), ISBN 9789174023787, 78 pp.

Kormak is one of the earliest Icelandic skalds known by name. He lived between about 935 and 970. It is round his poems written in the metre *drottkvætt* that this saga was built up, and out of the 85 songs in the saga 65 are, or rather are con-

sidered to be, Kormak's own works. The poems are the most important part of the saga. The prose story, assumed to have been recorded in the early thirteenth century, has a small gallery of characters and provides only a few fixed points in the landscape. Just as the translator Ingegerd Fries assumes, it is likely that the song were handed down verbatim from generation to generation, but that for explanatory reasons an oral narrative was later on added, which varied among different narrators. This would be the reason why the narrative and the songs have come to deviate from each other. The unhappy love between Kormak and Stengerd is the basic theme, a love that immediately strikes Kormak, who never forgets Stengerd. In the songs we encounter many emotions: infatuation, disappointment, anger, sorrow, bitterness, resignation—and constant longing. Fries observes, which is important to point out, that the choice of the basic word (*heiti*) in the *kennings* "is caused by the skald's feelings and the spirit of the moment" (p. 12). Some of the song translations are provided with simple but necessary comments to guide the reader. Lin-Gevn in song 26 is thus "Gevn in a linen dress: Stengerd. *Gevn* may be interpreted as '*given* (*away*).'" What the interpretation problems may look like is demonstrated by song 66, where the second semi-stanza reads as follows in translation: "Mod i hjärtat tarvar/ svärdbärarn, havburen/ ännu mera saknar/ lerman, guld-Guns make" ['The sword-bearer, sea-born, needs a brave heart; even more the clay man lacks, gold-Gun's spouse']. According to Ingegerd Fries the semi-stanza refers to the clay giant Mockerkalve, whom the giants cre-

ated, according to Snorre's *Edda*, and she continues: "The heart was not big enough, but he got a mare's heart and was so frightened that he pissed when he saw Thor. The song becomes a kind of revue song, full of enigmatic allusions for initiated persons" (p. 58). Among other things, a section in the saga's tenth chapter is interesting; Kormak's saga is actually the most detailed source we have got of the rules for the so called *holmgang*. *Kormak's saga* was previously translated into Swedish by A. U. Bååth (1895), a translation that is, however, far removed stylistically from both the prose of the work and its songs. In the 1950s Åke Ohlmarks translated some of Kormak's songs, but his interpretations feel very complicated in some places. In contrast, Ingegerd Fries's translation of the songs successfully utilise far simpler stylistic means. To translate the difficult songs into Swedish in the way she has done must be called an outstanding achievement

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Pirkko Lilius, *The History of Scandinavian Language Studies in Finland 1828–1918*, Helsingfors: Societas Scientiarum Fennica 2008 (The History of Learning and Science in Finland 1828–1918 13a), ISBN 9789516533561, 144 pp.

This book describes the Nordic studies in Finland in the period 1828–1918. In an introductory section we can read about a number of early representatives who were active before the real period of Nordic studies, such as Frans Petter von Knorring, Sven Gabriel Elmgren,

Anders Johan Hipping and Lars Wilhelm Fagerlund. Then we are given a picture of Axel Olof Freudenthal's work chiefly in dialectology but also concerning Finland Swedish. A less detailed depiction is made of Karl Lindström, who was the first to elucidate Finland Swedish academically in the mid-1880s. There is also a description of the establishment of Swedish dialect societies in Finland as well as of Herman Vendell's, K. J. Hagfors', Anton Karsten's och J. Thurman's research. Under the heading "The Modern Era Begins" we can read in the third chapter about Hugo Pipping's research on vowel phonology, *Edda* metrics, runology, Old Swedish legal language, toponyms and many other things. Arnold Nordling has described Pipping's research as "Baroquely fantastical," but Lilius also emphasises that Pipping's "fundamentally mathematical approach often led him to overlook the fact that questions of language history cannot be solved through formulae" (p. 80). Other research efforts from this period are also described. In his research O. F. Hultman dealt with language history and dialectology, while Rolf Saxén described the Finnish loanwords in the Finland Swedish dialects and toponyms, T. E. Karsten dealt above all with toponyms and Hugo Bergroth with Finland Swedish, for example in the classical monograph *Finlandssvenska* ['Finland Swedish'] (1917, 1928). A short chapter is about "Conclusions on Scandinavian language studies in Finland 1828–1918." An extensive bibliography and an index of persons conclude the book. A clear advantage of this book is that Pirkko Lilius has really penetrated the scholarly texts that she writes

about and hence avoids a more bone-dry enumeration of titles. There are broad scholarly history perspectives in the book, but these might well have been further developed in my opinion. As a whole this is however a scholarly history book of great merit.

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Jan Lindström (ed.), *Språk och interaktion* 1, Helsingfors: Institutionen för nordiska språk och nordisk litteratur, Helsingfors universitet 2008, ISBN 9789521045516, 188 pp.

Research on spoken language and interaction is one of the profile areas of the subject of the Department of Scandinavian languages and literature at the University of Helsinki, and parts of this research are described in this volume. After an introductory orientation written by Jan Lindström—who presents basic concepts and fundamental perspectives—there follow five different studies. Pekka Saaristo discusses a responsive construction in Swedish in Helsinki—exemplified by the second turn in the following: E: *de e hårt* ['it's hard']; U: *de e* ['it is'], where Standard Swedish has U: *de e de* ['so it is']—and initiates thereby a theoretical discussion. Sofie Henricson presents different realisations of repairs in a Swedish group conversation recorded in Kotka, and brings up perspectives concerning distinctive regional features and language contact. Camilla Wide's article deals with the use of demonstrative pronouns and definite forms in East Nyland in southern Finland conversations and interviews, and Þórunn Blöndal discusses the Icelandic conjunction *eða* 'or' as a final marker in

utterances, a usage that we also find in for example Swedish and English. Camilla Lindholm deals with interaction in conversations with persons suffering from mental illness. The research area of language and interaction is growing internationally. The Helsinki group show with the articles in this book—although the authors of these articles demonstrate different levels of ambition and take theoretical perspectives to a varying extent—that they are capable of giving substantial contributions to the research area.

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Uwe Ludwig & Thomas Schilp (eds.), *Nomen et Fraternitas. Festschrift für Dieter Geuenich zum 65. Geburtstag*, Berlin & New York: Walter de Gruyter 2008 (Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde, hrsg. von Heinrich Beck, Dieter Geuenich & Heiko Steuer. Band 62), ISBN 9783110202380, XX + 829 pp.

In the preface to this festschrift dedicated to Dieter Geuenich, the editors Uwe Ludwig and Thomas Schilp point out that the title was chosen with a view to two of the celebratee's research areas: in the first place his philologically and historically oriented onomastic research, "zum anderen das Gebiet der Gedenküberlieferung und des Verbrüderungswesens, der Memoria des Mittelalters in ihren vielfältigen Ausprägungen, mit einem deutlichen Schwerpunkt auf der Erforschung der Kloster- und Klerikergemeinschaften" (p. IX). Of the book's four sections I will focus here on the one that con-

cerns onomastic research. Rudolf Schützeichel's contribution gives an interesting account of aspects of Geuenich's onomastic research under the heading "Namen und ihre Träger." Stefan Sonderegger deals with the question of how Germanic personal names were rendered in the early medieval sources. Some graphic representations elucidate the description. Under the heading "Ethnisches in germanischen Personennamen?" Ludwig Rübekeil discusses methodological problems in the light of a concrete onomastic material. Elmar Neuß writes about the ethnonym *hunner* and *Hûn-* in dithematic Germanic personal names. Wolfgang Haubrichs focuses on the use of names in the prologue to *Lex Salica* and makes a detailed and useful survey of the material. The dithematic female names from eighth-century Lombard Italy are dealt with in Maria Giovanna Arcamone's contribution, which may be described as a presentation of a primary material. A document from 750 is the point of departure of Jörg Jarnut's discussion of the social and cultural importance of personal names. John Insley describes the Anglo-Saxon names in Rome. A voluminous and well-documented article by Hermann Reichert on Sigfried, Sigurd, Sigmund and Ragnar has the main heading "Zum Namen des Drachentöters." Other contributions to the onomastic theme are presented by Heinrich Tiefenbach, Martina Pitz and Wolf-Armin Frhr. von Reitzenstein. The other main themes of the festschrift are gathered under the headings "Beiträge zu Memoria, Gebetsgedenken und Verbrüderung," "Beiträge zur Archäologie" och "Beiträge zur Geschichte des frühen Mittelalters."

Among other things, the last section contains Ulrich Nonn's article "Karl Martell – Name und Beiname," a survey article concerning West Slavic trade in the early Middle Ages by Matthias Hardt, and Dieter Strauch's article on legal history "Geschworene statt Eisenprobe. Entwicklungen im mittelalterlichen schwedischen Prozeß." Taken together this is a substantial festschrift where not least methodological problems of general interest are treated.

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Carl-Erik Lundbladh, *Skånes ortnamn. Serie A*, *Bebyggelsenamn. Del 13*, *Norra Åsbo härad*, Uppsala: Institutet för språk- och folkminnen 2008, ISBN 9789172290570, 318 pp.

The work with Skåne's toponyms is purposefully being carried on. In 2008, volumes came out about the settlement names both in the hundred of Norra Åsbo and in the adjacent hundred of Västra Göinge (see p. 152). The part reviewed here has been compiled by Carl-Erik Lundbladh, who so far has published scholarly works in the areas of semantics and lexicography and who now makes his debut in earnest as a toponym researcher. The name *Åsbo* is interpreted as an original genitive plural of *åsbor* referring to the people who lived at Söderåsen, possibly those who lived at Söderåsen and Hallandsåsen. When reading this volume on toponyms, the reader naturally comes across a number of topographical words: a Danish *fed* 'low, moist stretch of land' (p. 25), an Old Scanian *hun* 'ridge,' 'range of hills' (p. 85, p. 184) and a *skärv*

'mound of stones,' 'stony place' (p. 168, p. 171), just to mention a few. In connection with at any rate some of these derivations, the interpretation of the topographic words may be further discussed. The element *sköld* as a topographic word is dealt with under *Skillinge* (pp. 91 ff.). It is evidently more complicated to analyse the *kås* that probably constitutes an attributive element in *Kåshässle* (p. 118). A lake name is quite likely behind *Bälinge*, probably a formation based on Old Danish *bælgia* 'blow up,' 'swell' (p. 112), and there is also likely to be a lake name behind *Glimminge* (p. 46). A name of a stream, Old Danish **Røghn*, for *Rönne å*, is assumed to lie behind the attributive element in *Rögnaröd* (p. 53), while the **Hæria* found in the compound attributive element in *Herrevadskloster* (pp. 153 ff.) probably is the name of a p a r t of Rönne å. In connection with the description of names denoting other things than villages, the reader finds interesting things. Thus a number of transfer names are mentioned under *Skillinge*: *Angersmünde*, *Bukarest*, *Mecklenburg*, *Olpenits*, *Stettin*, *Warschau* etc. (pp. 92 ff.). The name of the inn *Talavid* is considered to be formed on the verb phrase *tala vid* in the sense 'stop and drop in' (p. 136). In some places the reader pauses, however, wanting clarifications and/or complementary additions. To take just one example, one may wonder about the plausibility of interpreting *Varshult* in connection with Old Danish *hver* 'everybody' (p. 126), which is taken from Birgit Eggert. Concerning the attributive element in *Dejebäcken* (pp. 161 ff.), several alternatives are mentioned: *diger* 'huge,' Old Danish *deghia* 'swamp'— or less likely according to the au-

thor—*deja* 'housekeeper.' I would have liked a more detailed discussion here. In connection with *Torsjö* (p. 176) no fewer than six different possible explanations of the attributive element are mentioned, but the author takes sides with one of the alternatives as the most probable one. *Skånes-Fagerhult* (p. 31) is assumed to be formed on *fager* in the sense of 'suitable'—as suggested by Bertil Ejder—but this sense may probably be questioned. A series of colour pictures showing the topography, among other things, enhances the value of the book to a considerable extent. Not least the photographs showing *Dalagården* (p. 104) and *Öja* (ibid.) are illustrative.

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Tim William Machan (ed.), *Vafþrúðnismál* [with an introduction and notes], 2nd edition, Toronto: Centre for Medieval and Renaissance Studies, Durham University, Pontifical Institute of Mediaeval Studies 2008 (Durham Medieval and Renaissance Texts 1), ISBN 9780888445612, 142 pp.

This textbook contains the *Edda* text that is about the wisdom controversy between Óðin and the giant Vafþrúðnir. The text edition is intended for students. The extensive introduction of more than 50 pages gives an account of codicological, philological and cultural conditions that increases the understanding of the text to a great extent. The introduction describes for example the structure of the poem, its genre area—among other things with a discussion of *senna* och *mannjafnaðr*—and the mythological contexts

of which the text is a part. The meter is described in one section. After the presentation of the text there is a list of notes dealing among many other things with the text's *Reiðgotar* (p. 80), the much debated word *lúðr* (p. 89 f.), the word *hof* and its semantic context (pp. 92 f.) and the word *hamingja* (pp. 103 f.), all with thorough literature references. At the end there are a bibliography, a wordlist and a name index. This is a work that will have a useful function in academic teaching.

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Günter Neumann, *Namenstudien zum Altgermanischen*, hrsg. von Heinrich Hettrich und Astrid van Nahl, Berlin & New York: Walter de Gruyter 2008 (Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde, hrsg. von Heinrich Beck, Dieter Geuenich & Heiko Steuer. Band 59), ISBN 9783110201000, XI + 559 pp.

Günter Neumann (1920–2005) devoted his scholarly work to the Indo-European languages in Asia Minor, classical Greek and Latin and the older Germanic languages. As regards articles in the first-mentioned area, these have already been collected in the author's *Ausgewählte kleine Schriften* hrsg. von Enrico Badalì, Helmut Nowicki & Susanne Zeilfelder (in Innsbrucker Beiträge zur Sprachwissenschaft, Bd 77, 1994). In the present volume a number of articles have been collected together with contributions to *Reallexikon der Germanischen Altertumskunde* (RGA) concerning the Germanic languages. The omnibus starts with three more general contributions. Of particular inter-

est is the first "Substrate im Germanischen?," which tackles the question of whether, and in that case to what extent, there are ancient, non-Indo-European features in the vocabularies of the Germanic languages. It is sometimes claimed that up to a third of the older Germanic stock of native words should be of non-Indo-European origin, something that cannot be confirmed according to Neumann. In addition, it is not a particularly homogeneous group of words. More generally, one article describes the language conditions in the Germanic provinces within the Roman Empire, while another one deals with the oldest evidence of Germanic languages. The following sections contain articles on toponyms and personal names and a number of contributions on regional and cultural matters. Among articles of great interest there are for example "*Alust*–ein krimgotischer Ortsname?" and the one on *Dransfeld*, which is neither Celtic nor Illyrian but Germanic—not to mention the other articles on toponyms—but also some contributions from RGA: *Engern*, *Falen*, the survey article "Römische Ortsnamen" etc. Among noteworthy contributions to the section on personal names may be mentioned "Germanische Göttinnen in lateinischen Texten," which discusses an important material, as well as a number of articles from RGA: *Burgunden*, *Chaideinoi*, *Charuden*, *Dänen*, *Erminonen*, *Finnaithai*, *Germanen*, *Heruler*, *Ingwäonen*, *Istwäonen*, *Jüten* and *Kimbern*. The section on regional and cultural matters contains an interesting account of Pliny's *sualiternicum* 'amber,' interpreted by Neumann as original West Germanic *swali-terw-in-an*, *swali-terw-ij-an*, 'brennbares

aus Harz entstandenes (i.e. Material).' This interpretation is ingenious, but some of the specific details are debatable. This section also provides very worthwhile reading, for example about castles, bridges and many other things. Taken together it is a very valuable volume in which a number of problems concerning the oldest Germanic names have been collected. A bibliography of one hundred pages concludes the book.

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Helge Omdal & Helge Sandøy (eds.), *Nasjonal eller internasjonal skrivemåte? Om importord i seks nordiske språksamfunn*, Oslo: Novus Forlag 2008 (Moderne importord i språka i Norden 8), ISBN 9788270994908, 187 pp.

The research project "Moderne importord i språka i Norden (MIN)" ['Modern loanwords in the Nordic countries'] was initiated by Nordiska språkrådet ['the Nordic Language Council'] in 2001. The aim of the project is "to produce a comparative survey of how modern loanwords are treated in the Nordic languages as regards both norms and usage, and to obtain a general insight into the conditions of language attitudes and a special insight into the attitudes to loanwords in the Nordic countries" (p. 4). This is the tenth monograph in the project. It deals with the adaptation in w r i t i n g of the modern loanwords in the Nordic languages, both orthographic and morphological adaptations. Should the English *tape* be rendered *tape* or *teip/tejp*, should the form be *konto* (sing.)—*konti* (plur.) or *konto*—

kontoer? In Omdal's introduction a picture is given of the questions brought to the fore in connection with this partial study. In the following five studies the conditions in the different Nordic countries are elucidated. Ásta Svavarsdóttir deals with conditions in Iceland, and not least interesting is the description of the status of the loanwords in the language community. It must be said, however, that the empirical Icelandic material is rather small. Hanna Simonsen and Helge Sandøy describe conditions in the Faroese written language. They discuss the fact that English *scooter* is rendered in the form of *skutari* in dictionaries but only as *scootari* and *scotari* in the concrete newspaper material. This may be due to the language users having a good knowledge of English and also having seen the word in this form in Danish, but maybe also because "mange sprogbrugere vægrer sig ved at skrive importord med færøsk stavemåde, da man derved viser, at man accepterer importordene" ['many language users refuse to write loanwords with Faroese spelling, thereby showing that they accept the loanwords'] (p. 75). The latter conclusion is interesting. Under the heading "*Bacon* eller *beiken*? Tilpassing av moderne importord i norsk" ['*Bacon* or *beiken*? Adaptation of modern loanwords in Norwegian'], Helge Omdal describes the Norwegian situation, and presents, among other things, an important discussion of his source material, namely the fact that the newspaper material contains a proportionally large amount of advertising text in relation to editorial text. Margrethe Heidemann Andersen and Pia Jangvad show that the English loanwords in Danish are written in the English way, with some systematic exceptions, but often have Danish inflection. Finally, Åsa Mickwitz deals with Standard Swedish and Finland Swedish conditions and notes, among other things, that Finland Swedish has a larger proportion of adapted loanwords than Standard Swedish. In Omdal's concluding part, conditions in the different Nordic languages are compared.

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Claes Ringdahl, *Skånes ortnamn. Serie A*, *Bebyggelsenamn. Del 22*, *Västra Göinge härad med Hässleholms stad*, Uppsala: Institutet för språk och folkminnen 2008, ISBN 9789172280518, 507 pp.

Two volumes in the series *Skånes ortnamn* were published in 2008. One of them, the settlement names in the hundred of Norra Åsbo, is dealt with p. 149, the other deals with the settlement names in the hundred of Västra Göinge and will be scrutinized here to some extent. After the name of the hundred has been dealt with initially, the numerous settlement names in the hundred are discussed. There are 23 parishes here, among which Finja, Gumlösa, Hörja, Nävlinge, Stoby, Vankiva, Vinslöv and Visseltofta may be mentioned. This very enumeration provides a picture of the types of names that Claes Ringdahl has had to grapple with in this volume. As we can see, there are names here ending in -*lösa*, -*löv* and -*tofta*. The name *Finja* is formed on the noun *fen* 'marsh,' *Hörja* possibly contains an Old Danish **hørg*, a collateral form of *harg* 'heap of stones,'

and *Nävlinge* contains *næf* 'bill,' used about a protruding ground formation. The name *Stoby* might contain *stock* ('log'), not in a clearly identified sense, however; *Vankiva* has *vatten* 'water' in the attributive element and *kiv* 'disagreement' in the main element, and the name refers to "the confluence of two brooks east of the church with disagreement about the advantage" (p. 287), while *Visseltofta* might seem to have a watercourse name **Visla* in the attributive element. At the end of the volume the name *Hässleholm* is dealt with. A number of topographic appellatives are discussed: Old Danish **hakull* or **hækill* 'protruding ground formation' (p. 103), *mal* '(area with) coarse gravel or round pebbles' (p. 279), Old Danish *ruthil* or *rythil*, probably in the sense of 'elevation' (p. 124), Old Danish *søs* 'dirt,' 'marsh' (p. 169), *vege* 'curve of stream' (p. 191) and a large number of others. In other respects too, the author discusses some interesting words, such as *snäre* or *snärje* 'brushy shrubbery,' 'thicket' (p. 213, p. 403), a similar *snärka* 'tangled scrub that is difficult of access' (p. 57) and *pjyck* '(small) heap or stack (of hay, peat etc.)' (p. 186). In some places the reader wonders whether the author's standpoints might not have been clearer. This concerns for example the attributive elements in *Horröd* (pp. 33 ff.), *Deleberga* (p. 141), *Grantinge* (p. 238) and *Florröd* (p. 276) as well as the main element in *Rättelöv* (p. 249). It must however be understood that in a survey of this kind it is not possible to make in-depth analyses of every single problem.

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In this book the dialects in the eastern part of Vest-Agder are in focus, that is the dialects in the region of Kristiansand. The study has two main objectives, to elucidate what the traditionally great dialect variation in the region looks like today—for example: what development trends are there and what is the importance of the urban dialects?—and to illustrate "kva folk opfattar av, meiner og trur om forhold som er knytte til talemålet" ['what people conceive, think and believe of conditions connected to the spoken language'] (p. 5). In this latter part the emphasis is placed on the relation between language conceptions and real language use (p. 13). After the detailed presentation of the aims in the first chapter, there follows an account in the next two chapters of the overarching theoretical and methodological perspectives. It is made clear that there are problems concerning a study of language conceptions (pp. 44 ff.). In the fourth chapter the spoken language and societal conditions in east Vest-Agder are described. The following first investigative part (chapters 5 and 6) contains a study of what 20 teachers say about the spoken language in the region. This account is rich in detail. The most interesting section is entitled "Kva språkvitaren ikkje visste" ['What the linguist did not know'] (pp. 174 f.), where among other things explanations of spoken language variation related to social factors are presented. In the second investigative part (chapters 7 and

8), 24 young people's language is in focus. Here too a detailed analysis is made of linguistic features and the informants' conceptions of language are presented (pp. 212 ff.). In the comparative and summarising chapters (9 and 10) linguistic change is discussed, among other things in levelling, normalisation and regionalisation perspectives (pp. 263 ff.). Not least the discussion of the concept of *linguistic regionalisation* (pp. 277 ff.) is of interest here. The language situation in one of the places studied, Mandal, is discussed under the heading "Den vesle byens relative autonomi og styrke" ['The small town's relative autonomy and strength'] (s. 270 f.). How the language conceptions are created is then discussed and summarised in a model (p. 288). As mentioned above, the results are accounted for in minute detail in the study, but in the concluding parts the author laudably enough makes a summarising account that not least methodologically is of great interest.

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Kjell Ivar Vannebo, *Normer, strukturer og ferdigheter. Bidrag til nordisk språkvitenskap. Festskrift til Kjell Ivar Vannebo på 70-årsdagen 18. juli 2008*, ed. by Svein Lie & Geirr Wiggen, Oslo: Novus Forlag 2008, ISBN 9788270994816, 302 pp.

When Kjell Ivar Vannebo was 70 years in July 2008, he was presented with this publication containing twenty of his scholarly works. The book gives us a picture of the versatile Norwegian linguist. It starts with an article from 1970 on gender morphemes in Norwegian present-ing structuralist morpheme theory. Articles on grammar are well represented in the volume, not least such that deal with syntax. Different perspectives on Northern Norwegian syntax are thus adopted in a survey article (1988) where a number of dialectal syntactic features are discussed. Syntactic features in northern Scandinavia have sometimes been explained as the result of interference from Sami and sometimes as the result of internal developments. Vannebo himself made a close analysis of one of the features in this survey article in "Ein sterk ein prylert" (1972)—the feature mentioned in the heading is chiefly found in Northern Swedish and Norwegian dialects—and the use and distribution and historical development of the construction are analysed in great detail. What Vannebo calls *rekonstruerende perfektum* ['reconstructing perfect']—which in Swedish research has been called *preterital perfektum* ['preterital perfect'] and *modalt perfektum* ['modal perfect'], among other things—is dealt with in an article from 1989. The construction *ta og ro deg ned noen hakk* ['just cool it a bit'] is analysed from a grammaticalisation perspective in an article from 2003. Definite inflection in Norwegian, exemplified by *den unge man* and *den unge mannen* ['the young man'] is dealt with (2007) in a historical and normative perspective, among other things. Vannebo's participation together with Jan Terje Faarlund and Svein Lie in the preparation of the *Norwegian Reference Grammar* has resulted in a number of articles in the volume, for example "Har vi bruk for referansegrammatikkene?" ['Is the reference grammar useful?'] (1998). Norwegian as a second lan-

guage is dealt with in the printed public examination "Å ha en fortid på vietnamesisk" ['To have prehistoric times in Vietnamese']. Linguistic norms and standardisation represent another area of Vannebo's scholarly work. One article from 1980 is about "språkvitenskapens norm-begrep" ['the norm concepts of linguistics'], and one from 2001 is about linguistic standard and linguistic standardisation. An article in German from 1983 deals with the language situation in Norway from both a national and an international perspective. Vannebo has also taken an interest in the area of literacy—as is well known, he published in 1984 *En nasjon av skriveføre. Om utviklinga fram mot allmenn skriveferdighet på 1800-tallet* ['A nation of literates. On the development towards general literacy in the nineteenth century']. He has also published a number of articles in this area: one deals in general terms with sources, methods and problems in literacy research (1990), and another one consists of his examination of Vibeke Sandersen's thesis on Danish soldiers' literacy and written language in the middle of the nineteenth century (2003). Having the articles from a scholarly authorship collected in this way is a good thing, in particular since some of them were published in inconspicuous places and in some cases had actually not been published before. A couple of articles are repetitive to some extent, which is inevitable in an omnibus of this kind. Together with Svein Lies and Geir Wiggen's introduction and the concluding bibliography this is a very readable volume.

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Articles should not exceed c. 45,000 characters in size, including spaces (c. 7,000 words). This should, however, not include references.

Manuscripts should be double-spaced with wide margins, all pages numbered consecutively. Two 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.

2. The Manuscript

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.

Short quotations should be incorporated in the text and surrounded with double quotation marks, and quotations within quotations should be surrounded with single quotation marks. Quotations of more than 30 words and quotations from plays or poetry should be indented on the left-hand margin and set off from the main text. Omitted text in quotations should be marked [...] and the author's interpolations should be enclosed by square brackets [xxx]. Emphasis should be marked by italics except in linguistic articles where bold type may be used instead. Words and names used meta-linguistically should be given in italics. Commas, full stops etc. should be placed inside the closing quotation mark.

Quotation in other languages than English, German and French are permitted but must always be translated. Translations should be given within square brackets and should be surrounded by single quotation marks.

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 (p. 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 semicolon 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
Bäckman, L. & Hultkrantz, Å. (eds.) (1985). *Saami Pre-Christian Religion. Studies on the Oldest Traces of Religion among the Saamis* (Acta Universitatis Stockholmiensis. Stockholm Studies in Comparative Religion 25), Stockholm: Almqvist & Wiksell International.

Journal
Roesdahl, E. (1998). "L'ivoire de morse et les colonies norroises du Groenland," *Proxima Thulé. Revue d'études nordiques*, 3, pp. 9–48.

Chapter in edited book
Ränk, G. (1985). "The North-Eurasian background of the Ruto-cult," in *Saami Pre-Christian Religion. Studies on the Oldest Traces of Religion among the Saamis* (Acta Universitatis Stockholmiensis, Stockholm Studies in Comparative Religion 25), eds. L. Bäckman & Å. Hultkrantz, Stockholm: Almqvist & Wiksell International, pp. 169–178.

Conference proceedings
Fatychova, F. (2006). "Namenstraditionen unter den Baschkiren," *Proceedings of the 21st International Congress of Onomastic Sciences. Uppsala 19–24 August 2002*, vol. 2, Uppsala: Språk- och folkminnesinstitutet, pp. 89–95.

Newspaper
Palm, G. (1969). "De söp, dansade och älskade i vår märkligaste religiösa väckelse" ['They got drunk, danced, and made love in our most astonishing religious revival'], *Göteborgsposten* 12 October.

"Lärarinna säger upp sig för att flyga med kristallarken" ['Woman teacher resigns in order to fly with the crystal ark'], unsigned article in *Aftonbladet* 10 March 1935.

Electronic media
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; 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.

4. Illustrations, Maps and Tables

Illustrations, maps and tables accompanying the article should be listed separately.

4.1. Illustrations and Maps

Illustrations and maps should be numbered consecutively in Arabic numerals and presented with brief captions. The approximate placement of the illustration or map in the text should be stated in the article manuscript, and there should be a clear reference to the illustration or map in the text itself.

Illustrations and maps must be submitted in such condition that they may easily be reproduced in the journal. If possible, maps and illustrations should be submitted electronically, as separate files. Note that illustrations and maps should *not* be inserted into the text manuscript.

Unless the author has produced the illustration or map, the original source must be given. The article contributor is responsible for obtaining the right to reproduce the material. Permission should accompany the submitted article.

4.2. Tables

Tables should be numbered consecutively in Arabic numerals and provided with explanatory captions.

5. Proofs

Proofs will be sent electronically to the contributor and must be returned within ten days. Only minimal changes should be made and contributors will be required to pay for major alterations from the original manuscript.

6. Off-prints

The author or authors will receive altogether two copies of the journal containing the article and off-prints in the form of a PDF-document. Contributors to the sections *Notes* and *Reviews* will receive one copy of the journal. Authors may order further copies of the journal at a reduced price.