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Food Cultures in Sápmi

An interdisciplinary approach to the study of the heterogeneous cultural landscape of northern Fennoscandia AD 600–1900

Markus Fjellström

Doctoral Thesis in Scientific Archaeology at Stockholm University, Sweden 2020

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Academic dissertation for the Degree of Doctor of Philosophy in Scientific Archaeology at Stockholm University to be publicly defended on Friday 8 May 2020 at 13.00 in Nordenskiöldsalen, Geovetenskapens hus, Svante Arrhenius väg 12.

Abstract

The aim of this thesis is to highlight the heterogeneous cultural landscape in Sápmi through the study of food. By studying food and the choices of specific foodstuffs in Sápmi AD 600–1900, a greater understanding can be gained on the history of this area during the period. A number of well-known archaeological sites in Sápmi have been chosen as the focus, dating from the Late Iron Age in north-central Sweden to the late-19th century in northern Norway. By means of stable isotope analysis ($\delta^{13}C$, $\delta^{15}N$, $\delta^{34}S$ and $^{87}Sr/^{86}Sr$) and elemental analysis on human and animal skeletal remains, the diversity in food culture has been studied. The chronological range in this thesis is rather broad but has been determined by the available archaeological skeletal material from the area. The overarching questions are how cultural diversity is reflected in different food practices, how individual life history and studies of mobility contribute to the understanding of life in Sápmi, what role the reindeer had in the diet in Sápmi during the period studied, and finally, what impact mining activities had on the local population in Sillbajåhkå/Silbojokk in terms of lead poisoning?

Through the different case studies, it has been demonstrated that food consumption was by no means uniform and static during the period, and that the differences in food consumption reflect a multicultural landscape. Individuals buried in Vivallen had a diet based on terrestrial and freshwater resources, in contrast to individuals from Guollesuolu/Gullholmen and Kirkegårdsøya, who had diets based predominantly on marine protein. However, the diet of individuals buried at Gullholmen was much more varied than at Kirkegårdsøya, indicating a multi-ethnic presence. The intra-individual analysis of diet and mobility provided information on a more complex society. Whether they were Sámi or non-Sámi is difficult to assess, but they were clearly a culturally heterogeneous group of people. The individuals that were buried in Rounala and Sillbajåhkå/Silbojokk in northern Sweden had a mixed diet, including foodstuffs from terrestrial, freshwater and/or marine environments. The sites overlap chronologically, with Rounala dating from the 14th to the 18th century, and Silbojokk from the 17th to the 18th century. While individuals buried in Rounala had a mixed diet, focused on freshwater fish, individuals buried in Silbojokk had a much more varied diet. Through the analysis of sulphur and strontium isotopes, it was possible to investigate intra-individual change in diet and mobility. Further, the results indicated that reindeer protein was not a major food source at the sites studied.

The mining activities at Silbojokk can be seen as the result of colonial infraction on nature and people in Sápmi by the Swedish state, with an immense and negative impact on the environment and for people there. This thesis includes the analysis and handling of human skeletal remains, which always has ethical implications: even more so in areas subjected to colonialism, such as Sápmi. My aim has been to highlight the importance of discussing reburial and repatriation and offer some thoughts on how this may be handled in the future.

Keywords: *Food Culture, Diet, Mobility, Iron Age, Middle Ages, Sápmi, Sámi Archaeology, Reindeer Domestication, Stable Isotope Analysis, Elemental Analysis, Repatriation, Reburial.*

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Cover: "Insamling av angelica", 1895 (slightly cropped), by Johan Tirén (1853 –1911), painting privately owned, photo by courtesy of Håkan Tunón. Most likely painted in the vincinity of Oviken, Jämtland; the person depicted is a "Sámi man named Fjellström", (pers. comm., Håkan Tunón).

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To the memory of our
beloved Majlis Forsman

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This has been a journey with up and downs and even though I have had some really good times, I have been looking forward to finishing. It has been stressful and challenging for every part of me, both physically and intellectually, and it has been very educational. I would like to acknowledge all of you who have played a part in the writing of the thesis, those who have borne with me and to those who supported me all along. Thank you!

The long journey that writing a PhD thesis is has also been a journey of self-discovery and development and has led me to challenge myself many times in my research; it has also presented a challenge to my understanding of my own origins and identity. I was born in Arjeplog but moved to Paris with my mother at the age of seven. It wasn't until 2007, at the end of high school, that I moved back to Sweden, Gothenburg, to start my archaeological training. During my childhood, I was imbued with the imprint of a multitude of traditions. Growing up in Arjeplog, I was either in school or spending time with my siblings, family and friends, or visiting my father or other family members in Björklund or Mullbacken, in the vicinity of Arjeplog. My grandfather grew up as a farm boy in the small family village called Björklund. His grandfather, the bear hunter Lars Fjellström, was the first to build a house there. My grandfather's siblings came to build cottages, and the village is still today mostly inhabited by family members. I spent a lot of my time there and know the woods, water, mountains all by heart. Moreover, I also spent a lot of time in Mullbacken, southwest of Arjeplog, where my grandmother grew up as a farm girl. These were self-sufficient farms, which had livelihoods for their own consumption and living. I did not grow up identifying myself being Sámi; however, during the last ten years, with my archaeological training and studies, I have come to think more about my origins and I have become more aware of my Sámi ancestry from both Mullbacken and Björklund.

First of all, I would like to thank my supervisors. Thank you for all your help and the many supervision hours and insight into a new world of archaeology. Gunilla, thanks for all your good advice. My writing has not always been the best and I do feel insecure about it; for me it has been of great value to have your comments. I would like to blame my French education for that. Thank you for your sometimes rigorous questions leading me in the right direction and of course for all the sound guidance. Thanks, Kerstin, for your

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List of papers

I Salmi, A.-K., Äikäs, T., Fjellström, M. & Spangen, M. 2015. Animal offerings at the Sámi offering site of Unna Saiva – Changing religious practices and human–animal relationships. *Journal of Anthropological Archaeology* 40: 10–22.

II Fjellström, M., Eriksson, G., Lidén, K. & Svestad, A. Food and cultural traits in coastal Northern Finnmark in the 14-19th centuries. *Norwegian Archaeological Review* 52(1): 20–40.

III Dury, J. P. R., Eriksson, G., Fjellström, M., Wallerström, T. & Lidén, K. 2018. Consideration of freshwater and multiple marine reservoir effects: dating of individuals with mixed diets from northern Sweden. *Radiocarbon* 60(5): 1561–1585.

IV Fjellström, M., Lindgren, Å., López-Costas, O., Eriksson, G. & Lidén, K. (ms). Food, mobility and health in an Arctic 17th–18th century mining population. Submitted to *Arctic*.

V Fjellström, M., Eriksson, G. & Lidén, K. (ms). Fishing at Vivallen – stable isotope analysis of a south Sámi burial ground. Submitted to *Current Swedish Archaeology*.

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Abbreviations

Sámi names for objects and other terms are given in Pite Sámi, if not otherwise specified. Sámi place names are given according to the local Sámi language.

Norw.	Norwegian
SaP.	Pite Sámi
SaL.	Lule Sámi
SFS.	Swedish Code of Statues (Sw. *Svensk författningssamling*)
Sw.	Swedish

Contents

1. Introduction

1.1. Discovering diets, tracing traditions

All living organisms require vital substances, such as proteins, carbohydrates, lipids, vitamins, minerals and water to survive. These sources can be translated into food, and for humans into what we would call cuisine (Belasco 2008:1–2; Carr et al. 2018:145). Food is not only vital for survival, but cuisine is also intertwined with social, economic, political and religious traditions and practices. What resources are used in a particular geographic area during a particular time period is based not only on the available resources but just as much on cultural preferences and taboos. Through the study of artefacts, and human and faunal skeletal remains, we can study past food habits and culture: human behaviour, adaptation and traditions. Different source materials provide different information, e.g., while lipid food residue analysis applied to ceramics provides information on the use of pottery, the study of stable isotope analysis on skeletal remains provide information on diet and mobility, based on the food ingested.

The abundance of, and access to, food is different from one place to another and from one time period to another. In this thesis, that focuses on Northern Fennoscandia, the range of food sources available were very different compared to southern Fennoscandia. For instance, the garden angelica (*Angelica archangelica*) (*båsskå*, SaP), were and still are very much rooted in Sápmi, Sámi food culture, community and its traditions (Fjellström 1964:99–115). The range of available plant and animal species at any given time varies, and therefore it is necessary to assess which foodstuffs were accessible in each specific case. An example of such an animal is the elk (*Alces alces*), which disappeared in Northern Scandinavia during the Bronze Age, but reappeared later in prehistory (Bergman 1995; Larsson et al. 2012). According to Bergstøl (2008:152), elk hunting seems to have ceased in the Norwegian South Sámi area at the onset of the Late Iron Age, in favour of reindeer hunting.

In this thesis: 'Food Cultures in Sápmi. An interdisciplinary approach to the study of the heterogeneous cultural landscape of Northern Fennoscandia AD 600–1900', the aim is to highlight the heterogeneous cultural landscape in Sápmi through the study of food. By studying food and the choices of specific foodstuffs in Sápmi, it is hoped light will be shed on the history of Sápmi during this time period. The focus will be on a number of well-known

archaeological sites from different time periods in Sápmi, dating from the Late Iron Age in north-central Sweden to the late-nineteenth century in Northern Norway (Fig. 1).

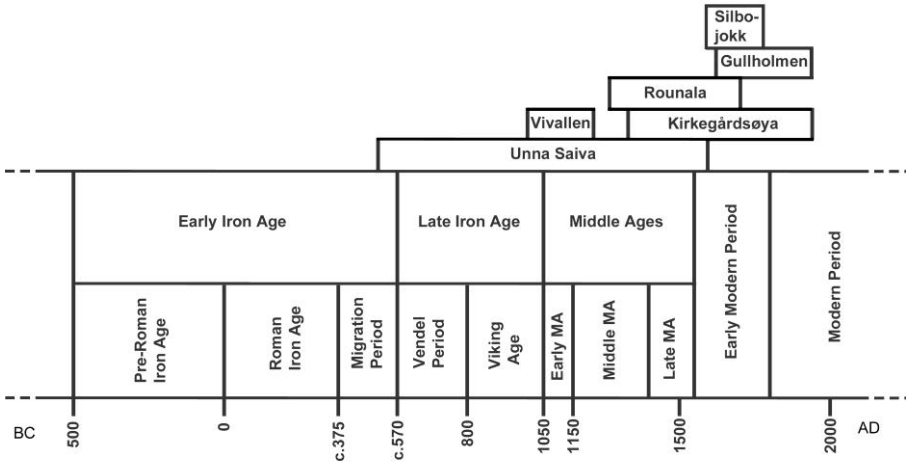

Figure 1. Chronological time line with archaeological and historic time periods framed from the Early Iron Age to the twenty-first century. The archaeological sites studied are lined at the top of the time line.

The study of food and diet in archaeology is nothing new. New methods are continuously being developed and the study of diet, mobility and migration can help us deal with, and better understand, our past. Archaeology, in itself an interdisciplinary discipline, can, in collaboration with other disciplines (e.g., ethnology, history, chemistry, physics, geology, religion studies), facilitate discussions and increase our understanding of the past. Stable isotope analysis of skeletal remains, together with many other bioarchaeological methods, can provide new insights into food and food culture in Sápmi (Paper I–VI; Fjellström 2011; Naumann & Price 2014; Hansson 2018; Salmi et al. 2018; Spangen & Fjellström 2018; Lahtinen & Salmi 2019; Lidén et al. 2019; Salmi et al. 2020; Salmi & Fjellström Submitted). By means of stable isotope analysis ($\delta^{13}C$, $\delta^{15}N$, $\delta^{34}S$ and $^{87}Sr/^{86}Sr$) and elemental analysis on human and animal skeletal remains, the diversity in food culture has been studied. Each paper (I–VI) approaches the study of food culture in Sápmi from a different angle, first and foremost based on chronological and geographical differences.

1.2. Aims and research questions

Sápmi has always been a heterogeneous cultural landscape (Hansen & Olsen 2014:7; Harlin 2019). However, in the 1990s during the *sedvanerättsprocessen* in Härjedalen, Baudou pointed out the difficulties in tracing such diversity (Baudou 2007:168–171). I would like to argue that it is possible to trace the diversity through the study of diet and mobility. Even though Sámi cultures throughout Sápmi share a number of common values, e.g., social, economic, political and religious traditions, Sápmi must be seen through the lens of multiculturalism, with the presence of not only one Sámi group, but several groups, with sometimes substantially different ways of living and subsistence.

At the end of the first century AD, Tacitus mentioned the *fenni*, who have been associated with the Sámi by many scholars (Tacitus 1916[98]:96; Ojala 2009:156). The word *Sámi* is first mentioned in the Icelandic sagas from the thirteenth and fourteenth centuries, although it may be older than that (Bäärnhielm & Zachrisson 1994:161). Throughout history, the Sámi transmitted their traditions, customs, knowledge and religion orally. Therefore, only secondary written sources are available for information on historic Sámi traditions, written by the Roman historian Tacitus (Tacitus 1916[98]), Catholic, Orthodox and Protestant missionaries (Graan 1672; Schefferus 1956[1673]; Tuderus & von Westen 1773), scientists (von Düben 1977[1873]), and foreign travellers (Regnard 1992[1681]).

Sápmi has been, and still is, inhabited by both indigenous and non-indigenous groups with different cultural traditions. In Sweden, there are five national minorities: the Sámi, the Jews, the Roma, the Swedish Finns and the Tornedalers, but only the Sámi are considered a minority with an indigenous status (Sw. *urfolk*). However, history is usually more complex and there might have been other ethnic groups that lived and used the landscapes in Northern Fennoscandia, both in modern times (Pietikäinen et al. 2010) and in the past (Tromholt 1885:132; Wallerström 1995; Lundmark 2008). Other groups, with different cultural affiliations, are sometimes forgotten and set aside. This becomes rather obvious and problematic in cases of repatriation and reburial, when the question of who has the right to the artefacts and human remains is raised (Clegg 2009:119). Acts of repatriation and reburial should and must consider all local and regional parties (Esborg 2012). For examples and discussion on repatriation, see Chapter 6.

The chronological frame of this thesis is rather broad but has been determined by the available archaeological skeletal material from the geographical area. The overarching questions are:

- Is cultural diversity in Sápmi reflected in different food practices (Papers I–V)?

- How do individual life history and studies of mobility contribute to the understanding of life in Sápmi (AD 600–1900) (Papers II, IV and V)?
- What role did reindeer play in the diet in Sápmi during the period studied (Papers I–VI)?
- What impact did mining activities have on the local population in terms of lead poisoning (Paper IV)?

1.3. Cultural delimitation and cultural identity

Northern Europe can be divided geographically in various ways and some areas may overlap. The sites studied in this thesis are situated in Sápmi and Northern Fennoscandia, where the latter is less a political concept than Sápmi. Nonetheless, in light of the early national-state colonialism in Sápmi, it is necessary, and important, to discuss the ethics of studying Sámi cultural heritage (see Chapter 6). Sápmi, the land of the Sámi, is not delimited by any strict borders but is rather constrained by cultural traits and subsistence patterns of different Sámi groups. How the landscape in Sápmi has been used, as well as the 'traditional' view of how to define Sápmi, is constantly renegotiated. However, Sápmi has a geographical definition that can be described accordingly: it stretches from the lake Femunden in Hedmark, Norway and Idre in Dalarna, Sweden in the south, to northernmost Finnmark in Norway to the north, and from western Norway to the Kola Peninsula in Russia, including Northern Finland, in the east (Zachrisson 1997a:9) (Fig. 2). Sápmi consists of a complex natural landscape, rich and diverse, including large mountainous areas (the Scandes), a multitude of forest and inland lakes of various sizes, and it has access to the Atlantic Ocean, the White Sea and the Baltic Sea. Sápmi is a wide geographic area across four different countries with different legislations and wide spectra of traditions and cultural affiliations, not only between the different countries but also between different Sámi communities.

In Sápmi, several languages and dialects are spoken. Languages and dialects are bearers of cultural identity, thus linguistic studies can add to the comprehension of past societies and culture and to the understanding of cultural differentiation between different Sámi groups (Aikio 2012). In historic times, Sápmi was divided into several *sijjdas* (i.e., Sámi villages), each defined as an economic and administrative geographical territory.

Although the Sámi today are the only recognised indigenous people in Sweden, there are other groups with minority languages in Northern Fennoscandia with a long history, for example, Kvens (Elenius 2019). In the past, there were also other groups with different ethnic affiliations and/or other functions, e.g., administrative, active in the societies in Northern Fennoscandia, such as the Norse and the so-called *birkarlar*.

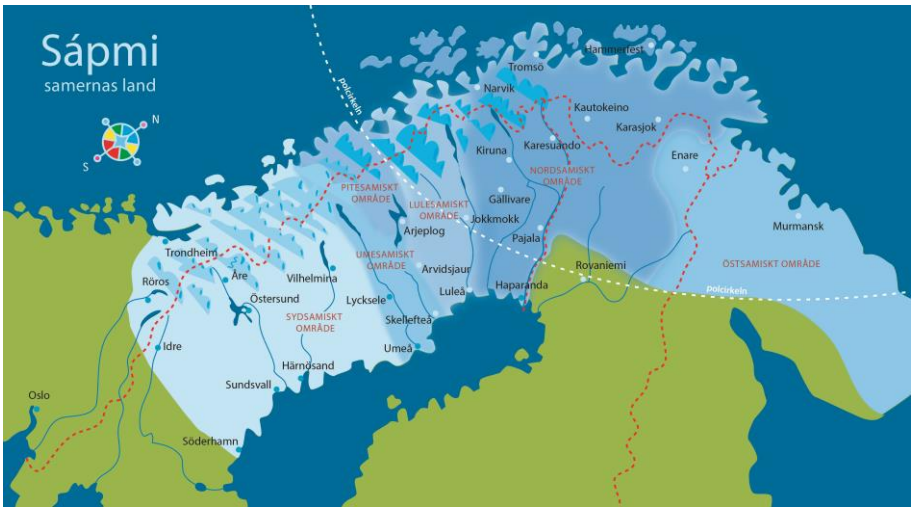

Figure 2. Map of Sápmi with different Sámi areas demarked (Illustration made by Anders Sunesson, www.samer.se).

Research on indigenous populations, and ethical considerations connected to this, are widely discussed within academia (see Chapter 6). There is even a specific terminology used in ethics-related research on indigenous populations, terms such as self-determination, claiming and re-claiming of the past, colonialism and post-colonialism (Tuhiwai Smith 2012). Anna-Lill Drugge, associate professor in Sámi studies, and Isabelle Brännlund, researcher at Várdduo, both at Umeå University, have argued for more transparent research in indigenous contexts with a so-called 'parrhesiatic' approach – deriving from a word signifying 'the one who speaks the truth' in ancient Greek (Drugge & Brännlund 2016:106–107). In this approach, the important concept is transparency in research for everyone in academia, the general public and indigenous societies. In the same volume, in a discussion on decolonising academia, Lawrence and Raitio argue for the necessity of an active and critical attitude to our choices, especially in relation to indigenous research and the contribution to the ethical discussions of the colonisation history of the Nordic countries (Lawrence & Raitio 2016:132). In my view, an archaeological perspective and application of scientific methods can contribute to a more thorough and well-grounded analysis. However, this was considered only to a lesser extent, in *De historiska relationerna mellan Svenska kyrkan och samerna. En vetenskaplig antologi*, two edited volumes on the reconciliation process between the Church and the Sámi, and the Swedish Church's White Book (Lindmark & Sundström 2016; Lindmark & Sundström 2017). Archaeology played an important role during the nineteenth and the first part of the twentieth centuries in the collection of Sámi skeletal material in the era of racial biology. Priests, biologists, archaeolo-

gists and many others took part in the plundering and collection of the human remains (Ojala 2016). Consequently, archaeologists today need to be aware of the dark history concerning this material and to have an ethically conscious approach to their own research on this material.

1.4. Ethnicity and ethnic groups

Ethnicity, as a concept, has an important political role in the modern world in the recognition, the self-consciousness and the self-identification of different indigenous groups. In the early twentieth century, the German archaeologist Gustaf Kossinna (1911) published *Die Herkunft der Germanen* (The Origin of the Germans), where he developed his 'settlement archaeology' that was used to distinguish people of different 'races' in order to prove Germanic racial superiority. Kossinna (1911) claimed that specific ethnic groups could be traced back in prehistory and that it was possible to identify prehistoric racial groups and ethnic continuity, such as for the Aryans and the Slavs (Shennan 1989:7-8; Jones 2008:414). According to Jones (1997:16, 2008:414), Vere Gordon Childe (1935) rejected Kossinna's racist assumptions and stressed that material culture of past societies could be used to identify past peoples or ethnic groups, but not races (Jones 2008:416). With the processual archaeology of the 1960s and 1970s, ethnicity was defined by social processes, subsistence, technology, economy, politics and religion (Jones 1997:26–28).

Schanche and Olsen (1985) accused Norwegian archaeology of being ethnocentric, since ethnicity must be seen as dynamic and a result of social interaction. They further argue that stereotypes of Sámi people as hunters and Norsemen as farmers is a product of the late-nineteenth and early twentieth century's national romanticism and contributes to maintenance of the idea of Sámi as a homogenous ethnic group (Schanche & Olsen 1985:93). There is a danger in connecting groups with a definitive material culture and traditions, as if cultures were static and did not evolve or change in time and space (Shennan 1989:14; Jones 2008:424).

Olsen and Kobyliński (1991) claim that an adequate theory of ethnicity must take into account social, political and economic interests, as well as the identity system. To quote the authors:

> An ethnic group is not a concrete phenomenon or objective category, but an ideational being from the sphere of social consciousness […] an ethnic group exists only to the extent that it exists in the consciousness of those who include themselves within, and those who exclude themselves from this group (Olsen & Kobyliński 1991:12).

2. Cultural diversity in Sápmi AD 600–1900

2.1. Sápmi

In this chapter, the cultural diversity in Sápmi is introduced, using established ethnonyms to describe different ethnic groups. It should be stressed that Sápmi can be seen as a culturally heterogeneous landscape with both similar and different social, religious and economic traits and complex interactions (e.g., see Norstedt & Östlund 2016; Bergman & Ramqvist 2017). The difficulty in discussing such matters without mentioning cultural affiliation of groups or of material culture, or indeed of landscape use, should also be acknowledged. Arguably, the use of ethnonyms to describe different indigenous and non-indigenous groups is not necessarily derogative. The ethnographic terms and ethnonyms used here are useful to show cultural diversity within and outside of the Sámi community, and to relate to their practices of food consumption. Ante Aikio (2012), a Sámi linguist, stressed the fact that Stone Age people are not to be regarded as Sámi, no more than Swedes, Norwegians or Finns. He also emphasises the difference between linguistic, cultural and genetic ancestry (Aikio 2012:65). Ethnographic descriptions can arguably be useful in the study of food culture in combination with bioarchaeological methods, such as stable isotope analysis. The focus here is not in trying to differentiate and polemicise different groups from each other but rather on discussing cultural heterogeneity in Sápmi regarding diet and mobility.

Sápmi is a vast area with a diverse topography including coastal, mountain and forest regions. The geology varies between Archean (the Kola Peninsula, Karelia, northeastern Finland and parts of Northern Sweden), Svecofennian (Northern and Central Sweden and southwestern Finland) and Caledonian (most of Norway and northern inland Sweden) bedrock. Moreover, Sápmi is divided into several vegetation zones, with a southern Arctic zone mostly at the northernmost coastal area of Norway and the Kola Peninsula, and an Alpine zone along the Caledonian and parts of the Svecofennian bedrock. Zones of northern, middle and southern boreal forests are present in that order from the Alpine zone to both the Norwegian and Swedish coasts (Fig. 3). The Atlantic coastal region of Sápmi has mild summer and winters, including more precipitation on the coast than inland and declining temperature to the east (Sjögren & Damm 2019:22). The boreal zones of Sápmi vary in temperatures depending on altitude and the proximity to the alpine area

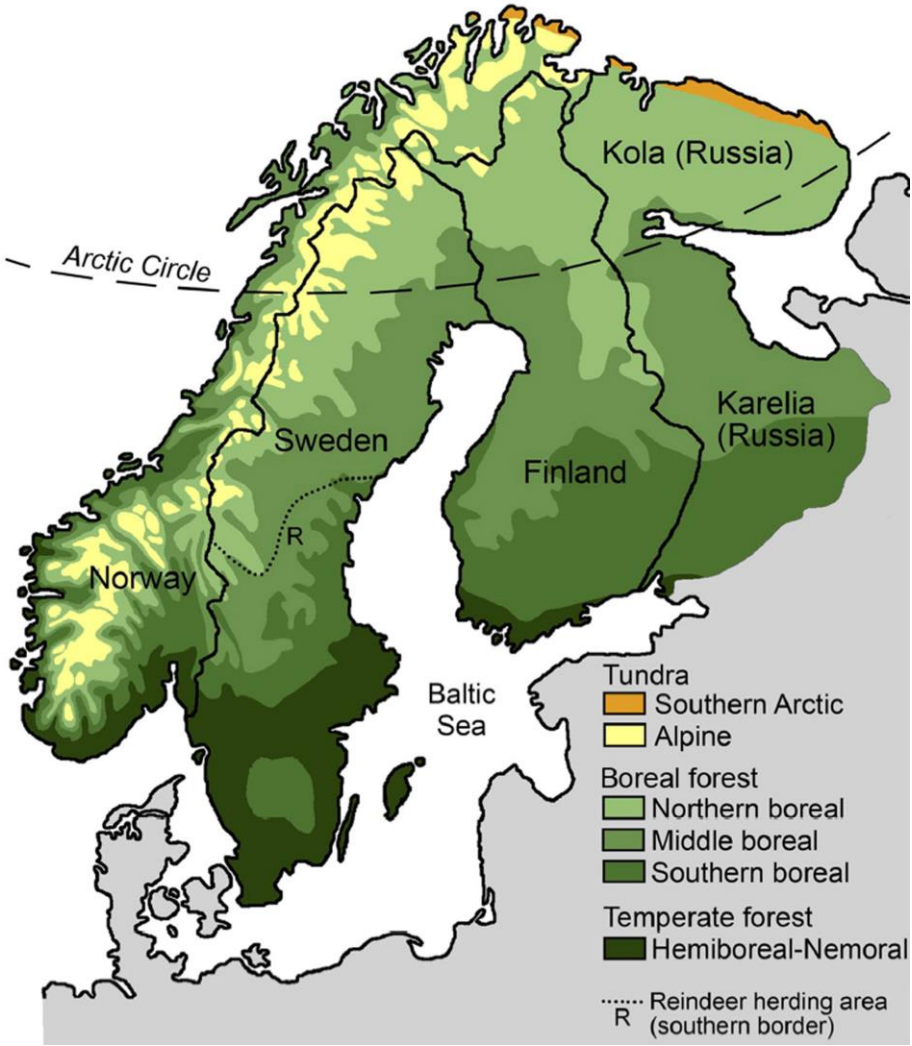

Figure 3. The different vegetation zones of Fennoscandia (map from Elmhagen et al. 2015).

and the Bothnian coast. In general, the summers are warm and the winters are cold (Mulk 1994:41–42; Kuuluvainen & Aakala 2011:825). Historically, the climate has fluctuated between warmer and colder periods, and longer stable periods of moderate temperatures. This had an impact on the vegetation, hence on food consumption and human adaptation to it.

In the late Middle Ages, the Swedish state subdivided the Swedish part of Sápmi into several administrative units, so called *lappmarker* (Sw.) (e.g., Kemi, Torne, Lule, Pite, Ume and Ångermanland *lappmarker*). In the Lule Sámi region, there were similar units called *vuobme* (SaL) (Mulk 1994:11;

Mulk & Bayliss-Smith 2007:101–102). These were in turn divided into several *sijjda* (SaP, singular form): villages compromising several families (or households) with a social structure embodying both an economic and a social organisation. These structures could vary from one region to another. However, each *sijjda* could have one to four households varying from two to nineteen members (Bergman et al. 2008a:101). In the Norwegian part of southern Sápmi, each *sijjda* could have up to three to five families, with twenty members each (Severinsen 2007:40). Another designation for *sijjda* in the Lule Sámi region is *tjiellde* (Mulk 1994:11). They had a traditional Sámi community organisation, with a social and religious territorial division connected to the exploitation of different ecological niches and in close relation to reindeer herding economies, dating back to the Late Iron Age (Mulk 1994:10–17; Eidlitz Kuojlok 2011; Olsen and Hansen 2014:82). All *sijjdas* within a *lappmark* or *vuobme* were culturally defined by their region, which included cooperation and sharing of resources, and marriages between members of different *sijjdas* within a region were common (Mulk 2005:35; Bergman et al. 2008a; Mulk & Bayliss-Smith 2007:102; Nordin 2009:57). The early *sijjdas* can be compared to modern Sámi villages with several families present and exploiting the same geographical area. They are today closely related to reindeer husbandry, with one or several families managing their reindeer together (Beach 1981:71).

Several studies have dealt with the utilisation of the natural resources in Sápmi and the Sámi community. For instance, Ørnulv Vorren divided the utilisation of the natural resources into coastal and inland *sijjdas* for the Sámi in eastern Finnmark. However, some were specialised on both coastal and inland resources, whereas others relied solely on coastal resources (Vorren 1978a:155–161). While reindeer (*Rangifer tarandus*) herders moved over large distances from one coast to another, fishers could be based in one specific area and did not move around as much. Earlier resource utilisation was not defined by national borders. Traditionally, the old borders of the *sijjdas* of the Sámi *veidekultur* (hunter-fisher-gatherer culture, Norw.), followed lakes or watercourses, such as fjords and river systems, and, in some cases, a lake could be divided between several *sijjdas* (Vorren 1978a:150). As some Sámi started herding domesticated reindeer during the Middle Ages, the hunt of wild reindeer was slowly reduced, and in the early eighteenth century, reindeer domestication was consolidated among reindeer-herding Sámi. The expansion caused a re-definition of the old borders of the *sijjda* areas, and resource utilisation. Vorren was also of the opinion that the borders and the internal regulations of the *sijjdas*, before the extension of reindeer domestication, were acknowledged. Breaking these would push you into the margins of the society (Vorren 1978a:158–159). Reindeer pastoralism and the intensification of reindeer domestication in the Middle Ages, alongside external trade, had an impact on Sámi social and economic organisation (Bergman et al. 2008a:107–108). The border demarcations between

Norway and neighbouring countries in 1751, 1826 and 1852 had important consequences for the development of reindeer herding (Vorren 1978a:162; 1978b:260; Hansen & Olsen 2014:276). Connected to the concept of the *sijjda* are the so-called winter villages. In the early 1920s, Väinö Tanner introduced the concept of Sámi winter villages in eastern Sápmi, which was then widely accepted. A winter village was thought to be a gathering place for several *sijjdas* within a region during winter; however, today this concept is challenged (see Edilitz Kuojok 2011; Wallerström 2017).

Although strong traditions may persist over centuries, culture is constantly changing, implementing new features all the time. For instance, with the conversion of people to Christianity came the Maria-pendant (Sw. *malja*), since then attached to garments in Sámi contexts and maintained over centuries (Wallerström 2000:21; Huggert 2009).

2.2. Sámi languages and regions

There are several languages / dialects spoken in different areas of Sápmi. These are, from the south to north, the South Sámi, Ume Sámi, Pite Sámi, Lule Sámi and North Sámi languages, and in the east the Inari Sámi, Skolt Sámi, Akkala Sámi, Kildin Sámi and Ter Sámi languages.

Southern Sápmi today officially stretches in Norway from Rana in Nordland to Elgå in Hedmark, and in Sweden from Västerbotten to Idre in Dalarna. There is evidence, both in Norway and Sweden, that the South Sámi cultural region stretched further south during the Late Iron Age (Zachrisson 1997a; Bergstøl 2008; Gjerde 2016:17; Severinsen 2016:160–162). This region comprises South, Ume and Pite Sámi dialects. However, whether Sámi in this region identify themselves as South Sámi may be questionable. There are no, or at least no definite, borders between different Sámi communities with different languages or subsistence strategies (e.g., reindeer herders or fishing Sámi), and differences may be local or regional.

Southern Sápmi has been inhabited by Forest, Mountain and Sea (Coastal) Sámi (see Section 2.3–2.5). Nordic settlers came along in different periods, depending on the area. For instance, we know that the Norwegian coast was settled by Norse farmers by the Late Iron Age. While the majority of Sámi living in this region were Forest and Mountain Sámi, both Swedish and Norwegian Sea Sámi also inhabited the region (Westerdahl 2008:138; Severinsen 2016). Another group of Sámi appeared during the seventeenth century, the so-called *sockenlappar* (parish or town Sámi, my translation). They were assigned duties both in villages and towns, especially to castrate domestic animals, but also to skin them (Westerdahl 2008:109). Another important trait of this region is the findings of boats in Forest Sámi areas in Sweden dating to the Late Iron Age, which highlights the use of boats for transportation and fishing (Severinsen 2016:172). According to Bergstøl,

Sámi burial traditions from the Late Iron Age, the so-called lake burials (Sw. *insjögravar*) or mountain graves (Norw. *fjellgraver*), more known as hunting-ground graves (Sw. *fångstmarksgravar*), differ from those in the rest of Sápmi, and may be seen as a cultural trait of South Sámi traditions (Bergstøl 2007:22). The expansion of Norse farming society along the Norwegian coast may have pushed the South Sámi into the interior as early as the sixth century AD (Bergstøl 2007:24). Burial finds can be indicative of cultural belonging (see Chapter 2.10). The Krankmårtenhögen cemetery in Härjedalen, with finds of elk and reindeer antlers deposited in some burials, has been interpreted as a pre-Christian Sámi burial ground (Zachrisson 1997a:199, 221–223). Similar artefacts have been found at Sámi offering sites more to the north, such as Jeärbmure / Gråträsk, Unna Sájvva / Unna Saiva and Rávttasjávri / Rautasjaure, all in present-day Sweden (Serning 1956; Zachrisson 1984). It is common that burials interpreted as Sámi had funerary goods of an eastern type (Dunjfeld-Aagård 2007:55), like individuals buried in Vivallen (Zachrisson 1997a).

The northern part of Sápmi differs linguistically from the southern part; the main languages here are Lule and North Sámi. Today in Sápmi, the majority of the Sámi live in the northern part of Sápmi, and North Sámi is also the predominant language. The subsistence patterns vary within this region and are not defined by language.

Sámi cultural traditions and livelihood in the eastern parts of Sápmi are somewhat different. The Skolt Sámi, present in both Finland and on the Kola peninsula in Russia (Storå 1971:63–64), had a livelihood based on terrestrial, marine and freshwater resources (Nickul 1964:220–221; Storå 1971:37; Vorren & Manker 1976:127). Regarding the terrestrial environment, they exploited wild reindeer and fur-bearing animals. Not until the nineteenth century did the Skolt Sámi employ large-scale reindeer herding for better access to meat (Fjellström 1986:41–43). Beaver (*Castor fiber*) trapping is of strong cultural significance for the Skolt and Inari Sámi. It was also of importance to the Kemi Sámi, who no longer exist but resided in the southern part of Finnish Sápmi (Tegengren 1952). The importance is mostly due to the demand for fur in the historic taxation of the Sámi in northern Finland, eastern Norway and western Kola Peninsula. This was also true for the Akkala Sámi in Russia (Storå 1971:38). The Orthodox monks around Petsamo practised beaver trapping on the Skolt Sámi lands; they also had the right to collect taxes from the Sámi in the form of beaver pelts (Storå 1971:53). Further to the east on the Kola Peninsula, the Kildin and the Ter Sámi groups could also be found (Storå 1971:64–65). Here, like for the South Sámi, the ethnonyms appointed to different Sámi groups are based on earlier linguistic research. The Ter Sámi language is currently also nearly extinct. The eastern Sámi were mainly Forest Sámi with a subsistence based on fishing and hunting wild reindeer.

2.3. Mountain Sámi

The Mountain Sámi reside both in Norway and Sweden. Ethnologist Phebe Fjellström (1986) divides the Norwegian Mountain Sámi into two different groups. One group is found south of Troms County, fishing and managing smaller reindeer herds on the islands off the coast during summer, and herding reindeer in the mountains during winter (Fjellström 1986). The other group, in Finnmark County on the inland mountain plains, moved their herds down to the coast during spring. The domesticated and wild reindeer have been of great importance in the Mountain Sámi economy, as reindeer were both herded and hunted. The Mountain Sámi traded and exchanged reindeer and dairy products for fish with the Sea Sámi (Vorren & Manker 1976:48; Fjellström 1986). There are archaeological remains of the Swedish Mountain Sámi culture both in Norway and Sweden, from the Atlantic coast in Trøndelag, Nordland and Troms counties in Norway, to the Bothnian Sea in Ångermanland, Västerbotten and Norrbotten passing through the mountains in Jämtland and Härjedalen. This encompasses a large geographic area with a varying topography and several vegetation zones. The Mountain Sámi groups were nomadic; they used to live in movable huts (*gåhte*, SaP, singular form) and had a very varied diet, although terrestrial resources were the main intake, alongside fish (Vorren & Manker 1976:49–50; Fjellström 1986). According to Kerstin Eidlitz (1969:9), they ate reindeer meat all year round.

2.4. Forest Sámi

Today, the Forest Sámi reside in the Swedish and Finnish woodlands, mostly in the boreal vegetation zones, with connections to the Atlantic Ocean, the White Sea and the Bothnian Bay. The Forest Sámi are mentioned in written sources on tax collection in the sixteenth century (Manker 1968:9), hence there was an established Forest Sámi subsistence at that time, probably predating the sixteenth century. Manker (1968) also mentioned other written sources on the presence of the Forest Sámi in the province of Ångermanland in the eighteenth century (Manker 1968:9). According to Manker (1968), based on written sources from the sixteenth century onwards, as well as on Sámi objects, he stated that the Forest Sámi were more stationary and had smaller reindeer herds than the Mountain Sámi (Manker 1968:229). The Forest Sámi subsistence is usually described as semi-nomadic, based on the way in which reindeer were herded (see Hedman 2003). This has been questioned by, e.g., Tegengren (1952) and Norstedt and Östlund (2016:30) because it gives a false impression of seasonal migration. The Forest Sámi had a more sedentary way of life with more permanent settlements, used all year round. The hunting of wild reindeer and fishing were important for their sub-

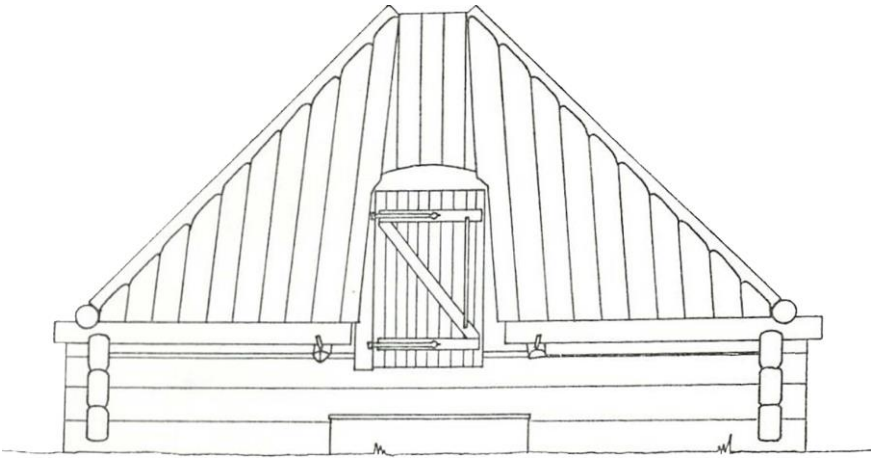

Figure 4. A timber hut from Västra Kikkejaure in Swedish Sápmi (Manker 1968:184).

sistence. The Forest Sámi in northern Finland did not practice that much reindeer herding, while their subsistence focused on wild reindeer hunting, fishing and beaver hunting (Tegengren 1952; Vorren & Manker 1976:104–105; Fjellström 1986). However, their diet was more varied than that of the Mountain Sámi, including food from terrestrial, marine and freshwater environments (Vorren & Manker 1976:118). In early modern times, hunting and fishing, but also farming, were practised in both Finnish and Swedish Sápmi (Tegengren 1952; Manker 1968:218). Fishing in particular was always of economic importance in these areas (Tegengren 1952:16; Bergman & Ramqvist 2017) and has been pointed out as one of the main activities (see Norstedt & Östlund 2016). Moreover, lake fishing (Sw. *träskfiske*) was important during the summer for the Kemi Sámi in Finland and was, according to Tegengren, the main reason for their seasonal mobility (Tegengren 1952:124–125). Their habitation and buildings were somewhat different from those of the Mountain Sámi: instead of movable huts, they had timbered huts (Manker 1968:179; Liedgren et al. 2009) (Fig. 4).

2.5. Sea / Coastal Sámi

The Sea or Coastal Sámi cultural traits are first and foremost found along the northern Norwegian coast, from Nordland in the south to the Varanger peninsula in the northeast. Even though the hunting of wild reindeer, and hunting and fishing in marine and freshwater environments, constituted their main subsistence, the hunt of smaller game and birds, in addition to domesticated cattle (*Bos taurus*) and goat (*Capra hircus*), were also important.

Moreover, recent stable isotope studies have demonstrated that sheep (*Ovis aries*) may have been foddered with fish (Spangen & Fjellström 2018). This adds to the written sources of goats being foddered with seaweed in winter periods (Eidlitz 1969; Odner 1989:29–31). From the coasts of Nordland, Troms and Finnmark, the Sea Sámi had their winter settlements along the coast of the fjords while they moved to the inner fjords in summer; many of them derived their origins from the Swedish Mountain Sámi (Vorren & Manker 1976:82). Øyvind Finnson Skaldespiller mentioned that the Sea Sámi kept cattle (Norw. *feavl*) as early as the tenth century, which is confirmed in written sources from the sixteenth century (Vorren & Manker 1976:83).

At the Varanger *sijjdas*, both Sea Sámi and reindeer-herding Sámi were living next to each other (Schanche 2005:68). Not until the late-nineteenth and early twentieth centuries do domesticated reindeer become an important part of their subsistence (Fjellström 1986); however, the wild reindeer hunt was still economically important (Vorren & Manker 1976:91). Odner (1989) argued that the Varanger Sámi kept sheep / goats and cattle as early as the fourteenth century, probably earlier, and did not have an economy based solely on hunting (Odner 1989:181). In addition, fox (*Vulpes vulpes*), otter (*Lutra lutra*), ermine (*Mustela erminea*) and squirrel (*Sciurus vulgaris*) were hunted for their fur and sold at markets, and marine fish and seabirds were also caught (Vorren & Manker 1976:93). In a recent study, Oddmund Andersen argues that cultivation and animal husbandry were implemented in the area of Divtasvuona / Tysfjord in Nordland County in northern Norway during the Late Iron Age / early Middle Ages, and that cattle breeding was probably present in the Sámi fisher-farmer economy by the fourteenth century (Andersen 2019:113). According to Kjersti Schanche, referring to Grydeland (2001), the Varanger Sámi lived in huts (Norw. *gammetufter*) with rounded floors around the seventeenth century, in contrast to the rectangular ones in the nineteenth and twentieth centuries (Schanche 2005:67). The geographical area, geology and vegetation zones are vast and diversified, and even though there are some similar traits among the Sea Sámi, there are still local and regional differences, including resource availability and food culture.

2.6. Kvens

The Kvens (*Cwenas*) are mentioned in the story of Ohthere during the ninth century and then sporadically through history (Valtonen 2007:108). *Cwenland*, or Kvenland, supposedly the land of the Kvens, existed as an entity that ranged in date, according to different sources, from the Late Iron Age to the eighteenth century. From the ninth to the thirteenth century, Kvenland was, according to written sources, located east of the Norwegian and Swe-

dish mountain range. Kvenland had its political arena situated in Finnmark, east of the Norwegian mountain range, north of Swedish Svealand and between Hälsingland, Finnmark, Finland and Karelia (Elenius 2019:117, 140). According to Elenius (2019), the Kvens were Finnish speakers living in the northernmost area of the Gulf of Bothnia (Olaus Magnus 2000[1555]; Lundmark 2008:15–16).

Kvens are also the name for people from Finland who emigrated to Finnmark in the sixteenth century (Elenius 2019:134); whether or not they are the same ethnic group as that referred to in the ninth-century sources is unclear. In early medieval texts, they were mentioned in war contexts as collaborating with Karelians against the Norwegians (Elenius 2019:126), and/or considered to be specialised tradesmen in Sápmi in the northern areas of the Bothnian Sea some time later, connected to the *birkarlar* (Wallerström 2006:68), or possibly preceding them (Elenius 2019:128). The term Kvens has also been interpreted as designating a part of the Sámi and/or the Finnic population (Bergman 2010; Elenius 2019:119). The Kvens do not necessarily designate an ethnic group, but could instead define an economic function, a lifestyle or an administrative division (Hagström Yamamoto 2010:116–117).

In a modern political movement to achieve indigenous status, some speakers of *meänkieli*, belonging to the Tornedaler national minority in Sweden, have claimed a Kven identity (Hagström Yamamoto 2010:116–117). However, all speakers of *meänkieli* living in Tornedalen do not identify as Kvens (Wallerström 2006:18–20). As evident, the identity of the Kvens is very much debated, and further details are beyond the scope of this thesis.

2.7. The *birkarlar*

The early establishment and use of trade routes in northern Sweden intensified contact between the interior and coastal areas during the sixth century (Bergman et al. 2014:56). Bergman and Ramqvist (2017) propose a scenario with intensified trade of furs and smoked salmon (*Salmo salar*) as early as the Migration Period. While fishing was in the hands of the indigenous coastal population, trading contact was administrated by local agents, the so-called *birkarlar* (Bergman & Edlund 2016; Bergman & Ramqvist 2018:22).

There are still uncertainties regarding the origins of the *birkarlar* organisation; however, they played an active role in trading activities, as tax collectors and for the interaction between the interior and the coast in Sweden, Finland and Norway (Steckzén 1964; Bergman et al. 2014; Bergman & Edlund 2016:58). The earliest mention of the *birkarlar* is from the fourteenth century. In the sixteenth century, the *birkarlar* were farmers and tradesmen living on the Bothnian coast between Bureå and Torneå (Bergman & Edlund 2016:54–56). However, apparently other peasants also traded with the Sámi,

thus the *birkarlar* were not the only traders (Bergman & Edlund 2016:58). According to Olaus Magnus (2000[1555]), tradesmen in Torne and Kemi used sledges (gärris, singularis SaP) and draught reindeer as they travelled to Finnmark trading fur and fish (Olaus Magnus 2000[1555]; Steckzén 1964; Odner 1989:11). The *birkarlar* travelled to the coasts of the Atlantic and the Barents Sea (Bergman & Edlund 2016:54). According to Bergman and Edlund (2016), the *birkarlar* were integrated into the 'everyday life and subsistence activities of farmers, fishermen and hunters'. They also suggest a pre-dating to Swedish colonisation of an indigenous trading network in Sápmi. It was also suggested that the Sámi-*birkarlar* relation was based on mutual respect and interdependence, in relation to, for instance, trade and marriage between the *birkarlar* and Sámi women (Bergman & Edlund 2016:71, 73–74).

2.8. Karelians and others

In the beginning of the twelfth century, the Karelians, originating from areas around Lake Onega and Lake Ladoga, started to expand north. They had rights to tax and trade in these areas, but in the thirteenth century, Novgorod in Russia claimed supremacy over the Karelians and the Sámi (Odner 1989:10). They also dominated parts of northern Ostrobothnia during the thirteenth and fourteenth centuries (Odner 1989:10). In the thirteenth century, the Russians of Novgorod started funding monasteries and chapels in Karelian and Sámi territories (Odner 1989:11), the city state became more influential, and the Karelians were to pay taxes to become subjects of Novgorod (Wallerström 1995:230). However, the Karelians, as well as the *birkarlar*, were at the centre of the trade with the indigenous population in northern Sápmi from the thirteenth to the fifteenth / sixteenth centuries and heavily present in Finnmark by the fifteenth century. When the monasteries in Solovetsk (1423) and Petsamo (1533) were built, they became nodes in the trade to the north (Odner 1989:11). Due to the economic values of the available resources along the coast and inlands of Finnmark, the relation between the Norwegians and the Karelians were rather hostile (Odner 1989:10; Wallerström 1995:230; Amundsen 2008:7–9; Hansen & Olsen 2014:157). A Karelian presence in the Sámi and northern Fennoscandian trade network is indicated by archaeological finds from Sámi offerings sites in Sweden (Zachrisson 1984:73–77). This does not necessarily mean that they were physically present in the Swedish inlands.

2.9. Sámi burial traditions

Attempts to list Sámi burials in Sápmi have been made before, including through the works of Ernst Manker (1957, 1961) and Audhild Schanche (2000). This thesis will not repeat the same extensive work they have done, but rather try to sort out the different type of burials.

In his work on *Lappmarksgravar* in 1961, Ernst Manker lists burials in what today is considered to be Sápmi. Not all have been excavated, and external grave morphology can be difficult to ascribe to a certain cultural affiliation. Nevertheless, their geographic location and the type of grave may point towards a Sámi burial tradition. Manker mentions three principal burial types from a Sámi context: earth graves, stone graves and cave graves (Manker 1961:180). The earth graves are probably the most common, but the lack of any tomb stones, or these being hidden, makes identification difficult. The stone graves (i.e., cist graves) are less common, but an example of the excavation and reburial of Soejvengelle is discussed below (Chapter 6) (Fig. 5). The cave graves (Norw. *urgraver*) are to be found above ground in cliff and mountain crevices (Manker 1961:180–181). In older texts, there are also allusions to Sámi graves and burials directly on the ground, in carved logs, between trees or hung up in trees (Manker 1961:182–183). According to Manker and his inventory on Sámi burial tradition, most graves are orientated in a Christian fashion, considering graves within a clear Christian tradition, from churchyards and summer graves. Otherwise, the local geographyhas been more important for the placing of the dead (Manker 1961:185), bearing in mind the dry and protective nature of crevices in mountains and cliffs. The dead could be buried in a sledge, a hollow log, in a tree, on some wooden planks, in a coffin, with or without his / her clothes, wrapped or not in some animal skin (reindeer, bear, other), birch bark or linen (Manker 1961:186–191; Storå 1971). The burial in a sledge could also have a more practical motive: to transport the dead from the summer burial to the churchyard, for instance. The tradition of burying in sledges existed before the introduction of Christianity (Schanche 2000:287–288). In the Russian Orthodox Skolt Sámi tradition, there is a superstructure over the dead body (Storå 1971:143), as can be seen on modern Skolt Sámi burial grounds (Fig. 6).

If death came in the summer, the dead was put in a summer grave until the winter, when the dead could be transported and buried in a churchyard (Manker 1961:183). The tradition of summer graves are provisional and definitely a Christian tradition. Summer graves are often found on islands and other remote places, kept away from animal interference, until the transportation. This burial tradition was still in use during the twentieth century.

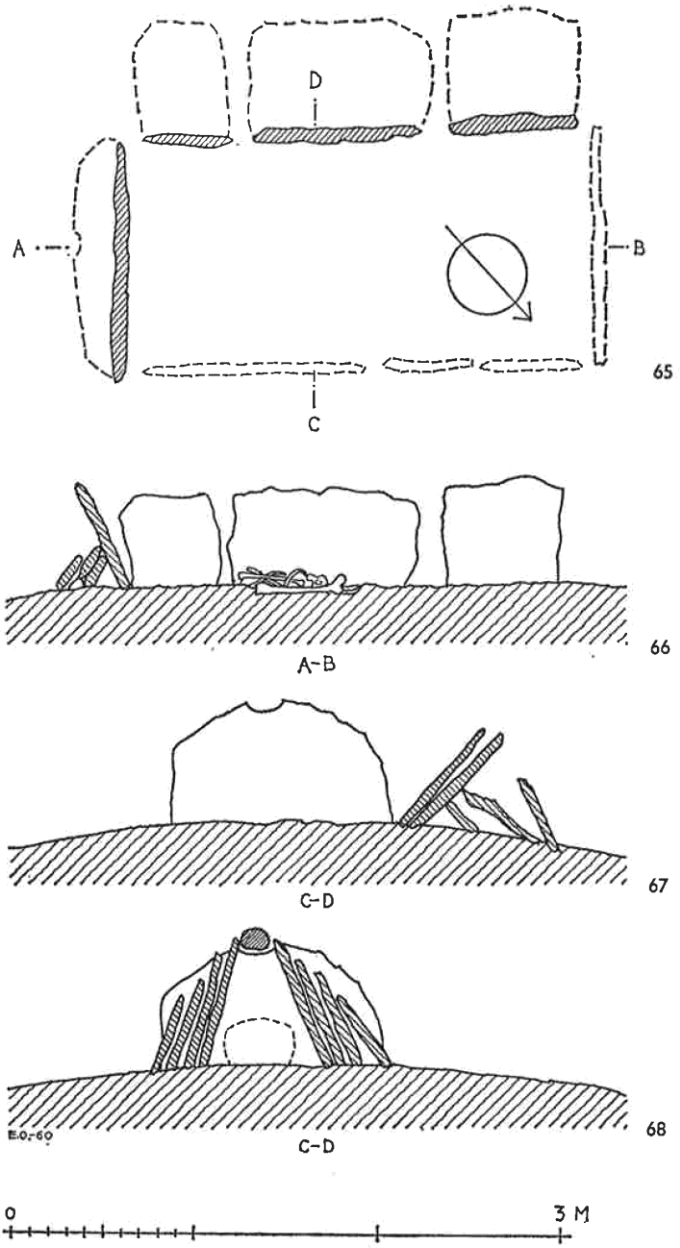

Figure 5. The reconstruction of the Soejvengelle burial at Aatoeklibpie/Atoklimpen in Swedish Sápmi (Manker 1961:159).

Figure 6. Sevettijärvi Skolt Sámi cemetery in Finnish Sápmi (photo: the author, June 2018).

2.10. Reindeer domestication and pastoralism

Today, reindeer hold a special place in the Sámi community and for Sámi culture and identity (Paper VI). The animal has always been important, and different parts of the animal are used for Sámi handicraft. Most reindeer in Sápmi are today domesticated and only a few are still wild; the development of reindeer herding and pastoralism has been widely debated for decades (Bjørklund 2013; Hansen & Olsen 2014:195). While some researchers argue for an early introduction of reindeer herding in the Late Iron Age (Hansen & Olsen 2014:203; Aronsson 1991:113; Hedman 2003:216–217; Bergman et al. 2008a:108; Andersen 2011:73–74), others argue that an intensification of reindeer domestication occurred in the Middle Ages / early modern period sometime between the fourteenth and the eighteenth centuries (Arell 1977:259; Mulk 1994:258; Wallerström 2000:27; Sommerseth 2009:282; Sommerseth 2010:123; Røed et al. 2018). Based on evidence for the tree line at higher altitudes in the past, the establishment of Stállo settlements and the increasing number of tame reindeer, Bergman et al. (2013) argue for a re-arrangement of social structures and a shift from hunting to herding among Sámi from AD 800 to 1500. There are different forms of reindeer management; while some Sámi reindeer herders move over larger areas between

different ecological niches (Andersen 2011:67), others move over smaller areas. In Sweden, today two types of herding are carried out: the forest type in the boreal forests all year round, and the mountain type in the mountains during summer and the boreal forests during winter (Inga 2008:8).

Although there is no conclusive evidence of reindeer domestication before the Iron Age, some of the rock carvings in Alta, dated to the Stone Age, have been argued to depict reindeer and fence systems. However, Helskog (2012) is critical of that interpretation. Also, the remains of a Sámi-type sledge in graves at Bol'shoy Oleni Ostrov at the Kola peninsula, dated to c. 1500–500 BC, have been interpreted as an indication of an early form of reindeer husbandry, as reindeer were likely used to pull the sledge (Murashkin et al. 2016:191; Røed et al. 2018:284). In an early stage of Sámi reindeer husbandry, in the Late Iron Age, reindeer were kept for transport, decoys in hunting wild reindeer and for clothing purposes (Ingold 1986; Bjørklund 2013:181; Hansen & Olsen 2014:195).

Ivar Bjørklund argued that if a household had between 25–40 domesticated reindeer, the number of reindeer manageable for a household, the resource it represents in terms of estimated calories would not be enough (Bjørklund 2013:182). While castrated male reindeer would be used for transport, a certain number of females were required for milking calves; the skins of other reindeer would be used in the construction of tents and clothing, and other adult individuals for taxing purposes. In that sense, a domesticated reindeer-based diet must be supplemented by other important resources, such as wild reindeer, birds, fish, berries, eggs, bark flour and plants (Sommerseth 2009:39; Bjørklund 2013:181–182). The list is obviously not exhaustive, and should also include, for instance, other terrestrial as well as marine mammals (see Chapter 3). While reindeer dairy products did play an important part in Sámi diet in some areas and in certain time periods (Hansen & Olsen 2014:197), the amount of milk (17.1% fat) was dependent on the size of the herd and the reindeer doe's production, and it could not have constituted the main source of protein. One reindeer doe could produce 1 dl/day (Sametinget 2010:21). The milk was collected in a milking cup (*náhppe*, SaP) and sieved, from which cheese could be made, and fresh milk that was frozen before consuming in winter was considered a delicacy (Korhonen 1994:263–264). According to Mulk, it is evident that reindeer milking would be part of a pastoralist economy and introduced in the Late Middle Ages / early modern period (Mulk 1994:197, 243). Aronsson is of another opinion, arguing for a much earlier introduction of reindeer milking (Aronsson 1991:102–103). The practice of milking reindeer was present throughout Sápmi (Manker 1968:200; Eidlitz 1972; Korhonen 1994); however, there has been discussion of whether or not it was absent in the east until more recent times (Tegengren 1952:199; Eidlitz 1972). While reindeer milking decreased, and more or less disappeared in the nineteenth and twentieth centuries with the rise of extensive reindeer herding, the milking of

goats became more noticeable in northern Swedish Sápmi in the early twentieth century (Blind & Kuoljok 2002:11). Before the industrialisation of reindeer herding in the mid-twentieth century, collaboration between settled Sámi (and non-Sámi) and reindeer herders was common. Whereas reindeer herders left their goats with the settlers, the settlers could leave their reindeer with the herders during the summer for grazing (Blind & Kuoljok 2002:29).

Several factors have been put forward to explain the increase in domesticated reindeer in the Middle Ages. These are usually taxation, trade, missionary activities and colonisation. Another hypothesis is that small herding families started to consider reindeer as an important food resource, as reindeer pastoralism and domestication became more important (Hansen & Olsen 2014:201–202). The development and intensification of reindeer domestication has also been explained by a decrease in the wild reindeer population (Lundmark 1982:160). Hedman suggested that there was an increasing privatisation (i.e., capitalism) of the resources within the Forest Sámi community by the Late Iron Age that mirrors an increase in reindeer domestication (Hedman 2003:223–224). This may fall within the argumentation of Bjørklund on the possibility of early, small-scale reindeer herding, reflecting societies' strategies for hunting, fishing and transportation, as well as a cultural shift from a hunting and fishing economy (Bjørklund 2013:184; Hansen & Olsen 2014:195). However, this is not in line with Wallerström's hypothesis that the extent of reindeer domestication was influenced by, and dependent on, the Swedish crown and its taxation (Wallerström 2000:32). Reindeer antlers were also important to Norwegian medieval towns and trading networks in the south (Rosvold et al. 2019).

3. Food cultures – the Sámi cuisine

> The cultural aspect of identity includes widely shared values and ideas, extravagant notions about the good life, as well as community's special food preference (Belasco 2008:8).

What is food culture? How do we define it? Food serves two things: survival and culture. Firstly, the body needs proteins, fats, carbohydrates, vitamins and water in order to function; without some or all of these vital substances we would either contract diseases or eventually starve to death. Secondly, food is very much cultural in its production, preparation and preference or selection. Food can be actively produced or gathered, hunted or fished. Active production of food includes management of small- or large-scale cultivation of seeds and plants and the keeping of livestock (cattle, sheep / goat, pigs (*Sus scrofa*), reindeer). What is regarded as food can differ substantially from one ethnic group to another. Peter Farb and George Armelagos define cuisine as: (1) the selection of food that natures offers; (2) the different ways of preparation; (3) the traditional flavouring of staple foods; and (4) the setting of rules surrounding consumption of different foodstuffs (Farb & Armalagos 1988:227–228).

The following description of Sámi traditional food is mostly based on ethnographic sources, complemented with archaeological and osteological studies and research on subsistence and resource management of different groups in Sápmi. While certain food items are more common to the traditional Sámi economy as a whole, such as garden angelica, there are still differences in how they are used from one area to another (Fjellström 1964:106). The overall traditional Sámi diet has been described as being rich in fat and proteins (Nilsson 2018:181).

3.1. Sámi tradition food categories – staple food

Most food available in Fennoscandia is seasonal. Sámi herding families and communities (i.e., *sijjda*) could move with their reindeer from one coast to another and from one settlement area to another, depending on their main economy. The move with a reindeer herd was mostly season-based depending on the needs of the reindeer, for calving and milking, etc., but the hunt of

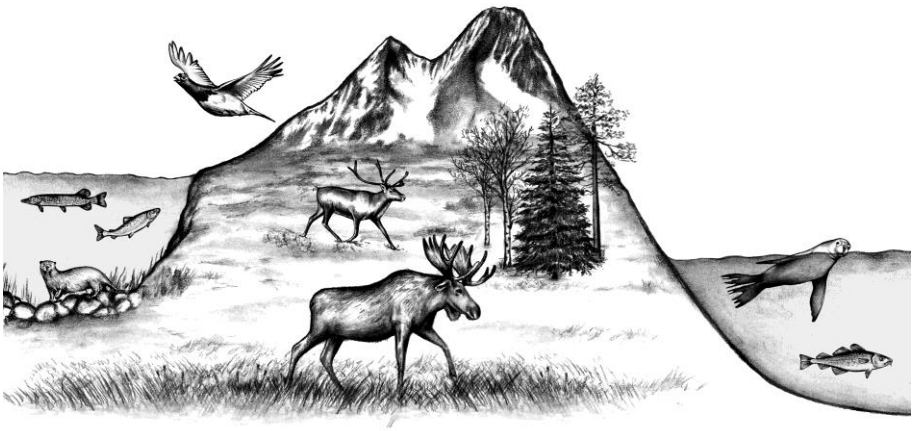

Figure 7. The different environments and some of the important food sources in Sápmi (Illustration made by Szulc).

wild reindeer and other species would also affect this seasonality. The mobility would have been different depending on the archaeological period and the subsistence strategy (Mulk 1994; Hedman et al. 2015; Bergman & Edlund 2016). Even though the consumption of reindeer would have been seasonal, it is not within the scope of this thesis to sort out seasonality in diet with the current research questions, methods and theories applied.

Preservation of different kinds are important in all food cultures. Reindeer meat, other game and fish, as well as plants and berries, were dried, enabling their all-year-round consumption. Cloudberries (*Rubus chamaemorus*) and lingonberries (*Vaccinium vitis-idaea*) have their own conserving agent (i.e., benzoic acid) and it is sufficient to put them in water until consumption. Another preservation technique is smoking, which also flavours the prepared meat or fish. Salt was important for preservation and flavouring, and through the medieval trade with the *birkarlar* and the Russians / Karelians, Sámi people also had access to it (Hansen 1990:133; see Nilsson 2018).

In her published thesis on Food and emergency food in the circumpolar area, Kerstin Eidlitz (1969) defines different foods as coming from land, sea and lakes and relates them to different circumpolar ethnic groups. Utilisation of resources is a consequence of cultural specialisation (Mulk 1994:45) and of historic trade and taxation (Hansen 1990:109–152). To facilitate the categorisation and classification of dietary patterns in Sápmi, this thesis has followed Eidlitz (1969) and divided all food items into three main food catego-

ries from different environments: terrestrial (land), marine (sea) and freshwater (lakes) (Fig. 7).

3.2. Terrestrial faunal resources

Terrestrial animals such as reindeer, elk, beaver, hare (*Lepus timidus*), squirrel, sheep and goat are commonly mentioned in the ethnographic and archaeological literature as food sources and are also present in the osteological material found in Sápmi (Drake 1918; Eidlitz 1969; Mulk 1994; Hedman 2003; Olsen 2010; Hedman et al. 2015; Liedgren et al. 2016). Reindeer, domesticated or wild, have been found throughout Sápmi and are considered to have been a staple food for Sámi from 500 AD (Eidlitz 1969:9–11; Mulk 1994:45-48; Hedman 2003:198; Kozlov et al. 2008; Kylli et al. 2019:127) (Fig. 8). Archaeologically, there are remains of reindeer from dwelling sites, meat and bone caches, offering sites and burials. The intake of reindeer protein varies depending on chronology and geographical specialisation of different groups. The Forest Sámi mainly lived on fish (Eidlitz 1969:33), even though they kept reindeer, while the Mountain Sámi, according to written sources, had a predominant intake of reindeer-related food (Vorren & Manker 1976:48–50; Fjellström 1986). In a case study on southern areas of Sápmi in Härjedalen and Jämtland, the intake of reindeer is stressed as important in both historic and prehistoric periods (Ljungdahl 2017:25, 28). In Sápmi, meat from reindeer and other animals was collected and stored in meat caches (Hedman et al. 2015). Chronological aspects are also important to consider; reindeer might have been more important after their domestication, with more intensive herding, compared to the hunting of wild reindeer (see Chapter 2.4). However, keeping, breeding and hunting reindeer does not necessarily entail its consumption (Fjellström 2011; Fjellström et al. 2019; Lidén et al. 2019). According to Nilsson et al. (2011), reindeer is consumed in greater quantities today than earlier. The lack of fish bones from 31 hearths excavated in a Forest Sámi area in northern Sweden dated to the period AD 1300–1600 is explained by an intensification of reindeer domestication and a living based on reindeer as a resource (Hedman 2003:198). Reindeer bones from leftovers are often found at dwelling sites, hearths and meat caches in Sámi contexts. It is not uncommon to find numerous reindeer bones and antlers at Sámi offering sites, where offerings were made in hope of good hunt, fishing and reindeer herding (Manker 1957:52; Mebius 2003:148–153; Salmi et al. 2020). Offering sites and the objects and bones offered relate to the local Sámi subsistence (Äikäs 2015:207). According to Salmi et al. (2015; 2018), offerings of animal bones date from the sixth century onward; there was an increase in the offering of animals at the offering sites and an increase of reindeer offerings which coincide with an intensification of reindeer herding between the thirteenth and the seventeenth century

Figure 8. The head of a reindeer (Rangifer tarandus) (Illustration made by Szulc).

(Salmi et al. 2015:20; Salmi et al. 2018:486). Unburnt reindeer and sheep / goat bone have also been found at dwelling sites. One of these sites is close to the burial site of Vivallen in Härjedalen, dated to the Late Iron Age and early Middle Ages (Zachrisson 1997b:150), stressing the importance of reindeer and goat domestication in the southern part of Sápmi.

Whereas Eidlitz (1969) argues for sheep and goat not being part of a Sámi diet, several other researchers do not agree. Goat, sheep and cattle bones have been found at Sámi offering sites and settlements (Manker 1957:52; Aronsson 1991:103; Hedman & Olsen 2009:20; Svanberg 2017; Spangen & Fjellström 2018; Andersen 2019:107–108). Judging from zooarchaeological remains in Sámi contexts, the keeping of goats and sheep by Sámi dates back to as early as the Viking Age (Zachrisson 1997b:150; Broadbent 2010:159; Hedman & Olsen 2009; Hedman et al. 2015:14–15). However, there is a lack of evidence about whether or not breeding of goats and sheep took place to

the same extent as for reindeer (Aronsson 1991:103). Nonetheless, during the nineteenth and twentieth centuries, goats were kept alongside reindeer in northern Swedish Sápmi (Blind & Kuoljok 2002:12), and there is evidence of keeping of goats by Sámi from the seventeenth century (Svanberg 2017:54). In the Tysfjord area in Nordland, northern Norway, cattle breeding was also practiced (Andersen 2019). According to Leif Olsen, the Sámi who kept domesticated animals, other than reindeer, were those who were in close contact with Norse culture, from whom they would have developed both transhumance (Norw. *fedrift*) and small-scale farming (Olsen 2010:127–128).

Another land mammal that seems to have been part of the staple food of a traditional Sámi diet is elk (Mulk 1994:48; Hedman 2003:198). Zachrisson argued that elk probably was important in the South Sámi area in the Late Iron Age and early Middle Ages (Zachrisson 1997a:198–199). Furthermore, according to Eidlitz, squirrels were part of the dietary intake in northern Sweden and Finland. While certain terrestrial animals are to be expected in a traditional Sámi diet (e.g., reindeer, ptarmigan (*Lagopus muta*), marine mammals and fish), others are not. It is out of the scope of this thesis to study the occassional or seasonal consumption of specific kinds of food. The reason is that it is not possible to pick up stable isotope signals from, for example, occasional consumption of bear (*Ursus arctos*) (e.g., the bear ceremony feasting) or any kind of emergency food, since they probably were consumed over a short period of time. Lemmings (*Lemmus lemmus*), occasionally eaten by reindeer, were considered by the Sámi to be the 'lice of the Evil One' (Eidlitz 1969:20), and therefore were avoided.

3.3. Marine and freshwater resources

Marine resources and freshwater fish were important, but their consumption varies depending on geography and availability (Svanberg & Tunón 2000:36–38). While marine resources were exploited along the coast in Norway, Russia and Sweden, the exploitation of freshwater fish seems to be more widespread in the whole of Sápmi and consumed on a daily basis (Nilsson 2018:180). Seals (*Phoca* sp.), whales (Cetacea), porpoises (*Phocoenidae*) and walruses (*Odobenus rosmarus*) were caught along the coast of Norway and along the Kola Peninsula, mostly by Sea Sámi and other ethnic groups living and specialising in coastal environments. Seal hunting was also practiced along the Bothnian bay (Odner 1989: 44–45; Broadbent 2010:21). Seal meat and fat were highly appreciated (Odner 1989:45) (Fig. 9). Even though the Sea Sámi subsistence, first and foremost, is based on sea-related foodstuffs, it does not mean that they were the only people fishing, consuming or distributing it. Catching marine fish was also important and used as a staple food for other groups. Depending on the group, marine fish would

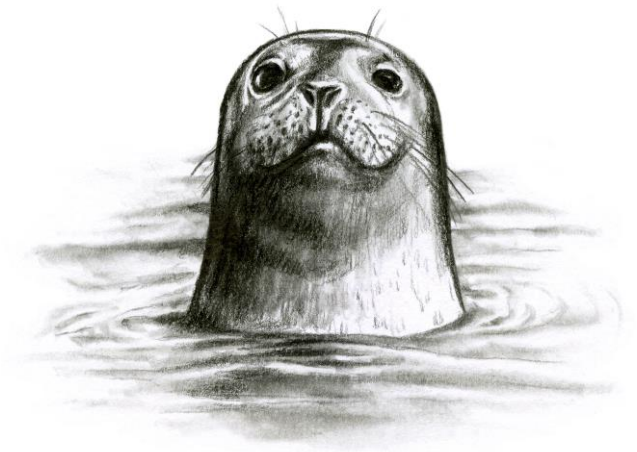

*Figure 9. The head of a seal (*Phocidae*) (Illustration made by Szulc).*

have been more or less important (Fjellström et al. 2019). Examples of the type of fish caught include cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), coalfish (*Pollachius virens*), salmon (*Salmo* sp.), fluke (*Platichthys flesus*) and herring (*Clupea harengus*) (Odner 1989:41, 48–49; Sommerseth 2010). Findings of fish-related gear, finds in hearths, and linguistic studies, have made several researchers stress the importance of freshwater fish such as pike (*Esox lucius*), perch (*Perca fluviatilis*), grayling (*Thymallus thymallus*), burbot (*Lota lota*), trout (*Salmo trutta*), Arctic char (*Salvelinus alpinus*) and whitefish (*Coregonus* sp.)**,** for the subsistence, in areas related to Mountain and Forest Sámi in Swedish and Norwegian Sápmi (Mulk 1994:50; Hedman 2003:198; Liedgren et al. 2016; Severinsen 2016; Aronsson 2017:13; Bergman & Ramqvist 2017). Different implements were used to catch the fish: various kinds of nets, creels, spears, harpoons, hooks and other items (Mulk 1994:50–54), but also bare hands (Severinsen 2016).

3.4. Birds

Forest, migratory and aquatic birds were part of the staple food and common in the traditional Sámi diet. Forest birds like the ptarmigan, different kind of

grouses, capercaillie (*Tetrao urogallus*) and bean gooses (*Anser fabalis*) were shot or snared (Mulk 1994:49) and are quite often found within Sámi archaeological contexts. Both Gollevárri and Sillbajåhkå / Silbojokk had faunal remains of these species (Sten 1989; Munch & Munch 1998). Some birds were caught for their feathers (e.g., eider (*Somateria* sp.) and gull (*Larus* sp.)); others were considered a delicacy (auks (Alcidae)) (Odner 1989:46–48). It is also common to find migratory and aquatic birds in offering and burial contexts (Manker 1957:52; Schanche 2000:197–206). At the offering sites of Unna Sájvva / Unna Saiva and Rávttasjávri / Rautasjaure there were remains of both whooper swan (*Cygnus cygnus*) and other unidentified birds (Paper I).

3.5. Plants

Another important source of proteins and vitamins are plants. Plants were important in the Sámi diet but they were also used for medical purposes. When reading about Sámi subsistence and food tradition, garden angelica (Fig. 10) is frequently mentioned. It was an important source of food but also used as a medical herb (Nilsson 2018:186). However, it is hard to conceive of it as a staple food, considering the effort of harvesting it compared to the energy it provides (Rautio 2014:54). The root was dried and eaten to cure catarrh. Alpine Blue-sow-thistle (*Cicerbita alpina*), common sorrel (*Rumex acetosa*) (*juobmo*, SaP) and garden angelica were used to make *gåmpå* (Svanberg 2000:260), a plant-based porridge (Sametinget 2010:22), to which reindeer, cattle or goat milk could be added. It could be eaten directly or stored during winter to be consumed later (Aronsson 2000:254–256). Garden angelica and common sorrel are both good preservation agents (Fjellström 1964:105pp; Sametinget 2010:26–29; Rautio 2014:20; Ryd 2015:300pp). Rautio et al. (2016) report from an interview with a Sámi woman from Jokkmokk that there was a difference in the geographic distribution of garden angelica and that Forest Sámi did not have access to it, and that they instead used a related plant (i.e., *Angelica sylvestris*), although not exactly with the same properties. This demonstrates local diversity in plant use (Rautio et al. 2016:628). Different plants (e.g., garden angelica) and, for instance, pine (*Pinus sylvestris*) inner bark were also roasted (Bergman 2005:59). According to Zackrisson et al. (2000:107), the pine inner bark was collected for its taste and nutritional value. Moreover, the tradition of peeling the inner bark could be traced back to before the medieval period. With examples from the eighteenth century in Norrbotten and northern Finland, and the nineteenth century in Västerbotten, the pine inner bark was turned into flour and used to make bread; however, the Sámi were said to use it with milk and fat, as well as in meat and fish dishes (Korhonen 2000:271–273).

The pine inner bark was harvested in the spring / early summer and may have had an impact on Sámi seasonal mobility when it came to choice of

Figure 10. Garden angelica / båsskå (Illustration made by Szulc).

settlement (Rautio 2014:27, 54). Although there is no doubt about the consumption of berries, the use of berries seems to vary and to be more seasonal, regional and based on individual preference. For instance, it is argued that crowberries (*Empetrum nigrum*) were part of the Sámi diet in coastal Västerbotten and in a particular north Norwegian context of multi-room houses (Norw. *mangerumstufter*) (Viklund 2005:418). However, even though the crowberries were consumed in a dish with fish liver (*maesto*, Sa), it is argued that crowberry plants were more likely brought into the houses for fuel, tinder, brooms, goat fodder and for bedding (Engelmark 2011:311; Henriksen 2017:440). Lingonberries, cloudberries, billberries (*Vaccinium myrtillus*) and wild raspberries (*Rubus idaeus*) were also part of the diet (Mulk 1994:50;

Nilsson 2018:184–185). Berries, however, are difficult to trace with the methods used in this thesis.

Palaeoecological and archaeological interdisciplinary work suggests possible small-scale cereal cultivation during the Migration Period (Hörnberg et al. 2014:322, 325; Bergman & Hörnberg 2015:63; Hörnberg et al. 2015:992). In this way, Hörnberg et al. (2014, 2015) challenges the traditional view of early Sámi land use, promotes its complexity and highlights our lack of knowledge on this matter. In Tysfjord in northern Norway, there is also evidence of early cultivation during the Middle Ages and the sixteenth to seventeenth centuries, but there is debate about whether or not this can be connected to Sámi farming (Andersen 2019).

3.6. Ritualised and uncommon foods

Ritualised and uncommon foodstuffs are not necessarily traceable using the methods in this thesis. However, it does not mean that these foods were not consumed. Here ethnographic, historic and archaeological sources become important in order to gain a more complete picture of societal aspects related to food.

The bear holds a special place in Sámi mythology. One myth states that a Sámi woman was driven away into the wilderness by her three brothers and eventually fell into a bear's den. The woman and the bear married and had a son who grew up to be a man. As the bear grew older, he decided that his wife's brother must kill him, which the youngest brother did. To be recognised by other bears and by his son, he demanded that a brass ring must be attached to his forehead. The bear was cooked and shared between the brothers. The son came back and, realising what bear it was, he demanded his uncles to give him his share, which they did not do until the son woke his father up from the stew he was cooking in. A set of rituals that reflect aspects of this myth, in the hunt, preparation, cooking and consumption of the bear, have been applied among the Sámi. Bear meat was consumed fresh and not preserved in any way (Fjellström 1981[1755]; Mebius 2003:96–101).

Bear bones are often buried in specific ways, in so-called Sámi bear graves (Zachrisson & Iregren 1974; Myrstad 1996; Schanche 2000), and also at Sámi offering sites (Manker 1957; Salmi et al. 2015), where offerings of animal bones (mostly reindeer), tobacco, alcohol, metal objects, blood and foodstuffs were made, partly to ensure good luck in the hunt, to please the gods, and in time of crisis and/or sicknesses. Offering sites were close to herding and slaughter areas, as well as migration routes, and close to hunting pits in case of wild reindeer hunting. Offerings were also made in connection with the living area, in and around the hut (Mebius 2003:133pp; Äikäs 2015).

Certain animals had a specific use for the Sámi but were also in demand among non-Sámi for their qualities, perhaps less for their nutritious value than for their fur or hide, and sometimes for medical purposes. Fur from squirrel and beaver were important for trade with Novgorod from the thirteenth century, and the beaver *castoreum* contains salicylic acid, well known for medical purposes (Steckzén 1964). Nevertheless, there is little information on whether beaver and squirrels were consumed or not. Hares could be snared for their fur but also for their meat.

4. Methods

Although the diet includes vitamins, minerals, carbohydrates, fats, proteins and water, this thesis focuses on proteins. Proteins, from different kinds of food and beverages ingested by living organisms, are incorporated into different tissues in the body. Since bone tissue is by far the most common tissue found at archaeological excavations, this is the main material used in different studies on food consumption. The second most common tissue comes from teeth and nails. In order to properly understand the results of the analysis of these different tissues, it is necessary to understand the biology of the studied osteological elements, and how these tissues are formed. For a more thorough description of what the different osteological elements represent, this thesis refers to the specific studies (Papers I–VI).

4.1. Stable isotope analysis

The most common isotopes used in dietary studies are $\delta^{13}C$ and $\delta^{15}N$ (Schoeninger & Moore 1992), and the most common in mobility studies are $\delta^{34}S$ (Richards et al. 2003; Fornander et al. 2008; Nehlich et al. 2013) and $^{87}Sr/^{86}Sr$ (Ericsson 1985). These are also the analyses applied in this thesis. For $\delta^{13}C$, $\delta^{15}N$ and $\delta^{34}S$ analysis of skeletal remains, a dentist's drill was used to obtain bone and dentine powder, usually *c*. 50–80 mg. Bones were drilled at compact areas, avoiding any morphologically informative areas, and teeth were drilled at the cervix. Bone and dentine collagen were extracted according to Brown et al. (1988). As lipids may alter the $\delta^{13}C$ values, they were removed from marine and modern faunal samples (Lidén et al. 1995). Lipids were also removed from nails (O'Connell 2001), which were then cut into pieces. Collagen and keratin were analysed with EA-IRMS (Elemental Analysis - Isotope Ratio Mass Spectrometry). For $^{87}Sr/^{86}Sr$ of tooth enamel, LA-MC-ICP-MS was used.

4.1.1. Bone

The main constituents in bones are protein, hydroxyapatite and water (White 2012:27). The protein collagen constitutes *c*. 90% of the organic content of the bone and is the most common protein in the body (White 2012:35). Pro-

teins and minerals in the bone alter throughout an individual's lifetime. Hence, the dietary information of a specific bone element provides dietary information for several years or even decades prior to death. The time it takes for a bone to completely renew is referred to as the turnover rate, and is 10–30 years, depending on the skeletal element and the biological age of the individual (Hedges et al. 2007).

4.1.2. Teeth

Stable isotope analyses of teeth allows studies of intra-individual changes during an individual's childhood, when the teeth are formed. Teeth are primarily composed of dentine and enamel. The tissue dentine, protected by the enamel, is similar to bone tissue and used to study diet and mobility. Once the dentine has formed, the dentine is metabolically inert and, in contrast to bone collagen, does not remodel. Therefore, it allows us to study dietary habits, mobility and migration during childhood.

4.1.3. Nails and hair

Nails and hair are much less common finds in archaeology than bones. The exceptional finds of these tissues are usually from mummies (Lamb 2016; Väre 2017) and bog bodies (van der Plicht et al. 2004; Frei et al. 2015). Nail and hair consist of keratin (α-keratin), a fibrous structural protein, and in contrast to bone, collagen does not remodel but grows continuously. This make nails and hair good indicators for the dietary intake months prior to death. However, since there is a difference in the amino-acid composition between keratin and collagen, $\delta^{13}C$ and $\delta^{15}N$ values from keratin need to be corrected for comparison with bone collagen (O'Connell & Hedges 1999; O'Connell et al. 2001; von Holstein et al. 2013) (e.g., Paper II). In addition, nail and hair growth may vary depending on the physiological status of an individual, as well as diet, age, and diseases, and there are also differences in growth between fingernails and toenails.

4.1.4. Carbon

Carbon stable isotopes are used to study past diets (Vogel & Van der Merwe 1977; Tauber 1981; Schoeninger & DeNiro 1984). Carbon is incorporated in plants through photosynthesis, and there are three different photosynthetic pathways – C_3, C_4 and CAM – giving the plants different carbon isotope values. The most abundant pathway in northern Fennoscandia is C_3, including plants, such as different trees and shrubs but also wheat, barley and rye. Plants using the C_4 pathway mostly live in tropical environments, whereas plants using the CAM pathway are plants with the ability to switch between the C_3 and the C_4 pathway (mostly succulents) (Vogel & van der Merwe

1977; Sealy 2001). The $\delta^{13}C$ value ($^{13}C/^{12}C$), measured against the standard PDB (PeeDeeBelemnite), is expressed in permil (‰) (Faure & Mensing 2005). While modern C_3 plants have a $\delta^{13}C$ value around -26.5‰, C_4 plants are less negative around -12.5‰. Carbon fractionates between producer and consumer with a value of *c*. +5‰ (Van der Merwe &Vogel 1978; Chisholm 1989). There is also a fractionation between different trophic levels in a food chain of about one permil in carbon (DeNiro & Epstein 1978; Chisholm 1989). This also means that the longer the food chain, the larger the difference in $\delta^{13}C$ between the highest and the lowest trophic level. Besides the difference between different photosynthetic pathways, there is also a difference between $\delta^{13}C$ values of carbon dissolved in the ocean and CO_2 from the atmosphere of *c*. 7 ‰. This difference is used to differentiate between resources from the sea and terrestrial resources.

It is important to establish a 'local isotope baseline' in order to interpret the human diet, preferably based on contemporary material. The terrestrial $\delta^{13}C$ end-values in this study vary between *c*. -22‰ and -20‰, while the $\delta^{13}C$ end-values for the marine environment along the Baltic Sea may be approxaimtley around -15‰. The values in the Atlantic Ocean are less negative, with values often around c. -13‰ to -12‰, depending on the species and its ecological niche (Lidén & Nelson 1994; Barrett et al. 2011).

4.1.5. Nitrogen

Nitrogen has two naturally occurring stable isotopes (^{14}N, ^{15}N), measured as $^{15}N/^{14}N$ relative to the standard AIR (N_2 of the atmosphere), expressed as $\delta^{15}N$ in ‰, (Faure & Mensing 2005). Nitrogen is incorporated into the human body through the diet. Plants incorporate nitrogen, either as NH_4^+ or NO_3^{2-} ions via soil uptake, or via nitrogen-fixating bacteria directly as N_2. In soil, the $\delta^{15}N$ is usually around 0‰. There is a fractionation in nitrogen with increasing trophic level of *c*. 3‰ (Minagawa & Wada 1984; Schoeninger & DeNiro 1984; DeNiro 1985; Sealy 2001) (Fig. 6). Some researchers suggest an even larger fractionation between the trophic levels of around *c*. 6‰ (O'Connell et al. 2012). In addition, the marine food chains are longer, thus nitrogen isotope values in marine mammals are more elevated than for terrestrial mammals. To complicate things further, elevated $\delta^{15}N$ values combined with depleted $\delta^{13}C$ values can indicate freshwater fish consumption, since freshwater carbon values are similar to terrestrial carbon values.

Factors other than trophic levels that affect the $\delta^{15}N$ values are different biological and/or environmental factors; physiological stress can, for example, alter the $\delta^{15}N$ values (Sealy 2001). Starvation, for instance, has shown to increase the $\delta^{15}N$ value, which can be explained by an internal recycling of the body's nitrogen reserve. The longer a consumer is affected by starvation, the more the nitrogen isotopic value will increase. Starvation has also shown to affect the $\delta^{13}C$ values (Haubert et al. 2005; Beaumont & Montgomery

2016; Doi et al. 2017). The $\delta^{15}N$ value has also been shown to increase between a child and its breastfeeding mother (Fogel et al. 1989; Eriksson 2003; Howcroft 2013).

4.1.6. Sulphur

Sulphur has four naturally occurring isotopes (^{32}S, ^{33}S, ^{34}S and ^{36}S). The ratio $^{32}S/^{34}S$, from the most abundant sulphur isotopes, is measured relative to the meteorite standard Canyon Diablo Troilite, and is expressed as $\delta^{34}S$ in permil (‰). Sulphur is incorporated into plants by their roots and reflects the biologically available sulphur of the bedrock. Sulphur can also be assimilated by the plants via the groundwater or moisture in the atmosphere, thus varying depending on the geographic location (Richards et al 2003; Faure & Mensing 2005; Nehlich 2015). The $\delta^{34}S$ values vary between -20‰ and +30‰ in terrestrial environments (Krouse 1980; Nehlich 2015). In the oceans, the $\delta^{34}S$ value is approximately +20‰, because of a constant mixing of the oceans. In contrast to ocean sulphates, the $\delta^{34}S$ values in freshwater ecosystems can vary from -5‰ to +15‰ (Nehlich 2015). Plants from a terrestrial coastal environment can display similar values to marine environments due to the so-called sea spray effect (Wadleigh et al 1994; Nehlich 2015). The $\delta^{34}S$ values of human and animals are used to study mobility and migration. There is little to negligible fractionation between different trophic levels in $\delta^{34}S$ (Peterson et al. 1985; González-Martin et al. 2001; Richards et al. 2003; Webb et al. 2017). As for the previous isotopes, it is important to establish a local baseline, based on contemporary samples.

4.1.7. Strontium

Strontium has four naturally occurring isotopes ^{84}Sr, ^{86}Sr, ^{87}Sr and ^{88}Sr, of which ^{87}Sr is radiogenic and is produced by decay of ^{87}Rb. The variation in $^{87}Sr/^{86}Sr$ in nature depends on the age and the relation of Rb/Sr in the local bedrock (Faure & Mensing 2005). Strontium from soil, water, vegetation and fauna reflects the value of the local bedrock, without any fractionation between source and consumer. Hence, $^{87}Sr/^{86}Sr$ in the analysed bone or enamel of the human or animal is representative of the bioavailable strontium ingested from plants, animals or water has been ingested. Nevertheless, there are some variation and diagenetic factors to consider (Montgomery 2010; Thomsen & Andreassen 2017).

4.2. Elemental analysis - lead

This thesis has used elemental analysis to study a population with a high exposure to lead (Pb). Lead is highly toxic and not vital to humans or ani-

mals. Lead accumulates in the body with time, and 90% of the lead is stored in skeletal elements. Therefore, bones are good indicators of exposure to lead. Loss of appetite, vomiting, severe colic and muscle weakness or paralysis are some of the symptoms that high exposure of Pb can lead to, in some cases even death (Handler et al. 1986).

4.3. Diagenesis, representativity and local ecology

Different pre- and post-mortem biological, chemical and physiological processes have to be taken into account in diet and mobility studies. Collagen degrades continuously post-mortem and can be substantially altered. Acidic soils are not favourable for bone and collagen preservation. The acidic soils in the Precambrian geology of northern Scandinavia is a problem for bone preservation. Collagen degradation also depends on the relationships between time, temperature and environment (Collins et al 2002:385). Lipids must be removed from bone elements with high lipid content, using methanol-chloroform, since they may alter the isotopic value from collagen (Lidén et al. 1995; Paper II). To control for diagenesis and assess collagen quality, certain parameters are measured prior to and during the stable isotope analysis (DeNiro 1985; Ambrose 1990; Nehlich 2015; Richards et al. 2003).

The information obtained from stable isotope analysis of collagen is an individual's protein intake, meaning that other nutrients (i.e., fats, carbohydrates and vitamins) important for metabolism are not represented. In addition, food consumed more rarely will not necessarily be reflected in the stable isotope values. For instance, fish protein sporadically consumed by an individual with an overall high terrestrial protein intake will not be visible in the collagen isotope signature. Occasional food, eaten during special ceremonies or other social events at a specific time of the year, will similarly not be visible (e.g., the bear ceremony feasting).

In archaeological dietary studies, it is important to establish the local isotope ecology, using the local fauna, preferably from the same time period. However, establishing the local isotope ecology can be difficult, since organic material is not always well-preserved or represented. Modern samples could be used to replace the archaeological, but there are several pitfalls. The species composition and the environment of modern fauna may be different. Further, domesticated animals might be fed differently, climate and environment may have changed, and, not least, the fossil fuel effect may have impacted on the isotopic values.

The methods used and applied here are, first and foremost, tools in the interpretation of past societies, and without any research question, the methods are merely just data producers. When analysing and interpreting the results obtained, new questions arise. In the Sillbajåhkå / Silbojokk study (paper IV), strontium isotope analysis was used on tooth enamel to study mobility

patterns during childhood. Due to the high cost of analysis, and for curatorial reasons, it was necessary to reduce the number of samples to one tooth per individual. In the best of worlds, all molars would have been analysed in order to get the full picture of an individual's mobility patterns during childhood.

5. Archaeological sites, material and some results

Human skeletal material has been analysed from five archaeological burial sites, dating from the Late Iron Age to the 19th century (for detailed accounts of each site, see Papers II–VI). They are all situated in Sápmi, and presented here in chronological order, and from south to north (Fig. 11). In addition, faunal material from a Sámi offering site, Unna Sájvva / Unna Saiva, in Lapland in the northern Swedish inland, was analysed (Paper I). The site was rich in artefacts, such as metal objects, dating to 800–1350 AD, and animal

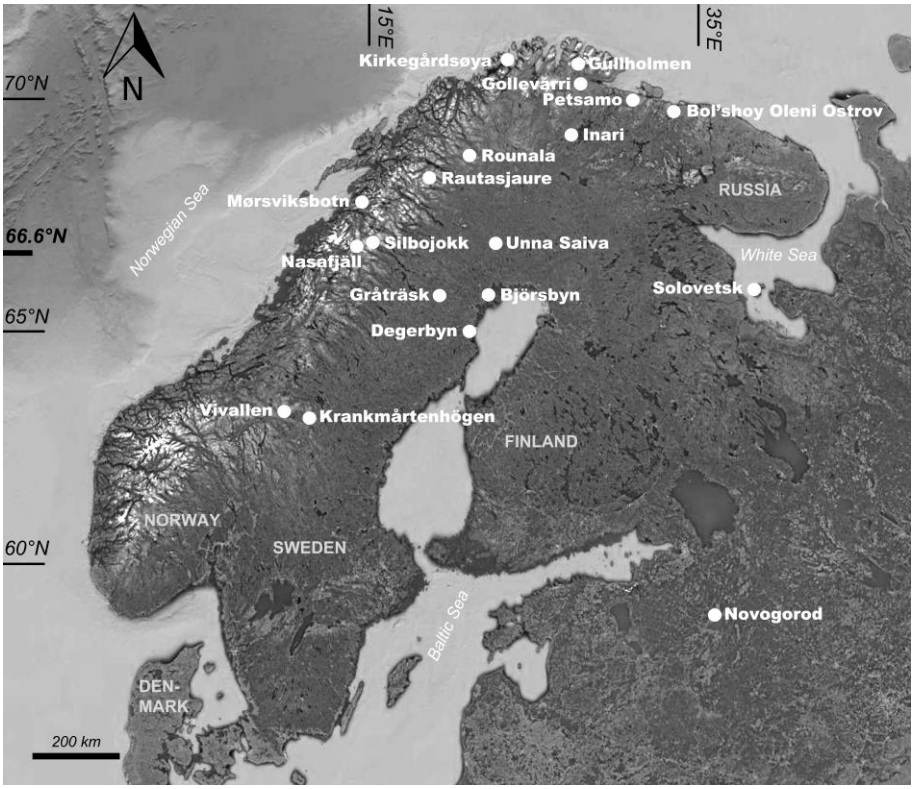

Figure 11. Map of northern Fennoscandia and Sápmi with sites studied and mentioned in the text, the background map, remodelled by the author, was screenshot from © 2020 Google, Map data: Google, DigitalGlobe.

bones of, e.g., bear, swan and reindeer. Radiocarbon dating indicated that the site was used from the 6th to the 17th centuries, and stable isotope analysis suggested that reindeer domestication was a major factor in the transformation of Sámi religion.

5.1. Vivallen

Vivallen is situated in Härjedalen in the Swedish inland, close to the Norwegian border. The burial site of Vivallen was discovered in the early twentieth century when the landowner stumbled upon some skeletons and artefacts. A few years later, Gustaf Hallström excavated the site and uncovered some 20 burials with a large set of artefacts (Hallström 1944). In the 1980s, 'the South Sámi project' excavated one more burial, as well as a dwelling site. Radiocarbon dates of faunal remains from the dwelling site and typological dates of artefacts from the cemetery dated the site to the Late Iron Age and early Middle Ages (Zachrisson 1997a; Zachrisson & Iregren 1997). The skeletons of the individuals buried at Vivallen were generally poorly preserved, and the individuals were most probably originally wrapped in birch bark (Hallström 1944; Hildebrandt et al. 1988). They ranged in age from 5 to over 50 years, and both sexes were represented (Alexandersen 1985; Iregren & Alexandersen 1997:83–84). To study diet and mobility, as well as the impact of trade and agriculture, 10 individuals were selected for stable isotope analysis, along with faunal remains of reindeer and sheep / goat (Paper V).

Stable carbon, nitrogen and sulphur isotope results of five individuals demonstrated that they had a mixed diet from several sources where freshwater and terrestrial diet were more important. There were no intra-individual changes, except for one female, aged 35–45 years, who did not reside in Vivallen during her childhood. Also, the diet for the individuals buried in Vivallen stands out compared to the other studies in this thesis (Paper II).

5.2. Silbajåhkå / Silbojokk

Sillbajåhkå / Silbojokk is situated in Lapland in the Swedish interior, at Lake Sädvvájávrre / Sädvajaure. This small community with a smeltery was established in 1635 to serve the silver mine at Nasafjäll, located on the Norwegian border, *c*. 40 km to the northwest (Bromé 1923; Awebro 1986a; Awebro 1986b; Roslund 1989:85–118; Roslund 1992). The lake was dammed in 1942, leading to a water level rise and subsequent shore erosion and the destruction of the site. The National Board of Antiquities performed archaeological excavations in the 1980s, revealing remains of buildings, a smeltery,

a church and a churchyard, used until 1770, connecting the site in part to a Sámi context. The Norrbotten County Museum has excavated the church and the churchyard areas, uncovering 74 burials (Lindgren 2019). Some individuals seem to have been wrapped in cloth, and some buried in coffins. In some burials there were funerary goods, such as fire steels, a ring, hooks and crooks, buttons, a needle, an axe and fragments of a supposed Sámi driving stick (*Vuodjemsåbbe*, SaP.) (Lindgren 2014–2019).

To study diet, mobility and the impact of mining, particularly with regard to lead contamination, on the population buried at the cemetery, 37 individuals, along with faunal remains of various species from a waste heap, were selected for stable carbon, nitrogen and sulphur isotope analysis, strontium isotope analysis, and elemental analysis (Paper IV).

The stable carbon and nitrogen isotope results demonstrated that the individuals buried at Sillbajåhkå / Silbojokk had a mixed diet, except for two individuals, who had a diet mainly consisting of freshwater fish. The sulphur isotope results demonstrated that the individuals were most likely from the region. On the other hand, the strontium isotope values exhibited values both local and non-local to Sillbajåhkå / Silbojokk. It is quite obvious that the mining and smelting activity had a negative impact on this population in terms of lead exposure. Their levels are several hundred times higher compared to a normal healthy population, which must have had negative consequences on their health, as well as on their life expectancy.

5.3. Rounala

Rounala is situated in Gárasavvo / Karesuando parish, Lapland, in the Swedish inland, close to the Finnish border. The Anatomical Institute in Uppsala commissioned the archaeologist Eskil Olsson to excavate the abandoned churchyard of Rounala in 1915, in order to expand the Sámi cranial collections. Twenty-one crania and a number of disarticulated bones were excavated and later stored in Uppsala (Statens Historiska museum 2009:3).

Today, the individuals have been deposited at Ájtte Swedish Mountain and Sámi Museum in Jokkmokk (see Section 6.3.6. for a discussion on repatriation and reburial).

Although there is little information on how the excavation was managed, some history is, however, known about the site. Beside the human skeletal remains, the foundation of a church (6.8 x 5 m) and *c*. 20 hearths were found. The latter were probably contemporary to the old market- and thing venue.

The buried individuals were orientated towards the east and buried at a depth between 0.4 and 1.35 m, and, according to Olsson, one individual was buried in a Sámi sledge. Some of the skeletal remains were wrapped in cloth; birch bark was commonly used as a wrapping material in Sámi burial tradi-

tion. A belt with squared iron mounts was also found at the site, indicative of Sámi traditions (Zachrisson 1997a). Dietary studies of stable isotopes of carbon, nitrogen and sulphur indicated that the individuals buried in Rounala had a diet composed of mainly freshwater fish, but also of fish from the Atlantic and the Bothnian Bay. Terrestrial protein was consumed to a lesser extent, and interestingly, reindeer does not seem to have been a great part of their diet. The diet varied slightly between individuals, indicating that they could have belonged to different ethnic groups. In addition, the study of mobility patterns demonstrated that three individuals had a different origin from the rest. Individuals buried in Rounala were interpreted as representing a heterogeneous group with different cultural affiliations (Fjellström 2011; Lidén et al. 2019:249). Because of their aquatic protein intake, from different carbon reservoirs, we used FRUITS and OxCal modelling to estimate the radiocarbon reservoir effects for each individual. The new results from radiocarbon dates of 19 of the individuals, corrected for marine and freshwater reservoir effects, demonstrated that there was no freshwater reservoir effect and that the churchyard was likely in use already from at least the fourteenth century until the end of the eighteenth century (see Paper III).

5.4. Kirkegårdsøya and Guollesuolu / Gullholmen

Kirkegårdsøya, situated on an island in Hammerfest municipality in northern Finnmark, Norway, is a Sámi Christian burial site, traditionally dated to the eighteenth century, where individuals dying from sickness and executions were buried, as well as German soldiers from the Second World War. A total of nine samples, from at least six individuals comprised of one female, two males, two indeterminate adults and one juvenile all aged from 12 to over 50 years of age, were sampled for analysis. The burials were of an early Christian type demonstrating somewhat mixed pre-Christian and Christian features. Two of the individuals were buried in a coffin in north-south and east-west directions and two without any container in east-west and west-east directions, of which one was on a wooden plank. All graves were shallow (see Paper II; Svestad 2006; Svestad 2007a).

The burial site Guollesuolu / Gullholmen is situated on the mainland next to the river mouth of Deatnu / Tana River in Finnmark, Norway. The name of Gullholmen derives from the Sámi place name *Guollesuolu* (i.e., 'The Fishing Island') and was a central marketplace for the area since the sixteenth century, where the fishing and trade of salmon was important (Pedersen 1984:43; Svestad 2010). In the 1730s, a Sámi chapel was erected and used as the main church for the area until 1847. Its churchyard, most likely originating from the period relating to Thomas von Westen's missionary work in the area in the very late 1710s, was in use until the late 1860s. It is first and foremost considered to be a Sámi burial ground; however, it could

be considered a multicultural churchyard since the late-eighteenth century (Svestad 2007b). Nine individuals from four single graves, one double and one triple, were excavated in 2006 and 2007. Of these nine individuals, there were three women, three men and three children ranging from 6 months of age to 50 years (Lynnerup 2006, 2007a, 2007b; Lynnerup et al. 2008). The individuals were west-east orientated and buried in rectangular coffins. Some of them were wrapped in organic material (see Paper II).

In this study, carbon, nitrogen and sulphur stable isotope analysis of bone, teeth and nails were performed to investigate the diet and mobility, including intra-individual changes, for the individuals. The results demonstrated that the individuals buried in Kirkegårdsøya had a homogenous marine diet, whereas the individuals buried in Guollesuolu / Gullholmen had a more heterogeneous diet of both terrestrial and marine protein. There were limited intra-individual changes, except for one individual from Guollesuolu / Gullholmen. The sulphur isotope analysis demonstrated that the individuals from Kirkegårdsøya were quite stationary and that some of the individuals buried in Guollesuolu / Gullholmen came from different areas (Paper II).

6. Ethics, repatriation and reburial practices

6.1. Introduction

There are numerous questions that arise in the ethics of repatriation and reburial regarding human remains and artefacts. Although it is not the intention of this thesis to provide answers to these, some of the questions can be highlighted here. Who owns the right to the human remains and artefacts? Who owns the right to history? And who has the right to the interpretation?

Even though there are international laws and declarations on the protection of indigenous people and right to self-identification, they have not yet been ratified by Sweden. In 1990, Norway was the first country in the world to ratify The Indigenous and Tribal Peoples Convention (no. 169) of the International Labour Organization (ILO). This convention concerns

> peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions (ILO 169: article 1, 2).

In 2007, a declaration of indigenous rights, the United Nations Declaration on the Rights of Indigenous Peoples, was adopted by the General Assembly at the United Nations (UN 2020).

The principal meaning of repatriation is the return of an object or human remains that once was abducted from its place of origin. The idea of repatriation concerns indigenous peoples' right to self-determination, history and self-definition in the restoration of their dignity, culture and past (Nilsson Stutz 2008:160; Ojala 2010:24), or as phrased by Liv Nilsson Stutz '[i]t is seen as a sign of democratization and as an important step on the path towards self-definition for groups that in the past were deprived from writing their own histories' (Nilsson Stutz 2013:171). Repatriation is often mentioned in the same context as reburial, especially concerning human remains. With reburial I mean the re-burial of human remains, sometimes with their funerary objects (if any) that had once been removed from their burial sites. The reasons for their removal are numerous and it is important to distinguish between these. For instance, while exhumations in the late-nineteenth and early twentieth centuries were usually conducted in order to study human

skeletal remains in the interest of racial biology, later archaeological rescue excavations were not, and are not, carried out for these purposes. The reasons for reburial are, however, similar to the ones for repatriation. A set of cases of repatriation and/or reburial have been chosen to illustrate different reasons, whether they were political, religious, regional, national, local or indigenous.

It is not the intention here to provide guidelines on how to handle repatriation and reburial, but rather to discuss the process, the outcome and problems. Attempts to provide ethical guidelines and recommendations for reburials have been made by, for example, Lønning et al. (1998), Masterton (2010:15–19), Drenzel et al. (2016) and Riksantikvarieämbetet (2020). This chapter is divided into three parts, where the first provides examples which highlight general concerns on repatriation and reburial, including both human remains and objects. Then follows a brief introduction to the history of racial biology. In the third part, repatriation and reburial cases in Sápmi are presented.

6.1.1. The Oseberg ship

In this example, a study and discussion by Elisabeth Arwill-Nordbladh (1997; 2002) on the excavation and reburial of the skeletal remains and artefacts from the Viking Age Oseberg ship burial is relied upon, excavated in 1904 and reburied 40 years later, in 1948.

The Oseberg ship burial contained fragmentary skeletal remains from two individuals, wooden artefacts, ropes, cloth and skeletal remains from fifteen horses, four dogs and two oxen. Based on the artefacts, the burial was interpreted as a female burial. In 1907, an osteological analysis of the skeletal remains made it possible to distinguish two female individuals (Holck 2009:39-40), one defined as the main individual and the other as its slave (i.e., *thrall*) (Arwill-Nordbladh 2002:207). A few years later, Anton Wilhelm Brøgger (1919:239) suggested that one of the buried individuals was Queen Åsa, mentioned by Snorri Sturluson (Nordström 2007:250). From the start, there was confusion over whether the younger or older individual was Queen Åsa. Anton Wilhelm Brøgger, archaeologist and head of the Norwegian *Oldsaksamling*, identified the older individual as Åsa (Brøgger 1919:239). The physical anthropologist Kristian Emil Schreiner, on the other hand, was convinced that Åsa, known from historical sources to be of a younger age, could not be identified as the older individual (Schreiner 1927:107–108) (Nordström 2007:290). In the 1940s, Brøgger promoted the theory that the burial had been robbed early on in connection to ritual collection of bones from high-ranking individuals and joined the opinion of Schreiner (Nordström 2007:298). One year after the excavation, in 1905, Norway became a sovereign state and was no longer a part of Sweden; at this point, the need for symbols in the creation and consolidation of the new nation seemed

to have become more important. It is within this national romantic era of the nineteenth and early twentieth centuries that the Oseberg ship burial was excavated.

Even before the First World War, there were claims from the local population to restore the mound; this was later followed by a decision from the antiquities board not only to restore the mound but also to rebury the two individuals (Arwill-Nordbladh 2002:208). At the end of 1946, the *Vestfold Historielag* requested the academic collegium in Oslo to rebury the two individuals. This was based on an idea of the *Vestfold bondekvinnelaget*, who had an agenda in emphasising the position of such a high-ranking woman in the Late Iron Age. At the same time as the individual identified as Queen Åsa, here used as a political symbol in the gender struggles in the early twentieth century, was highlighted, the other individual, the female thrall was less important and even forgotten (Arwill-Nordbladh 1997; 2002; Nordström 2007:293). At an exhibition in 1939 in Germany entitled *Frau und Mutter, Lebensquell des Volkes*, and in need of a grand and heroic prehistory, the National Socialists enlisted the Oseberg ship burial and the queen to promote their political ideology and their idea of the so-called Germanic woman in the history of the German realm (Nordström 2007:345–346).

Although unwilling to endorse the idea of reburial for the Oseberg women, Schreiner, according to Holck, wrote that if this had to take place, the individuals must be reburied in a similar position (Holck 2009:40–41). The individuals were finally reburied in August 1948 in the reconstructed mound in Oseberg, placed on an oak plate in an aluminium coffin and thereupon in a granite sarcophagus (Holck 2009:43–44). The Norwegian crown prince Olav, representing the Norwegian nation, conveyed a clear message at the reburial ceremony. It was important what the high-ranking individual from the Oseberg ship burial represented, namely, national self-esteem.

A few skeletal elements from both individuals were withheld from reburial by Schreiner and kept at the Anatomical Institute, University of Oslo. Some of these were radiocarbon dated and analysed for aDNA in the early 2000s. While radiocarbon analysis dated both individuals, from 680 to 900 AD, DNA could only be retrieved from the younger individual, who had the haplogroup U7, more common in the Black Sea area than in Scandinavia (Holck 2007; 2009:68). The burial was reopened in 2009 and the individuals are today exhibited at the Viking Ship Museum in Oslo (Sellevold 2013:156).

The Oseberg reburial is a perfect example of how human remains and artefacts were, and can be, used or misused, both politically, in the formation of a nation, and ideologically (i.e., gender). This leads to the question of who owns the right to the material and to interpretation of the past. As archaeologists, we have a responsibility in what we are mediating. We are not storytellers, and we must aim at reconstructing the past as close to reality as pos-

sible: where there are uncertainties, we have to be honest. As Arwill-Nordbladh (Arwill-Nordbladh 2002:212–213) emphasised, it is obvious that the reburial of these individuals had a very strong political and nationalistic dimension.

Holck has emphasised the preservation problems of skeletal remains when reburied, and the opportunity of future research. He refers to the reburial and the re-opening of the graves of the individuals from the seventeenth-century Vasa ship, where skeletal degradation was a fact. He also argues for using modern scientific methods to help elucidate and confirm the identity of the buried individuals from the Oseberg ship burial (Holck 2007:207). Since organic material deteriorates once reburied, this thesis argues that it is important to keep the remains accessible for future research.

6.1.2. The G'psgolox totem pole

Human remains are not the only material repatriated. Artefacts and other objects that were once removed from their place of origin also evoke similar feelings as human remains (Svestad 2019:23-24). The case of the G'psgolox totem pole at the Ethnographic Museum in Sweden is one such example.

In 1918, in a letter to Olof Hansson (Consul in Prince Rupert in British Columbia, Canada), David Bergström (Swedish Consul General in Montréal, Canada) wished to provide the Swedish National Museum with a totem pole (Björklund 2016:15-25). In 1929, the Ethnographic Museum in Stockholm received the Chieftain G'psgolox totem pole, taken from Kitamaat Village in British Colombia, Canada. In 1930, new buildings for the museum were planned and the pole was forgotten for about 50 years (Björklund 2016:78), and not until 25 March 1980 was the totem pole once again erected within the walls of the museum. Nine years later, the Ethnographic Museum received the first claim of repatriation of the G'psgolox totem pole from the Haisla nation. The Haisla people visited the museum, expressed hard feelings, and compared the way the pole was exhibited, with a wire system, to slavery (Björklund 2016:98). The G'psgolox totem pole was finally repatriated in 2006 after a long process of negotiation with the Haisla people. It is interesting to note that Sámi representatives were present at the repatriation ceremony in Stockholm, together with museum representatives, journalists, celebrities and the general public. Several traditional Sámi yoik (*vuolle*, SaP, singular form) were performed at the ceremony. Interestingly, the ice hockey legend Börje Salming, who has Sámi origins, was also present at the Ethnographic Museum, signing autographs. A collaboration between the Sámi and the Haisla people had developed on questions regarding issues of repatriation, and the following day the Haisla people travelled to Funäsdalen in Härjedalen, Sweden, where the Sámi talked about the tensions between landowners and reindeer herders. Two months later, the totem pole arrived in

Kitamaat Village in Canada and another ceremony was performed (Björklund 2016:123, 145–149).

As, according to the traditions of the Haisla people, totem poles are left to decay with time, the copy of the totem pole displayed at the Ethnographic Museum in Stockholm violates these traditions, since it is now preserved and available to be seen by the general public forever. While the exhibition of the totem pole bears the symbol of both colonialism and post-colonialism (Björklund 2016:196), one may wonder about the purpose of the exhibition and its ethical implications. Further, what is the role played by the presence of a celebrity with Sámi origin and the Sámi community in the repatriation of a Canadian indigenous totem pole? Salming is, first and foremost, a national hockey legend, and the repatriation concerns the Haisla people. The need for collaboration between indigenous people in the highlighting of past colonial violation is understandable; however, the subjective implication in the dissemination of these matters is concerning. Whose opinions are being mediated?

6.1.3. The Vasa ship

Three hundred and ninety-two years ago, in 1628, the Vasa ship encountered a dreadful end on its first journey, coming to rest at the bottom of the sea in the harbour at Stockholm. With it sank not only a large number of artefacts representing seventeenth-century everyday life and life on board, but also the people on board. The ship was rescued in 1961, which began a long process of restoration and construction, and it ended up in today's Vasa Museum. Here, the main artefact, that is, the Vasa ship itself, will not be discussed, but rather the focus will be on the people who died on the ship and how their remains were handled afterwards. The human remains, together with wax reconstructions, are today exhibited at the museum.

At the time of the rescue of the ship, discussions arose concerning whether the individuals should be buried or not. A decision was made to bury them. However, before that, an osteological analysis was made by professor Nils-Gustaf Gejvall in 1963. On 10 August 1963, the individuals who died on the ship were buried in five different concrete coffins, placed two metres below ground at the *Galärvarvskyrkogården* in Stockholm, close to where the museum was built. When the new Vasa Museum opened in 1989, these burials were re-opened and another osteological analysis was conducted by Ebba During. Even though special precautions were taken at the time of the burial, mould had grown on the skeletal remains. Results from the osteological analysis showed that taphonomic effects from the burial in the 1960s had negatively influenced the possibility of assessing the age of the individuals due to diagenetic alteration of the skeletal elements (During & Kvaal 2000). In addition, more skeletal elements were found in the attic of the museum, which had obviously not been buried in 1963. At least 25 individuals were

identified by the osteological analysis; the individuals had been denominated from A to Z by Gejvall and, based on these letters, were now given new names by During (During & Kvaal 2000). Odontological analysis was also performed, as well as radiocarbon dating, stable isotope analysis and analysis of mtDNA, the latter not yet published (During 1994; Green Jungstedt 2018). Stable isotope and elemental analysis of the individuals' dietary habits suggested that they, in general, had a very mixed diet consisting of meat and fish. While three of the individuals could have suffered from starvation, traces of healed injuries were also observed, telling us something about the harsh life on board (During 1994). Today, the combination and application of different bioarchaeological methods on archaeological remains, whether it is of skeletal remains or other organic or non-organic artefacts, is a well-established way of gaining a deeper understanding of our past and individual life histories.

So why is the treatment of the Vasa individuals of interest in a repatriation discussion? First of all, one could question the re-opening of the burials in 1989. Interestingly, new results and insights into the past and to the living conditions for seafarers and the local community during the seventeenth century were highlighted, but why weren't the individuals reburied once analysed? And what are the reasons today for displaying them, next to their wax reconstructions, at the Vasa Museum for the general public to look at? Further, Ebba During denominated the individuals with modern, north European Christian names, re-using Gejvall's alphabetic order from his analysis, where A became Adam, B became Beata, and so on (During 1994:38). The issue here is whether these individuals should have been given names at all. Do we know that they all were from the Nordic countries and Protestants? While scientific methods would provide us with until-now unknown information regarding dietary habits, mobility, kinship, and time of death, assuming individuals names *per se* arguably provides them with a national and religious identity with which they themselves did not necessarily associate.

6.1.4. Bonderup

In 1988, archaeological excavations were conducted within the walls of Bonderup church, in Scania, southern Sweden, commissioned by Dalby church assembly to renovate the church floor. Amongst other individuals, three children were discovered beneath the church. Without the knowledge of the local vicarage, the individuals were transported to Lund for osteological investigations. This led the vicar, Anders Blomstrand, on behalf of Dalby church assembly, to file a complaint on the importance of the vicar or church representative being given a voice in decisions on such matters (ATA dnr 5206/89). Furthermore, they demanded the skeletons be reburied as soon as possible. On the matter of reburial, researchers from the archaeological department at Lund University, where the osteological investigation was car-

ried out, suggested alternatives for keeping the individuals available for future research. While the individuals were found beneath the church, the remains were considered to be ancient remains (Sw. *fornlämning*), protected by The Swedish Ancient Monument Law. The researchers also argued that such analysis would highlight our knowledge of medieval living conditions in Scania. They were not in favour of a reburial; nevertheless, if a reburial were to be considered, conditions for antiquarian storage were suggested. These were that the parish should find an appropriate place for the human remains to be deposited; they should remain available for researchers; and they should be stored such that the bones were not to be mixed, nor to deteriorate (ATA dnr 5206/89). After a decision by the National Heritage Board not to rebury the skeletal remains, the parish assembly appealed to the National Heritage Board and the Parliamentary Ombudsman (Sw. *Justitieombudsmannen*) in favour of a reburial (ATA dnr 5206/89). The government finally decided that the skeletons should be kept at Lund University Historical Museum (Iregren 2004:267). The osteological analysis demonstrated that the three children did not suffer from anaemia or malnutrition due to the lack of *cribra orbitalis* (Holmgren et al. 2003:15–17). Here, there is an issue concerning conflicting interests, the Church or academia? In this case, the interest of academia was prioritised by the legislation.

6.1.5. The Ancient One / The Kennewick Man

In the summer of 1996, the skeletal remains of a human body were washed up on the riverbanks of the Columbia River in Kennewick, Washington, in the United States of America. It was the beginning of a long controversy concerning cultural property, repatriation, reburial practices, colonial and post-colonial legacies, and much more between archaeologist and the local Native Americans, the Umatilla tribe (Burke et al. 2008). The Ancient One, also known as the Kennewick Man, was one of the first important cases for NAGPRA (1990), and while waiting for a decision on what was going to happen to the remains, the court designated the Burke Museum to be the most suitable location for the safekeeping of the Ancient One, where the remains were never displayed to the public (Burke Museum 2017). Multiple bioarchaeological analyses were made, resulting in the interpretation of the individual as a young male who died *c.* 9,200 years ago, and who had a diet mainly consisting of migratory fish and marine mammals. In addition, based on the aDNA analysis in 2015, Chatters (2017) suggested that the 'Kennewick Man' belonged to the pioneer colonisers of western North America (Burke & Smith 2008:26; Chatters 2017: 93–95). Several Native American voices (Burke et al. 2008) were raised regarding the repatriation and reburial of the individual the local indigenous people would refer to as the 'Ancient One'. Research and its aims are not always regarded as something positive within indigenous communities (Tuhiwai Smith 2012); thus,

some communities were critical while others were interested in knowing more about their ancestry. Religion is repeatedly mentioned, together with colonial history, by Native American as one of the main reasons for reburial: 'We already know our history. It is passed on to us through our Elders and through our religious practices' (Minthorn 2008:42–43). The Kennewick Man is a good example of how an ancient individual can be, and has been, used in different political situations and with religious connotations. Results of autosomal and mitochondrial DNA and Y chromosome data conclude that the 'Kennewick Man' is directly related to modern Native Americans; however, it is not possible to say which Native group is most closely related (Rasmussen et al. 2015). Despite this, it was decided that the 'Kennewick Man' had to be reburied (Chatters 2017:83).

In early 2017, the human remains were repatriated by the Smithsonian Institute, and the 'Ancient One' was handed over to a group of Native Americans tribes, bands and organisations comprised of the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes and Bands of the Yakama Indian Nation, the Nez Perce Tribe of Idaho, the Confederated Tribes of the Colville Reservation and to the Wanapum Band of Indians and reburied at a secret location (Mick 2018). Clearly, genetic research was used to trace the individual's cultural affiliation back to its origin, although it was not concluded to belong to any specific ethnic group. This thesis does not question whether the descendants of the 'Ancient One' might be found among the Native American groups; however, it is arguably quite difficult to trace such cultural affiliation based on biology.

6.2. Nineteenth and twentieth century nationalism and racial biology

The nineteenth century experienced the development of racial biology, including the idea of measuring and categorising human beings. Lennart Lundmark defines a racist as a person who considers that a person's origins and physical features are part of that person's inner traits, for example, intelligence, behaviour and morals (Lundmark 2002:12). A brief summary is presented here of the history and development of racial biology and its important implications (for further discussion on this topic, see Ljungström 2004, Hagerman 2006).

In the mid-nineteenth century, the zoologist Sven Nilsson (1787–1883), in his publication 'The Primitive Inhabitants of Scandinavia' (Nilsson 1838–1843), based on a few finds of crania from a passage grave in southern Scandinavia, suggested that the Sámi were the indigenous population of Scandinavia. Nilsson had two arguments: the first argument was that the crania found in the passage grave were similar to modern Sámi crania; the

second argument was that passage graves resembled Eskimo igloos (Nicklasson 2011:171). To test his hypothesis, Nilsson asked his former student, Anders Retzius (1796–1860), to help. As Anders Retzius started measuring, categorising and documenting people and skeletal remains from archaeological burials in Scandinavia, he also came to construct a cranial index (Hagerman 2006:171; Furuhagen 2007).

During the same period, Anders Retzius developed a categorisation for skulls and a method for determining whether they were short- and long-headed skulls (brachycephalic and dolichocephalic), used by racial biologist to categorise people into different types. He made a list of groups of people who had long-headed skulls: categorised as Swedes, Norwegians, Danish, Dutch, Germans, English, French, Irish and Belgians, and, interestingly, they all fell within the grouping that was thought to be the ancestors of the 'Germanic' people (Hagerman 2006:169), seen as superior. Anders Retzius' work had a great impact internationally (Hagerman 2006:169), and his theory of long-headed skulls came to be used to prove 'Germanic' superiority over other groups (see Jones 2008:415). According to Nicklasson (2013), it is impossible to dismiss the racism that lies behind Nilsson's comparative method (Nicklasson 2013:45). In this period, craniology was looked upon as something positive, and different races were tied to different living standards and economies (Nicklasson 2013:45–46).

In the summer of 1863, Gustaf Retzius (the son of Anders Retzius), and his student friends, the archaeologists Oscar Montelius and Hans Hildebrand, participated in the excavation of a passage grave in Falköping in southwestern Sweden that came to have great importance for their future work (Hagerman 2006:231–232). In 1899, Gustaf Retzius continued in his father's footsteps and published his father's work, together with his own thoughts in *Crania Suecica Antiqua*, an inventory of all known prehistoric crania (Retzius 1899; Hagerman 2006:232). While the idea of Sámi inferiority had already been presented by Erik Gustaf Geijer, professor of History at Uppsala University, in the first part of the nineteenth century (Lundmark 2002), Sámi history quickly became an interesting starting point for these researchers, and expeditions to collect human skeletal remains from churchyards and other burials were carried out.

In the 1860s, the Anthropological Association (Sw. *Antropologiska sällskapet*) was established by Gustaf Retzius, Oscar Montelius, Hans Hildebrand and Hjalmar Stolpe. Among other topics, they discussed the origin of the Swedish people and how the Germanic people came to the North (Hagerman 2006:285–286). Based on information from artefacts, burial types and tales gathered from fieldwork into Sápmi, Gustaf von Düben challenged Nilsson's theory about the Sámi, arguing that the Sámi were never present in southern Sweden. Instead, Gustaf von Düben had a theory that people with short-headed skulls derived from, for example, Slavic tribes (Hagerman 2006:295–296).

In the early 1920s, the Institute of Racial Biology (Sw. *Rasbiologiska institutet*) was inaugurated under the direction of Herman Lundborg (doctoral practitioner and researcher). Lundborg pursued the work by Retzius on the racial biology of Sámi and Finnish people (Broberg 2002; Lundmark 2002; Furuhagen 2007). Sámi racial biology peaked with Herman Lundborg leading the Institute. However, he was not only praised for his work but also criticised for his interpretations and gross assumptions, categorising people into different groups of 'intelligence' based on physical traits. Lundborg was most active in the 1920s and 1930s in his work in Lapland, measuring the Sámi and non-Sámi population in Sápmi (Lundmark 2002), and published his work *The Race Biology of the Swedish Lapps* in 1932 (Wahlund & Lundborg 1932). The Institute was officially closed in 1958.

Today, researchers stress the complexity in comparing today's view on racism and racial biology and research from the time of the development of craniology (Welinder 2003; Ljungström 2004; Eidlitz Kuojlok 2015). On the one hand, Eidlitz Kuoljok considers aDNA to be quite interesting for understanding the past, yet on the other, she mentions that there is no understanding in the natural sciences of prehistoric cultural diversity and that no or little consideration is given to human and social sciences (Eidlitz Kuoljok 2015:61). She does not describe DNA research as a continuation of racial biology, but she concludes that DNA should be used as a complement to disciplines such as history, archaeology, ethnology and language history, and not on its own. She also stresses that the history and past of humankind cannot be handed over solely to biologists and geneticists (Eidlitz Kuoljok 2015:91). In a paper from 2002, Audhild Schanche, a Sámi indigenous archaeologist from Norway, made two statements: 'Genetic research with an historical basis is, needless to say, not in itself negative, nor is the measuring of skulls' and 'there are no grounds for claiming that genetic research in itself is not decisive; the danger only arises from how the findings are actually used' (Schanche 2002a:55). With the use of aDNA comes the responsibility for the researcher to state his / her purpose and in a clear and transparent manner report results in the most ethical way possible.

In a book by Stig Welinder (2003), *DNA, etnicitet, folk och folkvandringar*, the lack of social and humanistic input into biological research in understanding and avoiding misinterpretation and generalisations was problematised. He asked whether the study of genes is a useful tool for our understanding of Sámi ethnicity when examining the topic for a lengthy time span, and he questioned the connection between culture and biology (Welinder 2003:93).

We, as researchers, should make a distinction between biology and culture when it comes to the interpretation of the past; whether or not a person defines him- or herself as Sámi is connected more to cultural aspects than biological. To narrow down cultural belonging to biology is, in my view, to simplify history and to blur the meaning and complexity of ethnicity and

cultural affiliation. Traditions (oral and/or written), beliefs, religious and social practices are not genetically, but culturally transmitted. Fossum stressed that it is important to differ between biology and culture when considering ethnicity (Fossum 2006:95). Today, with the rise of national-romantic thoughts and a return to that kind of politics, it is important to deal with these questions so that research does not fall into the hands of dubious thoughts and into racism, as discussed by Hansson (Hansson 2018). Linda Tuhiwai Smith stressed the importance of dissemination and sharing as the responsibility of the researcher (Tuhiwai Smith 2012:162).

Cooperation between human, social and natural sciences is important for understanding our past. Needless to say, we might never obtain the full picture of the past, but with the combination of different methods and theoretical frameworks we may come closer to past events. Researchers have an obligation to conduct research in an ethical way, whether this is within the human, natural or social sciences. Some questions to ask oneself before conducting any research are what impact the research might have on society, why is it being done, who are the beneficiaries and what is its purpose. Who is, then, allowed to do research on an indigenous past? This is arguably a rather difficult question, without a clear-cut answer. Linda Tuhiwai Smith (2012) was adamant that indigenous research must be conducted by indigenous people. On the other hand, Stefan Mikaelsson points out that 'indigenous are humans, and entitled to enjoy human rights and fundamental freedoms' and that, whether or not the research is conducted by indigenous researchers, research should aim at reliable results, respect for the culture and its traditional knowledge (Mikaelsson 2016:19–20), a view with which I agree.

6.3. Repatriation and reburials in Sápmi

Several researchers have questioned the need for repatriation and reburial. From an osteologist's point of view, Elisabeth Iregren, together with Helena Shramm Hedelin (2010), points out some arguments for and against reburial. One of the arguments in favour is promises of reburial made at the moment of excavation (e.g., Gammplatsen). However, some arguments are given against such practices: (1) it would exempt human remains from future research, new knowledge, testing new hypotheses and applying new methods that are continuously developing; (2) osteological analysis is often not applied or incomplete; (3) the results are and must be reviewed by colleagues; and (4) taphonomic processes will continue, thereby preventing future analysis (Iregren & Shramm Hedelin 2010:59–60). Asgeir Svestad (2019) presents an opportunity for discussion and dialogue on both positive and negative effects of repatriation and reburial regarding some northern Fennoscandic Sámi reburial cases from Norway, Sweden and Finland. One of

his apprehensions is that ‘Sámi reburial marks itself almost as a quick fix, while the dead, their human and, in particular, non-human remains, are treated in a rather disinterested fashion’ (Svestad 2019:23). While he does not condemn reburials, he argues that reburial might not always be the most ethical solution (Svestad 2019:23–24).

In what follows, different known repatriation and reburial cases of Sámi human remains (Fig. 12) and objects such as Sámi drums and *sieidis* are presented.

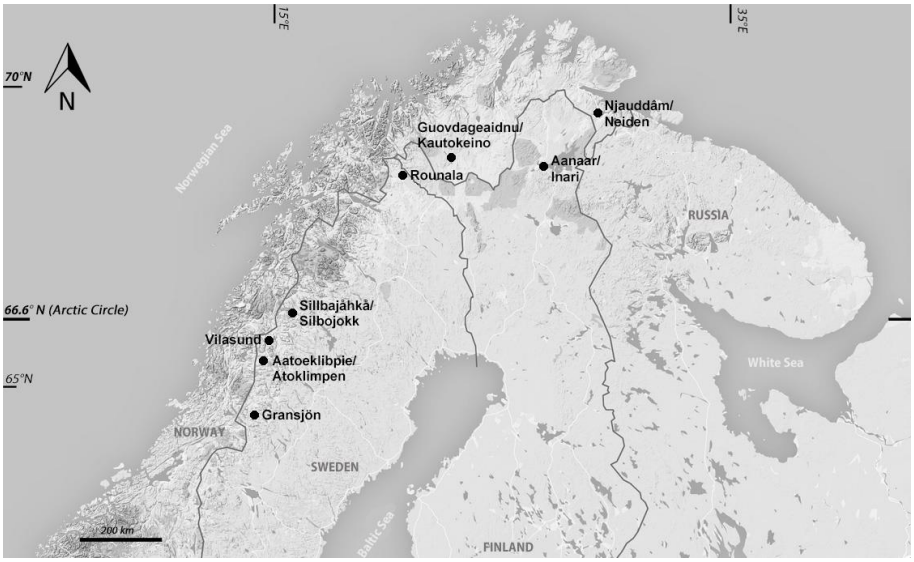

Figure 12. Map of northern Fennoscandia and Sápmi with Sámi reburial sites marked with black circles; the background map, remodelled by the author, was screenshot from © 2019 Google, Map data: Google, DigitalGlobe.

6.3.1. Gransjön

In 1986, a Sámi burial was commissioned to be excavated by the County Board in Jämtland, northern Sweden, where some skeletal remains had been exposed above the soil. The remains were from a 45–60 years old woman, radiocarbon dated to the sixteenth century. Two years later the excavation was published in Åarjel-saemieh (Sundström 1988). The osteological analysis demonstrated that this individual was, in general, in good health. There were no signs of caries, signs that would have indicated large consumption of carbohydrates, or porotic hyperostosis or enamel hypoplasia. Further, there were no signs of anaemia or stress-related sicknesses during childhood. However, she had lost several teeth, due to an inflammation in the gum, which may have led to some difficulties in chewing certain types of food. Further investigations of diet and mobility indicated a mixed diet of protein

from both land and aquatic living organisms. Nonetheless, meat consumption seemed to gain importance during adulthood (Hansson 2018:119–120). On 12 August 2011, the woman was reburied at the same place where she once was buried.

In connection to the Gransjön reburial, Anders Hansson (2011) debated the value of archaeology and the impact it can have on present-day politics, not least in relation to the agenda of an extreme right-wing party in Sweden, the Swedish Democrats. The local Swedish Democrats in Jämtland used results from archaeology and history to undermine local Sámi history and prehistory in order to criticise what they regarded as unfair Sámi reindeer-herding privileges. They put forward a simplified and false view of Sámi culture, history and identity, and claimed that Sámi had never been present in historic Jämtland, which undermined their rights as indigenous people (Hansson 2011:241). In order to avoid the Swedish Democrats' racist and false assumptions about history, Hansson stressed the importance of disseminating the results of modern research (Hansson 2011:242).

Hansson (2018) highlighted the potential of research, but also addressed the problems with exhumed skeletal material. Nevertheless, he pointed out the value of research and the importance of research ethics and raised general questions concerning repatriation and reburial: who is the reburial for, the dead or for the ones reburying? Who has the right to decide on the reburial of an individual of unknown history (Hansson 2018)? For research not to be used for extreme political agendas, it is important for research to be conducted ethically. The researcher has to position him- or herself against the use of archaeological and osteological research in politics in relation to the creation and anchoring of nationalistic values. In the Gransjön example, research demonstrated a change in diet and health during adulthood, and is a good example of how research can contribute to Sámi history.

6.3.2. Liksjoe / Lycksele

Two reburial cases are known from Liksjoe / Lycksele. The first example concerns a cranium from Liksjoe / Lycksele, which, according to a report from the Swedish History Museum (Statens Historiska Museer 2009:13), was given as a gift to Dr Ångström at the Anatomic Institute at Uppsala University in 1857. Together with more than a thousand skeletal remains, the cranium was rediscovered in the collections of Uppsala University in 1996 and identified as the one formerly belonging to the Anatomic Institute. It is possible the individual dates to before the nineteenth century, but without any context or radiocarbon date, it was difficult to be more precise about the date of the individual. The information about the find was scarce and the individual could not be identified as a specific person (Statens Historiska museer 2009:13). A reburial of the individual is planned to take place in 2020 (Johnny Karlsson, personal communication, 7 January 2020).

The second example concerns 25 individuals from Gammplatsen in Liksjoe / Lycksele, Västerbotten County, Sweden. In connection with building a local heritage centre on Öhn in Liksjoe / Lycksele, an archaeological survey that conformed to the laws of cultural management had to be executed. It is known that a church and churchyard were in use between 1697 and 1799 on Öhn. The Swedish Church had an interest in finding out where these had been situated and financed archaeological excavations in 1950 and 1951 to establish their location (Cajmatz 1951:1). The excavation revealed the remains of 25 individuals. In addition, funerary objects were found in the burials, an amber bead, an iron axe (loose find), textiles, dresses, hooks and crooks, a knife, several copper coins from 1719 and a bronze chain (Cajmatz 1950a:10–11; Cajmatz 1950b:1–5). In a letter to the National Heritage Board in 1951, written by the Västerbotten county custodian of antiquities, Gunnar Westin, he wrote that the excavated human remains should be reburied at Gammplatsen while the artefacts should be deposited at the Västerbotten County Museum (ATA, dnr 182151). The human remains were sent to the Swedish History Museum in Stockholm for an osteological analysis by professor Nils-Gustaf Gejvall. Based on a recently revealed mail correspondence between Gejvall and Cajmatz, Rovira Torres, a journalist at the Swedish journal ETC, and osteologist Johnny Karlsson from the Swedish History Museum in Stockholm draw attention to Gejvall's general interest in the collection of Sami 'specimens' and his interest in particular in these specific individuals. (Rovira Torres, Friday 2 August 2019; TT, Monday 26 August 2019).

Before the reburial, several Swedish news desks published information about the reburial. Some of them described these 25 individuals as Sámi; others did not specifically connect them to any ethnic group (Granath 12 March 2019; Jackelén et al. 8 June 2019; Stenberg Partapouli & Niia 7 August 2019; Skogelin 9 August 2019). Katherine Hauptman, director of the Swedish History Museum, expressed an official apology to the Sámi community (Hauptman, 2019: https://historiska.se/forsoningsceremoni-vid-gammplatsen/). In the Swedish Research Council's journal *Curie*, archaeologists and researchers pointed out some of the complexities with reburials due to the uncertainty of the cultural background of the individuals or items to be reburied (Wallerström 2006 and cf. Rounala, Lidén et al. 2019) and expressed their concern about indirectly being accused of conducting racial biology (Olofsson, 28 August 2019). Moreover, disappointment from the Sámi community was expressed after the reburial in regard to the lack of the Sámi community's influence on decisions; speeches should have been simultaneously translated into Sámi language, and it was also highlighted that the reburial was a matter not only for Sámi living in Liksjoe / Lycksele but rather for the whole Sámi community, considering its colonial history (Labba, 12 August 2019). This might reflect a lack of routine or guidelines regarding

repatriation and reburial of Sámi human remains, as well as miscommunication between representatives of the state and the Sámi community.

On the commission of Líksjuon Sámiensiäbrrie / Lycksele Sámi Association, an osteological analysis and photographic documentation was carried out a few days before the reburial of the individuals. In addition, one tooth per individual was kept for possible future analyses (Kjellström 2019), such as radiocarbon dating. These samples are in the care of the ethical committee, responsible for the reburial. That teeth were kept by the local Sámi association for possible future analysis demonstrated an interest in research from the indigenous population. However, the keeping of teeth may also be seen as contradictory to the act of reburial. Is it really acknowledging past violations if the complete skeletal remains are not reburied? On the other hand, is it really acknowledging the past population by preventing the future opportunity of obtaining new information?

On 9 August 2019, the individuals from Gammplatsen were reburied. The ceremony was 38 minutes long and was recorded live on Swedish National Television (Sveriges Television, 9 August 2019). This is by far the most important and largest repatriation and reburial of Sámi human remains in Sweden.

6.3.3. Aatoeklibpie / Atoklimpen

In 1950, *Soejvengelle* (the Shadow Man) at Rijsiejohke / Risbäcken near the mountain Aatoeklibpie / Atoklimpen in Dearna / Tärna, northern Sweden, was partially excavated and documented by Ernst Manker. The grave had been known to the Sámi community for a long time and had a mythological meaning for the Sámi people. A storage unit (*cf.* Sw. *förrådsgömma*) was found next to the grave, of which oral traditions holds that *Soejvengelle* was the keeper. According to the local tradition, *Soejvengelle* would accompany you and bring you luck on your travels if you offered something to him (e.g., a coin). The individual had been placed in a Sámi sledge, covered by slate slabs. According to Manker, finds of blackened birch bark under the slate slabs indicated that the sledge was placed on birch bark. (Manker 1957:249–250).

The skeletal remains were osteologically analysed at the Nordic Museum in Stockholm and identified as a man around 30-40 years old. Besides the radiocarbon analyses that dated the individual to the fifteenth century, an axe, an iron knife and 14 coins from the twentieth century were found (Sanell & Stångberg 2001:17–18; Heinerud 2002). The local Sámi organisation, together with representatives from the Västerbotten county board, Västerbotten Museum and Ájtte Mountain and Sámi Museum in Jokkmokk, decided to rebury the individual. The man was reburied on a reindeer skin, a tradition that is so far only known from an early medieval ‘Sámi-Norse’ burial (Svestad 2017, 2019:15), in a reconstructed sledge. The sledge was

then wrapped in birch bark and covered by stone slabs and soil. Svestad (2019:16) questions why the man was reburied on a reindeer skin and dug down into the soil. Pre-Christian Sámi burials are rarely covered by earth, in order to ensure the free passage of spirits between the worlds (Svestad 2019:16). Although the reburial was planned after Manker's documentation of the excavation and according to his interpretation (Heinerud 2002:11), it was not completely executed accordingly (Heinerud 2004:2). It is not always an easy task to reconstruct ancient monuments and burial traditions. Further, Sámi burial traditions are known to be diverse. I agree with Svestad that this is a pre-Christian Sámi burial; further, we know from the documentation of the excavation that it was not covered by soil. Why was the individual not reburied in the same fashion? And why was he reburied on a reindeer skin? Similar to the Haisla totem pole, which was meant to decay with time in the open air, should *Soejvengelle* not reside in his sledge above the ground?

6.3.4. Vila chapel

In 1723, a chapel and a churchyard were established in Vila (at that time in Norway) by Thomas von Westen, in present day Vilasund in Dearna / Tärna parish, Västerbotten County, Sweden. In 1751, new borders were drawn and Vila fell within the border of Sweden. After 1762, the chapel and its churchyard were slowly abandoned (Oddmar 1949:120–123). Due to the planned damming of lakes in the areas, archaeological excavations were conducted in 1962 and 1963 by Malmberg, even though a local Sámi was opposed to the idea of excavation (Svestad 2019:6–7). Around 25 individuals were found buried in Sámi sledges with deposits of knives, fire steel, flint, reindeer pelts and cloth. These individuals were then reburied at Gamla Kyrknäset some 50 km southeast of Vilasund. Five mandibles were kept for odontological analysis at the *Tandläkarhögskolan* in Umeje / Umeå (Iregren 2010; Svestad 2019:6–8). Once again, the individuals were reburied without their funerary objects and not at their place of origin (Svestad 2019:17). If we are to respect the individual being reburied and their descendants' will and traditions, it seems logical to return the human remains as well as their funerary objects to their place of origin. Sometimes it seems that reburial process is too fast and that there is not enough time to give full consideration to the ethical aspects; here some remains were not reburied.

6.3.5. Sillbajåhkå / Silbojokk

Sillbajåhkå / Silbojokk is situated on the shore of Lake Sädvvájávrre / Sädvajaure north of the polar circle in the Swedish inland in Norrbotten County (see Section 5.2 and Paper IV). In 1635, a silver mine (Násavárre / Nasafjäll) and a smeltery (Sillbajåhkå / Silbojokk) were established. A church and a churchyard were constructed later in the mid-seventeenth cen-

tury, and in 1659, the site was attacked by Danish-Norwegian soldiers, ending the mining activities. However, priests were still present at the site until 1770. In the early 1940s, a dam was constructed at Lake Sädvvájávrre / Sädvajaure (Norrman 1989:13) causing erosion of the shore. In the 1980s, archaeological rescue excavations were carried out, revealing remains of buildings, as well as remains from mining and clerical activities. Some of the artefacts found connected the site to a Sámi context: for example, bone spoons with ornaments from south and central Sápmi, a Sámi drum hammer and an Ave Maria pendant (Roslund 1989; Nurmi 2019). Norrbotten County Museum has been rescue excavating the churchyard from erosion since the beginning of the twentieth century, revealing *c*. 70 graves. In order to highlight the results from the ongoing research, Norrbotten County Museum has held seminars and performed other public outreach events each year (see https://kulturmiljonorrbotten.com/; Lindgren 2019a; Fjellström 2019).

In 2014, a claim for repatriation of human remains from the Sámi representative was sent on behalf of Árjepluovve / Arjeplog's municipality (Statens historiska museer 2014) to the Swedish History Museum. After the claim, representatives from the local Sámi organisation, the Sámi villages, Árjepluovve / Arjeplog's parish, as well as archaeologists from Norrbotten County Museum, met at the local museum in Árjepluovve / Arjeplog, *Silvermuseet*, to discuss the ethics regarding the excavation of the skeletal remains (Lindgren 2015:3). At the meeting, information about previous excavations and research in Sillbajåhkå / Silbojokk was presented, and future excavations and research were discussed. Reburial of the human remains was also discussed, which the representatives from Arjeplog supported. A representative from one of the Sámi villages in Árjepluovve / Arjeplog asked for a reburial to take place in Sillbajåhkå / Silbojokk and to be paid by *Skellefteå kraft* (i.e., the regional electricity company) responsible for the erosion caused by damming. However, all agreed that the Government had the final say in the decision to rebury (Lindgren 2015, bilaga 7:1). In mid-December 2019, Sámi people raised their voices in favour of reburying the individuals from Sillbajåhkå / Silbojokk (Kaddik 2019; Mikaelsson 2019). At the same time, Åsa Lindgren published a blog post about her thoughts on the Swedish *gravrätt* (when the right to a burial space at a public cemetery is conveyed to someone by the administrating body of the cemetery) and on the Cultural heritage management (Lindgren 2019b). The *gravrätt* is valid for 25 years but can be extended to 50 years or indefinitely. This is only valid as long as the burial is part of a public burial ground (Sw. *allmän begravningsplats*) (Begravningslagen 1990:1144, §7:5). As the churchyard was abandoned in 1770, it is no longer under the jurisdiction of the right of burial, but under the protection of the Cultural Heritage Law. Hence, the right of burial is not applicable. She also stressed that Sillbajåhkå / Silbojokk has a complex cultural heritage (Lindgren 2019b).

This is an interesting case that illustrates the importance of an open discussion between archaeologist, indigenous people and the local population. In this case, there is a claim to rebury these individuals, but researchers argue that there is great potential in this material to contribute to our knowledge of the history of this region. The *gravrätt* will not be discussed; however, Lindgren has arguably stumbled upon something important. Even though the churchyard has been abandoned since 1770, descendants of the buried individuals might exist – what if these descendants make a claim for reburial? In what manner and according to what tradition should they be reburied?

6.3.6. Rounala

In 1915, the Anatomical Institute in Uppsala commissioned the archaeologist Eskil Olsson to excavate the abandoned churchyard of Rounala in Gárasavvon / Karesuando parish, northern Sweden (see Section 5.3 and Paper III). Olsson died the following year and left a poorly composed report of six pages, today stored in the archives of Museum Gustavianum in Uppsala. The aim of the excavation in Rounala was to add to the Sámi cranial collections of the Anatomical Institute in Uppsala. Twenty-one crania and a 'less important' amount of disarticulated bones were excavated and later stored in Uppsala (Statens Historiska Museum 2009:3). Three pits and some wooden frameworks on the soil surface surrounding the pits contained sandy soil with marrow-split reindeer bones, as well as an iron handle from a kettle. A four-squared hearth about 3 metres long and comprised of timbered logs was also discovered (Olsson's notes at Museum Gustavianum 1915; Wiklund 1916). Some obscurities existed in the written documents in relation to dating the building of the church in Rounala. However, it was probably erected in the sixteenth century, after 1523, the year Gustav Vasa wrote a letter to the pope on the Christianisation of the Sámi people (Lidén et al. 2019).

The find of a Sámi sledge, wrapping material and a belt with square iron mounts indicated Sámi burials. In 2009, Sámediggi (i.e., the Sámi parliament) claimed repatriation of 12 of the crania (Sametinget 2009, dnr 2009-648). In a response to the claim, Lars Amréus, then director of the Swedish History Museum, expressed his concern about a reburial of the Rounala individuals, because of their unknown ethnicity. He also stressed that these skeletal remains were central to research that might highlight the history of Norrland and Sápmi (Amréus 2009). The Rounala lappby association (2010), a non-Sámi local association, showed an interest in gaining better knowledge of their past and were in favour of research. In May 2015, the Sámi radio broadcasted an interview with the archaeologist working on the material, Thomas Wallerström. The journalists erroneously reported that researchers had established that the individuals from Rounala were of Sámi origin (Heiki, 7 May 2015). Later the same year, this picture was corrected. It had

not been possible to establish the ethnicity of the individuals; furthermore, this was not the aim of this investigation (Sunna, 9 December 2015).

In his project on the history of Rounala, Thomas Wallerström, thoroughly reviewing written sources, was able to find several more crania and skeletal elements. In total, 17 crania and 2 individuals with disarticulated skeletal remains were identified. Osteological, ^{14}C- and stable isotope analysis (Lidén et al. 2017, 2019) have added to that finding. The individuals are now deposited at Ájtte Swedish Mountain and Sámi Museum in Jåhkåmåhkke / Dálvvadis / Jokkmokk (Östlund, 19 October 2017).

The churchyard was in use during both Catholic and Lutheran times, as demonstrated by corrected radiocarbon dates, from the fourteenth to the late-eighteenth century (Dury et al. 2018). The finding of a Sámi sledge does not exclude Christian burial traditions. In addition, the Christianisation of the local population pre-dates the seventeenth and eighteenth century and people other than the Sámi could have been buried at the site. Further, that the individuals had a diet based on freshwater fish and marine resources might suggest non-Sámi burials (Lidén et al. 2019:255). According to Kjell-Åke Aronsson, with whom I agree, new results and research have made us renew our thoughts and rethink Sámi medieval history (Aronsson 2013b:77). Of course, the background to the excavation of the churchyard must be considered and must not be forgotten. In the same manner, indigenous peoples' claims on repatriation and reburial must be considered, and past violations recognised.

6.3.7. Aanaar / Inari

Also in Finland, some time in the late nineteenth and early twentieth centuries, cemeteries and burial grounds were excavated for the purpose of Finnish anatomic collections. The cemetery island Jaamišsuálui / Vanha Hautuumaasaari in Aanaarjävri / Lake Inari was one of them. On the 16 July 1995, 95 supposedly Sámi skulls were reburied (Harlin 2008:196) on the island by a local priest. According to Svestad, there was little documentation of the ceremony, which happened quickly, and there were also ambiguities concerning whether all individuals came from that island and whether all of them were of Sámi origin (Svestad 2019:8–9). If the purpose of reburials is reconciliation and recognition of past violations, is it not also important to be respectful towards individuals' cultural affiliations and burial traditions? If this cemetery was a multi-ethnic burial ground, individuals must have been buried according to different burial traditions.

6.3.8. Guovdageaidnu / Kautokeino

In 1852 in Guovdageaidnu / Kautokeino in Finnmark County in northern Norway, a group of Sámi rebelled against the Norwegian Lutheran Church

in favour of the new Laestadian religious revival movement. On the 14 October 1854, as a consequence of the rebellion, two men, Aslak Jacobsen Hætta and Mons Aslaksen Somby, were sentenced to death and decapitated. As there was a growing interest in racial biology and craniology during this period, the two men's crania entered the scientific collections at the University of Christiania (i.e., Oslo). The rest of their bodies were buried on the margins of the churchyard in Gáivuotna / Kåfjord in northern Norway. A claim to repatriate and properly rebury Aslak Jacobsen Hætta was made in 1976 by some of his relatives. The request was denied, and it was not until the 1990s, with the intervention of the Sámi Parliament, that the University of Oslo consented to the claim. The individuals' skulls, placed in miniature sledges, were buried with their bodies in the autumn 1997 at the church in Gáivuotna / Kåfjord (Mathisen 2017:23; Svestad 2019:2). Whether or not a more appropriate place could be found for the deceased was discussed, but nothing appears to have come of this.

The conflict in Álttá / Alta continued with the construction of a hydroelectric dam. In 1979, Niillas Somby, one of the descendants of the executed men in the former conflict in Álttá / Alta, participated in a hunger strike against the construction in front of the Norwegian parliament. In 1982, he was convicted for an attempt to bomb the construction site. Somby fled to Canada but returned to Norway some time later and claimed repatriation of his ancestors to Sápmi. He was in favour of a reburial of the individuals but he did not agree upon the proposed location of the reburial in Gáivuotna / Kåfjord. Somby opposed a Christian (re-)burial, as 'Christianity is an alien religion that is part of Norway's subjugation of the Sami', and he wanted the graves to be a reminder of the colonial violations of the Norwegian state (Mathisen 2017:27–30). As Mathisen stresses, 'Old injustices can hardly be corrected, and the conflicts that brought these violent actions and equally violent retributions must not be forgotten' (Mathisen 2017:32). Matland is of the opinion that 'human remains act as a link to the past, enabling these groups to claim legitimate moral and cultural status in form of ownership as well as control over their cultural heritage' (Matland 2018:211). This example is very much embedded in the nineteenth-century racial biology discourse in the collecting of Sámi skeletal remains (Svestad 2019:3). According to Svestad (2019), the crania of the two individuals may not have been buried together with the appropriate post-cranial remains (Svestad 2019:2–3). In my opinion, this is highly problematic, as there still is a lack of respect for the buried individuals. Regardless of the rebellion and what these two men were accused of, it is important to bury the individual's crania together with the rest of the skeletal remains. The reburial may be seen as an acknowledgement of these past violations, and discussions about repatriation should be kept alive.

6.3.9. Njauddâm / Neiden

In 1915, Schreiner commissioned Johan Brun, a Norwegian physician and odontologist, to undertake some excavations in Njauddâm / Neiden at a Skolt Sámi burial ground. The purpose of the excavation was to collect Sámi skeletal remains for the Norwegian Anatomical Institute in Oslo (Schanche 2002a:50; Svestad 2013a:203). After some discussion with several Neiden Sámi, Brun obtained the permission of a local Skolt Sámi, Ondre Jakobovitsj, to excavate on his land in exchange for a few Norwegian crowns for the skeletons found (Svestad 2013a:209). Ninety-four graves were opened, of which 15 had finds of birch bark, grass, moss, fragments of leather, human hair, a fragment of fur, jewellery, an Orthodox crucifix, knives, iron nails, and more (Svestad 2013a:203–205).

In 2006, the Orthodox Church in Njauddâm / Neiden, *St. Georgs Kirkeforening*, made a claim to repatriate and rebury the individuals (Svestad 2013a:198). Sámi politicians seemed not to be in agreement at first as to whether or not the repatriation and reburial should take place. Some were in favour of reburying the individuals, whilst others believed the best solution would be for them to remain at the University of Oslo. Finally, the decision was taken to repatriate and rebury them. Nevertheless, a compromise was under discussion which would prevent the skeletons from being destroyed; and interestingly, no consideration was given to the funerary goods which are still stored in different museums (Svestad 2019:14). An interest in research and a more careful, cautious and open-minded process was shown by a large group of Skolt Sámi from Njauddâm / Neiden and its surroundings (Svestad 2013a:199–200; Svestad 2019:13). In Njauddâm / Neiden and within the Sámi community in Norway, some people were against research, while others were in favour of it. Some Njauddâm / Neiden Sámi were against reburial, since they argued that this would deprive them of their history (Interviews from *Finnmarken* and *Ságat* in Svestad 2013a:201; Svestad 2019:13).

Even though the question of pre-Christian burial traditions was raised by an appointed working group, pre-Christian traditions were not considered and the 94 individuals were reburied in September 2011 in Skoltebyen in small wooden coffins covered by a large mound, resembling a Viking Age burial, not common in Skolt Sámi burial traditions (Svestad 2019:18). The ceremony was led by an Orthodox priest according to Orthodox ecclesiastic traditions (Svestad 2013a). Ten of the reburied individuals were radiocarbon dated between the early fourteenth century and the early seventeenth century. A possible reservoir effect was not taken into account, but it was argued that some of these individuals were most probably dated to the pre-Orthodox period, including both pre-Christian and Christian (Catholic) Sámi burial traditions (Svestad 2013a:210). One of the problems that Svestad highlights was the reburial of individuals according to Orthodox religious traditions,

even though we know that the individuals date to the pre-Orthodox period (Svestad 2013a:210). In an agreement with representatives from the Sámi community, samples were selected from the skeletal remains for future research (Svestad 2019:13).

Several researchers commented on this study in a volume of Norwegian Archaeological Review, some of them in favour of Svestad's arguments, others against (Svestad 2013a; Svestad 2013b Aronsson 2013a; Karlsson 2013; Goldstein 2013; Zimmerman 2013). Kjell-Åke Aronsson agrees on the reburial being a paradox but also that reburials are an important act in the work of reconciliation between the oppressed indigenous people and the oppressor (Aronsson 2013a:224–225). Håkan Karlsson concludes that Svestad contributed to a new ethical path for archaeology and seems to be rather positive to Svestad's arguments on reburial practices (Karlsson 2013:230). On the other hand, Lynne Goldstein and Larry Zimmerman with American and Native American points of view, were more critical (Goldstein 2013; Zimmerman 2013). Similar to the reburial of the individuals in Lycksele in 2019, the Neiden case demonstrates the complexity of reburial practices. There are many voices and not all of them are heard or considered. Strikingly, the funerary goods were, once again, not reburied with the individuals and everyone's voice was not heard. In ethical debates concerning the will to rebury and acknowledgement of past violations, arguably the reburied individuals are not always respected, sometimes due to a lack of background information of the events and the causes for excavation and collection. Most importantly, all voices do not seem to be listened to; in many cases, religion is allowed to have the strongest voice and is given the lead in reburials. In my opinion, similar to Svestad, the reburial of the Njauddâm / Neiden individuals undermines the history of the Skolt Sámi and disregards their claim to their past and the diversity of their historic traditions.

6.3.10. Sámi drums and *sieidis*

The Sámi drum is one of the most well-known artefacts, representing Sámi religious traditions. During the seventeenth and eighteenth centuries, they were confiscated by the Church (sometimes burnt) from the *nåjjde* (SaP, singular form) (Sw. *nåjd*) and families, based on accusation of witchcraft and communicating with the devil (Silvén 2016:197). The stolen and destroyed Sámi drums (Fig. 13) are today important symbols in the discussion and debates regarding Sámi cultural heritage and self-determination (Mulk 2009:203; Nordin & Ojala 2018:67).

In 1938, Ernst Manker published his first volume in a survey of Sámi drums displayed in different cabinets and museums in Europe, an immense work of documenting the remaining drums from the Christian 'inquisition' against the non-Christian traditions (Manker 1938). A total of 71 drums were documented, of which 42 were in Sweden, while the rest were mainly in

Germany, but also in Norway, Denmark, France, Great Britain and Italy (Manker 1965:9). Most of the drums are today kept at the Nordic Museum in Stockholm as part of their collection.

Figure 13. A Sámi drum from Liksjoe / Lycksele lappmark, donated to Kungliga Antiquitets Collegium by Chrispoher Graan in 1688. Deposited at the Nordiska museet in 1943. Drum number 1 in Manker's Die Lappische Zaubertrommel (1950:217-218) (photo: Bertil Wreting; the Nordiska museet identification number: NMA.0228847).

The inquisitorial process of collecting Sámi drums during the seventeenth and eighteenth centuries is a dark history and part of the Christian and Western colonisation in Sápmi. Lars Nilsson from Norrvästerbyn in *Pite lappmark* was found praying to the Sámi gods. Per Noræus (also known as 'Herr Per'), priest in Silbojokk and strenuous servant of God, sentenced him to death. In 1693, he was to burnt at the stake with his wooden gods and his drum in Árjepluovve / Arjeplog. Two other male Sámi, also *nåjjde*, were put on trial for using their drums. Whereas Anund Thorsson died before prosecution, Erik Eskilsson promised to serve the Christian God and not pray to the Sámi gods any longer (Manker 1965:121–129; Bergman et al. 2008b:22). There were similar witch-hunts of the local inhabitants of Varanger and Finnmark in northern Norway, where people were sentenced to death (Willumsen 2013:240; Kallestrup & Toivo 2017:6). This was the case for Anders

Poulsen from Varanger / Utsjok, sentenced to death in 1692 for using his drum and for witchcraft (Willumsen 2016). This is an early example of colonial assault on indigenous people in northern Fennoscandia, rooted in religion.

So, have drums been repatriated to their original locations? In 2014, one drum was relocated to the museum in Liksjoe / Lycksele (Skogsmuseet). In 1976, Anders Poulsen's drum was relocated to the Sámiid Vuorka-Dávvirat / The Sámi Museum in Kárášjoga / Karasjok, Sápmi. A copy of the same drum is at the Museum of Cultural History in Oslo. These are a few cases where drums have been relocated to their geographic origin (Silvén 2016:200). While the Nordic Museum refused to relocate the drums in their archives, Trinity College in Cambridge conceded a loan of a drum to Ájtte the Swedish Mountain and Sámi Museum, once dispossessed from Sámi in Sápmi. However, the drum is now back in the college museum in Cambridge. According to Inga-Maria Mulk, it was embarrassing for the Nordic Museum and they have since conceded to loan a drum to Ájtte; however not yet relocated (Mulk 2009:205–206). So far, no proper repatriation of drums to Sápmi in Sweden has occurred. Along with the drums that were misplaced, stolen or/and destroyed by missionaries and other Church representatives (Nordin & Ojala 2018:67), other Sámi sacred objects were casualties of the colonising process, as they were collected by travellers and tourists (Silvén 2012:181).

Besides drums, *sieidis* were also taken from their place of origin. The *sieidis* were worshipped by the Sámi and could be part of the landscape, such as mountains, rivers and lakes, or an object in the landscape (Figs. 14, 15a–b) (Mebius 2003:146; Silvén 2012:181). To my knowledge, the only example of a repatriated *sieidi* stone is the one from Gárgovárri from northern Norway. It was taken in 1906 and brought to Oslo. In 1999, the stone was returned to its original site (Schanche 2002b:29; Harlin 2008:197). In Sweden, the only example of a relocated *sieidi*-stone is *Sieberbuollda*, which was taken in the summer 1900 from the Julevädno / Lule River valley and relocated to Ájtte in 2002 to be part of an exhibition; nevertheless, it has not been repatriated (Mulk 2009:207; Kuoljok 2010:6). Arguably, objects such as drums and *sieidis* should be repatriated to Sápmi and administered by Sámi organisations. However, it is also important ensure dissemination of the history behind the collection and destruction of drums and *sieidis*. The exhibition of such objects at museums acknowledges Sámi history and enhances their self-identification, while also making people aware of past colonial violations.

Figure 14. The offering site Paddustievva, Torne lappmark, Sweden (photo: Ernst Manker, 1947; the Nordiska museet identification number: NMA.0091142).

Figure 15. Sieidi from Sápmi. (a) the Sieberbuollda stone sieidi from Vaisaluokta, Jokkmokk, exhibited at Ájtte, height c. 30 cm – the Swedish Mountain and Sámi Museum in Jokkmokk (photo: Jan Gustavsson); (b) wooden sieidi from Risfjället (photo: Bertil Wreting; the Nordiska museet identification number: NM.0135141).

6.4. Concluding remarks on repatriation and reburial practices

Repatriation and reburial in the Western world are very much about recognition of past violations against indigenous communities and reconciliation between the indigenous and the non-indigenous. Burnt drums in the seventeenth century, stolen *sieidis*, and plundered graves in the late-nineteenth and early twentieth century are some of these violations that have to be recognised, and to some extent have been. Some Sámi skeletal remains, excavated in pursuit of racial biology and craniology, have been reburied; others have not. In Sweden, Sámi drums and *sieidis* in museums in Sápmi are merely loans from museum in southern Sweden, or from abroad. However, they are not administered by the Sámi community. Some objects have been returned (i.e., the *sieidi* from Gárgovárri) and recently, over 2,600 Sámi objects have returned to Finnish Sápmi (Harlin 2019:256). Today, with the repatriation of Sámi objects and reburial of skeletal remains, museums and other non-indigenous organisations and national authorities are working towards recognition of past violations, and Sámi objects are slowly finding their way back to where they belong. It is important to acknowledge Sámi history around the world, and collaborating with museums on exhibitions may be a way to ensure this occurs.

Without doubt, humans and their cultures, regardless of ethnic group or affiliation, constantly change. Climate, warfare, cultural, religious and economic change all play a role in the development of societies. The idea of the Sámi as a homogenous culture and a static society, confined within the 'borders' of Sápmi, does not present an accurate picture.

Archaeology has often been used in political and juridical cases to prove or exemplify one group's right over another. For example, it has answered the question of who is indigenous and who is not. If archaeological research is to be used in such cases, it must be handled carefully. One must understand that we may never obtain the full picture of prehistoric societies and how they defined themselves. What we can study, for example, and gain an understanding of is their material culture, food preferences and mobility. The question of who is indigenous is complex and, arguably, difficult to answer. One example is provided by the site of Bol'shoy Oleni Ostrov on the Kuelnegk njoarrk / Kola Peninsula in Russia, dated to the early Metal Age (*c*. 1500 BC), which, traditionally, has been interpreted as a proto-Sámi burial ground due to the artefacts, the wooden remains and a sledge-like burial type. Murashkin et al. (2016) discussed the complexity of the site and that it cannot be connected solely to a proto-Sámi cultural affiliation. Even though research can highlight the past, we must be careful about the categorisation of past individuals and societies, of which we know little, into different ethnic groups. Archaeology must not be used politically, especially when this is

done to undermine any ethnic group or prove someone's superiority. Hence, discussions are essential and must occur.

Why is it that funerary objects do not have the same importance as human remains? Funerary objects and other artefacts do not seem to command the same interest or engagement as the human remains. For instance, the individuals reburied in Aatoeklibpie / Atoklimpen, Njauddâm / Neiden, Vilasund, and Liksjoe / Lycksele were not accompanied by their belongings. According to Svestad (2019), if artefacts are removed from the individual, the individual's identity is, in some respect, neglected, as well as his / her spiritual and physical dignity (Svestad 2019:17). While claims for Sámi reburial are often pursued by representatives of the Church (Catholic, Protestant or Russian Orthodox), together with indigenous representatives, it seems that reburials are performed according to modern Christian beliefs and traditions. Can the lack of (re-)deposition of funerary goods with their owners be explained by traditional Christian values? And is it an active choice not to rebury funerary goods with their owners because it does not fit modern Christian burial traditions? Just as funerary objects are heavily connected to an individual's identity, names are also important identity markers, and have been throughout history. Ebba During (1994), while studying the individuals from the Vasa ship, created modern imaginary identities for the individuals who died on the ship, rather than letting the remains speak for themselves. We will never reach a decisive conclusion about the past; however, research help us better understand individuals' living conditions and the different social, political, religious and economic characteristics of societies and individual interaction.

According to Holand and Sommerseth, it is a problem that researchers might refrain from conducting research to avoid potential ethical controversies, despite a genuine interest from, for example, the Sámi community in their history (Holand and Sommerseth 2013:43). Today, we do not excavate to collect crania (Sellevold 2013:146–147).

Each case of repatriation or reburial that has been discussed above has a specific history, with regard to the cause and time of violation. These examples have highlighted the need for repatriation and reburial of human remains, and also raised issues concerning different preferences and desires of private persons, indigenous people, the Church and the academic community. It is important to consider repatriation and reburial, as well as to acknowledge past violations, in order to reconcile with indigenous communities. It is also important to acknowledge the positive impact research can have in highlighting Sámi history.

7. Food practices in Sápmi

Archaeology has the ability to gain a better understanding of the human past through interdisciplinary research (e.g., Lidén & Eriksson 2013; Lidén 2017). In this study, the use of stable isotope and elemental analysis are merely methods used to understand specific aspects of past human societies. My current research has demonstrated that the study of past food culture does indeed give us an insight into social, cultural, religious and political structures of societies in Sápmi. Through different case studies in Sápmi, it has been demonstrated that food consumption was by no means uniform and static during the period AD 600–1900, and that the differences in food consumption reflect a multicultural landscape.

The four research questions posed in this thesis relate to whether cultural diversity in Sápmi is reflected in different food practices and how individual life-history and mobility studies can contribute to an understanding of life in Sápmi during the period studied. These questions are related to each other and will be discussed together below. The third question concerned the role that reindeer played in the diet in Sápmi during the period. Since reindeer and the history of its domestication holds a special importance within Sámi prehistory and history, it will be discussed separately. The final question relates to the impact of mining activities on the local population in terms of lead poisoning, which connects to matters of the colonisation of Sápmi, something that will be discussed together with issues on repatriation and reburial ethics.

7.1. Diet, mobility and intra-individual changes

Today, the view of Sámi culture as one uniform entity still seems to prevail among the general public. In her study of Finnish Skolt and Inari Sámi, Eeva-Kristiina Harlin (2019) states that Sámi culture has been described and pictured ‘like a homogenous’ and ‘unchanged entity’ during at least the last hundred years at exhibitions in national museums, and through this, presents a false impression of stagnating culture and traditions (Harlin 2019:51). Sámi history, culture, economy and society are neither uniform nor stagnant (Olsen 2004; Hansen & Olsen 2014:6–7; Kylli et al. 2019) (Chapters 1–2, Papers I–VI). Through time, there has been local and regional specialisation

and utilisation of natural resources, as well as interactions with groups with other cultural affiliations. Access to natural resources in the land- and seascapes was important for both indigenous and non-indigenous groups, which is seen in the presence of different Sámi communities, but also of other groups, such as Swedes, Norwegians, Finns, Dutch, English, Karelians and Russians, and at marketplaces, for instance, the one at Kjørvåg on the Kola Peninsula in the sixteenth century (Odner 1989:14–15). Cultural diversity in Sápmi in (pre-) history and today is a fact.

Sámi culture is not limited to one means of subsistence; it has varied through time and place. For instance, it would be ignorant to think that being Sámi means being restricted to one way of living, with one specific tradition, and a static culture based solely on reindeer herding. According to Eidlitz (1969:9), reindeer, wild or domesticated, were a staple food throughout the Sámi community, and were also a strong cultural marker. However, this does not necessarily mean that all Sámi are, or have been, reindeer herders and had a diet based solely, or even mainly, on protein from reindeer. Considering this wide geographical area, it is evident that there are local, regional and chronological differences within the Sámi community; in other words, Sápmi is culturally heterogeneous in space and time.

From Vivallen in the interior of southern Sápmi in the Late Iron Age and Middle Ages, to Guollesuolu / Gullholmen and Kirkegårdsøya in the northern coastal parts of Sápmi in historic times, diet and mobility differed depending on resource utilisation and cultural traditions. Individuals buried in Vivallen had a diet based on terrestrial and freshwater resources (Paper V), in contrast to individuals from Guollesuolu / Gullholmen and Kirkegårdsøya who had diets based predominantly on marine protein. However, the diet of individuals buried at Guollesuolu / Gullholmen was much more varied than at Kirkegårdsøya, indicating a multi-ethnic presence (Paper II). The intra-individual analysis of diet and mobility provided information of a more complex society. Whether they were Sámi or non-Sámi is difficult to assess, but they were clearly a culturally heterogeneous group of people. The two sites in northern Norway and Vivallen are not directly comparable due to their differences in both chronology and geography, where the natural resources, geology and climate differ. These groups lived in times with substantially different access to food sources, but also marked by different social, economic, cultural and religious codes.

In some cases, protein intake and mobility can be more difficult to assess and are often quite complex. The individuals buried in Rounala and Sillbajåhkå / Silbojokk in northern Sweden had a mixed diet, including foodstuffs from terrestrial, freshwater and/or marine environments. The sites overlap chronologically, with Rounala dating from the fourteenth to the eighteenth century, and Sillbajåhkå / Silbojokk from the seventeenth to the eighteenth century. The excavations of Sillbajåhkå / Silbojokk uncovered a waste heap with numerous animal remains, providing a good animal baseline for both

diet and mobility studies (Paper IV). This was not the case for Rounala (Fjellström 2011; Paper III), where no faunal remains were recovered. Nevertheless, both sites had similar carbon and nitrogen isotope values; however, this may not be indicative of them having had similar diet. While individuals buried in Rounala consumed a mixed diet more focused on freshwater fish, individuals buried in Silbojokk had a much more varied diet. This difference might also be the result of the lack of an animal baseline for Rounala. The more animal reference there is for one site, the more precise the interpretation of food consumption will be. Through the means of stable isotope analysis, it has been demonstrated that food traditions, in spite of cultural, social, political and religious traditions, are different for different Sámi ethnic groups.

While carbon and nitrogen isotopes contribute to information on food consumption, sulphur and strontium isotope analysis can provide an insight into mobility and migration. Intra-individual studies of diet and mobility are an effective way of tracing landscape use and resource utilisation. Comparing stable isotope values from bones and teeth, knowing that they are continuously remodelling or formed at a certain age, changes in food consumption and individual mobility can be traced. Through several of my studies (Papers II and IV), it was possible to show that some individuals originated from geographic areas other than where they were buried. Not only is $\delta^{34}S$ analysis indicative of the geological provenance of the food ingested, but with the combination of $\delta^{13}C$ and $\delta^{15}N$, the precision of interpretation is increased.

In addition, $^{87}Sr/^{86}Sr$ analysis of tooth enamel has shown to be an effective way of tracing mobility. By targeting a series of spots on the tooth enamel of one single tooth, it is possible to trace mobility and migration. Several individuals from Sillbajåhkå / Silbojokk were subjected to such an analysis, and it was possible to demonstrate that the mobility patterns among the individuals buried in Sillbajåhkå / Silbojokk varied (Paper IV). The importance of combing $^{87}Sr/^{86}Sr$ analysis with other isotope analysis, such as $\delta^{13}C$, $\delta^{15}N$ and $\delta^{34}S$, should be stressed. It might seem trivial to study diet and mobility patterns in prehistory; nevertheless, the importance of acknowledging today that humans have always been mobile and have exchanged traditions, values and ideas is clear. There is no such thing as a static culture.

7.2. What about the reindeer?!

Today, as in history and prehistory, not all Sámi are reindeer herders. However, the reindeer has a strong cultural affinity to Sámi identity and cultural traditions, whether or not it was domesticated, herded or just hunted. Its presence has been recorded in a multitude of archaeological contexts. As described in Section 2.10, remains of reindeer bone and antler have been found at Sámi offering sites, as food waste at dwelling places and in hearths.

Antlers were commonly used in the construction of spoons, drum hammers and other artefacts. Antlers, teeth and bones were also deposited in graves at different burial sites (Schanche 2000:375–376). Not all Sámi groups kept reindeer on a large scale, but, according to ethnographic and older written sources, they were very much used as draught and packing animals. In addition, according to the same sources, the reindeer was a staple food and an important source of protein throughout Sápmi. As seen in some of the papers, there is an inconsistency between the archaeological and osteological material and the stable isotope analysis (Papers II, III, IV and V). It has been shown that reindeer protein was not a major food source at the sites studied. However, it cannot be ruled out that other groups may have consumed reindeer protein to a greater extent. While the individuals buried in Vivallen had a freshwater and terrestrial protein intake of animals other than reindeer (Paper V), individuals from Kirkegårdsøya and Guollesuolo / Gullholmen in Norway consumed more marine protein, with some exceptions where individuals had a more terrestrial diet (Paper II). Individuals buried in both Rounala and Sillbajåhkå / Silbojokk had mixed diets (Papers III and IV; Fjellström 2011).

Through several studies, the reindeer and its diet has been examined more closely, and the studies have explored how stable isotope analysis can make it possible to separate between natural and cultural keeping of reindeer (Papers I and VI; Salmi et al. 2019). It would be interesting to study the lichen isotopic values from different areas known for reindeer grazing more closely and compare them to modern and archaeological reindeer specimens from that area. Does lichen isotopically vary substantially depending on the geography?

7.3. On colonialism, repatriation and reburial

The aim of this thesis has been to study diet and identity in Sápmi from the seventh to the nineteenth century. This includes the analysis and handling of human skeletal remains, which always has ethical implications – even more so in areas subjected to colonialism, such as Sápmi. Sillbajåhkå / Silbojokk (Paper IV) can be seen as the result of colonial violations on nature and people in Sápmi by the Swedish state, with an immense and negative impact on the environment and the people living and working there. Despite the fact that repatriation and reburial take place throughout Fennoscandia, the issue is more of a pressing question in Sápmi. The aim has been to highlight the importance of discussing such matters and provide some thoughts on how this may be handled in the future. First of all, it should be acknowledged that this is a sensitive and complex matter. It is sensitive because of the history and the violations resulting from the colonisation of Sápmi throughout the period. It is complex because cases of repatriation and reburial are often

unique. Whether we are indigenous or non-indigenous researchers, we all have to be transparent, respectful and, all in all, consider ethical issues while studying the human past and ancient remains. I do not think that we can – or should – treat individuals buried during the Mesolithic, the Iron Age or the seventeenth century differently.

To sum up, all cases of repatriation and reburial are unique and should be handled individually, such that each case should be considered separate and distinct. In addition, we should make a distinction between repatriation and reburial. This thesis does not argue against a code of ethics in the handling of such remains; on the contrary, guidelines are very much needed, and Sámi cultural heritage should be administrated by the Sámi. It has been possible to demonstrate through my studies that Sápmi is very much culturally heterogeneous, which leads to the next conclusion. Research, in all its form and disciplines, whether it is intra- or interdisciplinary and of course ethically conducted, can highlight unknown histories and pasts, but also help us in our endeavours to reconcile with the past.

8. Sammanfattning

I den här sammanläggningsavhandlingen har jag med hjälp av studier kring matkultur, intag av föda och förhållandet till människor och djur belyst den kulturella heterogenitet som rått i Sápmi från ca 600 till 1900 efter vår tideräkning. Den har belysts med hjälp av stabila isotop- och elementanalyser av skelettmaterial från ett antal arkeologiska lokaler i Sápmi. Det vi inom ett samhälle väljer att äta styrs av den naturliga tillgången till olika resurser, samt av kulturella, sociala, ekonomiska, politiska och religiösa traditioner och seder. De arkeologiska lokaler som ligger i fokus är Vivallen (Paper V), Sillbajåhkå / Silbojokk (Paper IV), och Rounala (Paper III) i Sverige, samt Guollesuolu / Gullholmen och Kirkegårdsøya i Norge (Paper II). Förutom det har även fokus lagts vid betydelsen av renen i det samiska samhället (Paper I och VI).

I kapitel 1 introduceras syften och frågeställningar till avhandlingen. Frågorna berör bland annat studiet av kulturell heterogenitet i Sápmi och hur det speglas i faktisk konsumtion av olika födoämnen under perioden. Frågan ställs även om hur studiet av livshistorier och mobilitet kan bidra till mer kunskap om livet i Sápmi. Eftersom renen har en starkt kulturell koppling till samiska samhällen ställs frågan om renens roll i kostintaget. Slutligen berör frågan om hur gruvdriften påverkat befolkningen i Násavárre / Nasafjäll och Sillbajåhkå / Silbojokk, särskilt med avseende på blyförgiftning. I samma kapitel introduceras även Sápmi geografiskt samt kulturellt och vikten har lagts vid att lyfta fram etnicitets-begreppet och diskussion kring etniska grupper i norra Fennoskandien och Sápmi.

I kapitel 2 görs en djupdykning i det kulturella landskapet i Sápmi utifrån dess geografi, geologi och naturtillgångar. Förutom en beskrivning av fjällssamer, skogssamer och sjö- eller kustssamer, berörs även kväner, *birkarlar* och karelare. Dessutom lyfts, för den samiska kulturen, andra framträdande drag fram, såsom samisk förkristen begravningssed samt en forskningshistorik över rendomesticeringen och pastoralism.

Kapitel 3 utgörs av en presentation av matkultur och det traditionella samiska köket. Förutom att lyfta fram på vilket sätt mat är viktigt för människor beskrivs även den naturliga och kulturella tillgången till föda. En genomgång görs av de traditionellt viktigaste födokällorna från hav, sjö och land utifrån skriftliga källor och etnografiska studier. Bland djuren märks t.ex. ren, älg, småvilt, boskap, sötvattensfisk, havsfisk, säl, val, skogshöns

och sjöfågel. Växterna inkluderar bl.a. kvanne, ängssyra, torta, alla sorters bär samt barkmjöl gjord på innerbarken av tall. Även mer sällan förekommande födointag lyfts fram, som t.ex. ritualiserad mat vid offerplatser eller i samband med andra religiösa ceremonier (t.ex. björnceremonin), men även andra typer av föda som importerad mat såsom mjöl och salt.

Med hjälp av ^{14}C-dateringar och stabila kol-, kväve-, och svavelisotopanalyser visas att individer gravlagda i Kirkegårdsøya (1331–1953 cal AD) haft en huvudsakligen marin kost, medan individerna i Gullholmen (1661–1953 cal AD) har haft en mer varierande kost, men fortfarande med ett starkt marint inslag (Paper II). För de individer som gravlagts i Rounala har vi genom ^{14}C-dateringar och stabila kol- kväve- och svavelisotopanalyser klarlagt att ^{14}C-dateringarna påverkats av en marin reservoareffekt – däremot inte av någon sötvattensreservoareffekt. Detta innebär att gravplatsen började användas redan innan kyrkan uppfördes – kanske så tidigt som 1300-talet – och var i bruk fram till och med 1700-talet (Paper III). Tillsammans med stabila kol-, kväve- och svavelisotopanalyser och elementanalyser av bly har studien av individerna i Sillbajåhkå / Silbojokk visat att de har haft en blandad kost, med föda från marina, terrestriska och sötvattensmiljöer. Förutom det har de även exponerats för bly från gruvverksamheten, vilket med stor sannolikhet har haft en mycket negativ inverkan på deras hälsa (Paper IV). Kosten hos de gravlagda individerna i Vivallen skiljer sig från den hos individerna från Guollesuolu / Gullholmen, Kirkegårdsøya, Rounala och Sillbajåhkå / Silbojokk, med ett betydligt mindre inslag av marint protein (Paper V). I material från den samiska offerplatsen vid Unna Sájvva visar ^{14}C-dateringar och kol-, kväve- och svavelisotopanalyser av deponerade djurben på förändringar i offerpraktiken i samband med förändringar i den sociala och ekonomiska organisationen av det samiska samhället (Paper I). I den sista artikeln (Paper VI) analyserades ett antal renben från olika arkeologiska lokaler i både fjäll- och skogssamiska områden runt om i Sápmi för att spåra om det finns några skillnader i renskötselstrategier. Kortfattat visade resultaten visade på att låga kväveisotopvärden indikerar en fjällsamisk renskötselstrategi, medan högre kvävevärden antyder en skogsamisk renskötselstrategi. Svavelisotopvärdena var stundtals olika för de olika renarna och indikerade diverse betesområden.

I kapitel 5 beskrivs metoderna som används i de olika studierna mer grundligt. De använda metoderna är analyser av stabila kol- och kväveisotoper för att studera kosthåll, svavel- och strontiumisotopanalyser för att studera mobilitet, och elementanalys som används för att studera blyexponering i en av studierna (paper IV). Kapitlet avslutas med en genomgång av källkritiska aspekter såsom diagenes, representativitet och begräsningar i tillgång till faunamaterial för att studera den lokala isotopekologin.

I kapitel 6 diskuteras arkeologins roll i forskningen kring Sápmi, forskningsetik, repatriering och återbegravning. Genom att belysa ett antal skandinaviska, internationella och samiska exempel på repatriering och återbe-

gravning av både mänskliga kvarlevor och artefakter lyfts en diskussion om dess ändamål och syften fram.

Kapitel 7 är ett sammanfattande kapitel där de tidigare kapitlen tillsammans med artiklarna diskuteras i förhållande till de ställda frågorna. Här lyfts bland annat matkultur, mobilitet och intra-individuella skillnader i Sápmi fram utifrån de studerade lokalerna och de använda metoderna. Dessutom diskuteras renens domesticering och roll inom de samiska samhällen och hur man skulle kunna gå vidare med den typen av frågeställningar. Slutligen diskuteras frågor kring kolonialism, repatriering och återbegravningar i Sápmi.

9. Tjåhkkájgiessem

Dán tjállagij lev mån tjuhkkim artihkkalijt bäbbmokultuvra ja bårråma birra ja gasskavuoda birra almatjij ja juhtusij gaskan vaj ådtjov vuosedit kultuvralatj måddelágátjvuodav mij lä urrum Sáme iednamin 600 rájest git 1900 rájjáj. Måddelágátjvuohta lä vuosedum stuovas isotåhpå- ja vuorroábnasanalysaj tjara skelähttaábbnasist nágan arkeologalatj sijijst Sáme iednamist. Resursa ma gävdnuji, kultuvralatj, sosiálalatj, ekonomalatj, politihkalatj ja jáhkolatj dábe ja dijda mierredi mav almatja burri. Arkeologalatj saje majt lä guoradallam lä Vivallen (Paper V), Sillbajåhkå (Paper IV), ja Rounala (Paper III) Sverjin, ja Guollesuolu ja Kirkegårdsøya Vuonan (Paper II). Buhtsu sajev sáme sebrudagan lä aj guoradallam (Paper I ja VI).

Vuostas kapihttalin vuosedav manen mån lev tjállám tjállagav ja gatjalvasajt. Gatjalvasa lä åvvdåmärrkan kultuvralatj måddelágátjvuoda birra Sáme iednamin ja gukkte dat båhtá åvvdån jur almatjij bårråmin dan ájgen. Gatjalvis lä aj jus guoradallam viessomhistårjåj ja jåhtema birra máhttá vaddet ienap diedov viessoma birra Sáme iednamin. Båtsoj lä ninnusit kultuvraladtjat tjanadum sáme sebrudahkaj ja danen guoradalav gukkte almatja idnin buhtsuv bäbbmon. Maŋŋegietjen gatjadav gukkte gruvva lä bájdnám almatjijt Násaváren ja Sillbajågån jur slijjasällganime hárráj. Sämmá kapihttalin tjellgiv aj Sáme iednamav geográfaladtjat ja kultuvraladtjat ja biejav dieddov etnisitiehtabähkuj ja ságastav etnalatj duhkij birra nuarrta Fennoskándian ja Sáme iednamin.

Mubbe kapihttalin tjellgiv kultuvralatj iednamav Sáme iednamin geografija, geologija ja iednambunddudagaj hárráj. Mån tjellgiv várre-, vuävvde- ja jávvre- jala mierrasämijt ja aj kvienajt, birålbmájt ja karelarijt. Mån luggŋiv aj ietjá vijjurijt sáme kultuvran degu sáme åvvdåkristalatj hávvdádimdijdajt ja guoradallamhistorijkav buhtsudábmama ja pastoralisma birra.

Gålmát kapihttalin lä vuosádis bäbbmokultuvra ja iemelágátj sáme biebmo birra. Mån luggŋiv gukkte bäbbmo lä nanos almatjijda ja vuosedav biebmo natuvralatj ja kultuvralatj gävdnumav. Tjellgiv iemelágátj ninnusumos biebmojt sievast, jávrest ja iednamist tjálalatj gáldoj ja etnográfalatj guoradallamij tjara. Juhtusij gaskan vujdnuji åvvdåmärrkan båtsoj, sarrva, smávjuhtusa, klihtara, jávvreguole, sievvaguole, nuarrjo, fállá, mähttsevuanntsá ja tjáslådde. Sjaddo lä åvvdåmärrkan båsskå, juobmo, järrjá ja

umas muorje ja guolmasjáffo dagadum bietse sisbárkost. Mån luggŋiv aj biebmojt majt almatja idtjin nåv dájjva bårå, åvvdåmärrkan ritualiseridum biebmojt vierrosijijn jalá ietjá jáhkolatj seremonijajn (åvvdåmärrkan bärdnaseremonian) ja aj ietjá bäbbmotjierdajt nåv gukkte jáfojt ja sáltev, majt udtjun ullgot.

^{14}C-ájjgemierredime ja stuoves tjarra-, nitrogiena-, ja rissjaisotåhpåanalysa vuosedi almatja ma lä hávvdádum Kirkegårdsøyan (1331–1953 cal AD) lä ienamusat bårråm sievvabiebmojt. Almatja Gullholmenin (1661–1953 cal AD) lä duov dáv bårråm, men aj iedna sievvabiebmojt (Paper II). ^{14}C-ájjgemierredime ja stuoves tjarra-, nitro-giena-, ja rissjaisotåhpåanalysa almatjijst Rounalan hávvdádum vuosedi ^{14}C-ájjgemierredime lä bájnedum sievalatj reservoaraeffiektast, ij jávvretjáhtsereservoareffiektast. Dat vuoseda almatja adneguhtin hávvdádimsajev juo åvvdål gu tseggijin girkov - kannu juo 1300-lågon - ja idnin hávvdádimsajev git 1700-lågo rájjáj (Paper III). Stuoves tjarra-, nitrogiena- ja rissjaisotåhpåanalysa ja vuorroábnasanalysa slijast almatjijst Sillbajågån vuosedi almatja lä bårråm umas biebmojt sievast, iednamist ja jávrest. Almatja aj lä slijast bájnedum gruvvast, mij lä vissa nievredam sija viessomijt alvosláhkáj (Paper IV). Almatja ma lä hávvdádum Vivallenin lä bårråm ietjá biebmojt gu almatja Guollesuolun, Kirkegårdsøyan, Rounalan ja Sillbajågån. Da lä änj binnáp sievalatj proteijnav bårråm (Paper V). ^{14}C-ájjgemierredime ja tjarra-, nitrogiena- ja rissjaisotåhpåanalysa vurrkidum judosdäktijst Unna Saivan vuosedi vierrodimvuoge ietjájduvvujin gu sosiálalatj ja ekonomalatj organisasjuvdna sáme sebrudagan ietjájduvvuj (Paper I). Maŋemus artihkkalin (Paper VI) guoradallá buhtsudäktijt umas arkeologalatj sijijst. Juogadasa tjarra-, nitrogiena- ja rissjaisotåhpåanalysajn vuosedi juogadasajt várre- ja vuävvdesáme båtsojsujto gaskan.

Vidat kapihttalin tjellgiv barrgovugijt majt idni guoradallamijn vil tjiegŋalubbot. Barrgovuoge lä analysa stuoves tjarra- ja nitrogienaisotåhpåjst vaj máhttep diehtet mav almatja burrin, rissja- ja strontiumisotåhpåanalysajt vaj máhttep diehtet gukkte almatja juhtin, ja vuorroábnasanalysa mij aneduvvu vaj máhttep diehtet gukkte slijja bäjnij (Paper IV). Kapihttala maŋŋegietjen tjellgiv gálldokritihkalatj aspiektajt degu diagenesav, representativitiehtav ja binnáp faunamateriálajt mij gártjeda guoradallamav bájke isotåhpåekologija birra.

Gudat kapihttalin ságastav arkeologija sajev guoradallamin Sáme iednama birra, guoradallametihkav, máhtsadimev ja visstekhávvdádimev. Mån luggŋiv ságastallamav ussjolmasaj birra Skandinávalatj, rijkajgasskasatj ja sáme åvvdåmierka bakkto gukkte lä máhtsadam ja visstek hávvdádam gåbbåtjak almatjij bätsijdasajst ja umijst.

Gietjat kapihttal lä tjåhkkájgiessem gunne ságastalav åvdep kapihttalijt aktan artihkkalij gatjalvasaj hárráj. Dánne luggŋiv åvvdåmärrkan bäbbmokultuvrav, jåhtemav ja juogadasajt almatjij gaskan Sáme iednamin guoradaladum sijij ja anedum barrgovugij tjara. Duädden ságastalav buhtsuj dáb-

mama ja saje birra sáme sebrudagan ja gukkte máhttá vijjdábut mannat daj gatjalvasaj. Maŋŋegietjen ságastalav gatjalvasajt kolonialisma, máhtsadime ja visstekhávvdádime birra Sáme iednamin.

10. References

Äikäs, T. 2015. *From boulders to fells: sacred places in the sámi ritual landscape*. Dissertation. Monographs of the Archaeological Society of Finland 5. Helsinki.

Aikio, A. 2012. An essay on Saami ethnolinguistic prehistory. In Grünthal, R. & Kallio, P. (eds.) *A Linguistic Map of Prehistoric Northern Europe (SUST MSFOU266).* Helsinki: Société Finno-Ougrienne. 63–117.

Alexandersen, V. 1985. Odontologisk undersøkelse af skeletmateriale fra gravfeltet på Vivallen i Funäsdalen. Sörsamiska projektet, rapport 5. Jamtli Länsmuseum.

Ambrose, S.H., 1990. Preparation and characterization of bone and tooth for isotopic analysis.*Journal of Archaeological Science* 17: 431–451.

Amréus, L. 2009. Interviewed by Jörgen Heiki for *Sameradion*, 10th June. Available at: https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=2896919 (Accessed: 23rd January 2020).

Amundsen, C. P. 2008. Culture contact, ethnicity and food practices of coastal Finnmark, Norway (1200 to 1600 A.D.). PhD thesis. The City University of New York. New York.

Andersen, O. 2011. Reindeer-herding cultures in northern Nordland, Norway: Methods for documenting traces of reindeer herders in the landscape and for dating reindeer-herding activities. *Quaternary International* 238: 63–75.

Andersen, O. 2019. The settlement mounds in Divtasvuona/Tysfjord, North Norway. Traces of a Sami fisher-farmer economy. *Acta Borealia* 36(1): 93–116.

Arell, N. 1977. *Rennomdismen i Torne lappmark – markanvändning under kolonisationsepoken i fr. a. Enontekis socken*. Dissertation, Umeå. Kungliga Skytteanska samfundets handlingar 17.

Aronsson, K.-Å. 1991. *Forest reindeer herding A.D. 1-1800: an archaeological and palaeoecological study in northern Sweden*. Dissertation, Umeå University.

Aronsson, K.-Å. 2000. Användningen av ängssyra (*Rumex acetosa*) bland samerna. In: Svanberg, I. & Tunón, H. (eds.). *Samisk etnobiologi. Människor, djur och växter i norr*. Nya Doxa. 253–258.

Aronsson, K.-Å. 2013a. Reburial ethics: the Neiden and Rounala cases. *Norwegian Archaeological Review* 46(2): 223–225.

Aronsson, K.-Å. 2013b. Reflections from an archaeological perspective (with example from Rounala). In: Fossheim, H. *More than just bones. Ethics and research on human remains*. The Norwegian National Research Ethics Committees. 65–80.

Aronsson, K.-Å. 2017. Májddum – en samisk vinterby i skogslandet? In: Nielssen, A. R. (ed.). *Gielas/Kjølen. Arkeologi og historie i lule- og sørsamisk område*. Drag: Báhko.

Arwill-Nordbladh, E. 1997. Att lägga förhistorien till rätta. Om återbegravningen av människoskeletten i Osebergsgraven. In: Åkerlund, A., Nordbladh, J. & Taffin-

der, J. (eds.). *Till Gunborg, Arkeologiska samtal.* SAR, Stockholm Archaeological Reports 33. Stockholm University. 511–526.
Arwill-Nordbladh, E. 2002. Rearranging History: The Contested Bones from the Oseberg Grave. In: Hamilakis, Y., Pluciennik, M. & Tarlow, S. (eds.). *Thinking through the Body: Archaeologies of Corporeality*. Kluwer Academic/Plenum, New York. 201–216.
Awebro, K. 1986a. *Kyrklig verksamhet i Silbojokk*. Stockholm: Institutet för lappmarksforskning.
Awebro, K. 1986b. *Från malm till mynt. En historisk-metallurgisk studie om Nasafjäll*. Stockholm: Institutet för lappmarksforskning.
Bäärnhielm, G. & Zachrisson, I. 1994. De finnis, ”Om samerna”, ur Historia Norvegiae ca 1190 e.Kr. *Fornvännen* 89: 161–164.
Barrett J.H., Orton D., Johnstone C., Harland J., Van Neer W., Ervynck A., Roberts C., Locker A., Amundsen C., Enghoff I.B., Hamilton-Dyer S., Heinrich D., Hufthammer A.K., Jones A.K.G., Jonsson L., Makowiecki D., Pope P., O'Connell T.C., de Roo T., Richards M. 2011. Interpreting the expansion of sea fishing in medieval Europé using stable isotope analysis of archaeological cod bones. *Journal Archaeological Science 38*(7):1516–1524.
Baudou, E. 2007. Arkeologi och politk i norr. In: Lundström, I. (ed.) *Historisk rätt? Kultur, politik och juridik i norr*. Riksantikvarieämbetet, Stockholm.
Beach, H. 1981. *Reindeer-Herd Management in Transition. The Case of Tuorpon Saameby in Northern Sweden*. Dissertation. Uppsala studies in Cultural Anthropology. Uppsala University. Almqvist & Wiksell international.
Beaumont, J. & Montgomery, J. 2016. Oral histories: a simple method of assessing chronological age to isotopic values from human dentine collagen. *Annals of Human Biology* 42(4): 407–414.
Belasco, W. 2008. *Food. The key concepts*. Blomsbury Academic. London/New York.
Bergman, I. 1995. *Från Döudden till Varghalsen. En studie av kontinuitet och förändring inom ett fångstsamhäll i övre norrlands inland, 5200 f.Kr. – 400 e.Kr*. Dissertation, Umeå University. Studia Archaeologica Universitatis Umensis 7.
Bergman, I. 2005. The roasting of plants. Sami tradition and the archaeological recordEn lång historia. In: Engelmark, R., Larsson, T. B. & Rathje, L. (eds.). *Festskrift till Evert Baudou på 80-årsdagen*. Archaeology and Environment 19, Kungliga Skytteanska Samfundets Handlingar 57: 51–65.
Bergman, I. 2010. Finnar, lappar, renar och bönder. Om medeltida befolkningsgrupper och näringar avspeglade i ortnamn i Bottenvikens kusttrakter. *Arkeologi i Norr* 12: 167–191.
Bergman, I. Liedgren, L. Östlund, L. & Zackrisson, O. 2008a. Kinship and Settlements: Sami Residence Patterns in the Fennoscandiand Alpine Areas around A.D. 1000. *Arctic Anthropology* 45(1): 97–110.
Bergman, I., Östlund, L., Zackrisson, O. & Liedgren, L. 2008b. Värro Muorra: The Landscape Significance of Sami Sacred Wooden Objects and Sacrificial Altars. *Ethnohistory* 55(1): 1–28.
Bergman, I., Zackrisson, O. & Liedgren, L. 2013. From Hunting to Herding: Land Use, Ecosystem Processes, and Social Transformation among Sami AD 800-1500. *Arctic Anthropology* 50(2): 25–39.

Bergman, I., Zackrisson, O. & Östlund, L. 2014. Travelling in boreal forests: routes of communication in pre-industrial northern Sweden. *Fennoscandia Archaeologica* XXXI: 45–60.
Bergman, I. & Hörnberg, G. 2015. Early Cereal Cultivation at Sámi Settlements: Challenging the Hunter–Herder Paradigm? *Arctic Anthropology* 52(2): 57–66.
Bergman, I. & Edlund, L.-E. 2016. Birkarlar and Sámi – inter-cultural contacts beyond state control: reconsidering the standing of external tradesmen (birkarlar) in medieval Sámi societies. *Acta Borealia* 33(1): 52–80.
Bergman, I. & Ramqvist, P. 2017. Farmer-fishermen: interior lake fishing and itercultural and intra-cultural relations among coastal and interior Sámi communities in northern Sweden AD 1200-1600. *Acta Borealia* 34(1): 134–158.
Bergman, I. & Ramqvist, P. 2018. Hunters of forests and waters: Late Iron Age and Medieval subsistence and social processes in coastal northern Sweden. *Acta Borealia* 35(1): 1–28.
Bergstøl, J. 2007. Sørsamisk historie. Beretningen om en samisk utkant eller en helt særegen utvikling?. In: Lyngman, S. (ed.). 2007. *Om sørsamisk historie. Foredrag fra seminar på Røros 2006 of Trondheim 2007*. Saemien sijte. Snåsa. 19–27.
Bergstøl, J. 2008. *Samer i Østerdalen? En studie av etnisitet i jernalderen og middelalderen i det nordøstre Hedmark*. Dissertation in archaeology. Oslo: University of Oslo.
Björklund, A. 2016. *Hövdingens totempåle. Om konsten att utbyta gåvor*. Carlssons Bokförlag och Etnografiska museet.
Bjørklund, I. 2013. Domestication, Reindeer Husbandry and the Development of Sámi Pastoralism. *Acta Borealia* 30(2): 174–189.
Blind, A.-C. & Kuoljok, K. 2002. *Getens plats och funktion i det rennomadiska samhället: inom Jokkmokksområdet under 1900-talet*. Institutionen för kulturantropologi och etnologi, Etnologiska avdelningen. Uppsala universitet, Uppsala.
Broadbent, N. 2010. *Lapps and Labyrinths. Saami Prehistory, Colonization and Cultural Resilience*. Washington, DC: Smithsonian Institution Scholarly Press.
Broberg, G. 2002. *Statlig rasforskning. En historik över Rasbiologiska institutet*. Ugglan 4, andra upplagan, Lund Studies in the History of Science and Ideas.
Bromé, J. 1923. *Nasafjäll. Ett norrländskt silververks historia*. AB Nordiska bokhandeln, Stockholm.
Brown T.A., Nelson, D.E., Vogel, J.S. and Southon, J.R. 1988. Improved collagen extraction 545 by modified Longin method. *Radiocarbon* 30(2): 171–177.
Brøgger, A. W. 1919. Osebergdronningen. *Nordisk tidskrift för vetenskap, konst och industri.* 225–240.
Burke, H., Smith, C., Lippert, D., Watkins, J. & Zimmerman, L. (eds.) 2008. *Kennewick Man: perspectives on the ancient one*. Walnut Creek, California: Left Coast Press.
Burke, H. & Smith, C. 2008. Perspectives on the Ancient One. In: Burke, H. (ed.) 2008. *Kennewick Man: perspectives on the ancient one*. Walnut Creek, California: Left Coast Press. 20–25.
Burke Museum, 2017. The Ancient One, The Kennewick Man. Available at: https://www.burkemuseum.org/news/ancient-one-kennewick-man. (Accessed on 26-02-2020).
Cajmatz, K: 1950a. *Redogörelse för undersökningar å Gammplatsen i Lycksele sommaren 1950*. ATA, Vitterhetsakademien dnr 001582 b/1951: 1–13.

Cajmatz, K. 1950b. *Förteckning å fynd från grävningarna å Gammplatsen i Lycksele sommaren 1950.* ATA, Vitterhetsakademien dnr 001582 b/1951: 1–5.
Cajmatz, K. 1951. (Unpublished). *Redogörelse för undersökningar på Gammplatsen i Lycksele sommaren 1950.*ATA, Vitterhetsakademien dnr 001582 b/1951.
Carr, G., Stig Sørensen, M. L. & Viejo Rose, D. 2018. Food as Heritage. In: Lightfoot, E., Liu, X. & Fuller, D. Q. (eds.). *Far from the Hearth. Essays in Honour of Martin K. Jones.* McDonald Institute for Archaeological Research, University of Cambridge.
Chatters, J. C. 2017. Making archaeological sense of Kennewick Man. *Quaternary International* 444(2): 83–97.
Childe, V. G. 1935. Changing methods and aims in prehistory. Presidential address for 1935. *Proceedings of the Prehistoric Society*1: 1–15.
Chisholm, B. S. 1989. Variation in diet reconstructions based on stable carbon isotopic evidence. In: Price, T. D. (ed.). *The Chemistry of Prehistoric Human Bone*. Cambridge University Press. Cambridge. 10–37.
Clegg, M. 2009. The Problem of Provenance: inaccuracies, changes and misconceptions. British Association for Biological Anthropology and Osteoarchaeology. Conference (2009). *Proceedings of the Ninth Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology. Department of Archaeology, University of Reading 2007*. Oxford: Archaeopress.
Collins, M.J., Nielsen-Marsh, C.M., Hiller, J., Smith, C. I., Roberts, J. P. 2002. The survival of organic matter in bone: a review. *Archaeometry* 44(3): 383–394.
DeNiro, M.J. & Epstein, S. 1978. Influence of diet on the distribution of carbon isotopes in animals*. *Geochimica et Cosmochimica Acta* 42: 495–506.
DeNiro, M.J. 1985. Postmortem preservation and alteration of in vivo bone collagen isotope ratios in relation to palaeodietary reconstruction. *Nature* 317: 806–809.
Doi, H., Akamatsu, F. & González, A. L. 2017. Starvation effects on nitrogen and carbon stable isotopes of animals: an insight from meta-analysis of fasting experiments. *Royal Society open science* 4:170633.
Drake, S. 1918. *Västerbottenslapparna under förra hälften av 1800-talet.* Akademisk avhandling. Almqvist & Wiksells. Uppsala.
During, E. 1994. *De dog på Vasa. Skelettfynden och vad de berättar*. Vasastudier 16, Grafisk Press. Stockholm.
During, E. & Kvaal, S. 2000. Tafonomiska aspekter på osteologisk och odontologisk åldersbedömning. *Tandläkartidningen* 92(10).
Dury, J., Eriksson, G., Fjellström, M., Wallerström, T. & Lidén, K. 2018. Consideration of freshwater and multiple marine reservoir effects: Dating of individuals with mixed diets from northern Sweden. *Radiocarbon* 60(5): 1561–1585.
Drenzel, L., Gustafsson Reinius, L., Hauptman, K., Hejll, L. & Svanberg, F. 2016. *Mänskliga kvarlevor vid offentliga museer*. FoU rapport 15. Statens Historiska museer samt arkeologiska uppdragsverksamheten.
Drugge, A.-L. & Brännlund, I. 2016. Challenging the mainstream through hparrhesiatic theory and practice. In: Drugge, A.-L. (ed.). 2016. *Ethics in Indigenous Research. Past Experiences – Future Challenges*. Sámi Dutkan no. 7, Umeå universitet, 105–116.
Eidlitz, K. 1969. *Food and emergency food in the circumpolar area*. Studia ethnographica upsaliensia XXXII. Almqvist & Wiksells botryckeri AB, Uppsala.
Eidlitz, K. 1972. Renmjölkningen hos samerna. *Rig* 55(1): 74–76.

Eidlitz Kuoljok, K. 2011. *Den samiska sitan och vinterbyarna: en utmaning. Dissertations and documents in cultural anthropology.* Uppsala: Institutionen för kulturantropologi och etnologi, Uppsala universitet.

Eidlitz Kuoljok, K. 2015. *Lockrenar och motstånd bland folken i norr*. Ord&visor förlag, Skellefteå.

Elenius, L. 2019. The dissolution of ancient Kvenland and the transformation of the Kvens as an ethnic group of people. On changing ethnic categorizations in communicative and collective memories. *Acta Borealia* 36(2): 117–148.

Elmhagen, B., Kindberg, J., Hellström, P. & Angerbjörn, A. 2015. A boreal invasion in response to climate change? Range shifts and community effects in the borderland between forest and tundra. *Ambio* 44(Suppl.1): 39–50.

Engelmark, R. 2011. The Archaeo-Botany of Multi-Room House sites. In: Olsen, B., Urbańczyk & Amundsen, C. (eds.). *Hybrid Spaces. Medieval Finnmark and the Archaeology of Multi-Room Houses*. Novus Press. Oslo. 307–311.

Ericson, J.E. 1985. Strontium isotope characterization in the study of prehistoric human ecology. *Journal of Human Ecology* 14: 503–514.

Eriksson, G. 2003. *Norm and difference. Stone Age dietary practice in the Baltic region*. Theses and Papers in Scientific Archaeology 5. Stockholm.

Esborg, L. 2012. (Re)constructed Cultural Heritage. *Acta Borealia* 29: 77–97.

Farb, P. & Armalagos, G. 1980. *Consuming Passions. The anthropology of Eating*. Washington Square Press. United States of America.

Faure, G. & Mensing, T. M. 2005. *Isotopes: principles and applications*. 3. ed. Hoboken: John Wiley & Sons.

Fjellström, M. 2011. *Stable isotope analysis and ethical issues surrounding a human skeleton material from Rounala in Karesuando parish*. Master thesis. Stockholm University: Archaeological Research Laboratory.

Fjellström, M. 2019. Interviewed by Jörgen Heiki for Sameradion, 16th December. Available at: https://sverigesradio.se/avsnitt/1428068 and https://sverigesradio.se/avsnitt/1428086 (Accessed: 23rd January2020).

Fjellström, M., Eriksson, G., Lidén, K. & Svestad, A. 2019. Food and Cultural Traits in Coastal Northern Finnmark in the 14th–19th Centuries. *Norwegian Archaeological Review* 52(1): 20–40.

Fjellström, M., Lindgren, Å., Eriksson, G. & Lidén, K. Submitted. Food, mobility and health in an arctic 17th-18th century mining population. *Arctic*.

Fjellström, M., Eriksson, G. & Lidén, K. Submitted. Fishing at Vivallen – stable isotope analysis of a south Sámi burial ground. *Current Swedish Archaeology*.

Fjellström, M., Eriksson, G., Angerbjörn, A. & Lidén, K. Accepted. Approaching historic reindeer herding in Northern Sweden by stable isotope analysis. *Journal of Nordic Archaeological Science*.

Fjellström, P. 1964. Angelica archaengelica in the Diet of the Lapps and the Nordic Peoples. In: Furumark, A., Lagercrantz, S., Nesheim A. & Widengren, G. (eds). *Lapponica*. Studia Ethnographica Upsaliensis XXI. Håkan Ohlssons boktryckeri. Lund. 99–115.

Fjellström, P. 1981[1755]. *Kort berättelse om lapparnas björna-fänge, samt deras der wid brukade widskeppelser*. Umeå: Två förläggare.

Fjellström, P. 1986. *Samernas samhälle i tradition och nutid*. 2:a upplaga. P.A. Norstedt & Söners Förlag.

Frei, K. M., Mannering, U., Kristiansen, K., Allentoft, M. E., Skals, I., Tridico, S., Nosch, M. L., Willerslev, E., Clarke, L. & Frei, R. 2015. Tracing the dynamic life story of a Bronze Age Female. *Scientific reports* 5: 10431.

Fogel, M. L., Tuross, N. & Owsley, D. W. 1989. Nitrogen Isotope Tracers of Human Lactation in Modern and Archaeological Populations. *Annual Report from the Director of the Geophysical Research Laboratory at the Carnegie Institution of Washington 1988-1989*. 111–117.

Fornander, E., Eriksson, G. & Lidén, K. 2008. Wild at heart: Approaching Pitted Ware identity, economy and cosmology through stable isotopes in skeletal material from the Neolithic site Korsnäs in Eastern Central Sweden. *Journal of Anthropological Archaeology* 27: 281–297.

Fossum, B. 2006. *Förfädernas land. En arkeologiska studie av rituella lämningar i Sápmi, 300 f. Kr. – 1600 e. Kr*. Dissertation, Umeå University. Studia archaeologica universitatis umensis 22.

Furuhagen, B. 2007. *Den svenska rasbiologins idéhistoriska rötter. En inventering av forskningen av Björn Furuhagen dnr 326/2006*. Bilaga 3 till regeringsuppdrag redovisat av Forum för levande historia 20070330.

Gjerde, H. 2016. *Sørsamisk eller førsamisk? Arkeologi og sørsamisk forhistorie i Sør-Norge – en kildekritisk analyse*. Dissertation. Oslo University.

Goldstein, L. 2013. Reburial ethics: Svestad's analysis of the Neiden Sámi case. *Norwegian Archaeological Review* 46(2): 225–227.

González-Martín, I., Gonzaléz Pérez, C., Hernández Méndez, J & Sánchez González, C. 2001. Differentiation of dietary regimene of Iberian swine by means of isotopic analysis of carbon and sulphur hepatic tissue. *Meat Science* 58: 25–30.

Graan, O. J. 1672. Relation, Eller En Fulkomllig Beskrifning om Lapparnas Vrpsrung, så wähl som om heela dheras Lefwernes Förehållande (8 maj 1672). In: *Berättelser om samerna i 1600-talets Sverige*. (Faksimill-utgåva av de s. k. prästrelationerna m. m. först publicerade av K. B. Wiklund 1897-1909). (1983[1897]). Skytteanska samfundet. Umeå.

Granath, A., 9th August 2019. "Största återbegravningen i Sveriges historia – se bilder från dagen". Sveriges television, https://www.svt.se/nyheter/lokalt/vasterbotten/idag-aterbegravs-de-samiska-kvarlevorna.

Green Ljungstedt, I. 2018. *The people behind the bones. MLMNI and water taphonomy on the Swedish warship Vasa*. Master thesis in Osteoarchaeology, Osteoarchaeological Research Laboratory, Department och Archaeology and Classical Studies, Stockholm University.

Grydeland, S. E. 2001. *Den sjøsamiske siidaen. En studie med utgangspunkt i Kvænangen, Nord-Troms*. Nord-Troms Museums Skrifter 1/2001.

Hagerman, M. 2006. *Det rena landet. Om konsten att uppfinna sina förfäder*. Prisma. Stockholm.

Hagström Yamamoto, S. 2010. *I gränslandet mellan svenskt och samiskt. Identitetsdiskurser och förhistorien i Norrland från 1870-tal till 2000-tal*. Dissertation. Occasionnal Papers in Archaeology 52. Uppsala University.

Hallström, G. 1944. Gravfältet på Vivallen i Funäsdalen. *Heimbygdas tidskrift (Fornvårdaren)* 8(4): 305–344.

Handler, J. S., Aufderheide, A. C., Corruccini, R. S., Brandon, E. M. & Wittmers, L. E. 1986. Lead contact and poisoning in Barbados slaves: historical, chemical, and biological evidence. *Social Science History* 10(4): 399–425.

Hansen, L. I. 1990. *Handel i Nord. Samiske samfunnsendringer ca. 1550 – ca. 1700*. Dissertation. Tromsø University.
Hansen, L. I. & Olsen, B. 2014. *Hunters in Transition. An Outline of Early Sámi History.* Brill. Leiden.
Hansson, A. 2011. Cultural Heritage Use i nthe Twenty-first Century: The Politics of a Sami Skeleton Reburial. *Current Swedish Archaeology* 19: 238–243.
Hansson, A. 2018. En samisk återbegravning. *Historiskarkeologisk tidskrift*: 111–126.
Harlin, E.-K. 2008. Repatriation as knowledge sharing – returning the Sámi cultural heritage. In: Gabriel, M. & Dahl, J. (eds.). *Utimut. Past Heritage – Future Partnerships. Discussions on Repatriation in the 21st century.* Copenhagen, International Work Group for Indigenous Affairs.
Harlin, E.-K. 2019. Returning home – the different ontologies of the Sámi collections. In: Hylland Eriksen, T., Valkonen, S. & Valkonen, J. (eds.). *Knowing from the indigenous North. Sámi approaches to History, politics and belonging.* Abingdon, Oxon: Routledge. 47–66.
Haubert, D., Langel, R., Scheu, S. & Ruess, L. 2005. Effects of food quality, starvation and life stage on stable isotope fractionation in Collembola. *Pedobiologia* 49: 229–237.
Hauptman, K. *Försoningsceremoni vid Gammplatsen*. Statens historiska museer: https://historiska.se/forsoningsceremoni-vid-gammplatsen/
Hedges, R.E.M., Clement, J.G., Thomas, C.D.L. & O'Connell, T.C. 2007. Collagen turnover in the adult femoral mid-shaft: modelled from anthropogenic radiocarbon tracer measurements. *American Journal of Physical Anthropology* 133(2): 808–816.
Hedman, S.-D. 2003. *Boplatser och offerplatser. Ekonomisk strategi och boplatsmönster bland skogssamer 700-1600 AD*. Dissertation. Umeå University. Umeå.
Hedman, S.-D. & Olsen, B. 2009. Transition and order: a study of Sámi rectangular hearths in Pasvik, Arctic Norway. *Fennoscandia archaeologica* XXVI: 3–22.
Hedman, S.-D., Olsen, B. & Vretemark, M. 2015. Hunters, herders and hearths: interpreting new results from hearth row sites in Pasvik, Arctic Norway. *Rangifer* 35(1): 1–24.
Heiki, J., Thursday 7th May 2015. Forskare slår fast: Rounalakranier är samiska. Sameradion & SVT Sápmi, https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=6159001.
Heinerud, J. 2002. *Rapport över arkeologisk undersökning av samisk grav, RAÄ 195:1, Tärna socken, Storumans kommun, Västerbottens län.* Västerbottens museum/Uppdragsverksamheten.
Heinerud, J. 2004. *Rapport över återbegravning av skelett, RAÄ 195:1, Tärna socken, Storumans kommun, Västerbottens län.* Västerbottens museum/Uppdragsverksamheten.
Helskog, K. 2012. Ancient depictions of reindeer enclosures and their environment. *Fennoscandia archaeologica* XXIX: 29–54.
Henriksen, J. E. 2017. *Kulturmøte og identitet på Finnmarkskysten i tidlig historisk tid. Tolkninger basert på arkeologiske analyser av mangerumstufter.* Dissertation. Tromsø University – Arctic University of Norway. Tromsø.
Hildebrandt, M., Sundström, J. & Willemark, K. 1988. *Arkeologisk undersökning av flatmarksgravfält, boplatsområde och gravhög 1986-1987. Vivallen och Söruet,*

Tännäs sn, Härjedalen. Sörsamiska projektet, rapport 8. Kulturhistorisk utredning 37. Jämtlands Läns Museum.
Holand, I. & Sommerseth, I. 2013. Ethical issues in the semi-darkness. Skeletal remains and Sámi graves from Arctic Northern Norway. In: Fossheim, H. (ed.) *More than just bones. Ethics and research on human remains.* The Norwegian National Research Ethics Committees. 21–48.
Holck, P. 2007. The Oseberg ship burial, Norway: new thoughts on the skeletons from the grave mound. *European Journal of Archaeology* 9(2-3): 185–210.
Holck, P. 2009. Skjellettene fra Gokstad- og Osebergskipet. *Antropologiske skrifter* nr. 8. Insituttt for medisinske basalfag. Oslo University.
Holmgren, K., Iregren, E. & Jansson, P. 2003. *Nya rön om Bonderups kyrka. Rapport från Projekt Bonderups kyrka, ett projekt som genomfördes med stöd av Stiftelsen Bengta Pålssons No.1 Lunnarp fond*. Lund University.
Howcroft, R. 2013. *Weaned upon a time. Studies of the infant diet in prehistory*. Theses and Papers in Scientific Archaeology 14. Stockholm.
Huggert, A. 2009. Senmedeltida dräktsilver med mariasymbolik i södra Lappmarken. *Fornvännen* 104: 188–198.
Hörnberg, G., Josefsson, T. & Liedgren, L. 2014. Revealing the cultivation history of northernmost Sweden: Evidence from pollen records. *The Holocene* 24(3): 318–326.
Hörnberg, G., Josefsson, T., Bergman, I., Liedgren, L. & Östlund, L. 2015. Indications of shifting cultivation west of the Lapland border: Multifaceted land use in northernmost Sweden since AD 800. *The Holocene* 25(6): 989–1001.
Inga, B. 2008. *Traditional Ecological Knowledge among Reindeer Herders in Northern Sweden.* Licentiate thesis, Swedish University of Agricultural Sciences, Umeå.
Ingold, T. 1986. Reindeer economies and the origin of pastoralism. *Anthropology Today* 2(4): 5–10.
Iregren, E. & Alexandersen, V. 1997. De döda berättar. In: Zachrisson. I. (ed.) *Möten i gränsland. Samer och germaner i Mellanskandinavien*. Monographs 4, Statens Historiska Museum, Stockholm: 81–116.
Iregren, E. 2004. Humans in Wrecks. An ethical discussion on marine arcaheology, exhibitions and scuba diving. In: Karlson, H. (ed.). *Swedish archaeologists in Ethics*. Bricoleur Press. 265–*286*.
Iregren, E. & Schramm Hedelin, H. 2010. Vi behöver tydliga regler för bevaring-återbegravning av mänskliga lämningar. *Fornvännen* 105 (1): 54–60Jackelén, A., Inga, I. & Jakobsson, M., 8th June 2019. "Krav på återlämnande av kvarlevor måste respekteras". Dagens Nyheter, https://www.dn.se/debatt/krav-pa-aterlamnande-av-kvarlevor-maste-respekteras/
Jones, S. 1997. *The archaeology of ethnicity: constructing identities in the past and present*. London: Routledge.
Jones, S. 2008. Ethnicity: Theoretical Approaches, Methodological Implications. In: Bentley, R.A., Maschner, H.D., & Chippindale, C. (eds.). *Handbook of Archaeological Theories*. Lanham: Altamira: 421–428.
Kaddik, F. 2019. Interviewed by Jörgen Heiki for Sameradion, 18 December. Available at: https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=7370344 (Accessed: 23rd January 2020).

Kallestrup, L. N. & Toivo, R. M. (eds.) 2017. *Contesting Orthodoxy in Medieval and Early Modern Europe Heresy, Magic and Witchcraft*. Cham: Springer International Publishing.

Karlsson, H. 2013. A new ethical path for archaeology? Norwegian Archaeological Review 46 (2): 227–230.

Kjellström, A. 2019. *Rapport över analys av kranier från Gammplatsen, Lycksele.* Osteologiska forskningslaboratoriet (OFL), Rapport 2019:11. Stockholms universitet.

Korhonen, O. 1994. Några termer i den samiska renmjölkningen. In: Storm, D., Jernsletten, N., Aarseth, B. & Kyrre Reymert, P. (eds.). *Festskrift til Ørnul Vorren*. Tromsø museums skrifter XXV, Tromsø museum, Tromsø University. 254–268.

Korhonen, O. 2000. Äldre samiskt bruk av tallens innerbark: In: Svanberg, I. & Tunón, H. (eds.). 2000. *Samisk etnobiologi: människor, djur och växter i norr*. Nora: Nya Doxa. 266–280.

Kossinna, G. 1911. *Die Hekunft der Germanen*. Leipzig. Kabitzsch.

Kozlov, A., Borinskaya, S., Varshubsky, G., Vasilyev, E., Popov, V., Sokolova, M., Sanina, E., Kaljina, N., Rebrikov, D., Lisitsyn, D. & Yankovsky, N. 2008. Genes related to the metabolism of nutrients in the Kola Sami population. *International Journal of Circumpolar Health* 67: 58–68.

Krouse, H.R. 1980. Sulphur isotopes in our environment. In: Fritz, P. & Fontes, J. Ch. (eds.). *Handbook of environmental geochemistry Vol. 1 The terrestrial environment A:* Elsevier, Amsterdam. 435–471.

Kuuluvainen, T. & Aakala, T. 2011- Natural Forest Dynamics in Boreal Fennoscandia: a Review and Classification. *Silva Fennica* 45(5): 823–841.

Kuoljok, A. I. 2010. Mina föräldrars berättelse om sejten från Sieberbuollda. In: Kuoljok, A. I., Kuoljok A. & Westman Kuhmunen, A. (eds.) *Sejtar som har förts bort och kommit hem*. Ájtte museums vänners småskrift. 4–6.

Kylli, R. M., Salmi, A.-K., Äikäs, T. & Alto, S. 2019. "Not on Bread but on Fish and by Hunting". Food Culture in Early Modern Sápmi. In: Salmi, A.-K. & Äikäs, T. (eds.). *The sound of silence : Indigenous perspectives on the historical archaeology of colonialism*. Berghahn Books. 119–140.

Labba, V., 12th August 2019. "Återbegravning i Lycksele möter kritik". *Sameradion & SVT Sápmi*, https://sverigesradio.se/sida/artikel.aspx?artikel=7278923.

Lahtinen, M. & Salmi, A.-K. 2019. Mixed Livelihood Society in Iin Hamina – a Case Study of Medieval Diet in the Northern Ostrobothnia, Finland. *Environmental Archaeology* 24(1): 1–14.

Lamb, A. L. 2016. Stable isotope analysis of soft tissues from mummified human remains. *Environmental Archaeology* 21(3): 271–284.

Lawrence, R. & Raitio, K. 2016.Academia and activism in Saami research: negotiating the blurred spaces between. In: Drugge, A.-L. (ed.) 2016. *Ethics in Indigenous Research. Past Experiences – Future Challenges.* Sámi Dutkan no. 7, Umeå universitet. 117–136.

Larsson, T. B., Rosqvist, G., Ericsson, G. & Heinerud, J. 2012. Climate Change, Moose and Humans in Northern Sweden 4000 cal. Yr BP. *Journal of Northern Studies* 6(1): 9–30.

Lidén, K. & Nelson, E. D. 1994. Stable carbon isotopes as dietary indicator, in the Baltic area. *Fornvännen* 89: 13–21.

Lidén, K., Takahashi, C. & Nelson, E. 1995. The effects of lipids in stable carbon isotope analysis and the effects of NaOH treatment on the composition of extracted bone collagen. *Journal of Archaeological Science* 22(2): 321–325.
Lidén, K. & Eriksson, G. 2013. Archaeology vs. archaeological science. Do we have a case? *Current Swedish Archaeology* 21: 11–20.
Lidén, K. 2017. A Common Language is the Basis for Sound Collaboration. *Norwegian Archaeological Review* 50(2): 124–126.
Lidén, K., Fjellström, M. & Wallerström, T. 2019. Nya resultat från Eskil Olssons Rounalagrävning 1915. In: Moritz, P. (ed.). *Norrbotten 2018-2019*. Norrbottens hembygdsförbund, Norrbotten museum, årsbok 2018-2019. Luleå. 235–262.
Liedgren, L. Östlund, L. & Josefsson, T. 2009.Samisk byggnadskultur – timrade kåtor och exemplet Bläckajaure. *Arkeologi i norr* 11: 115–143.
Liedgren, L., Bergman, I., Ramqvist, P. H. & Hörnberg, G. 2016. Hearths in the coastal areas of northernmost Sweden, from the period AD 800 to 1950. *Rangifer* 36(1): 25–50.
Lindgren, Å. 2014. *Silbojokk 2014. Arkeologisk besiktning inom Raä Arjeplog 368:1, Arjeplogs kommun, Lappland, Norrbottens län.* Rapport 2014:11. Norrbottens museum.
Lindgren, Å. 2015. *Silbojokk 2015. Arkeologisk räddningsundersökning av kyrka och kyrkogård inom Raä Arjeplog 368:1, Arjeplogs KRÖLM, Arjeplogs kommun, Lapplands landskap, Norrbottens län.* Rapport 2015:12. Norrbottens museum.
Lindgren, Å. 2016. *Silbojokk 2016. Arkeologisk räddningsundersökning av kyrka och kyrkogård inom Raä Arjeplog 368:1, Arjeplogs KRÖLM 3:1, Arjeplogs kommun, Lapplands landskap, Norrbottens län.* Rapport 2016:12. Norrbottens museum.
Lindgren, Å. 2017. *Silbojokk 2017. Arkeologisk räddningsundersökning av ödekyrkogård, Raä Arjeplog 4232, Arjeplogs KRÖLM, Arjeplogs kommun, Lapplands landskap, Norrbottens län.* Rapport 2017:11. Norrbottens museum.
Lindgren, Å. 2018. *(Manuscript). Silbojokk 2018. Arkeologisk räddningsundersökning av ödekyrkogård, Raä Arjeplog 4232, Arjeplogs KRÖLM, Arjeplogs kommun, Lapplands landskap, Norrbottens län.* Rapport 2018:6. Norrbottens museum.
Lindgren, Å. 2019. *(Manuscript). Silbojokk 2019. Arkeologisk räddningsundersökning av ödekyrkogård, Raä Arjeplog 4232, Arjeplogs KRÖLM, Arjeplogs kommun, Lapplands landskap, Norrbottens län.* Rapport 2019:10. Norrbottens museum.
Lindgren, Å. 2019a. Interviewd by Jörgen Heiki for *Sameradion*, 18 December. Available at: https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=7369491 (Accessed: 23rd January 2020).
Lindgren, Å. 2019b. Silbojokk och den svenska gravrätten [blog post]. Available at: https://kulturmiljonorrbotten.com/2019/12/27/silbojokk-och-den-svenska-gravratten/ (Accessed: 23rd January 2020).
Lindmark, D. & Sundström, O. (eds.) 2016. *De historiska relationerna mellan Svenska kyrkan och samerna. En vetenskaplig antologi.* Band 1 & 2. Artos & Norma. Skellefteå.
Lindmark, D. & Sundström, O. (eds.) 2017. *Samerna och svenska kyrkan. Underlag för kyrkligt försoningsarbete*. Gidlunds förlag. Halmstad.

Ljungdahl, E. 2017. Bengömman – en samisk kökkenmödding. In: Nielssen, A. R. (ed.). *Gielas/Kjølen. Arkeologi og historie i lule- og sørsamisk område*. Tjálarájddo – Árran julevsáme guovdásj – nr. 2. 22–40.

Ljungström, O. 2004. *Oscariansk antropologi. Etnografi, förhistoria och rasforskning under sent 1800-tal*. Gidlunds förlag.

Lønning, I., Guhttor, M., Holm, J., Schanche, A. & Sjøvold, T. 1998. *Innstilling fra Utvalg for vurdering av retningslinjer for bruk og forvaltning av skjelettmateriale ved Anatomisk institutt.* Universitetet i Oslo. Oslo.

Lundmark, L. 1982. *Uppbörd, utarmning, utveckling. Det samiska fångstsamhällets övergång till rennomadism i Lule lappmark*. Arkiv avhandlingsserie 14.

Lundmark, L. 2002. ”Lappen är ombytlig, ostadig och obekväm”. Svenska statens samepolitik i rasismens tidevarv. Norrlands universitetsförlag. Umeå.

Lundmark, L. 2008. *Stulet land. Svensk makt på samisk mark*. Ordfront. Stockholm.

Lynnerup, N. 2006. *Rapport over skeletfund ved Kirkegårdsøya, Hammerfest kommune, Finnmark fylke, Norge – Sommaren 2005*. Antropologisk Laboratorium. Københavns universitet.

Lynnerup, N. 2007a. *Rapport over skeletfund ved Gullholmen, Tana kommune, Finnmark fylke, Norge – Sommaren 2007*. Antropologisk Laboratorium. Københavns universitet.

Lynnerup, N. 2007b. *Rapport over skeletfund ved Gullholmen, Tana kommune, Finnmark fylke, Norge – Sommaren 2007*. Antropologisk Laboratorium. Københavns universitet.

Lynnerup, N., Riddersholm, S. & Faurskov Nielsen, O. 2008. *Echinicoccosis in an 18th century grave in Northern Norway*. Unpublished poster, Laboratory of Biological Anthropology and Institute of Biochemistry, University of Copenhagen.

Manker, E. 1950. *Die lappische Zaubertrommel: eine ethnologische Monographie. 2 Die Trommel als Urkunde Geistigen Lebens*. Hugo Gebers Förlag. Stockholm.

Manker, E. 1957. *Lapparnas heliga ställen. Kultplatser och offerkult i belysning av Nordiska museets och landsantikvariernas fältundersökningar.* Nordiska museet: Acta lapponica XIII. Almqvist & Wiksell.

Manker, E. 1961. *Lappmarksgravar. Dödsföreställnignar och gravskick i lappmarkerna*. Nordiska museet: Acta Lapponica 17. Almqvist & Wiksell.

Manker, E.1965. *Nåidkonst: trolltrummans bildvärld*. Stockholm: LT.

Manker, E. 1968. *Skogslapparna i Sverige: fältanteckningar*. Acta Lapponica 18. Almqvist & Wiksell. Uppsala.

Masterton, M. 2010. Ethical Considerations in Reburying Old Human Remains, a Narrative Approach. Paper IV, In: Masterton, M. 2010. *Duties to Past Persons. Moral Standing and Posthumous Interests of Old Human Remains.* Dissertation. Centre for Research Ethics and Bioethics, Uppsala University.

Mathisen, S. R. 2017. The Three Burials of Aslak Hætta and Mons Somby. Repatriation Narratives and Ritual Performances. *Museum Worlds: Advances in Research* 5: 22-34.

Matland, S. 2018. The Multiple Identities of Aslak Hætta and Mons Somby. The Case of the Sámi Skulls. In: Seebach, S. & Willerslev, R. (eds.). *Mirrors of passing. Unlocking the nysteries of death, materiality, and time*. Berghahn: New York – Oxford: 202–217.

Mebius, H. 2003. *Bissie. Studier i samisk religionshistoria*. Jemtlandica.

Mick, K. 2018. *Laying the Ancient One to Rest. The Kennewick Man and Conflict over Heritage Values*.

https://www.researchgate.net/publication/323556864_Laying_the_Ancient_One_to_Rest_The_Kennewick_Man_and_Conflict_over_Heritage_Values

Mikaelsson, S. 2016."We, the Saami, are one People, united in our own culture, language and history, living in areas which since time immemorial and up to historical times, we alone inhabited and utilized". In: Drugge, A.-L. (ed.). 2016. *Ethics in Indigenous Research. Past Experiences – Future Challenges.* Sámi Dutkan no. 7, Umeå universitet: 19–24.

Mikaelsson, S. 2019. Interviewed by Maria Dahlgren and Sara Björne for *Sameradion*, 18 December. Available at: https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=7370354 (Accessed at: 23rd January 2020).

Minagawa, M. & Wada, E. 1984. Stepwise enrichment of 15N along food chains: Further evidence and the relation between δ^{15}N and animal age. *Geochemica et Cosmochemica Acta* 48*:* 1135–1140.

Minthorn, A. 2008. Human Remains Should Be Reburied. In: Burke, H., Smith, C., Lippert, D., Watkins, J. & Zimmerman, L. (eds.). *Kennewick Man: perspectives on the ancient one*. Walnut Creek, California: Left Coast Press. 42–*43.*

Montgomery, J. 2010. Passports from the past: Investigating human dispersals using strontium isotope analysis of tooth enamel. *Annals of Human Biology* 37(3): 325-346.

Mulk, I.-M. 1994. *Sirkas – ett samiskt fångstsamhälle i förändring Kr. f. – 1600 e.Kr.* Dissertation. Studia archaeologica universitatis umensis 6.

Mulk, I.-M. 2005. Bosättningsmönster, vildrensjakt och tamrenskötsel i Lule lappmark – 100 e.Kr. – 1600 e. Kr. In: Andersen, O. (ed.) *Fra villreinjakt til reindrift = Gåddebivdos boatsojsujttuj*. Drag: Árran julevsáme guovdásj. 33–59.

Mulk, I.-M. 2009. Conflicts Over the Repatriation of Sami Cultural Heritage in Sweden. *Acta Borealia* 26(2): 194–215.

Mulk, I.-M. & Bayliss-Smith, T. 2007. Liminality, Rock Art and the Sami Sacred Landscape. *Journal of Northern Studies* 1–2: 95–122.

Munch, J.S., & Munch, G.S. 1998. Utgravningenepå boplassen på Gållevarri. In: Ø. Vorren, 1998. *Villreinfangst i Varanger fram til 1600-1700 årene*. Stongland-seidet: Nordkalott-forlaget. Tromsø Museums skrifter 28: 106–133.

Murashkin, A. I., Kolpakov, E. M., Shumkin, V. Y., Khartanovich, V. I. & Moiseyev, V. G. 2016. Kola Oleneostrovskiy Grave Field: A Unique Burial Site in the European Arctic. *The Finnish Antiquarian Society, ISKOS* 21: 186–199.

Myrstad, R. 1996. *Bjørnegraver i Nord-Norge. Spor etter den samiske bjørnekulten. Institutt for samfunnsvitenskap*. Hovedfag. Tromsø University.

NAGPRA, 1990. *Native American Graves Protection and Repatriation Act*. Available at: https://www.nps.gov/subjects/nagpra/index.htm (Accessed: 26-02-2020).

Naumann, E. & Price, T. D. 2014. The Peopling of the North Atlantic: Isotopic Results from Norway. *Journal of the North Atlantic* 7: 88–102.

Nehlich, O., Barrett, J. H. & Richards, M. P. 2013. Spatial variability in sulphur isotope values of archaeological and modern cod (Gadus morhua). *Rapid communications in mass spectrometry* 27: 2255–2262.

Nehlich, O. 2015. The application of sulphur isotope analyses in archaeological research: A review. *Earth-Science Reviews* 142: 1–17.

Nicklasson, P. 2011. Sven Nilsson och Den Skandinaviska Nordens Ur-invånare. Fornvännen 106: 161–178.

Nicklasson, P. 2013. Sven Nilssons resa 1836. *Fornvännen* 108: 33–48.

Nickul, K. 1964. Place Names in Suenjel – a Mirror of Skolt History. In: Furumark, A. Lagercrantz, S., Nesheim, A. & Widengren, G. (eds.) *Lapponica*. Studia Ethnographica Upsaliensis XXI. Håkan Ohlssons boktryckeri, Lund. 219–227.

Nilsson, S. 1838–43. *Skandinaviska nordens ur-invånare. Ett försök i komparativa ethnografien och ett bidrag till menniskoslägtets utvecklingshistoria*. Lund.

Nilsson, L. M., Dahlgren, L., Johansson, I., Brustad, M., Sjolander, P. & Van Guelpen, B. 2011. Diet and lifestyle of the Sami of southern Lapland in the 1930s-1950s and today. *International Journal of Circumpolar Health* 70(3): 301–318.

Nilsson, L. M. 2018. Food, Nutrition, and Health in Sápmi. In: Andersen, V., Bar, E. & Wirtanen, G. (eds.). *Nutritional and health aspects of food in Nordic countries*. Elsevier. London. 179–195.

Nilsson Stutz, L. 2008. Archaeology, Identity, and the Right to Culture. Anthropological perspectives on repatriation. *Current Swedish Archaeology* 17: 157–172.

Nilsson Stutz, L. 2013. Claims to the Past. A Critical View of the Arguments Driving Repatriation of Cultural Heritage and Their Role in Contemporary Identity Politics. *Journal of Intervention and Statebuilding* 7(2): 170–195.

Nordin, G. 2009. *Äktenskap i Sápmi: giftermålsmönster och etnisk komplexitet i kolonisationens tidevarv, 1722-1895*. Dissertation. Umeå universitet, Umeå.

Nordin, J. & Ojala, C.-G: 2018. Collecting, connecting, constructing: Early modern commodification and globalization of Sámi material culture. *Journal of Material Culture* 23(1): 58–82.

Nordström, N. 2007. *De odödliga. Förhistoriska individer i vetenskap och media*. Dissertation. Lund University.

Norrman, J. 1989. Kraftverk i Skellefteälven. In: Awebro, K., Björkenstam, N., Norrman, J., Petersson, S., Roslund, Y., Sten, S. & Wallquist, E. (eds.) *Silvret från Nasafjäll: arkeologi vid Silbojokk*. Stockholm: Byrån för arkeologiska undersökningar, Riksantikvarieämbetet. Stockholm. 13–18.

Norstedt, G. & Östlund, L. 2016. Fish or Reindeer? The Relation between Subsistence Patterns and Settlement Patterns among the Forest Sami. *Arctic Anthropology* 53(1): 22–36.

Nurmi, R. 2019. A Clockwork Porridge. An Archaeological Analysis of Everyday Life in the Early Mining Communities of Swedish Lapland in the Seventeenth Century. In: Äikäs, T. & Salmi, A.-K. (eds.). *The sound of silence: Indigenous perspectives on the historical archaeology of colonialism.* Oxford: Berghahn Books. 90–118.

O'Connell, T. C. & Hedges, R. E. M. 1999. Isotopic comparison of hair and bone: Archaeological analyses. *Journal of Archaeological Science* 26: 661–665.

O'Connell, T. C., Hedges, R. E. M., Healey, M.A. & Simpson, A. H. R. W. 2001. Isotopic Comparison of Hair, Nail and Bone: Modern Analyses. *Journal of Archaeological Science* 28: 1247–1255.

O'Connell, T. C., Kneale, C. J., Tasevska, N. & Kuhnle, G. G. C. 2012. The Diet-Body Offset in Human Nitrogen Isotopic Values: A Controlled Dietary Study. *American Journal of Physical Anthropology* 149: 426–434.

Oddmar, E. 1949. *Thomas von Westen och Vila kapell*. Umfors.

Odner, K. 1989. *The Varanger Saami. Habitation and economy 1200-1900 AD*. Dissertation. Institute of Social Anthropology, Oslo University.

Ojala, C.-G. 2009. *Sámi Prehistories. The Politics of Archaeology and Identity in Northernmost Europe*. Dissertation. Department of Archaeology and Ancient History. Occassional papers in archaeology 47. Uppsala University.

Ojala, C.-G. 2010. Etik i tiden? Utmaningar och möjligheter för arkeologin. In: Bockgård, G. & Tunón, H. (eds.). *Gäller vanligt folkvett också för akademiker? Rapport från ett seminarium om makt och etik.* CB:s skriftserie 38. Centrum för biologisk mångfald, Uppsala: 24–31.

Ojala, C.-G. 2016. Svenska kyrkan och samiska mänskliga kvarlevor. In: Lindmark, D. & Sundström, O. (eds.) 2016. *De Historiska relationerna mellan Svenska kyrkan och samerna*. En vetenskaplig antologi. Artos. 993–1028.

Olaus Magnus, 2010 [1555]. Historia om de nordiska folken. Michaelisgillet & Gidlunds förlag. Vilnius.

Olofsson, C., 28th August 2019. "Laddad fråga om samiska kvarlevor". *Curie – en tidning från Vetenskapsrådet*, https://www.tidningencurie.se/nyheter/2019/08/28/laddad-fraga-om-samiska-kvarlevor/

Olsen, B. & Kobyliński, Z. 1991. Ethnicity in anthropological and archaeological research: a Norwegian-Polish perspective. *Archaeologica Polona* 29: 5–27.

Olsen, B. 2004. Hva er samisk forhistorie? In: Krogh, M. & Schanche, K. (eds). *Samisk forhistorie. Rapport fra konferanse i Lakselv 5.-6- september 2002.* Várjjat Sámi Musea Cállosat (Varanger Samiske Museums skrifter): 20–30.

Olsen, L. 2010. *Sørsamisk historie i nytt lys*. Dissertation. Senter for samiska studier, skriftserie nr. 17. Tromsø University.

Östlund, H. 2017. Kvarlevor skapar huvudbry för universiteten. *Curie - en tidning från Vetenskapsrådet*, https://www.tidningencurie.se/nyheter/2017/10/19/kvarlevor-skapar-huvudbry-for-universiteten/

Pedersen, S. 1984. Glimt fra Guollesuolu/Gullholmen. *Deatnu – Teno – Tana*: 42–53.

Peterson, B. J., Howarth, R. W., Garritt, R. H., 1985. Multiple stable isotopes used to trace the flow of organic matter in estuarine food webs. *Science* 227: 1361–1363.

Pietikäinen, S., Huss, L., Laihiala-Kankainen, S., Aikio-Puoskari, U. & Làne, P. 2010. Regulating Multilingualism in the North Calotte: The Case of Kven, Meänkieli and Sámi Languages. *Acta Borealia* 27(1): 1–23.

Rasmussen, M., Sikora, M., Albrechtsen, A., Sand Korneliussen, T., Moreno-Mayar, J. V., Poznik, G. D., Zollikofer, C. P. E., Ponce de León, M. S., Allentoft, M. E., Moltke, I., Jónsson, H., Valdiosera, C., Malhi, R. S., Orlando, L., Bustamante, C. D., Stafford, T. W., Meltzer, D. J., Nielsen, R., Willerslev, E. 2015. The ancestry and affiliations of Kennewick Man. *Nature* 523: 455–459.

Rautio, A.-M. 2014. *People – Plant Interrelationships. Historical Plant Use in Native Sami Societies.* Dissertation. Swedish Univeristy of Agricultural Sciences. Umeå.

Rautio, A.-M., Axelsson Linkowski, W. & Östlund, L. 2016. "They followed the power of the plant": historical Sami harvest and traditional ecological knowledge (TEK) of *Angelica archangelica* in northern Fennoscandia. *Journal of Ethnobiology* 36(3): 617–636.

Regnard, J.- F. 1992[1681]. *Voyage en Laponie 1681: [récit de voyage]*. Édition du Griot, Boulogne.

Retzius, G. 1899. *Crania Suecica antiqua: beskrifning av svenska mennisko-kranier från stenåldern, bronsåldern och järnåldern jämte en blick på forskningen öfver de europeiska folkens ras-karaktärer*. Stockholm.

Richards, M.P., Fuller, B. T., Sponheimer, M., Robinson, T. & Ayliffe, L. 2003. Sulphur Isotopes in Palaeodietary Studies: a Review and Results from a Controlled Feeding Experiment. *International Journal of Osteoarchaeology* 13: 37–45.

Riksantikvarieämbetet 2020. *God samlingsförvaltning : stöd för museer i återlämnandeärenden*. Rapport från Riksantikvarieämbetet. Stockholm.

Riksantikvarieämbetets arkiv, Antikvarist-topografiska arkivet (ATA), dnr 5206/89. Blomstrand, A. 1988. *Angående osteologiska undersökninger i Bonderups ka*. Anders Blomstrand, kyrkoherde för Dalby kyrkliga samfällighet i ett brev till Länsantikvarien i Malmöhus län den 14 december 1988.

Riksantikvarieämbetets arkiv, Antikvarist-topografiska arkivet (ATA), dnr 001582a. Skrivelse av landsantikvarie i Västerbotten Gunnar Westin adresserat till Riksantikvarieämbetet. 15 mars 1951. Dnr 182151.

Roslund, Y. 1989. Den arkeologiska undersökningen. Silvret från Nasafjäll. In: Awebro, K., Björkenstam, N., Norrman, J., Petersson, S., Roslund, Y., Sten, S. & Wallquist, E. (eds.). *Silvret från Nasafjäll: arkeologi vid Silbojokk*. Stockholm: Byrån för arkeologiska undersökningar, Riksantikvarieämbetet. Stockholm. 71–132.

Roslund, Y. 1992. *Silbojokk – ett gruvsamhälle i fjällvärlden*. Bcs thesis. Uppsala University.

Rosvold, J., Hansen, G. & Røed, K. H. 2019. From mountain to towns: DNA from ancient reindeer antlers as proxy for domestic procurement networks in medieval Norway. *Journal of Archaeological Science: Reports* 26: 1–9.

Rovira Torres, F., Friday 2nd August 2019. "Same-kraniesamlaren. *ETC*, 31.

Ryd, L. 2015. *Urfödan. Om självhushållets mat hos folk i Lappland.* Ord&visor förlag. Skellefteå.

Røed, K. H., Bjørklund, I. & Olsen, B. J. 2018. From wild to domestic reindeer – Genetic evidence of a non-native origin of reindeer pastoralism in northern Fennoscandia. *Journal of Archaeological Science: Reports* 19: 279–286.

Salmi, A.- K., Äikäs, T., Fjellström, M. & Spangen, M. 2015. Animal offerings at the Sámi offering site of Unna Saiva – Changing religious practices and human–animal relationships. *Journal of Anthropological Archaeology* 40: 10–22.

Salmi , A.- K., Äikäs, T., Spangen, M., Fjellström, M. & Mulk, I.- M. 2018. Tradition and transformation in Sámi animal-offering practices. *Antiquity* 92 (362): 472–489.

Salmi, A.-K., Fjellström, M., Äikäs, T., Spangen, M., Núñez, M. & Lidén, K. 2020. Zooarchaeological and stable isotope evidence of Sámi reindeer offerings. *Journal of Archaeological Science: Reports* 29: 102129.

Salmi, A.-K. & Fjellström, M. Submitted. "Most Beautiful Favourite Reindeer": Osteobiographies of Reindeer at a Sámi Offering Site in Northern Fennoscandia. In Whiteridge, P. & Hill, E. (eds.) *Reimagining Animals in the (Global) North*.

Sametinget 2009. *Begäran om återförande av 12 samiska kranier från Rounala ödekyrkogård till Samtinget.* Hemställan till Kulturdepartementet, 2009-05-08. Lars-Anders Baer/Ulla Barruk Sunna. Dnr 2009-648. Sametingets kansli, Kiruna.

Sametinget 2010. *Samisk mat. Exempel på mattraditioner som grund för det moderna samiska köket.* Sametinget. Kiruna.

Sanell, C. & Stångberg, A. 2001. Atoklimpen – ett samiskt kulturlandskap. In: Lundberg, Å. (ed.). 2001. *Arkeologi i Västerbotten* 4(1): 12–18.

Schanche, A. & Olsen, B. 1985. Var de alle nordmenn: En etnopolitisk kritikk av norsk arkeologi. In: Naess, J.-R. (ed.). *Arkeologi og etnisitet. NAM-Forskningsseminar nr. 3 Kongsvoll Fjellstue, 25.-27. Sept. 1984*. AmS-Varia 15, Arkeologisk museum i Stavanger. Stavanger, Norway 1985. 87–99.

Schanche, A. 2000. *Graver i ur og berg. Samisk gravskikk og religion fra forhistorisk til nyere tid*. Davvi Gitji OS. Karasjok.

Schanche, A. 2002a. Saami skulls, anthropological race research and the repatriation question in Norway. In: Fforde, C. H., Fforde, C., Hubert, J. & Turnbull, P. (eds.) 2002. *Dead & Their Possessions: Repatriation in Principle, Policy, & Practice [Elektronisk resurs]*. London: Routledge: 47–62.

Schanche, A. 2002b. Museer, gjenstander, rettigheter, in *Vem äger kulturarvet? Anföranden vid konferens om återföringsfrågor vid Ájtte, Svenskt Fjäll och Samemuseum 6-8 juni 2000*. Duoddaris 20 Rapportserie, 29-34. Jokkmokk: Svenskt Fjäll- och Samemuseum, Duottar-ja Sámemusea.

Schanche, K. 2005. Varangersamene før 1600. Bosettingsstruktur og økonomisk basis I Varangersiidaen i siste del av middelalderen. In: Andersen, O. (ed.) *Fra villreinjakt til reindrift = Gåddebivdos boatsojsujttuj*. Drag: Árran julevsáme guovdásj. 61-73.

Schefferus, J. 1956[1673]. *Lappland* (i översättning av Henrik Sundin). Nordiska museet: Acta Lapponica VIII. Gebers.

Schoeninger M. J. & DeNiro M. J. 1984. Nitrogen and carbon isotopic composition of bone collagen from marine and terrestrial animals. *Geochimica Cosmochimica Acta* 48:625–639.

Schoeninger, M.J. & Moore, K. 1992. Bone Stable Isotope Studies in Archaeology. *Journal of World Prehistory* 6(2): 247–296.

Schreiner, K. E. 1927. *Menneskeknoklene fra Osebergskibet og andre norske jernalderfund.* Osebergfundet, bd. 5. Oslo: utgitt av Den norske stat. 79–109.

Sealy, J. 2001. Body tissue chemistry and paleodiet. In: Brothwell, D.R. & Pollard, A.M. (eds.), *Handbook of Archaeological Sciences.* John Wiley & sons, New York: 269–279.

Sellevold, B. 2013. Ancient skeletons and ethical dilemmas. In: Fossheim, H. *More than just bones. Ethics and research on human remains*. The Norwegian National Research Ethics Committees. 139–163.

Serning, I. 1956. *Lapska offerplatsfynd från järnålder och medeltid i de svenska lappmarkerna*. Dissertation. Stockholm : Stockholms högskola.

Severinsen, A. Den sørsamiske sijte – bruk og rettigheter. In: Lyngman, S. (ed.). 2007. *Om sørsamisk historie. Foredrag fra seminar på Røros 2006 of Trondheim 2007*. Saemien sijte. Snåsa: 38–51.

Severinsen, A. 2016. Sørsamenes fjellfiske. Ørret, sik og røye– et svømmende matforråd. In: Mjaerum, A. & Utvik Wammer, E. (eds.). *Fjellfiske i fortiden. Årtusener med svømmende rikdom.* Portal forlag og Kulturhistorisk museum. Kristiansand: 159–181.

SFS 1990:1144. *Begravningslagen*. Stockholm: Justitiedepartementet.

Shennan, S. J. 1989. *Archaeological approaches to cultural identity*. Unwim Hyman. London.

Silvén, E. 2012. Contested Sami Heritage: Drums and *siedies* on the Move. *National museums and the negotiation of difficult pasts* [electronic]: Conference proceedings from EuNaMus, European National Museums: Identity Politics, the Uses of

the Past and the European Citizen, Brussels 26-27 january 2012 –2013: 173–186.
Silvén, E. 2016. Hemfört, bortfört, återfört. Museerna och det samiska kulturarvet. Hegardt, J. & Lundemo, T. (eds.). *Historiens hemvist 3 Minne, medier och materialitet*. Göteborg: Makadam. 189–217.
Sjögren, P. & Damm, C. 2019. Holocene vegetation change in northernmost Fennoscandia and the impact on prehistori foragers 12 000-2000 cal. A BP – A review. *Boreas* 48: 20-35.
Skogelin, M., 9th August 2019. ”Samiska kvarlevor åter till sin vilojord”. *Svenska Dagbladet*, https://www.svd.se/samiska-kvarlevor-ater-till-sin-vilojord
Sommerseth, I. 2009. *Villreinfangst of tamreindrift i indre Troms. Belyst ved samiske boplasser mellom 650 og 1923*. Dissertation. Insitutt for arkeologi og sosialantropologi, Tromsø Univeristy.
Sommerseth, I. 2010. Arcaheology and the debate on the transition from reindeer hunting to pastoralism. *Rangifer* 31(1): 111–128.
Spangen, M. & Fjellström, M. 2018. A fishy tale about a sheep and a dog – isotope studies and medieval Sámi mobility and husbandry in inner Finnmark Northern Norway. *Archaeologica Fennoscandica* XXXV: 3–17.
Statens historiska museer 2009. *Överlåtelse av mänskliga kvarlevor i Statens historiska museers samlingar*. Hemställan till Regering, 2006-06-02. Dnr. 629-527-2009. Statens Historiska Museer, Stockholm.
Statens historiska museer 2014. *Begäran att mänskliga kvarlevor från kyrkogården i Silbojokk som förvaras i era arkiv återbördas till Arjeplogs kommun för återbegravning.* Shm dnr 331-296-2014.
Steckzén, B. 1964. *Birkarlar och lappar. En studie i Birkarleväsendets, lappbefolkningens och skinnhandelns historia*. Kungliga Vitterhets Historie och Antikvitets Akademiens Handlingar. Historiska serien 9.
Sten, S. 1989. Husdjurshållning, jakt och fiske i Silbojokk – en osteologisk analys av djurbenen. In: Awebro, K., Björkenstam, N., Norrman, J., Peterson, S., Roslund, Y., Sten, S. & Wallquist, E. (eds.). *Silvret från Nasafjäll: arkeologi vid Silbojokk*. Stockholm: Byrån för arkeologiska undersökningar, Riksantikvarieämbetet. Stockholm: 167–178.
Stenberg Partapouli, A. C. & Niia, A.-K., 7th August 2019. “Återbegravningen – en historisk händelse. *Sameradion & SVT Sápmi*, https://sverigesradio.se/sida/artikel.aspx?artikel=7250852
Storå, N. 1971. *Burial customs of the Skolt Lapps*. Helsinki: Suomalainen tiedeakatemia.
Sundström, J. 1988. Graven vid Gransjön i Frostviken. *Åarjel-saemieh*, Samer i før, årbok 3. Snåsa. 136–144.
Sunna, A., Wednesday 9th December 2015. Oklart kring Rounalakraniernas etincitet. *Sameradion & SVT Sápmi,* https://sverigesradio.se/artikel/6321585
Svanberg, I. 2000. Järjan (*Lactuca alpina)* i samiskt kosthåll. In: Svanberg, I. & Tunón, H. (eds.). *Samisk etnobiologi. Människor, djur och växter i norr*. Nya Doxa. 259–265.
Svanberg, I. 2017. ”Getter hafwa både sin stora förmon och stora olägenhet”. Om geten i det förindustriella Sverige. In: Leibring, K. & Svanberg, I. (eds.). 2017. *Geten i Sverige. Kulturhistoriska och samtida perspektiv*. Institutet för språk och folkminnen. Uppsala: 43–69.

Svanberg, I. & Tunón, H. (eds.). 2000. *Samisk etnobiologi: människor, djur och växter i norr*. Nora: Nya Doxa.
Svestad, A. 2006. *Undersøkelse av graver på Kirkegårdsøya Hammersfest kommune, Finnmark fylke*. Rapport, Insitutt for arkeologi, Universitetet i Tromsø.
Svestad, A. 2007a. *Undersøkelse av graver på Kirkegårdsøya Hammersfest kommune, Finnmark fylke*. Rapport, Insitutt for arkeologi, Universitetet i Tromsø.
Svestad, A. 2007b. *Arkeologisk utgraving på Gullholmen kirkegård, Deannu gielda / Tana kommune, Finnmark fylke.* Rapport, Institutt for arkeologi, Universitetet i Tromsø.
Svestad, A. 2010. De døde skjuler mange ting – Arkeologiske undersøkelser på Gullholmen kirkegård. *Tana-årboka/Deatnu jahkegirji:* 77–91.
Svestad, A. 2013a. What Happened in Neiden? On the Question of Reburial Ethics. *Norwegian Archaeological Review* 43(2): 194–222.
Svestad, A. 2013b. Reply to Comments from Kjell-Åke Aronsson, Lynne Goldstein, Håkan Karlsson, Duncan Sayer and Larry J. Zimmerman. *Norwegian Archaeological Review* 43(2): 236–242.
Svestad, A. 2017. Svøvpt i myra – synspunkter på Skjoldehamnfunnets etniske og kulturelle tilknytning. *Viking* 80: 129–156.
Svestad, A. 2019. Caring for the dead? An alternative perspective on Sámi reburial. *Acta Borealia* 36(1): 32–52.
Tacitus, 1916[98]. *Germanerna: författad år 98 e.Kr*. (2., bearbetade uppl). Hugo Gebers förlag. Stockholm.
Tauber, H. 1981. 13C evidence for dietary habits of prehistoric man in Denmark. *Nature* 292: 332–333.
Tegengren, H. 1952. *En utdöd lappkultur i Kemi lappmark. Studier i Nordfinlands kolonisationshistoria*. Acta Academiae Aboensis, Åbo Akademi.
The Association Rounala lappby 2010. 'Item 14/10: Forskning om Övre Norrlands historia. Kranier från Rounala kyrkogård, Karesuando. *Minutes of the association Rounala lappby's annual meeting 30th January 2010.*
Thomsen, E. & Andreassen, R. 2017. Agricultural lime disturbs natural strontium isotope variations: Implications for provenance and migration and migration studies. *Science Advances* 5: 1–11.
Tuderus, G. & Westen, T.V. 1773. *Twå berättelser om lapparnes omwändelse ifrån deras fordna widskeppelser, och afguderi./(Gabriel Tuderus. Thomas von Westen.) Stockholm, tryckt i kongl. finska boktryckeriet, på Joh. Arv. Carlbohms bekostnad. 1773*. Carlbohm, Stockholm.
Tromholt, S. 1885. *Under the rays of the aurora borealis: in the land of the lapps and kvaens*. Houghton, Miffin and company, Boston.
Tuhiwai Smith, L. 2012. *Decolonizing Methodologies. Research and Indigenous Peoples*. 2nd ed. Zed Books. London.
UN (United Nations) 2020. *United Nations Declaration on the Rights of Indigenous Peoples*. Avaliable at: https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html. Accessed 2020-03-20.
Zachrisson, I. 1984. *De samiska metalldepåerna år 1000-1350 I ljuset av fynden från Mörtträsket, Lappland.* Dissertation. Archaeology and Environmnent 3. Umeå University.
Zachrisson, I. 1997a. *Möten i gränsland. Samer och germaner i Mellanskandinavien*. Monographs 4, Statens Historiska Museum, Stockholm.

Zachrisson, I. 1997b. Samer med status. In Zachrisson, I. (ed.) *Möten i gränsland. Samer och germaner i Mellanskandinavien.* Monographs 4, Statens Historiska Museum, Stockholm: 144–150.

Zachrisson, I. & Iregren, E. 1974. *Lappish Bear Graves in Northern Sweden. An Archaeological and Osteological Study*. Early Norrland 5. Kungliga Vitterhets Historie och Antikvitets Akademien.

Zachrisson, I. & Iregren, E. 1997. De bodde i kåtor. In Zachrisson. In: (ed.) *Möten i gränsland. Samer och germaner i Mellanskandinavien.* Monographs 4, Statens Historiska Museum, Stockholm: 117–143.

Zackrisson, O., Östlund, L., Korhonen, O. & Bergman, I. 2000. The ancient use of Pinus sylvestris L. (Scots pine) inner bark by Sami people in northern Sweden, related to cultural and ecological factors. *Vegetation History and Archaeobotany* 9: 99–109.

Zimmerman, L. 2013. "Beings who are", "beings who were", and the Neiden reburial. *Norwegian Archaeological Review* 46 (2): 233–236.

Valtonen, I. 2007. Who were the Cwenas? In: Bately, J. & Englert, A. 2007 (eds.). *Ohthere's Voyages. A late 9th-century account of voyages along the coasts of Norway and Denmark and its cultural context*. Roskilde: The Viking Ship Museum: 108–109.

Van der Merwe, N. J. & Vogel, J. C. 1978. ^{13}C content of human collagen as a measure of prehistoric diet in Woodland North America. *Nature* 276: 815–816.

Van der Plicht, J., van der Sanden, W. A. B., Aerts, A. T. & Streurman, H.J. 2004. Dating bog-bodies by means of ^{14}C-AMS. *Journal of Archaeological Science* 31: 471–491.

Viklund, K. 2005. Kråkbär och gravid sik – Västerbottens mångkulturella förflutna i miljöarkeologisk belysning. In: Engelmark, R., Larsson, T. B. & Rathje, L. (eds.). *en lång historia…festskrift till Evert Baudou på 80-årsdagen*. Archaeology and Environment 19. Umeå University: 415–429.

Vogel, J. C. & van det Merwe, N. J. 1977. Isotopic Evidence for Early Maize Cultivation in New York State. *American Antiquity* 43(2): 238–242.

Von Düben, G.V. 1977[1873]. *Om Lappland och lapparne, företrädesvis de svenske: ethnografiska studier*. (2. utg.) Stockholm: Gidlund i samarbete med Nordiska museet.

Von Holstein, I.C.C., Hamilton, J., Craig, O.E., Newton, J., Collins, M.J., 2013. Comparison of isotopic variability in proteinaceous tissues of a domesticated herbivore: a baseline for zooarchaeological investigation. *Rapid Communications in Mass Spectrometry* 27(23): 2601–2615.

Vorren, Ø. & Manker, E. 1976. *Samekulturen: en kulturhistorisk oversikt*. 2. utg. Tromsø: Universitetsforlaget.

Vorren, Ø. 1978a. Bosetning of ressursutnyttning under veidekulturen og dens differensiering. In *NOU 1978:18A Finnmarksvidda. Natur-Kultur*. Universitetsforlaget. Oslo.

Vorren, Ø. 1978b. Siida-Områder på "Sör-Fieldit" under veidekulturens siste fase. In: Hals, S. (ed.), *Kultur på karrig jord. Festskrift til Asbjørn Nesheim.* Norsk folkemuseum. Oslo. 259–274.

Väre T. 2017. *Osteobiography of Vicar Rungius. Analyses of the bones and tissues of the mummy of an early 17th-century Northern Finnish clergyman using radiology and stable isotopes.* Dissertation. Acta Universitatis Ouluensis B Humaniora 150, University of Oulu.

Wadleigh, M.A., Schwarcz, H.P. & Kramer, J.R. 1994. Sulphur isotope tests of sea salt correction factors in precipitation: Nova Scotia, Canada. *Water, Air and Soil Pollution* 77 (1):1–16.

Wahlund, S. & Lundborg, H. 1932. *The race biology of the Swedish Lapps. Pt. 1. General Survey. Prehistory. Demography. Future of the Lapps.* Almqvist & Wiksell. Uppsala.

Wallerström, T. 1995. *Norrbotten, Sverige och medeltiden. Problem kring makt och bosättning i en europeisk periferi del 1.* Dissertation. Lund Studies in Medieval Archaeology 15:1. Almqvist & Wiksell International. Stockholm.

Wallerström, T. 2000. The Saami between East and West in the Middle Ages: an archaeological contribution to the history of reindeer breeding. *Acta Borealia* 17(1): 3–39.

Wallerström, T. 2006. *Vilka var först? En nordskandinavisk konflikt som historisk-arkeologiskt dilemma.* Riksantikvarieämbetet, Stockholm.

Wallerström, T. 2017. *Kunglig makt och samiska bosättningsmönster. Studier kring Väinö Tanners vinterbyteori*. Institutt for sammenlignende kulturfoskning. Novus forlag. Oslo.

Webb, E. C., Newton, J., Lewis, J., Stewart, A., Miller, B., Tarlton, J. F. & Evershed, R. P. 2017. Sulphur-isotope compositions of pig tissues from a controlled feeding study. *Science & Technology of Archaeological Research* 3(1): 71–79.

Welinder, S. 2003. *DNA, etnicitet, folk och folkvandringar*. Bricoleur press. Göteborg.

Westerdahl, C. 2008. *Sydsamer. Från Bottenhavet till Atlanten. En historisk introduktion till samerna i Ångermanland och Åsele lappmark med angräsnande delar av Jämtland och Norge.* Båtdokgruppen, Skärhamn.

Willumsen, L. H. 2013. *Witches of the North: Scotland and Finnmark.* Brill.

Willumsen, L. H. 2016. Trolldomssak mot en samisk noaide – Anders Poulsen, Vadsø, 1692. *Heimen* 53: 203–225.

White, T. D., Black, M. T. & Folkens, P. A. 2012. *Human osteology.* 3rd ed. Amsterdam: Academic Press.