NORTHERN ARCHAEOLOGY AND COSMOLOGY

In its analysis of the archaeologies and histories of the northern fringe of Europe, this book provides a focus on animistic—shamanistic cosmologies and the associated human—environment relations from the Neolithic to modern times. The North has fascinated Europeans throughout history, as an enchanted world of natural and supernatural marvels: a land of light and dark, of northern lights and the midnight sun, of witches and magic and of riches ranging from amber to oil. Northern lands conflate fantasies and realities.

Rich archaeological, historical, ethnographic and folkloric materials combine in this book with cutting-edge theoretical perspectives drawn from relational ontologies and epistemologies, producing a fresh approach to the prehistory and history of a region that is pivotal to understanding Europe-wide processes, such as Neolithization and modernization. This book examines the mythical and actual northern worlds, with northern relational modes of perceiving and engaging with the world on the one hand, and the 'place' of the North in European culture on the other.

This book is an indispensable read for scholars of archaeology, anthropology, cultural studies and folklore in northern Europe, as well as researchers interested in how the North is intertwined with developments in the broader European and Eurasian world. It provides a deep-time understanding of globally topical issues and conflicting interests, as expressed by debates and controversies around Arctic resources, nature preservation and indigenous rights.

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NORTHERN ARCHAEOLOGY AND COSMOLOGY

A Relational View

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CONTENTS

Acknowled	lgements	viii
The N Relatio Spiritu Knowi Relatio Time, Defini A brie	duction: Northern Exposure North and the world 3 conality, spirituality and the richness of reality 5 cality and magic in the northern world 7 cong the world 9 conality and the northern world 10 temporality and the longue durée 13 cong the North 15 foutline of the Fennoscandian past 17 ructure of the book 20	1
PART I Land		23
A race The w Crysta Caviti Early i Discipi Minin Dream	-worlds to the Arctic 25 orld inside the rock 26 I cavities and other marvels of the Underworld 30 es and recent folklore in the North 32 modern northern mining as dreamwork 35 lining and ordering of the North 37 g and magic 38 s of Lapland's gold 40 nduring allure of minerals and the Underworld 42	25

vi Contents

3	Houses, land and soil Dwellings, people and the cosmos in the North 46 The introduction of the house 48 Pottery, semi-subterranean houses and cultural transformation 50 Early pottery, cultivation and place making 51 Houses and the changing relationship with the underworld 53 Clay work as a means of restructuring human—environment relations 54 Living in an inspirited world 57 The inspirited house 58	46
4	Forests and hunting The forest in northern landscapes and mindscapes 63 Engaging with trees 66 Humans and animals in the North 70 Seducing the prey 73 Elk-headed staffs – symbols of Stone Age clans? 75 Sceptres of the shaman? 77 The Bear – the 'Golden King of the Forest' 80	63
PAF Sea	RT II a	85
5	Coastal landscapes and the sea Living with the sea 87 The two Mediterraneans 89 Engaging with changing coastal environments 92 The temporality of Baltic coastal landscapes 95 Cairns in northern coastal landscapes 99 Otherworldly islands 102 Coastal mazes in the North 104	87
6	Boats and waterways The mystery object from a Lapland bog 108 Water and the Otherworld in a northern context 110 Travelling as a spirit fish 111 Blue elks and flying boats 114 Solar boats in razors and rock art 118 Boats for the dead 119	108
7	River mouths and central places The real and mythical rivers 123 River mouths as liminal spaces and central places 127	123

	The 'trader kingdom' of the birkarls 133 Marketplaces 135	
PAF Sky	RT III Y	139
8	Birds and cosmology Migratory birds and changing seasons 141 Birds as persons 144 Birds as guides and soul-birds 145 Cranes and dwarfs 148 Devil's swans 151 Solar swans? 152	141
9	The sun, light and fire People of the Sun 154 Amber and Apollo 156 Worshipping the northern sun 159 The marriage of fire and earth 162 Fire and the hearth in northern cultures 166 Fire and transformation 168 Strange lights in the northern sky 169	154
10	Epilogue A world full of life 171 The North and the South 173	171
Bib Ind	oliography lex	17 <i>6</i> 198

Mythical kingdoms in later prehistory 130

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Like most books, this one has a history. The two of us originally arrived at the themes discussed in this book independently, and from different angles, when working on our doctoral dissertations. However, we always seemed to share much common ground and have later collaborated in various contexts. Most importantly for the present book, we were both core team members of a project entitled *The Use of Materials and the Neolithization of North-Eastern Europe (c 6000–1000 BC)*, which was funded by the Academy of Finland for 2013–2017 (AoF decision 269066) and directed by Janne Ikäheimo at the University of Oulu, Finland. It was Janne, who prompted us to write this book as our contribution to the project. The bulk of this book was written in the spring term 2017 when we were on research leave enabled by the said Academy of Finland funding. This gave us a welcome break from teaching and administrative duties, as well as a chance to engage in discussions and exchange of ideas with close colleagues – particularly Janne Ikäheimo, Teemu Mökkönen and Kerkko Nordqvist.

The idea for this book had started to incubate already a little earlier when Elina Anttila, the director of the National Museum of Finland in Helsinki, asked us to write a manuscript for the upcoming permanent prehistory exhibition in late 2015. We were captivated by this opportunity, as the exhibition has traditionally been of a central importance in teaching Finnish archaeology students about prehistoric artefacts, as well as being one of the main channels in introducing laypeople to Finnish prehistory. The exhibition had, however, only been renewed once in its century-long history of existence and had not changed much since the museum opened in 1916. The old exhibition had been arranged in a strictly chronological fashion, while we chose a thematic approach, with artefacts associated with themes such as cosmology, mobility and materiality.

Excited, we went on to produce a manuscript that was probably much longer and more exhaustive than what the museum expected. It nonetheless guided the building of the new exhibition, which was opened in the spring of 2017, and a somewhat compacted version of the manuscript was published as a book (Herva and Lahelma 2017). In addition to Elina Anttila, we would particularly like to thank Anna Wessman, Wesa Perttola, Marja Ahola and Timo Salminen for their comments on the exhibition manuscript which - although very different from the present book - provided a kernel of inspiration to it. Both works are structured around similar general ideas and ultimately revolve around the dynamic relationship between materiality, cosmology and the environment in the context of the circumpolar European North.

The present book draws from and synthesizes the research that we have done over the 2000s independently, together and in collaboration with numerous other colleagues in Finland and abroad. This research has encompassed a wide range of specific topics from rock art to the heritage of the Second World War and from the dynamics of Neolithization to Renaissance-Baroque culture and understanding of the world. This book, like our previous research, covers a time span of over 7,000 years with a geographical focus on north-eastern Europe, although we have always tried to locate this rather poorly known region in a broader European, Eurasian and/or circumpolar context. Likewise, most of our previous research has generally explored questions of relational thinking and northern environmental perception and cosmologies, which are at the heart of this book.

We would like to extend special thanks to our home institutions – the University of Oulu and University of Helsinki - for their flexibility and generosity during this book project, which has enabled us to take some time off, travel back and forth between the two cities and occasionally retreat to the tranquillity of northern nature to work on the book.

INTRODUCTION

Northern Exposure

Northern Exposure, the award-winning American TV series created by Joshua Brand and John Falsey, ran for six seasons in 1990–1995 and introduced the viewers to a neurotic New York medical doctor, Joel Fleischman (Rob Morrow). Dr Fleischman unwillingly ended up working in the small town of Cicely in Alaska, inhabited and occasioned by a wide variety of colourful characters. There was the Amelia-Earhart-type bush pilot Maggie O'Connell (Janine Turner), the ex-astronaut and millionaire Maurice Minnifield (Barry Corbin), the calm and quiet Native Alaskan Marilyn Whirlwind (Elaine Miles), who works as Dr Fleischman's receptionist, and the young half-Native Ed Chigliak (Darren E. Burrows), who aspires to become a film director and later discovers his calling as a shaman, among many other intriguing characters (Figure 1.1; see Epes 2008 for an analysis of the characters and their identities).

Over the course of the 110 episodes produced, the viewers were exposed to a wide array of mundane and extraordinary aspects of the North, grounded on real or perceived features of northern life and worldview. The series blended realities, imaginaries and fantasies to produce a cinematic North that in many ways resonates with both northerners' and non-northerners' (however one chooses to define them) views and experiences of the world. In addition to the stories and how they were scripted, the design and production also promoted a sense of an enchanted reality. As Diffrient (2006: 81) puts it, 'the experience of watching this cult dramedy, noted for its eccentric characters, surreal storylines, psychological nuance, philosophical musings, picturesque backdrops and high production values can be likened to a kind of "cinematic sublimity".

Upon his arrival to Cicely, the central character, Dr Fleischman, is a furiously sceptical rationalist and a New Yorker to the core, who finds himself in a fundamentally incomprehensible northern natural, social and spiritual world. The close community of the small 'frontier' town is deeply alien to him, and he is constantly at



FIGURE 1.1 Key characters of the TV series Northern Exposure, which ran on CBS from 1990-1995. From left to right: Marilyn Whirlwind (Elaine Miles), Holling Vincoeur (John Cullum), Shelly Tambo (Cynthia Geary), Ed Chigliak (Dan E. Burrows), Maggie O'Connell (Janine Turner), Chris Stevens (John Corbett), Joel Fleischman (Rob Morrow) and Maurice Minnifield (Barry Corbin). Photo: Alamy Stock Photos.

odds with the Alaskan environment and local ways of relating with it, as well as northern ways of life and thinking in general. Alaska constantly presents Dr Fleischman with marvels and oddities which conflict with his ideas and assumptions about the world and its workings. Drama-comedy in style, Northern Exposure portrays a reality that is prosaic and extraordinary at the same time, blending mundane affairs of dayto-day life with wondrous and surreal dimensions of the northern world, where learning to fix a toilet goes hand in hand with solar storms that mix up peoples' dreams.

Fiction though it is, Northern Exposure illustrates many themes that cut across this book, which employs insights drawn from archaeology, history, ethnography and folklore to explore northern cosmologies and ways of being in the world. The series engages with various aspects of northern peoples, cultures and lived worlds, as they appear from within the northern world, on the one hand, and as they have been seen by outsiders on the other. Like Northern Exposure, this book explores both of these two views on the North and 'North-ness' and how they have been intertwined at different times. Northern Exposure draws particular motifs, such as a shape-shifting bear/man, directly from northern natural and cultural worlds but echoes also more intangible or transcendental northern matters, such as the mysterious or 'magical' connectedness between different things in the world. These are also characteristic features of relational cosmologies which are at the heart of our exploration of northern worlds.

The North and the world

This book analyses shamanistic-animistic cosmologies and the associated humanenvironment relations in northernmost Europe from the Neolithic to modern times. It frames northern cosmologies and ways of life in terms of 'relational thinking', which has recently attracted considerable interest in archaeology and anthropology. Geographically anchored on north-eastern Europe, and specifically on northern Fennoscandia (Figure 1.2), the book addresses a host of themes related to northern relational modes of perceiving and engaging with the world in a broader circumpolar context, on the one hand, and the 'place' of the North in European culture on the other. Although the imagined and real North – its lands, skies and people – has fascinated European minds since classical antiquity, it has also remained unknown and overlooked in European archaeological narratives and also more generally. At the same time, the North has become a globally topical issue due to climate change and the implications that it has to, for instance, resource extraction, nature preservation and indigenous rights. The current interest in the North and its material and symbolic resources, however, is ultimately rooted in much longer-term imaginations of and engagements with the North. The study of the northern world can make a significant contribution to the understanding of continent-wide prehistoric and historical processes, such as Neolithization and modernization, and to current theoretical discussions in archaeology.

Fennoscandia is a name used of the geographic region that consists of the Finnicspeaking areas of Finland and Karelia, the Kola Peninsula and the Scandinavian Peninsula, consisting of Norway and Sweden (Figure 1.2). The term derives from geology, where it refers to the Fennoscandian Shield, consisting primarily of granite and gneiss, but is increasingly used also in a wider sense. It refers to a region that,

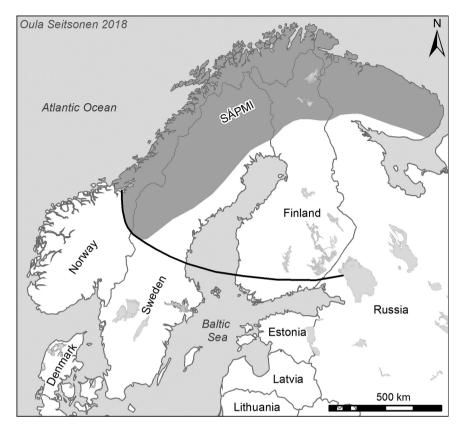


FIGURE 1.2 Fennoscandia encompasses the modern states of Norway, Denmark, Sweden, Finland and parts of north-western Russia and Sápmi, the core area of the indigenous Sámi people in northern Fennoscandia. The black line marks the northern boundary of urban settlement in Fennoscandia in the Middle Ages. It also roughly denotes the cultural border zone between south-western and north-eastern Fennoscandia, which can be traced far back into prehistory. Map: Oula Seitsonen.

in addition to shared geology and geography, is climatically, ecologically and to a certain extent also culturally distinct from the more 'continental' Denmark or other countries on the southern shores of the Baltic Sea, where a limestone bedrock dominates. It comprises an excellent arena for exploring the nature and significance of relational ontologies and epistemologies in a long-term perspective, because traditional ways of life based on hunting and fishing (typically accompanied by small-scale farming) persisted especially in the more remote parts of the region almost until present day. This makes it possible to employ 'ethnographically informed approaches' to trace cultural and cosmological continuities and changes over centuries and millennia; in other words, some information on beliefs and practices recorded in the ethnographic present can — with some reservations — be projected into 'deep prehistory' (see e.g. Lahelma 2007).

Northern cultures have provided anthropological examples for discussions of relational ontologies and epistemologies, which nonetheless tend to lack the deeptime perspective that the combining of archaeology, history, ethnography and folklore can provide, and such a dialogue between different materials is at the heart of the approach taken in this book. By the same token, we interrogate the mythical and actual northern worlds that are intertwined in many curious and sometimes surprising ways. The northern fringe of Europe is often viewed as an enchanted land of marvels and magic, albeit conceived differently in European imagination from local northern perspectives. Both perspectives, however, can contribute to an understanding of northern landscapes and mindscapes.

Past and present northern worlds are generally poorly known and often marginalized or exoticized. For example, broad surveys and large-scale master narratives of European prehistory (e.g. Scarre 2005) and history commonly ignore the northernmost reaches of the continent. And yet while the North has always been unknown – and in many ways still is – it has fascinated European minds recurrently since classical times. Indeed, Arctic regions have recently become a hot topic again due to climate change and the new opportunities it is claimed to promise for global transportation and extractive industries, thus rendering the Arctic as an arena for a range of geopolitical, economic, environmental and sociocultural interests. The future of the Arctic is an issue of global interest, as demonstrated for example by China's Arctic strategy and the active involvement of major powers like the United States, Canada and Russia in the Arctic Council - an intergovernmental forum founded in 1996, with eight member states and six organizations representing Arctic indigenous peoples.

This upsurge of interest is, however, but the most recent phase in a much longer continuum where the North has been seen as a land of riches and utopias but also of darkness and dystopias. Indeed, ambiguity, contrasts and oppositions have characterized 'outsider' perceptions of the North since the dawn of European history (e.g. Davidson 2005; Naum 2016). On one hand, the North has appeared exotic and alluring, but on the other hand, it has often been overlooked and ignored. Although geographically on the margins, northernmost Europe has nonetheless always been part of, and connected in diverse ways with, European and Eurasian worlds. Northern Fennoscandia has for centuries and millennia been a borderland where the North, East, South and West meet, which makes it as a highly interesting region in its own right and at the same time affords a fresh perspective, a view from the margins, on wider developments that extend well beyond the northern lands themselves.

Relationality, spirituality and the richness of reality

Although 'only' a TV series, Northern Exposure resonates closely with the 'real' relationally constituted and known northern worlds. Relationality as a theoretical stance and framework has attracted an increasing interest in archaeology over the 2000s, inspired by research and thinking in anthropology and other fields. Relational thinking comes in many specific forms and under many banners, such as 'perspectivism' (e.g. Viveiros de Castro 1998), 'Actor Network Theory' (e.g. Latour 2005) and 'symmetrical archaeology' (e.g. Olsen 2010), and engages with ideas such as 'material agency' (e.g. Knappett and Malafouris 2008) and 'non-human persons' (e.g. Harvey 2005). The different frameworks of relational thinking have different emphases and to some degree different terminologies but also similar foundational ideas and ambitions. Relational approaches seek to collapse the subject/object and related dualisms, recognizing that non-humans, such as artefacts and animals, are active players in the world and not merely passive objects. Besides having agency (an ability to make things happen in the world), non-humans can be more or less person-like beings. In the relational view, what things 'are' and what they do is situational; so (say) a tree can be a sentient person-like being in one context of interaction and merely an 'object' in another.

Relational thinking seeks to defuse the anthropocentrism and essentialism that characterize modern Western thinking. This is also one reason why relational thinking and modes of being in the world – reciprocity and interconnectedness – can be difficult to grasp. Relational thinking rejects or turns upside down many foundational assumptions of modern Western thinking and understanding of the world. Because relational thinking is embedded in different ideas about the world from how rationalist thinking conceives it, various aspects of relational thinking may appear magical and irrational. The extraordinary dimensions of relational worlds, however, are better understood in terms of different systems of knowledge and forms of engaging with the world. Relational knowing builds on situational and embodied knowledge instead of abstract propositional 'laws' that are dear to Western scientifically oriented understanding of the world.

Dr Fleischman comes across this difference and otherness in various forms in Alaska. The Cicilian world is populated by whites and indigenous people, by 'rednecks and intellectuals, escapists and entrepreneurs' (Hanna 1996: 640). Fleischman must engage with people, both Native American and local whites, whose general disposition to the social world, life and indeed reality is profoundly different from his own. Assuming his rationalist disposition to be superior, Fleischman scorns local views on the world, which often have a mystical or spiritual dimension and which he finds inconceivable or unreal. Yet this reveals more about his mechanistic understanding of the world than the nature of reality that he is enmeshed with and a part of. When Ed is visited by the 258-year-old Indian spirit One Who Waits ('The Big Kiss' 2.2), Dr Fleischman gets worried over Ed's mental health because, in his view, Ed is keeping company to an imaginary person, whereas Marilyn merely observes that 'White people can't see'. Likewise, exasperated with Dr Fleischman's stubbornness to accept phenomena that do not fit his narrow worldview, Maggie cites Hamlet, 'There is more between heaven and earth than your philosophy ever dreamed of' ('Dateline Cicely' 3.11). In Northern Exposure, people encounter, interact and engage with mystical powers and non-humans with extraordinary properties, ranging from strange forces that link together particular human individuals to artefacts that manipulate and change their owners.

Spirituality and magic in the northern world

Spirituality plays an important role in the fictitious world of Northern Exposure (Mihelich and Gatzke 2007), which echoes the centrality of spirituality within traditional northern cultures and outsider perceptions of the North. It is not by coincidence that the White Sea, in the north-western corner of Russia, emerged as a spiritual centre of Russian Orthodox Christianity in the sixteenth century, as most prominently exemplified by the Solovetsky monastery (Figure 1.3), now a UNESCO World Heritage site.

The North has been seen as a place of spirituality, self-realization, retreat and isolation for a long time. As the Italian war correspondent Curzio Malaparte, who was stationed in Finnish Lapland during the Second World War, wrote: 'War is far from us. We are outside it, in a remote country, in a timeless space, outside of mankind' (quoted in Lähteenmäki 2006:84). 'Spirituality' is a tricky word and concept because it tends to be associated with out-of-this-worldliness and a religious or belief-related mode of thinking. In a relational view, however, spirituality is primarily about connectedness: we take it to refer to a sense and awareness of reality being richer than a purely natural-scientific view would have it. This entails a sense of deep connectedness and entanglement of all things in the world. Magic and magical thinking, in turn, can usefully be conceptualized as reflecting a sense of an interconnected reality. While modern Western thinking builds on analytical deconstruction (trying to understand the world by reducing it to its constituent elements and their properties), magical thinking proposes



FIGURE 1.3 A view on the Solevetsky monastery in the White Sea. The monastery was founded in the fifteenth century and soon became the northern centre of Christianity in Russia, a faraway place in the North suitable for spiritual pursuits. Photo: Vesa-Pekka Herva.

that everything in the world is interconnected – that there is unity and reciprocity between people and the world (see Greenwood 2009).

Magic can be understood as a means of becoming aware of this deep interrelatedness by manipulating perception and consciousness (Glucklich 1997: 12; Greenwood 2009), as exemplified by shamanic practices. Magic enables 'seeing' reality and one's place within it from a new angle, which can bring unconscious issues and anxieties to the surface and help to recognize patterns of connections and relationship with which one is enmeshed (Greenwood 2009: 111–113). Magical thinking is not limited to premodern or non-Western cultures, but flourishes also in contemporary Western society – and thus affects the ways people perceive the world and relate to it – although it does not necessarily take conscious or clearly defined forms (e.g. Aupers 2009; Greenwood 2009: 45–56; Fernandez and Lastovicka 2011: 280). For example, the idea of the magical transference of properties appears to be commonplace even today (Greenwood 2009: 45–46 with references), and there is also a 'spiritual' dimension to the complex interaction between programmers, computers and software, which can produce experiences of enchantment (Aupers 2009).

Connectedness is closely associated with openness, another key aspect of relationality. Modern Western thinking assumes that the 'real' world is composed of bounded material entities with clearly defined boundaries and fixed properties. In this view, people are categorically different from, say, rocks, whereas the relational view holds that such categorizations are illusionary products of modernity – and that all things in the world have porous boundaries and are 'open' to the world without fixed boundaries or inner 'essence'. Therefore, there is no clear division between subjects and objects or insides and outsides. Likewise, cognition and thinking are not simply something that happens in the brain but also out there in the world, within the brain-in-body-in-an-environment system (e.g. Ingold 2000, 2011; Clark 2010), which also means that artefacts and the material world in general shape people's identity, thinking and behaviour in various ways.

In Northern Exposure, Ed finds a ring in a fish, engraved with the initials FF, hypothesizing that it once belonged to the Italian film director Federico Fellini ('On Your Own' 4.4). Wearing the ring, Ed gradually starts to see the world through 'Fellinian eyes' and ultimately discovers to his horror that he himself appears to be changing, turning into somebody else. Although artefacts may not alter people quite as clearly in the real world, they do affect people even if people are usually not aware of this. In the relational view, artefacts are effectively parts or extensions of people and their physiological—cognitive machinery. An intuitive sense of this connectedness between people and artefacts is perhaps reflected in magical swords and rings of power featuring in contemporary popular culture, with Tolkien's *The Lord of the Rings* as the best-known example. Artefacts with extraordinary powers are a recurrent theme in northern cultures from prehistoric to present times, as reflected in the archaeological record and historical accounts, as well as mythological and folklore sources.

Knowing the world

When Dr Fleischman is (involuntarily) in the process of becoming an adopted member of a local Tlingit tribe, he must go on a vision quest, accompanied by the shaman trainee Ed. When Ed calls it a night after hours spent in the forest, Dr Fleischman complains that he has not had his vision yet. 'Well, maybe you did', Ed observes, 'and you just didn't know it' ('Our Tribe' 3.12). Visions may seem to have little to do with proper knowledge, and yet they can be - and have been - understood to afford insights into some state of things in the world, thus constituting a form of knowledge in certain cultural contexts. Rationalism has come to dominate the understanding of what proper knowledge is like, but there are also other systems of knowing and knowledge. It is against this background that visions, too, can be interpreted as providing a particular ('magical') perspective on the world, with the focus on 'seeing' and understanding the deep connectedness of things in the world, and one's place and position within this network of relationships (Greenwood 2009).

Different systems of knowledge and knowing also resonate with a branch of relational theorizing called 'perspectivism' (Viveiros de Castro 1998) which holds that different beings know the world from their own embodied perspective. A walrus perceives, experiences and knows the world very differently from an elk or a human being because they all have different sensory apparatuses, different brains, different modes of moving and so forth - they inhabit the world in profoundly different ways. In Northern Exposure, Ed's Uncle Anku advises Dr Fleischman, who is at pains over how to fix his toilet, that 'in order to catch a fish, one must think like a fish' ('Brains, Know-How and Native Intelligence' 1.2). This is an accurate crystallization of what perspectivism means in the context of northern hunter cultures, where hunters during the hunt do their best to become the animals they seek to catch in order to seduce and kill them (Willerslev 2007). In a less spiritual setting, Dr Fleischman stumbles on a perfectly preserved carcass of a mammoth that an elderly Cicely trapper (and formerly a Wall Street stockbroker) subsequently butchers for the meat, leading Dr Fleischman to exclaim a broadly perspectivist observation that 'Life is a mystery. One man's life-altering experience is another man's tenderloin' ('Lovers and Madmen' 5.24).

'Becoming an animal' obviously comprises a rather different mode of knowing and engaging with the environment from the analytical, abstracted and distanced approach enshrined by rationalist science. As Bird-David (1999) illustrates it, to know a tree in terms of modern Western epistemology is to cut it to pieces and put them under the microscope, whereas relational knowing is grounded on engaging with a tree, with attentiveness to what a particular form of engagement in particular circumstances does to the tree and oneself. Such forms of knowing are at odds with Dr Fleischman's rationalist stance and therefore appear as esoteric nonsense to him. The Enlightenment never eradicated 'non-modern' forms of thinking, as illustrated, for example, by a range of esoteric traditions that tend to have relational elements to them irrespective of their specific ideas and vocabulary (see e.g. Goodrick-Clarke

2008). Indeed, relational knowing has not disappeared from the modern Western world either, as Ingold (1999) observes, although it has lost its authority. The situation was different still in the Renaissance and Baroque periods when reality was conceived in essentially relational terms and relational knowing was fully legitimate (e.g. Herva and Nordin 2013, 2015). Modernity has constructed a particular hegemonic understanding of the world and its workings, but it describes only one aspect of reality from a specific vantage point and does not mirror what reality is 'really' like. Even scientific knowledge is culturally constructed and situational (e.g. Ingold and Kurttila 2000).

Relationality and the northern world

Northern Exposure evokes a sense of wonder with elements like a golf course in the middle of nowhere ('Realpolitik' 6.10) or the film enthusiast and aspiring film-maker Ed turning out to be a pen pal with the movie directors Steven Spielberg, Martin Scorsese and Woody Allen ('Animals R Us' 3.4). The world of Northern Exposure is a world where unexpected things can happen, where things are not necessarily what they first appear to be and where they are sometimes (inter-) connected in unexpected ways. This is an important element of how the world is perceived within northern cultures – with their animistic—shamanistic relationship with the world – and an important characteristic of relationally constituted worlds in general.

A key element of both 'insider' and 'outsider' views of the North is that it is a magical place. While outsider ideas of the enchanted North reflect the exoticization, romanticization and colonialist 'Othering' of northern lands and peoples, there are also rich and persistent northern traditions of nature spirits, ghosts and non-human persons, of enchanted and haunted places and of the magical and extraordinary in general (e.g. Sarmela 1994; Harjumaa 2008; Myllyniemi 2013 for a range of Finnish examples). In a rationalist framework, such notions would be regarded as mere beliefs and superstitions (effectively something that has no bearing to what the world is 'really' like) whereas we argue that they are better understood as reflecting relational knowing and an ultimately relational constitution of reality. Although the relevance of this perspective is not limited to the northern world or northern peoples, the significance of non-humans to the unfolding of human life – or the mutual and dialogic relationship between humans and non-humans – is particularly acutely felt in the North, where the coexistence of and connectedness of diverse 'natural' and 'cultural' constituents of the world is (or was) a normal state of affairs.

Cultures and environments co-generate each other, and *Northern Exposure* frequently taps on the close and deep connections between people and the extraordinary northern environments. The seasonal Coho wind ('Ill Wind' 4.16) and the 'breaking of the ice' in the spring inflicts strange behaviour in the townspeople ('Spring Break' 2.5). The water in a millions-year old sealed deposit, which Maurice Minnifield starts bottling, turns out have the curious property of reversing the gender roles of its consumers ('Horns' 6.13). Aurora Borealis activity, in turn,

mixes up the peoples' dreams ('Mr. Sandman' 5.12). Outlandish as these particular fictional impacts of the environment on people are, they nonetheless illustrate the entanglements of and correspondences between people and their environments, or how human beings and other organisms are open to the world. 'Everything leaks', as the philosopher Andy Clark's (2004) playful 'Clark's Law' puts it. The world leaks into people, and people leak into the world, destabilizing and dissolving the imagined boundary between self-contained subjects and objects. It is readily acceptable that the environment poses conditions to cultural forms, but relational thinking suggests a profound unity and multidimensional correspondence between people and the environment. Alfred Gell's (1995) study of environmental perception in Papua New Guinea is a case to the point in showing how living in a thickly wooded rainforest environment affects the very understanding of the world.

As a part of Dr Fleischman's initiation process into a Tlingit tribe, he is expected to give away his personal possessions, which he feels results in the melting of his very personality and makes him aware of his porous identity and the boundaries of himself. Rites of passage are designed to have such an impact on people, as they effectively mark, or facilitate, transitions from one identity or mode of being to another. In a relational view, nothing in the world is stable and fixed, and trying to 'stay the same' requires effort as it means an attempt to halt the normal state of constant becoming (Alberti 2012). Or as Dr Fleischman exclaims: 'I [...] have zero desire to go native. I have a hard enough time maintaining my identity as it is' ('Our Tribe' 3.12; quoted in Wilcox 1993: 6).

In the unstable relational world everything is constantly moving, changing and coming into being, which is a principle central to northern animisticshamanistic cosmologies. This has important implications to knowledge, as knowing such a dynamic world is essentially situational. It requires continuous and active attentiveness to one's surroundings, as well as negotiating one's place in the world, which frequently calls for improvisation and adapting to particular situations of interaction. The relationally constituted properties of things are not 'in' things as such but 'between' them, and knowledge about the relational world is constituted in a dialogue between people and things. Relational knowing or knowing the relational world - is about knowing the links and connections between things. This is expressed in the relational Renaissance-Baroque view of knowledge, where

To know the peacock [...] one must know not only what the peacock looks like, but what its name means, in every language; what kind of proverbial associations it has; what it symbolizes to both pagans and Christians; what other animals it has sympathies or affinities with; and any other possible connection it might have with stars, plants, minerals, numbers, coins or whatever.

[Westerhoff 2001: 641]

In a northern Fennoscandian context, the same principle is demonstrated, for example, in the academic treatise of a certain Hermann Daniel Bonge (1706–1774)

from the town of Oulu (Sw. *Uleåborg*) in Finnish Ostrobothnia, who in 1730 delivered a disputation about salmon fishing at the University of Uppsala in Sweden (Roling 2017). He described the habitats of the fish and ways of catching it, but rather symptomatically of the period, then spent much of his attention to the various etymologies for the word for salmon (Lat. *salmo*, Sw. *lax*, Finn. *lohi*). In his view, all these words for salmon contained the root *sal* or 'salt', thus referring to a salty fish, while *sal* in turn was supposedly derived from the Hebrew word *salat*, also denoting something salty. The words for trout (Sw. *trutta*, Finn. *taimen*) were according to him similarly derived from the Hebrew word *tarit* that refers to a particular species of fish. In Bonge's view, the words must have derived from ancient Hebrew, since Noah's sons Japhet and Magog were the first humans to make their way up north after the Deluge and had given names to all of the fish in the Sea. Etymologies, in general, play a major role in both Baroque and later explorations of the perceived connection between the North and the Mediterranean world.

Here Hermann Bonge probably drew upon the work of the great Swedish seventeenth-century polymath Olaus Rudbeck the Elder (1603–1702), who had a school of followers at the University of Uppsala, and whose name will come up on numerous accounts in the following pages. Rudbeck held that a healthy climate, clean water and above all plentiful sources of fish were the main reasons why Japhet and Magog made their way to the northern latitudes, eventually settling down in Sweden and Finland. It thus seemed only natural that some remains of their stay should be preserved in either physical monuments or toponyms and folklore in both regions. His son Olaus Rudbeck the Younger (1660–1740) – also a professor at the University of Uppsala – likewise devoted much of his professional life to determining whether the Sámi and Hebrew languages are related (they are not) and went on to search for Noah's Ark in the northern Swedish mountains (Chapter 3).

Dreams, visions and the spirit world can provide insights into how things in the world are related to each other, with direct or indirect contributions to the unfolding of human life. In *Northern Exposure*, the Indian spirit guide One Who Waits tries to help Ed to find his biological parents by conversing with wind, water and other elements ('The Big Kiss' 2.2). Likewise, Marilyn informs Maggie's mother, who is visiting Cicely, that she is an eagle in spirit, and, indeed, she lands unharmed after falling off the cliff ('Birds of a Feather' 5.6). The theme of 'supernatural' flying comes up in other contexts as well. The 'flying man' in the touring circus party seems to be capable of actually flying, but, more importantly, Ed starts waking up in high places at some point ('Get Real' 3.9). It is implied that he must have flown in his sleep and the healer Leonard interprets this as the sign that Ed has been called to become a shaman, and his journey towards shamanhood – which involves engaging with non-humans – becomes a recurrent theme later in the series.

Although fictional, these examples again resonate closely with actual relational ways of knowing and engaging with the environment in the northern world. Dreams and visions – and altered states of consciousness in general – are integral to northern animistic—shamanistic modes of being in the world. They are associated with 'spiritual' flying and diving, which in turn provide an alternative perspective

on reality and one's place in it – that is, they enable 'seeing' and knowing it differently, which can be considered as a key function of magical practices in general (cf. Greenwood 2009). 'Magic', as Glucklich (1997:12) puts it, 'is based on a unique type of consciousness: the awareness of the interrelatedness of all things in the world by means of a simple but refined sense of perception'. Mystical forces are in operation in relationally constituted and interrelated worlds, and knowing the networks of correspondences and affinities that bind things in the world together requires other than rationalist knowledge. Thus, for example, Maggie in Northern Exposure appears to have a special relationship with death in that all her former boyfriends have died in a more or less peculiar manner. There is also, in one episode, a strange correspondence between her and Dr Fleischman where her amorous approaches always result in him getting hurt and almost killed ('Old Tree' 4.25). Whatever a scientist approach makes – or rather does not make – out of such extraordinary forces and apparently meaningful connections between things, they have nonetheless been, and still are, part of (northern) lived worlds and therefore relevant for understanding the dynamics of human relationship with the environment.

Time, temporality and the longue durée

Pregnant overdue, Shelly – a former 'Miss Northwest Passage' and the partner of Holling Vincoeur, the proprietor of the Cicely bar, The Brick – meets a stranger, a teenager girl by the name Miranda, in the self-service laundry ('Hello, I Love You' 4.15). Intrigued by the girl, Shelly engages with her in a conversation and comes to learn figments about her life. Shelly keeps bumping into Miranda in the same place also in the following days, except that every time the girl is a year older, and Shelly comes to believe that the girl is actually her daughter in the future. As Miranda has reached her early adulthood, Shelly realizes that life is treating the girl well and finally goes into labour to give a birth to a baby girl, who is then given the name Miranda.

Time is a messy place and a mysterious thing. For a long time, archaeology relied unproblematically on the idea of linear chronological time - time as a unidirectional arrow that moves forward, with the implication that the past and present cannot exist at the same time. This, of course, is how time is generally conceived in popular thinking, although developments in physics have problematized such linear notions of time since the early twentieth century. However, time and temporality have become a subject of theoretical interest and critical scrutinizing in archaeology especially since the 1990s (e.g. Gosden 1994; Lucas 2005; Olivier 2011). Geographers have likewise problematized the geometric and linear understanding of time-space, inspired by the idea of haunting that effectively suggests an overlapping of different worlds and times horizons. Similar perspectives have recently been pursued also in more theoretically oriented branches of heritage studies (e.g. Harrison 2013).

The Renaissance 'anachronic' understanding of time, as discussed by the art historians Nagel and Wood, provides an example of how time may be understood

in relational terms. Although a linear and historicist understanding of time was not alien to post-medieval Europe, it coexisted with other ways of configuring the past–present relationships, which enabled a peculiar (from a modernist perspective) overlapping and entanglement of histories, periods, cultures, mythologies, peoples and places in a non-linear and non-historicist manner (see Wood 2008; Nagel and Wood 2010). Thus, the sixteenth–seventeenth century Swedes, for instance, could identify themselves with the migration–period (400–600 AD) Goths, while at the same time asserting a cultural affiliation with the ancient Roman civilization that preceded the Goths by many centuries (Neville 2009).

This theme of alternative pasts and utopias projected on the North was rehearsed also in *Northern Exposure*. There is, for instance, the case of a frozen French soldier who possesses a diary that indicates that Napoleon was never at Waterloo, pushing Dr Fleischman on the verge of breaking because nothing that he used to believe in – or regard as true knowledge about the past – seems certain anymore ('The Body in Question' 3.6). Towards the end of the show, Dr Fleischman learns about the mythical 'Jeweled City of the North', supposedly located on an island. He goes looking for it with Maggie, and they indeed find it after an adventure that is modelled after Homer's *Odyssey* ('The Quest' 6.15). This conflation of the classical Graeco-Roman and northern worlds is a recurrent theme also in the real world and in the present book.

Artefacts played an important role in bringing together different times and worlds as they 'stitched through time, pulling together different points in the temporal fabric until they met. By means of artefacts, the past participated in the present' (Nagel and Wood 2005: 408). The past and present worlds could also be brought together through material practices, such as Renaissance mythico-historical plays. These plays mixed seemingly unrelated peoples and places - for instance ancient Goths and American Indians - or the real, mythical and imaginary pasts (Godwin 2002: 181-202; Nordin 2013: 198) and can be understood as a means of bringing the past 'magically' back to life or establishing a gateway or channel between different times. This provides a concrete example of the rather abstract idea of relational time and place and of how there was a broadly mystical or magical dimension to the overlapping or 'percolating' time horizons in the relational reality of the Renaissance. Ghosts and haunting experiences can be thought to provide a modern example of how the past is sometimes leaking into the present. Whatever the 'causes' of such experiences may be, they nonetheless demonstrate one form of how the coexistence of the past and present can manifest itself.

The power of artefacts to 'stitch through time' can be understood in terms of Gell's (1998) concept of artefacts 'abducting' qualities from the people who own them. Artefacts thus become extensions of people and their personality and agency (or ability to make things happen in the world), an idea that others have pursued also in more metaphysical and ontological terms (e.g. Clark 1998, 2010; Ingold 2000, 2011). Artefacts can outlive human persons and, through the qualities they have abducted from them, represent a living presence of the past in the present. They can thus potentially collapse the boundaries between the past and present, just

like '[g]hosts unsettle the assumed stability and integrity of western temporalities and spatialities' (Cameron 2008: 383). Indeed, ghosts comprise a prime example of the 'mystical' dimensions of non-linear time and temporality and illustrate the manner in which the past can be considered to be actively present in the present. By the same token, in early modern Scandinavia the ancient Germanic runic letters were thought to have a mystical connection to the ancient worlds (Karlsson 2009: 71–72), and early modern antiquarian pursuits in general carried mystic and esoteric ambitions (Curran 2007; Curran et al. 2009; Stolzenberg 2013; Herva and Nordin 2015).

Defining the North

General works on the archaeology of Fennoscandia have mostly only been published in languages such as Finnish (e.g. Haggrén et al. 2015) and Swedish (Edgren 1992), and the topic thus remains poorly known outside the region. It is illustrative that, so far, the only English-language textbook on the prehistory of Finland (Kivikoski 1967) was published over fifty years ago at the time of writing this volume. While the present work is hopefully helpful in highlighting some of the research done in the region to an English-speaking audience, our approach is not of the systematic or chronicling kind, even if the individual chapters do follow a rough chronological outline. Instead, we take up a variety of themes and phenomena in the northern world, and specifically northern Fennoscandia, at different times. We identify cultural and cosmological elements that appear to have persisted in the North for very long periods of time - in some cases from the Neolithic to a recent past and even the present-day world – but our focus is not on specific cultural expressions as such. Instead, we are primarily interested in the more general-level structure and dynamics of northern relational modes of being in the world. Long-term continuities on this 'deeper' level do not imply an absence of change or cultural stagnation. We posit that the persistence of a particular cosmological element, for example, is not only a matter of passing on abstract cultural knowledge from one generation to another but rather reveals something more fundamental about the unity and reciprocal dynamics of human-environment relations, which must be understood in relational terms. The cases we discuss arise from this wider aim.

Various cultural features associated with circumpolar and Arctic cultures bear witness to deep and ancient roots even today. Modernity never completely wiped out 'non-modern' or 'non-rational' ways of thinking and being in the world, but their significance to the unfolding of the modern world is often ignored, overlooked and marginalized, resulting in a skewed perspective on modernization. However, modernist ideas and categories continue to haunt the portrayal of the premodern world. This book is, in essence, an attempt to understand how the northern animistic and shamanistic ways of being in the world have been generated and reproduced over millennia in a reciprocal relationship between people and the world. However, to assist the reader in following the argument, it is probably useful to provide a brief overview of the postglacial past of the region, as the characteristics and datings of

various prehistoric and historic periods differ significantly from those of Central or Southern Europe. But first it needs to be clarified what we mean when we speak of the North.

As noted, we focus geographically on north-eastern Europe, and more specifically on Fennoscandia, but alas the geographic terminology related to this corner of Europe is quite confusing. While Fennoscandia as a geographical area can be unambiguously defined, its usage tends to be limited to a narrow group of specialized fields such as geology and meteorology, and to a lesser extent archaeology. Scandinavia is a term much more commonly used by laypeople when speaking of the northern reaches of Europe, and in English it is often used collectively of the five countries of Sweden, Denmark, Norway, Finland and Iceland. In Scandinavian usage, however, Finland is usually left out due to the fact that Finnish is not a Germanic language but belongs to the completely unrelated Finno-Ugric language group. However, Finland's historical and cultural links to the Scandinavian sphere run deep, while from a purely geographical perspective neither Iceland nor Denmark are part of Scandinavia, which in geography refers to the northern European peninsula formed by Norway, Sweden and the north-western parts of Finland.

To escape this rather messy situation, the term 'Nordic' (Sw/Dn/No. nordisk) is commonly used in the region to cover all five countries, which in the post–World War II period sought shelter from the Great Powers by deepening mutual political and cultural cooperation and formed the Nordic Council in 1952. But then, unlike its Scandinavian counterpart, the English word 'Nordic' is not without ambiguity or historical ballast: it sometimes suggests northern Europe in general but is also associated with Nazi ideological concepts such as the 'Nordic race'. Overall, the geographic terms intended to cover north-eastern Europe all seem to be more grounded in ideological, political or cultural discourses than any observable facts.

When speaking of 'the North' in this book, we will generally refer to Fennoscandia, with an emphasis on its central and northern parts characterized by boreal forest and tundra environments. This emphasis on eastern Fennoscandia is partly due to the fact that this is admittedly the northern region that the two of us are most familiar with, but at the same time it is, as indicated earlier, probably also the least known part of Fennoscandia in the English-speaking world because of the language barrier - and it thus deserves to be 'exposed'. At times, we may also use the word 'North' to refer to the entire Nordic region, but in such cases the meaning should be obvious from the context. Only sporadic references will be made to the archaeology and ethnography of Denmark and Scania (the southernmost province of Sweden, which until 1658 was a part of Denmark), as that region is in many ways distinct from areas further north. It is characterized by a limestone bedrock, a temperate climate and deciduous forests, and while the climate and vegetation have of course changed over time, it is in part due to these natural factors that the region has undergone a rather different (pre-)historic trajectory compared to that of the Fennoscandian Shield. However, boundaries such as these are obviously artificial and porous. Indeed the connectedness of the North with the South (as well as other

directions) is one of the main themes of our discussion, and therefore some degree of vagueness in defining 'the North' cannot be escaped.

A brief outline of the Fennoscandian past

A significant feature of the Fennoscandian past that makes it distinct from Central and Southern Europe is that it was covered by a thick glacier during the last (or 'Weichselian') glaciation. The region was thus uninhabitable during the Upper Palaeolithic, and the ice sheets moreover effectively removed all signs of older occupation. The first traces of pioneer human occupation in Fennoscandia are thus 'only' ca. 11,000 years old, or from the Early Mesolithic period, and related to small groups of highly mobile hunter-fishermen. Mesolithic sites generally bear just modest traces of human activity, dominated by lithics and burnt bone, as in the boreal zone soils are acrid and organic material is generally preserved only in exceptional environments (such as waterlogged conditions or permafrost). The Mesolithic sites, moreover, bear few signs of permanent dwellings or burials. Large burial sites such as the famous Olenyi Ostrov in Karelia (Gurina 1956) and rock art emerge towards the end of the period, suggesting social changes and changing relations towards the environment. Pottery is adopted in north-eastern Europe in the latter half of the sixth millennium BC, with the Early Comb Ware, while the emergence of the so-called Typical Comb Ware around 4000 BC marks a plethora of changes across much of Fennoscandia, including a more sedentary lifestyle and increasing signs of social complexity - that is, a variety of cultural traits associated with the Neolithic (Chapter 3). Unlike in southern Scandinavia, where the emergence of Neolithic ways of life is related to Central European developments such as the Funnel Beaker Culture (ca. 4300-2800 BC), the Neolithic of northern Fennoscandia seems to be related to impulses from the Far East (Jordan and Zvelebil 2009; Nordqvist 2018).

The divisions between South and North and East and West are indeed a recurrent theme in Nordic prehistory and history and their later representations. Although as noted such divisions are artificial and porous, a general division between southwestern Fennoscandia and the rest of Fennoscandia can be identified at least since the Neolithic and becomes rather clear in the Bronze Age (ca. 1800-500 BC). South-western parts of Finland manifests connections to the Nordic Bronze Age, whereas the northern and eastern parts of Fennoscandia retain contacts to the East and appear 'poorer' in cultural expression – but are also less well known and studied.

The Iron Age in Fennoscandia begins around 500 BC with both imported iron objects and evidence of indigenous iron-making occurring at the same time. The earliest phase of the Iron Age, the so-called Pre-Roman Iron Age (500 BC-0 AD), appears to have been characterized by receding settlement and possibly a very low human population. A slow recovery of at least permanent agricultural settlement begins in the Roman Period (AD 0-400), even though it should be noted that an undue concentration on burials (especially ones equipped with grave goods) may skew the picture of both this and all other periods of the Finnish Iron Age. In the course of the 'Migration Period' (AD 400-600), we begin to see a marked increase

in the influx of goods from both the Germanic and Baltic cultural spheres – in effect resulting in a 'rebirth' of the Fennoscandian world and its realignment with the European world following the fall of the Roman Empire. Although there were connections between the Graeco-Roman world and the northern reaches of Europe already during classical antiquity – just like there had been connections during the Bronze Age – the North started to loom in a new manner in the broader European world in the second half of the first millennium AD. This was especially due to Viking activity (beginning in late eighth century AD) and the incipient state formation and Christianization of the Nordic world around the turn of the second millennium. Even if these processes affected the vast region of Fennoscandia very differently and at different times, it is nonetheless against these large-scale processes that the signs of increased activity – such as trade – in Late Iron Age northern Fennoscandia should be understood (Chapter 7).

The historical period begins comparatively late in Fennoscandia. The threshold between prehistory and history has traditionally been set at AD 1050 in the southwestern part of the region and AD 1300 in eastern and northern Fennoscandia, although in truth, written sources remain very scarce throughout the entire medieval period and in the North are almost non-existent. Medieval cultural forms in southern Fennoscandia, with urban centres and close contacts to the continental world, differed radically from those of northern Fennoscandia. The Scandinavian kingdoms of Denmark, Norway and Sweden formed in the Middle Ages, but northern Fennoscandia remained only partly and loosely under royal control. Meanwhile in the East, the Republic of Novgorod (and later Muscovy) likewise sought to expand its influence northwards, leaving the territory of present-day Finland a meeting ground and conflict zone between 'Western' (or Scandinavian) and 'Eastern' (or Russian) interests until the latter part of the sixteenth century.

Sweden established a prominent presence across present-day Swedish and Finnish Lapland – or Sápmi, the homeland of the indigenous Sámi people – in the course of the sixteenth and seventeenth centuries. Even though it was a poor, underdeveloped and sparsely populated country at the dawn of the Early Modern Period, the expansive and militaristic Kingdom of Sweden managed to reinvent itself and emerge as a European great power in the seventeenth century. For a short time, Sweden dominated the Fennoscandian and Baltic Sea world and embarked on colonial ventures along with its long-time adversary Denmark. Sweden and Denmark reached for overseas colonies, such as New Sweden in present-day Delaware in North America, but northern Fennoscandia, too, was now connected to the traditional heartlands of the kingdom through essentially colonialist ideologies and practices (Chapter 2).

The Swedish Empire collapsed in the beginning of the eighteenth century with the Great Northern War (1700–1721), fought between Sweden and Russia, which also marked the founding of St Petersburg in 1703 and thus the re-entry of Russia into the Baltic Sea world. At the same time, the European fascination with the northernmost reaches of the continent, as well as its indigenous inhabitants, the Sámi, increased in momentum in the eighteenth century, with travellers driven

by both scientific interests and sheer curiosity exploring the exotic and unknown North. This Enlightenment Era interest in the North was in every respect a continuation to the European Arctic explorations of the sixteenth century, which in turn were partly inspired by the classical literary sources concerning northern marvels, where the fantastic and the factual were inextricably intertwined.

The nineteenth and early twentieth centuries brought about industrialization and the formation of nation states, including Norway's independence from Sweden in 1905 and the establishment of an independent Finnish republic in 1917. This process also saw the gradual settling of definite state borders in the northernmost parts of Fennoscandia, as well as other boundaries between regional and territorial units, which deeply impacted upon traditional northern ways of life. For millennia, the remote North had been an 'open borderland' - an arena for mobilities and encounters between different groups of people with different ethnic and cultural backgrounds. Unlike modern state borders that limit mobility, such borderlands are deeply dynamic and generational places, rendering the northern 'periphery' a meeting zone for trade, intermarriage, possibilities and innovation. Therefore, together with other detrimental effects of modernization and colonization in the north, the cessation of free movement caused severe social problems and contributed to the increasing marginalization of the Sámi in their ancestral homeland in the course of the twentieth century.

However, the fundamental changes brought about by modernization also promoted a nostalgia for and research into premodern times. There was an understanding that modernization posed a threat to traditional forms of life, which - although viewed as doomed to disappear - were nonetheless deemed worth recording before they disappeared forever. Nations and nation states required narratives of their pasts and origins, while industrialization and urbanization (and the associated large-scale relocation of people) fostered a sense of rootlessness. All these interlinked processes promoted an interest in and study of traditions and ancient times in the form of archaeology, ethnography and folkloristics - all of which were fields of research in which scholars from the Nordic countries pursued pioneering and groundbreaking work. Modernization thus contributed to the preservation of archaeological and historical sites, as well as the early collecting and documenting of the rich northern mythology and folklore, such as the Icelandic sagas and the Finnish national epic, the Kalevala (first published in 1835).

The Kalevala and related Nordic folklore plays an important role in the understanding of northern cultures and pasts in our research. However, it should be kept in mind that the book known as the Kalevala (which can be loosely translated as 'The Land of Heroes') is a literary creation of Elias Lönnrot (1802-1884), a Finnish historian who was instrumental in collecting the poems and believed that they represented fragments of an ancient Finnish epic not unlike the Homeric Iliad and Odyssey. He was not content to publish the poems as such, but heavily edited and processed them, forcing a coherent storyline into a body of folk poetry that in reality is incoherent, contradictory and quite often incomprehensible. Lönnrot's Kalevala thus should not be used in drawing analogies or interpretations in archaeological or historical research – the original poems must be used instead (an anthology of English translations has been published in Kuusi et al. 1977) – and even then only with great care (see e.g. Lahelma 2008, 2010 for a discussion).

Unlike the Norse myths, which were written down by medieval Icelandic scholars 'only' a couple of centuries after the conversion of the island, the *Kalevala* poems were collected mostly in the nineteenth century, while they were still part of a constantly changing and evolving oral tradition in an essentially illiterate Karelian society. They thus do not relate directly to an Iron Age situation (let alone a Stone Age one), but 'belong' in nineteenth-century rural Karelia, even if they carry echoes of much more distant times. The poems were situational or related to a particular ritual context – an aspect relevant to their interpretation but often ignored by the early collectors of folklore – and the mythical themes reflected in them are evidently historically stratified, making their decipherment an incredibly complicated case of detective work (Siikala 1992, 2013). Even so, they sometimes appear to open windows to an incredibly distant past, offering a unique opportunity to interpret archaeological phenomena that would otherwise remain completely mute.

The structure of the book

This book is structured in three parts – around the themes of land, water and sky – modelled loosely after the traditional three-tiered northern shamanistic understanding of the world. In this view, land is most readily associated with 'this world', whereas water has associations with the underworld and the sky with the upper world. Although the relationships between the three worlds (or dimensions of the world) cannot be reduced to a 'geometrical' superposition, but have rather more complex mutual interrelations, the tripartite model provides a structure that identifies distinct themes related to basic cosmological notions. Such notions have been widely acknowledged in the North over the millennia, but at the same time they allow a certain overlap between the chapters of this book. This also reflects the nature of northern cosmological notions, which do not follow a strict or coherent doctrine but are often ambiguous or contradictory.

The first part of the book ('Land') traces the entanglements of the spiritual and material in relation to land, including underground worlds, from prehistory to the recent past. We focus on three basic components of terrestrial environments and how northern cultures have related with them, namely rockscapes, soils and the forest, all of which bring together a number of material, experiential and cosmological aspects. These are considered in a long-term 'deep-time' perspective to which postglacial processes, such as isostatic land uplift, provides a general background, as they have shaped northern environments from the end of the Ice Age to the present. Indeed, we propose that glacial and postglacial processes have linked together different generations in northernmost Europe and in part shaped the perception and understanding of the northern world through millennia.

The second part ('Sea') engages with the Baltic Sea region as a distinctively maritime world similar to the Mediterranean: an inner sea that has connected

different regions and cultures of northern Europe. Furthermore, bodies of fresh water – great lakes and rivers – are a prominent feature of northern landscapes and have further facilitated mobility and cultural contacts over vast areas in Eurasia, not just throughout prehistory and the historical period. Finally, the North Atlantic and the Arctic Ocean frame the Fennoscandian world, and bogs and wetlands are one of the predominant landscape types in northern Europe, besides woodlands and tundra. Water, and particularly the contact zone between water and land, can be seen as a cosmological constant in the Nordic worlds, marked archaeologically by such remains as rock art, burial cairns and stone labyrinths. In this section we trace the role of water in the northern experienced, symbolic and cosmological world in a long-term perspective.

The third part ('Sky') addresses the significance of the sky and the celestial world in northernmost European cultures. The sky was more intimately present in premodern lifeworlds than it is in today's urban contexts where artificial light can substitute sunlight and 'light pollution' obscures starlight. Various aspects and elements of the sky, from migratory birds to the phases of the moon, have been subject to symbolic construction in northern pasts. Two phenomena particular to the extreme North - the mysterious Aurora Borealis and the midnight sun (and conversely, the months-long darkness of winters) - accentuated the significance of the sky in the northern way of life and affected northern mentalities, perceptions and representations of the North since classical antiquity. Some elements of northern skies have undoubtedly been invested with meanings among northerners since prehistoric times, such as the North Star, around which the northern sky appears to revolve, and the associated constellation of Ursa Major (the Great Bear). In the traditional Finnic cosmology, the bear is considered to have heavenly origins, and it has been conceived as a forefather to and kin of people. Combining archaeological, historical, ethnographic and folklore sources affords glimpses of human relationship with northern skies through time.

PART I Land

2 STONE-WORLDS

A race to the Arctic

Arctic resources, ranging from minerals to fish, have been subject to a thriving interest in recent years and are intertwined with the debates of environmental and climate change, as well as indigenous issues and geopolitical interests in the northern Polar Regions. Global warming has particularly pronounced effects in the Arctic, opening up new opportunities in the North, such as the extraction of previously inaccessible mineral deposits or access to new Arctic transportation routes like the Northeast Passage, while at the same time endangering the fragile Arctic ecosystems and indigenous ways of life. But although mineral riches are one of the most important reasons for the present-day global interest in the North, the contemporary interest in the 'New Arctic', and the economic opportunities that it is imagined to provide, is but one expression of centuries- and millennia-long fascination of real and imagined northern riches. This fascination has its roots already in the amber trade of the Mycenaean and classical periods and in medieval trade in walrus-tusk ivory. A 'race for the North' was taking place already in the Middle Ages when the Scandinavian kingdoms and the Republic of Novgorod sought to establish their presence in the northern fringes of Fennoscandia and thus secure their access to its resources, of which furs and fish were particularly attractive at the time.

However, this interest reached a completely new level in the Age of Discovery, or the late sixteenth and early seventeenth centuries, when explorers like the Dutch Willem Barentsz (1550–1597) mapped the Arctic and rising powers such as Sweden and Muscovy began to systematically explore and exploit the resources of their northern extremes. The early modern period saw the intensification and diversification of the interests in northern and Arctic regions of Europe, with economic, cultural and scientific dimensions to them. In addition to the Nordic and Russian states, the British, Dutch and French were drawn to the North and exploring the

opportunities it promised to offer. Mineral resources became of a special focus of interest in the seventeenth century, and the dreams and realities of mineral riches have significantly affected northern environments and people ever since.

On a different level, stones, rocks and the mineral world have also played an important role in the landscapes and mindscapes of northern cultures from prehistoric to modern times, and the spiritual and mythological dimensions of the stone-worlds underneath are crucial to understanding the nature of the early modern and modern mining ventures (cf. Boivin 2004a). Although rock formations or other features of rock and stone as landscape elements have presumably been meaningful already to early Mesolithic communities, and stone was quarried in some magnitude for artefacts, a different kind of engagement with the rocks becomes evident in the Mesolithic–Neolithic transition in the latter sixth millennium BC (Herva et al. 2014). There is a new fascination with colourful or shiny rocks, polished surfaces and digging deeper into the rock. One important manifestation of this engagement is what Gjerde (2010) calls the 'rock art explosion' in northern Europe.

Although a small number of early and middle Mesolithic rock art exists in northern Fennoscandia, the situation changes dramatically throughout the region virtually simultaneously between 5500 and 5000 BC. The number of sites suddenly and greatly increases, 'mega-sites' like Alta in Norway, Nämforsen in Sweden and River Vyg in northwestern Russia emerge and the style and choice of motifs depicted undergoes a major change. Whereas the rock art of the preceding period was focused on animals, typically naturalistic in both size and execution, now humans engaged in various scenes and activities emerge as a central theme, and new types of figures such as boats are being depicted. All of this probably signifies changes in the meaning and purpose of rock art, as well as new ways of relating between human and non-human beings, but there is also evidence of a new kind of attentiveness to the shapes and features of the rock itself. For example at Alta, according to Helskog (2004), the undulations, crevasses and small pools of water are integrated into narratives played out in the carvings (Figure 2.1).

At River Vyg, likewise, the shapes of the rock appear to represent hills and valleys, through which groups of skiing hunters speed in pursuit of prey (Janik et al. 2007). Gjerde (2010) has pursued this view even further, suggesting that the microtopographies of rock surfaces were conceived as 'maps' which correspond with the surrounding macro-landscapes. At Nämforsen and Lake Onega, for example, boats have been carved into black linear lava formations that resemble rivers, and significantly these 'rivers' in the rock may refer to real-world rivers as both sites are immediately adjacent to a river.

The world inside the rock

Some sites also indicate a fascination with the world beyond the rock surface. At Vingen, western Norway, many of the carvings have been made inside small cavities formed by boulders (Mandt and Lødøen 2012), and at Lake Onega images of swans appear to emerge from cracks in the rock or, alternatively, to disappear into the



FIGURE 2.1 Undulating bedrock at the rock carvings of Alta, northern Norway. The carvings (painted red in modern times to increase visibility) are intimately related to the microtopography of the rock. Photo: Antti Lahelma.

Underworld through 'openings' formed by cracks in the bedrock (Lahelma 2010). The most famous figure of the Onega carvings, a large anthropomorph known locally as 'The Devil' (Rus. Bes), is intentionally positioned around a large crevice so that it divides the figure in two. At some Finnish rock painting sites (such as Salminkallio and Siliävuori), apparently significant cracks and openings have been emphasized with red paint (Lahelma 2012b), and in a few cases, paintings have been made inside caves and semi-caves. Actual cave paintings occur in Trøndelag, north-western Norway, suggesting a similar interest with the Underworld (Norsted 2013). Their dating is uncertain (the early Metal Period has been suggested because of artefacts associated with them), but as Sognnes (1982) notes, stylistically they resemble the Finnish paintings and thus could be broadly contemporary.

An interplay between rock art and rock surface and a fascination with the Underworld are of course phenomena known already from Palaeolithic cave art (Clottes and Lewis-Williams 1998; Lewis-Williams 2000), and shamanistic interpretations of rock art emphasize the rock as an opening to - or a membrane between - different dimensions of the world. This notion even occurs in Kalevalametric poetry, where one particularly significant poem appears to describe the making of rock art (Lahelma 2010). In it, the sage Väinämöinen 'drew a picture on the stone, a line on the rock', as a result of which 'the stone split into two', and he

sees snakes – denizens of the lower world – inside the rock. There is, of course, a staggering temporal gap between Neolithic rock art and historically and ethnographically documented traditional northern cosmologies, but it is interesting that in Finnish lore falling into a shamanistic trance is referred to as falling into a cleft of rock (Lahelma 2007). Siberian folklore and rock art express similar ideas of shamans entering into rock and meeting with mountain spirits, which could also be conceived as ancestors, sometimes coupled with the notion that in order to gain their first drum, shamans were to take a journey into a mountain (Rozwadowski 2017).

In northern ethnography, the widespread notion of non-human beings residing inside the rock was in part vindicated by auditive evidence, in particular echoing. Ethnographic accounts concerning echoes in association with Sámi sacred sites suggest that echoes were perceived as evidence of spirits residing inside particular cliffs and were among the reasons why particular loci came to be viewed as sacred (Lahelma 2010). Rainio and others (2018) have explored the significance of the acoustic features in defining 'special' places – rock art sites and a Sámi sieidi site – through 3D–recording sound waves and their reflections in the landscape. They discovered that the painted cliffs produced particularly clear echoes that appeared to come directly from the painted images and moreover produced confusing 'auditive illusions' that contributed to an 'eerie' auditive environment, suggesting that sounds were indeed among the reasons why particular cliffs were perceived as 'special'.

The notion of venturing inside rock, in turn, was not merely a shamanistic mental concept but had a correlation with material practices, especially in the form of quarrying. Quarries and quarrying were effectively a form of entering and engaging with a world under the surface of rock in a material, experiential, spiritual and metaphysical sense. While quarrying was a means of acquiring raw material for stone tools, it was also an experiential and spiritual journey inside the earth, a mode of getting to know what the world was like beneath the surface. Even small-scale breaking into the ground would potentially have had spiritual or metaphysical consequences, as it involved coming into contact with the beings and powers residing underground. It has, for example, been suggested that the empty and apparently immediately backfilled small pits sometimes documented at prehistoric sites in northern Europe could be seen in terms of communicating with the underground world (Davies and Robb 2004: 147). This may also be the reason why rock art is sometimes associated with stone quarries (e.g. Mulk and Bayliss-Smith 2006; Goldhahn 2010). Because disrupting the rock surface was a dangerous activity, it necessitated ritual engagements with the rock and the inhabitants of the Underworld. In Fennoscandia, historical and folklore accounts reveal that the underground world was believed to be inhabited by gnomes and trolls - nonhuman beings that were in some ways similar to humans. They lived their lives inside the rock, unconstrained by it, and were social beings with which people could and did occasionally communicate and engage (Sarmela 1994: 414).

Quarrying intensified in the late Mesolithic, sometimes reaching massive proportions, as exemplified by the diabase quarry of Stakallneset (Figure 2.2) and greenstone quarry at the island of Hesperiholm in western Norway, where



FIGURE 2.2 A view from the vast Mesolithic diabase quarry of Stakallneset, central Norway. Photo: Antti Lahelma.

as much as 400 m³ of stone has been extracted at each of them (Nyland 2017). The use of these quarries continued well into the middle Neolithic, and Nyland (2017) makes the argument that quarrying became an expressive act and a sociopolitical strategy undertaken to demonstrate continuity, uphold traditions and strengthen group cohesion. For example, greenstone would have been readily available at sites more easily accessible than Hesperiholm, a little island in the open sea, but evidently it was essential to import the material from that particular site. The myths and history associated with the site were in a sense attached to the artefacts made, and distributing them among group members may have contributed to a shared identity.

The diabase quarry of Stakallneset has likewise been regarded as a special, possibly sacred site. With this in mind, it seems significant that excavations of hut-floors associated with the huge rock carving site of Vingen in western Norway produced a pecking tool made of diabase (Lødøen 2012). Geological thin-section analyses have confirmed that the raw material for the artefact almost certainly derives from Stakallneset. At the same time, practically no flakes or axes of diabase were found at the Vingen excavations, even though both are extremely common at virtually all other contemporary sites in the region. This has led Lødøen (2012) to suggest that its use at Vingen was strongly regulated and reserved into 'sacred' contexts, in particular the making of rock carvings.

Crystal cavities and other marvels of the Underworld

In early modern historical sources as well as in modern mining folklore, the world underground is represented as a place of manifold marvels:

The myriad sizes, shapes, and colors of rocks underground as they become visible in the flickering light of a candle or in the pale light of the miner's lamp account in large part for the numerous fanciful stories one hears of ghosts, white mules and other animals, devils, and so forth, supposed to inhabit the workings of certain mines. Almost every mine of any size has its ghost story.

[Hand 1942: 131]

This would not have been simply a matter of imagination but also supported by actual encounters with colourful or otherwise special rocks and ores. In physical terms, the underground world was familiar to the prehistoric inhabitants of Fennoscandia only 'superficially', or in very small scale compared to the limestone caves or the vast quarries and mines in some other parts of Europe. However, even this kind of a small-scale penetration into rock would have introduced people to a range of otherwise unfamiliar experiences associated with being inside of rock. The introduction of deeper mines in the historical period would only have amplified this sensory strangeness of the underground world – weird sounds, colours and light effects and even hallucinations, illusions and transformations.

The so-called crystal cavities of eastern Fennoscandia are a particularly interesting and illuminating example of the marvels that could be encountered inside the rock (Figure 2.3). The cavities, which have only recently attracted the interest of archaeologists (Mökkönen et al. 2017), vary in size from tiny to over 2 m in diameter, usually with a thin pegmatite lining and quartz or amethyst prisms covering the interior. Because they occur in a soft, crumbling type of stone known as rapakivi granite, some of the cavities have become exposed by glacial forces and have been subject to quarrying activities especially during the Typical Comb Ware phase in the first half of the fourth millennium BC (Mökkönen et al. 2017).

Although crystal cavities have not yet been subjected to proper archaeological research, at least four sites in south-eastern Finland show traces of prehistoric (most likely Stone Age) quarrying for crystals, as evidenced by knapping debris and the occasional chipped artefact. The archaeological record of the region confirms that the systematic exploitation of the cavities begins in the early Neolithic and becomes



FIGURE 2.3 The entrance to a quarried crystal chamber in Hitonharju, south-eastern Finland, known as the 'Devil's Nest'. One of the authors (V.-P. Herva) is shown as descending into the chamber that is about 2 m in diameter and accessed through a half a metre wide hole in the rock. Photo: Teemu Mökkönen.

relatively common in the Typical Comb Ware phase, when flakes and artefacts made of rock crystal, smoky quartz and related high-quality quartzes become relatively common (Mökkönen et al. 2017). The exposed cavities would have been filled with glacial deposits and so had to be emptied in order to access the crystals, which may have been thought of as a form of descent into another dimension of reality and thus associated with shamanic trances. This experience would have been further heightened by the strange, geometric shapes of the prisms and their unusual visual properties, which may have evoked connotations with the light phenomena experienced in altered states of consciousness and ideas of 'seeing' behind the surface of things (cf. Lewis-Williams and Pearce 2005: 253, 259, 280; Reynolds 2009: 160).

Rock crystals and smoky quartz provided first class raw material for knappers: their properties equal those of flint, and the artefacts made of them can be exquisitely beautiful. But what is more, rock crystals (especially if they are convex or concave) can sometimes work as 'lenses', looking through which reveals a different world than that seen with the naked eye. Moreover, crystals can function as prisms that reflect light or break it into rainbow colours. Associating rock crystals with spirituality may seem a bit 'new ageish', but human fascination with rock crystals goes back several millennia, as evidenced, for example, by one of the graves excavated at the TCW burial ground of Vaateranta, south-eastern Finland. Among other grave goods, the buried individual had been given an idiomorphic rock crystal, one end of which was notched, indicating that it had been attached to a cord and worn as a pendant (Mökkönen et al. 2017).

An increasing awareness of the richness of stone-worlds, which emerged together with the increased exploitation of mineral resources, is also reflected in the choice of lithic materials, which (particularly from the TCW phase onwards) seem to celebrate colour, shininess and other 'non-functional' properties of stone. Artefacts of red slate, a material specific to the Caledonian mountains of northern Scandinavia that often features decorative white stripes, were distributed in an intensive exchange network where the important rock art site of Nämforsen in northern Sweden seems to have been a central node (Baudou 1992; Goldhahn 2010). Although red slate had been used locally already during the Mesolithic, in the early Neolithic artefacts made of the material spread over a vast area ranging from north-western Finland to much of northern Scandinavia and as far south as the Uppland region of Sweden. Some of them feature elaborate shapes such as carved elk heads, suggesting that they belonged to the ritual sphere (Hallgren 2012).

In a similar way, the metatuffite known as 'Onega green slate' that derives from deposits on the western shores of Lake Onega, Karelia, had been used and traded already during the Mesolithic, but their distribution and frequency increases dramatically in the Early Comb Ware and Typical Comb Ware periods (Heikkurinen 1980; Tarasov and Gogolev 2018). As with the quarries of Hesperiholm and Stakallneset discussed above, the location of the main quarry of Lake Onega slate at the outfall of River Shuya on the western shore of the lake also seems to have been symbolically significant and perhaps accounts for the fact that the so-called 'Karelian adzes' produced there were so widely distributed. The Onega rock carvings on the eastern shore of the lake were a major ritual congregation site for millennia, and it has been suggested (Lahelma 2010) that the lake itself may have been mythologically important, perhaps understood as the place where the world was created. Onega green slate is also a prime example of how new dimensions of stone could be discovered also in a small scale: the unworked slate is non-descript and brownish, but when grinded and polished, it transforms into a green and sparkly material. Some artefacts made of green slate are immaculately shaped and show no signs of use-wear, such as a shiny, impractically long (40 cm) curved adze from Kiuruvesi in eastern Finland – an astonishing piece of craftsmanship quite unlike most of the rather roughly worked Mesolithic stone tools. The practices or grinding and polishing stone thus had the capacity of revealing different and surprising aspects of stone, a discovery that the northern early Neolithic societies made great use of (Herva et al. 2014).

Cavities and recent folklore in the North

Developments during the Neolithic set the stage: a fundamental change in the way the subterranean world was perceived, nature manipulated and man's role accentuated. Rocks and stones have continued to be culturally and cosmologically

significant among northern cultures also in later times, as demonstrated by historical and folklore materials. A famous case, discussed, for example, by Bradley (2000), is the Sámi sacred site of Ukonsaari in Finnish Lapland. The site is a strangely shaped little rocky island on Lake Inari, where sacrificial meals were held still in the late nineteenth century (Äikäs 2015). Sir Arthur Evans visited the island in 1873 and excavated what he called a 'votive cave', finding bones, charcoal and a late Iron Age silver ornament in it. When the Finnish ethnologist T.I. Itkonen conducted fieldwork in the region in 1910-1912, the site was still venerated to the extent that his informants refused to point out the actual site of sacrifice at the island (Itkonen 1962: 136-137). Subsequent investigations have confirmed that the ritual activity was concentrated on a little rock shelter on the south-western part of the island (Okkonen 2007). In general, mountains and rock cliffs were widely venerated in traditional Sámi religion as the abodes of supernatural beings and people of the Underworld (Bäckman 1975). Particular kinds of cracks or formations in the rock, such as the famous door-shaped Passeuksa, or 'Sacred Door' in Padjelanta, Swedish Lapland (Mulk and Bayliss-Smith 2006), were perceived as entrances to an enchanted Underworld.

Finnish historians and other scholars have occasionally discussed the relationships between the geographies of the Kalevala and the real geographies of eastern Fennoscandia - that is, where or if the places described in the epic poems can be put on a contemporary map (Chapter 7). These explorations have produced uncertain and ambiguous results, but there are some intriguing cases where the poems seem to refer to real cliffs and rock formations. For example, several poems that describe a magical battle between two seers - the Sámi Joukahainen and the Finnish hero Väinämöinen – refer to the hill of Pisa, a rock formation ca. 270 m high that rises well above the surrounding plateau in central/eastern Finland. The same poems also refer to the hill as the 'Hill of Hell' (Fi. hornan kallio), and it seems significant that the hill also features a particularly large crystal cavity traditionally known as the 'Devil's Cellar'. The cavity has been almost completely quarried clear of rock crystal, presumably already in the prehistoric period.

A second interesting example of a real location possibly described in the poems concerns the so-called 'Kipumäki' (or 'Pain Hill'), a supernatural cliff to which Finnish folk healers banished the pains of their patients and where the spirit of maladies known as Kiputyttö, or 'Pain Girl', was thought to reside. The folklore related to Kipumäki precedes the collection of the Kalevala, and although it has been widely considered a purely mythical site, already in the eighteenth century, the antiquarian Christfrid Ganander (1984) speculated that it might also represent a real location. This suggestion has recently been elaborated by Tuomo Kesäläinen (Kesäläinen et al. 2015; Kesäläinen and Kejonen 2017). Based on the relevant descriptions of Kipumäki, as well as the travels of the person who documented the poem, Kesäläinen argues that the mythical Kipumäki can be identified with a specific place near the town of Rovaniemi – a central place of northern Finland since ancient times - on the Arctic Circle.

According to the tradition recorded in the poems and oral accounts recorded by the nineteenth-century Finnish historian and author Zachris Topelius (1818–1889), the Pain Hill was located near river Kemijoki, at a cliff where there are nine holes on top that have been 'bored into the rock', with the largest hole in the middle said to be 15 m deep. Furthermore, the hill is said to be located where three large rivers converge. Kesäläinen observes that the topographic description of Kipumäki matches perfectly with that of a rocky hill today known as Sukulanrakka, a local geological attraction on top of which there are nine so-called giant's kettles, or large cavities formed in the bedrock by boulders rolling in glacial rivers. The kettles are among the largest found in Finland, and the deepest of these formations indeed reaches 15 m into the bedrock, as specified in the poems. Because several of these formations have characteristic corkscrew-like walls, they do indeed give the impression of having been bored into the rock with a gigantic drill (Figure 2.4). The place names associate the holes with both demons (Finn. hiisi) and Bishop Hemming (1290–1366), an important medieval bishop of Finland.

It is of course impossible to know for certain if the Kipumäki referred to in folk poetry actually refers to a real identifiable location – let alone a single location – as even if it was associated with a real place, the place identified as Pain Hill may have varied regionally. However, what matters here is not so much whether or not the said rocky hill in Rovaniemi is the actual Pain Hill of the poems but rather the way



FIGURE 2.4 A 'Devil's kettle' (Finn. hiidenkirnu) at Sukulanrakka near Rovaniemi, possibly related to the myth of the 'Pain Hill'. Photo: Tuomo Kesäläinen.

in which it illustrates how real topographies were tied to mythical descriptions of landscapes and offers clues of how rock formations were signified in the past. Even though the archaeological evidence is largely absent at such formations (or at least so far unrecognized), there can be little doubt that various features in 'rockscapes' such as the giant's kettles - have attracted the attention of local people from the prehistoric past up to the recent past and present times.

Early modern northern mining as dreamwork

While the notion that all 'places' are culturally constructed is self-evident, northern Fennoscandia seems to have formed an unusually fertile ground for European cultural images, ideas and fantasies over the centuries. The northern world is thus a particularly illustrative example of the deep fusing of the real and imaginary, or the natural and cultural. In other words, our view of the North must be seen as inextricably entangled with the historical processes unfolding in the northern margins of the continent and are critical, for instance, to understanding how the various projects of modernization such as industrialization (here exemplified by mining) unfolded in the North.

Contemporary and historical extractive industries are often regarded as mostly technical and economic 'rational' pursuits, but mining is also deeply imbued with sociocultural, ideological and cosmological issues. Early industrial mining in central and northern parts of early modern Sweden can thus be regarded as a kind of dreamwork, which unfolded not simply in relation to rationally encountered physical realities in the North but was thoroughly affected by dreams, fantasies and imaginaries. In other words, there was a distinctive irrational (as it would be understood today) and utopian dimension to early extractive industries.

In Sweden, mining and metal industries have been central to the representation of the nation's progress and fortune (Evans and Rydén 2007), and metal production was elementary to the modernization of Sweden, as it has been an important supplier of copper and iron to European consumption since early on. Large-scale metal production in Sweden dates back to the Middle Ages, but mining and metal industries expanded into new regions in the early modern period, when copper, iron and forest products comprised the backbone of Swedish economy and domestic metal reserves were invested with substantial symbolic and ideological meanings (Evans and Rydén 2007; Nordin 2015).

As noted, Lapland has been viewed as exotic and somehow outside the ordinary world - an idea expressed by many travellers to the North. Thus, when the renowned Swedish naturalist Carl Linnaeus (1707-1778) travelled to northern Sweden, he wrote in his journal that

When I reached this mountain, I seemed to be entering on a new world; and when I had ascended it, I scarcely knew whether I was in Asia or Africa, the soil, situation, and every one of the plants, being equally strange to me.

[quoted in Naum 2016: 496]

At the same time, the North has been as a land of opportunity and material plenty. Already in the sixteenth century, Olaus Magnus had depicted Sápmi as a rich and plentiful land, pleasant to live in. As Naum (2016: 501) writes, 'Sápmi was seen not only as an exotic place but as the fulfilment of a desire of marvellous transformation of an underappreciated wasteland into a rich promised land'. As we have seen, this perception of northern lands – appropriated and promulgated in early modern Swedish antiquarianism (see Herva et al. 2018) – can in turn be seen as grounded on age-old cultural images of the North that date back to the classical antiquity.

The first 'mining fever' took place from around 1630 onwards when silver ore was found in Nasafjäll on the Swedish–Norwegian border in Lapland/Sápmi. This discovery led almost immediately in the founding of mines and foundries on the northern fringes of the kingdom. However, even though substantial economic hopes were projected on the North, the region was poorly known even from a southern Scandinavian perspective. It is illustrative that, following the discovery of the Nasafjäll silver, the Privy Councillor Carl Bonde mused that Lapland could become 'the West Indies of the Swedes' (Bäärnhielm 1976; Naum 2016: 493), which clearly echoes the idea that industrial projects were embedded in 'dreams of colonial wealth' (Nordin 2015).

The search and exploitation of metals in northern parts of Fennoscandia occurred with the tightening of the Swedish state's control over the North, and they were also driven by the increased need of metals for arms production as Sweden joined the Thirty Years' War (1618–1648) on the Germanic lands of the Holy Roman Empire in Central Europe. Indeed, the Falun mine alone in Sweden produced about two-thirds of European copper in the seventeenth century (Heckscher 1954: 175–176), and the Falun and Sala mines were so famous in Europe that they were among the northern marvels that travellers wished to see in addition to natural attractions such as the midnight sun (Naum 2019). In addition to the increased demand for metals by the arms industry, domestic metal resources were integral to the mercantilist thinking of the time. Silver, in particular, was invested with a substantial cultural meaning among the seventeenth-century Swedish elites (Götlind 2005: 261–262; Nordin 2015: 252; see also Nordin 2013).

The seventeenth-century mining boom and metal fever, which were accompanied by significant long-term environmental and sociocultural changes in northern Fennoscandia, died out soon but has since been followed by a number of more or less utopian mining projects. Although some of them led to the founding of the large iron mines in northern Sweden that continue to flourish, such as Malmberget and Kiruna, many were economic failures, founded on great but unsustainable dreams. The first foundry and works site at Silbojokk operated only for a short while before it was destroyed by the Danish–Norwegian troops, and the subsequent works at Kvikkjokk also functioned only for some decades. The works of Kengis, in the River Tornio valley, was more long–lived – and briefly even profitable – but struggled with financial and other problems most of the time (see further Nordin 2015; Nordin and Ojala 2017).

Disciplining and ordering of the North

Even if the acquisition of northern treasures proved to be more challenging than imagined, the broader sociocultural function of metal production - that of ordering and disciplining the North - was arguably a more successful project. The seventeenth-century mining projects instilled new ('modern') cultural elements in the northern fringes of Europe and contributed to the transformation of northern landscapes and mindscapes (Nordin 2015; Naum 2017). Mines, foundries and works were highly ordered and regulated materially and socially, as metal making was to promote civility, order and rationality. Besides the strict rules of conduit, the places themselves were geometrically and hierarchically ordered, with different activities, functions and groups of people spatially separated from each other.

It is striking that the classically inspired grid plan makes an early appearance at sites associated with the expansion of mining industries to central and northern Sweden, spearheading the broader classicizing of Swedish spatial planning, architecture and culture in the mid-seventeenth century. The classicizing of Sweden in itself can be regarded as something of a utopian project - a material, cultural and spiritual endeavour to become like ancient Romans - and it seems fitting that one of its earliest manifestations should take place in the context of metal-making in a northern land of fantasy.

Industrial complexes have been characterized as 'social utopias' (Anfält 2002), which structured human life so as to cultivate virtues, such as obedience and productivity, and comprised islands of civility in the wilderness. Perhaps the most obvious material expressions of the dream-like utopian ideals implanted in northern landscapes are the substantial manor house and formal garden constructed at the site of Kengis on the Torne River in Sweden, at its time the northernmost iron works in the world (Nordin 2015). The use of the grid plan also echoes the colonialist character of industrial projects in the North, with associations to New World plantations. Industrialization and colonialism were indeed deeply connected in early modern Sweden, but the industrial complexes were just one expression of the Swedish Crown's attempts to transform the North. It was accompanied by several other policies and practices, such as the founding of towns and market places and the launching of an extensive surveying and mapping campaign around the realm. According to Naum (2016: 504),

All these proposals for improvement and multiple visions of utopia had one common trope: they transformed the landscape and nature of Sápmi into a commercial product, abstracted away from the existing and dense socioecological web and meaning it had for the Sami.

Moreover, the early modern pursuits of metal also had a religious dimension. In the seventeenth-century Lutheran Orthodox rhetoric of Sweden, it was a responsibility of Man to harness nature and its resources for general benefit. However, the success of the state was predicated on its internal cohesion which, in the (learned) aristocratic

view, was compromised especially by the heathen and nomadic Sámi, whose lifestyle and beliefs diverged from proper subjects to the Crown. The establishing of mines and foundries thus served two different but interrelated functions: economic profit and the moral responsibility of bringing the Sámi to God and teaching them civility (Naum 2017).

Mining was also closely associated with the extension and instituting of monetary economy in Sweden, and money itself, in turn, was an expression of and tool for the abstraction and standardization of value and the world (Simmel 1992[1900]). Early modern states in Europe were continuously wrestling with the shortage of cash, and the value of money was still tied to the very metal that coinage was made of (Wennerlind 2003). Sweden was the first state to introduce copper money in an attempt to boost economy, on the one hand, and to put excess copper in a use that would not affect the prices of copper in international markets on the other. Some of this money consisted of thick copper plates (Sw. plåtmynt) that could weigh several kilograms. The plan did not work, as copper coins floated out of the country to be re-melted, and the price of copper – and consequently of copper money – fluctuated radically (see further Herva et al. 2012). But although Sweden failed to control the markets the way it had hoped, the case again demonstrates the importance and implication of mining to other domains of society.

Mining was integral to the development of the modern monetary system also through the invention of credit money: Sweden was the first country in the world to introduce banknotes in the 1660s, and this innovation was based on the tokens used by mining companies (Hyötyniemi 1978: 184–186; Lappalainen 2007: 100–101; Nurmi 2011: 123). The idea of banknotes was an important step towards the 'modern' concept of money as representing value, in which money became a matter of social trust (Simmel 1992 [1990]). It can also be argued that the introduction of credit money and the expansion of money economy promoted the modern idea of measuring in standard units and the prioritizing of quantities over qualities (Zelizer 1989: 344–348). It thus also mediated the development of a mechanical worldview (Wennerlind 2003: 255) in a similar manner as early modern planned urban spaces did (Akkerman 2001).

Mining and magic

Early industrial mining heralded the certain elements that we may recognize as 'modern' in the North, but 'modernization' was far from a straightforward development in the European world in general and the northern world in particular. They must be considered in the broader frame of the Renaissance–Baroque cosmology, in which the emerging rationalist and mechanistic ideas about the world and its workings were still embedded in and entangled with relational and magical thinking. Indeed, northern mining and metal-making in the seventeenth century provides a particularly illustrative setting for exploring the relationship between the 'modern' and 'pre-modern' ways of perceiving and engaging with the environment.



FIGURE 2.5 A human and a mountain troll working in a mine. A vignette from Olaus Magnus's Historia de Gentibus Septentrionalibus (1555).

In both the learned and folk view, mining and processing of ores were practices which involved reciprocity and sociality with entities and powers of the underground world, because people co-inhabited the world with range of non-human beings - from angels and demons to trolls, people of the Underworld (Finn. maahinen) and so on (Figure 2.5). Mining thus took place in a setting which involved many actors and was an inherently social practice involving, in addition to the miners and their foremen, also encounters with non-human beings (Fors 2015: 31-33). For example, since the trolls were inhabitants of the mountains, for them rock was thought to present a medium through which they could move and see as easily as humans move and see through the air. Inside the rock, they were believed to carry out social lives more or less similar to those of humans (Fors 2015: 32-33).

In Scandinavia, orebodies were thought to be controlled by 'keeper entities', which were mostly invisible but could manifest themselves in different forms, such as animals or ghostly shapes or strange sounds. They had a material dimension as well and could be touched (and even had sex with), and they were capable of manipulating the minerals and changing reality. They could, for instance, substitute orebodies of precious metals with worthless metals - a notion that corresponded with broader ideas of how metals were 'organic' in the sense that they grew and transformed in the earth (Fors 2015: 35-36).

Material things and substances were likewise infused with extraordinary or magical properties and could thus be manipulated by other than purely mechanical means (see further e.g. Herva 2010b). It is well established, for instance, that early chemistry (or 'chymistry') and laboratory science brought together what in today's terms would be considered as magic and scientific thinking (e.g. Principe 2007), not unlike iron working in a prehistoric or non-Western context (e.g. Gansum and Oestigaard 2004; Haaland 2004). Substances and entities had a potential to transform, or be transformed, into other substances and entities. Objects

could be 'compressed, expanded, made to disappear and reappear, and affect other objects over vast distances' (Fors 2015: 20–21), and even though the behaviour of substances and entities was predictable and 'stable' in many contexts, they could also be autonomous and behave unexpectedly. In other words, 'seventeenth-century epistemology, or knowledge, about things material was still quite fluid and openended' (Fors 2015: 40).

Dreams of Lapland's gold

Extractive industries in the North have often failed or proved disappointing from the early modern period to the present, regardless of increasing knowledge and improving technologies, but nonetheless 'expectations tend to be the same, no matter how many times such expectations have been disappointed or opportunities wasted in other regions in the past' (Wilson and Stammler 2016: 1). Faith in the economic and social benefits of mining remains strong, which in some ways reflects the situation in early modern times and the long-standing dream of northern riches. These utopian legacies can be identified in contemporary industrial projects, such as the disastrous case of the Talvivaara mine in northern Finland, where a privately owned company begun large-scale extraction of nickel and zinc in 2008 but went bankrupt in 2018, in spite of significant state support for building the necessary infrastructure. More than 80,000 minor shareholders lost their investments in the process.

Although the Talvivaara saga has already made an imprint on Finnish popular imagination (a major feature film titled *The Mine* directed by Aleksi Salmenperä entered Finnish cinemas in 2016), the utopian nature of these later exploits is even more clearly manifest in the case of the late nineteenth- and twentieth-century gold rushes in Finnish Lapland. The gold rushes are of particular interest here because they demonstrate the wide-ranging cultural impacts and implications of extractive pursuits, and the manner in which dreams and fantasies can be entangled with reality. Moreover, the pursuit for gold in the North once again replicates the age-old perception of Lapland as a strange, exotic and enchanted land, where opportunity awaits.

While traces of gold had been reported from Finnish Lapland earlier, the first finds of sizable gold nuggets were made in 1868 at River Ivalojoki by a gold-finding expedition commissioned by the Finnish Senate. In the following summer, two gold panners exploring the river banks managed to pan 2 kg of gold, causing enormous excitement and the first gold rush to Lapland. Following this discovery, a number of other significant deposits were located, and small-scale prospecting of gold mainly using simple panning techniques has continued up to this date (Figure 2.6).

Globally, the nineteenth century marked a huge growth in the production of gold, as reflected in the great gold rushes in, for instance, South Africa, California and Alaska (Schoenberger 2011). The scale of the Lapland gold rushes in the nineteenth and twentieth centuries was minuscule in comparison but can nonetheless be seen as one manifestation of the global gold fever, and some people who



FIGURE 2.6 Gold prospecting has left diverse traces in the landscapes of Finnish Lapland. The prospector Jaakko Mäkinen lived in this hut, built on his claim in Laanila, Inari, permanently for thirty years in the later twentieth century. Photo: Vesa-Pekka Herva.

ventured for Lapland gold had previous experience of prospecting and mining in North America. Like the seventeenth-century mining boom, the later gold rushes contributed to the 'modernization' of northernmost Finland. The discoveries boosted geological survey, cartography, industrial extractive ventures, road building, population growth, tourism and so forth (Partanen 1999). At the peak of the gold rush, the mining station of Kultala (kulta is Finnish for gold) at River Ivalojoki was a bustling community of more than 600 people - very large in the context of nineteenth-century Finnish Lapland, and with inhabitants of highly diverse origins, forging new connections with faraway regions.

But even if the search for Lapland gold was in part motivated by economic gain, it is at the same time deeply grounded in fantasy and imagination. It made a few lucky individuals comparably rich, but in reality, the river deposits had little commercial potential, and most prospectors struggled to make even a modest living. Mining companies such as Prospektor, Ivalojoki and Lapin kulta all faced trouble and went bankrupt very soon after they had started, even though notable figures such as J.K. Paasikivi - who later became president of Finland (1946-1956) were involved as shareholders (e.g. Launonen and Partanen 2002: 14). However, the cultural significance of the gold rush cannot be downplayed: Lapland gold miners are featured in numerous Finnish novels and films, and in general form an archetypal character in Finnish popular culture. Still, the estimated total yield of the desired metal is a very modest 2,000 kg over the entire 150-year time period. By way of comparison, the thriving modern gold mine of Suurikuusikko in Kittilä, northern Finland, produces ca. 5,500 kg of gold per year. This facility, founded in 2005, is another legacy of the dreams of Lapland's gold and today the largest gold mine in Europe. Thus, a dream that was fundamentally ungrounded in reality, nonetheless facilitated real sociocultural, economic and environmental changes in Lapland.

From early on, Lapland gold and its prospectors began to develop a legendary aura. For example, the prominent Finnish folklorist Julius Krohn (1835–1888) compared the prospectors to the heroes of the *Kalevala*, who likewise endured hardships in their exploits in the mythical Northland. This aura persists to the present day, and the prospectors – many of them from the South – comprise an exotic 'tribe' of their own, with their own ways of life and traditions that echo broader cultural fantasies of the North. Some prospectors have become larger-than-life figures within Lapland gold culture, 'forefathers' who are revered and whose ways are still imitated (Leppänen 2016) and whose stories are related in the extraordinary Gold Village and Gold Prospector Museum in Tankavaara, Finnish Lapland. Prospecting as escape from civilization and as a distinct way of life (see Leppänen 2016) also resonates with the classical notion of the North as 'a place of purification, an escape from the limitation of civilization' (Davidson 2005: 21).

There is also a dose of the supernatural to the stories and experiences related to gold hunting, which adds to its dream-like character. For instance, the deposit of Hopiaoja in Tankavaara was allegedly revealed to a local Sámi man in a dream and a spiritual being guided him in the right place, whereas the mining station of Kultala, the site of the first Finnish gold rush, is said to be haunted (Leppänen 2016: 63), and we have heard similar stories in association with the Gold Prospector Museum in Tankavaara. In more concrete terms, Lapland gold is commonly seen as a special type of gold, which is somehow different from 'normal' gold (typically described as more reddish in colour). One expression of this is that Lapland gold can fetch prices that are substantially higher than the normal market prizes. This has to do with the individual character of larger nuggets which have a cultural life – even reputation – of their own, often as collectibles with certain identifiable features (such as a specific shape) and stories associated with them, especially their connections to the legendary gold prospectors.

The enduring allure of minerals and the Underworld

In the folklore of Lapland gold miners, some of the legendary prospectors and other characters of the gold rush mythos are associated with hidden treasures. One example is 'the treasure of Appisjoki, a kettle full of gold supposedly hidden by the Sámi trader Gabriel Aikio (1834–1903), who ran a general store and an inn and sold wares to prospectors in exchange for gold' (Launonen and Partanen 2002: 36–37).

A similar story relates to Jaakko Isola (1903-1978), who was known as a hardworking and skilled panner, but a hermit by nature and had little use for gold (or money) and is said to have rarely sold any. Mr Isola was found dead in his cabin in 1978 and the gold that he is thought to have found – allegedly 'many kilograms' – is supposedly hidden somewhere near his cabin (Leppänen 2016: 47). To add to the sense of mystery, it is said that an enchanted white reindeer is watching or guarding Mr Isola's cabin and treasure.

Supernatural elements are typical to the folklore of hidden treasures, which can be retrieved only in special circumstances and appear to exist in an interdimensional space between the worlds ordinarily inaccessible to humans (Lindow 1982: 262). This applied not only to narrated but also real treasures of different age and origins that were found in the past. Treasures were magical and treasurehunting an inherently magical practice (Dillinger 2011: 1-6). Treasures could also demonstrate independent agency, shift shapes and behave in ways that resembled living and conscious beings (Sarmela 1994: 452); they could, for instance, first manifest themselves in the form of an animal or everyday objects before revealing their true nature (Lindow 1982: 261). Like the ores encountered by early modern miners, treasures were much more than matter: they had a spiritual dimension and were capable of transformation.

Real and narrated treasures came in many forms but were often composed of coins or other metal objects, and in the folklore sources were often placed in a kettle or a similar container. Certain peculiar natural phenomena could be seen as indicating the presence of a treasure, including what in Finnish folklore is referred to as 'treasure fires' or will-o'-the-wisps - an elusive but probably real physical phenomenon of spontaneously ignited gasses burning in the landscape, especially in wetland environments. Although shrouded in the supernatural and extraordinary, treasure stories are perhaps ultimately grounded on occasional discoveries of actual ancient caches of hidden objects in the past. There are, for instance, medieval Scandinavian laws that address the ownership of treasures found in the ground (Lindow 1982: 257-258), some or many of which would have been prehistoric metal hoards, hundreds of which have also been recorded by antiquarians and archaeologists (e.g. Spangen 2009). There is even an etymological connection between hoards and buried treasures (Lindow 1982: 257). In addition to prehistoric caches of valuables, buried treasures could also comprise of objects such as church bells which may reflect a real practice that people sometimes engaged with in turbulent times.

While placer gold and orebodies are not treasures in a literal sense, there are several links between the northern folklore on treasures and the hunt for Lapland's gold. Rich orebodies, for instance, are sometimes metaphorically referred to as treasures hidden under the fjells. Likewise, the element of the supernatural associated with certain discoveries of gold, as in the case of Hopiaoja mentioned above, can be seen as reflections of much older ideas that mineral riches – and indeed treasures as they feature in folklore – are guarded or controlled by spiritual keeper entities. They can thus likewise be seen as a type of supernatural treasures.

One of the most curious recent manifestations of the enduring allure of Underworld realms and hidden treasure in the North relates to the life and deeds of the charismatic and eccentric Finnish neo-pagan artist Ior Bock (1942–2010), who for decades captured the public imagination in Finland with his projects. His pseudo-historical family saga (eventually published in Bock 1996) fused fantastic elements drawn from an idiosyncratic reading of the *Kalevala* with real-world locations, such as Gumbostrand east of Helsinki and the castle of Kajaani in northeastern Finland, where physical evidence vindicating the saga was supposed to be found. Interestingly, the Bock mythology – much like those constructed by the Baroque antiquarians – depended heavily on flawed etymologies.

Just like Rudbeck, Bock also initiated a project for uncovering the hidden Nordic past. In 1987, he began excavations at a rubble-filled cave at Gumbostrand near Helsinki, close to his family estate, in an effort to uncover the 'Temple of Lemminkäinen' (one of the central heroes of the *Kalevala* poems). Although the academic community unanimously viewed the cave as a natural formation, with no potential for archaeological discovery, excavations were nonetheless begun and attracted a large international group of followers of alternative lifestyles, whose antics stirred and aroused the curiosity of the little rural community. Rather incredibly, Bock also received substantial financial support from a large construction company (called Lemminkäinen Ltd.) and a local bank, which enabled the use of heavy machinery in the excavation work. A section of the cave ca. 50 m long, 4 m wide and 3,5 m high was emptied. Unsurprisingly, nothing was found, and eventually the companies involved withdrew from the project, as it began to draw ridicule and negative attention in national media. Today, the cave is inaccessible as it is filled with groundwater (Figure 2.7).

Presumably, only a small core group of followers took Mr Bock's version of Finnish history literally, but it nonetheless captured several prominent followers, some of whom took it very seriously indeed. Petri Walli, the lead singer of a Finnish progressive rock band called Kingston Wall, famously committed suicide in 1995 by throwing himself from the top of Kallio Church in Helsinki, apparently having become disillusioned in the Bock mythology. The Bock legend fused the real and the imaginary in a way that appealed to a wide segment of the Finnish populace – even resulting in financial support for the outlandish temple project. In a similar vein, Mr Bock maintained that a sacred golden statue of a ram (bock is Swedish for a ram) weighing 300 kg was hidden by 'the last king of Finland' in the castle of Kajaani in AD 1250. According to conventional knowledge, the castle – which is the northernmost stone castle in the Swedish realm - was constructed only in the early seventeenth century. However, according to the Bock saga, it was preceded by others many centuries earlier and served as a hideaway of the family when the Swedish conquerors arrived in Finland and forced the royal Bock family to flee to northern Finland.

This aspect of the Bock family saga likewise found remarkably wide support outside the academia. In 1990, followers of Mr Bock – who identified themselves as 'Diggers of the Truth' – faced criminal charges, having dug a large hole in the castle courtyard in search of the golden ram (Korhonen 1990), and subsequently



FIGURE 2.7 A view of the 'Temple of Lemminkäinen' near Helsinki in 2018. The entrance to the cave is today filled with groundwater. Photo: Antti Lahelma.

the castle courtyard was studied using a ground-penetrating radar. Intriguingly, the data suggested the presence of a substantial metal object some metres under the surface of the ground. This stirred up excitement in some circles, and several groups with questionable archaeological knowhow applied for permission to excavate in the castle, which however was not granted. Even such prestigious institutions as the Thor Heyerdahl museum in Oslo, Norway, sent out applications. The Finnish Heritage Agency eventually conducted excavations at the courtyard as part of the restoration works at the site, and it transpired that the echo detected in the geophysical survey was caused by a bit of thick copper cable buried in the courtyard due to some earlier construction work. Even so, the story of the golden ram buried in the castle - just like the Temple of Lemminkäinen - attracted substantial interest and publicity, testifying to the enduring significance of real and mythical geographies and material realities in the North.

HOUSES, LAND AND SOIL

Dwellings, people and the cosmos in the North

Houses and other constructed dwellings have been central to human life for thousands of years. Given their importance, it is unsurprising that dwellings have not only rich symbolism to them but also reflect and structure the ways of life and thought of their inhabitants in various ways. There is an intimate and dynamic relationship between people and dwellings – dwellings are, in effect, extensions of people's bodies and cognition in much a similar manner as termite mounds constitute a part of termites' metabolism (Carsten and Hugh-Jones 1995; Turner 2000; Herva 2010a). Buildings have been likened to organisms in different cultures. For instance, parts of buildings may be named after body parts (Blier 1983) and buildings can be seen as biographical entities with their own life cycles. Buildings can also be understood as active living beings in a more literal sense, as will be discussed later in this chapter.

The deep entanglement of dwellings with the sociocultural world also means that numerous broader themes can be accessed through the study of buildings, and this chapter considers houses in the northern world in relation to environmental perception, cosmological concepts and modes of engaging with the world. Dwellings function as a 'mesocosm' which connects together the human person as a microcosm to the macrocosmic world. Associations and correspondences between particular features or aspects of dwellings – such as form, materials and decoration – have been identified and discussed in a range of Eurasian prehistoric cultural contexts. For instance, Lewis–Williams and Pearce (2005) have discussed how various spatial and built forms at the early Neolithic town of Çatal Hüyük in Turkey would have been connected to a shamanistic cosmology, while Boriç (2002) proposes that the conical form of the Mesolithic huts at Lepenski Vir in Serbia imitate the shape of a prominent mountain opposite to the settlement.

The symbolic dimensions of built environments have also been addressed within historical archaeologies (although usually not in cosmological terms) by writers such as Mrozowski (1999). Renaissance urban planning and architecture were informed by ideas of correspondences (or causal influence) between a meaningfully organized cosmos and human life (e.g. Akkerman 2001). By the same token, a new perspective can be gained on apparently ordinary vernacular buildings of historical times by examining them in the light of traditional cosmologies and folklore.

While the cosmological dimensions of early modern and modern-built environments in the Western world have attracted limited attention, the dwellings and cosmologies of the indigenous peoples inhabiting the northern parts of Eurasia – from the Scandinavian lands of the Sami in the west to Siberia in the east - have been subject to an ethnographic interest from the seventeenth century onwards (e.g. Schefferus 1956 [1673]; Witsen 1692). This ethnographic work provides at least a glimpse of how the organization of space and structural elements were embodied in the context of northern peoples. While specific cultural concepts and practices associated with dwellings of course have not remained stable over the centuries and millennia, the ethnography nonetheless gives some ideas of how dwellings were signified in a deeper northern past.

Archaeologically, settlements and dwellings are very unevenly known and studied from different periods of prehistory and history in north-eastern Europe. In Finland, for instance, thousands of dwelling sites are known from the earliest postglacial inhabitation in the region to the beginning of the fourth millennium BC (Ranta 2002; Mökkönen 2011), but remains of the actual buildings are very scarce. They are common at sites of the later Stone Age, and a substantial number has also been excavated, but the number of known building remains again decreases dramatically in Bronze and Iron Ages and only a handful have been properly excavated.

Even though the evidence is limited, it seems nonetheless evident that the predominant type of dwellings before 4000 BC was light tent/teepee-like structure, which suited a mobile hunter-gatherer way of life, with the dwellings probably packed up and taken to new places according to the annual economic cycle. The archaeological record of these Mesolithic and Early Neolithic sites may not lend itself easily to an analysis and interpretation in cosmological terms, but northern ethnographies suggest that mobile communities have very different way of perceiving, understanding and engaging with the environment than the more sedentary house-based communities. Even simple dwellings could be intertwined with cosmological concepts. For instance, the central axis of the tent, along which smoke ascended and escaped from an opening in the tent, was typically associated with the notion of the world-pillar that supported the sky, by climbing which the Upper World could be reached. The sky dotted with stars was likened to a huge tent canvas, to which sparks shooting from the central hearth had burned holes allowing the light of the Upper World to shine down on Earth. Likewise, the compass points and their cultural meanings appear to have been reiterated within the dwelling and its spatial divisions. As an example, in the Finnish language, the word for North (pohjoinen) is associated with the back or far-end of a dwelling (pohja), and South (*etelä*) is associated with the entry or vestibule of a building (*eteinen*), reflecting the ethnographic and archaeological reality that these kind of dwellings were always aligned according to the north–south axis (Häkkinen 1996). Such basic vocabulary, then, reflects the correspondences between the dwelling and the world; the dwelling in effect offered a blueprint for the structure of the cosmos.

The introduction of the house

A major change in the mode of dwelling occurred in north-eastern Europe around 4000 BC with the wide introduction of the so-called semi-subterranean pit-houses, or rectangular log-built houses which were partly dug into the ground (Ranta 2002; Mökkönen 2011). Pit-houses are known from different periods around the circumpolar world, across Eurasia and in western parts of North America (Mökkönen 2011: 20–22). Although not exclusive to the Arctic and sub-Arctic regions, ethnographic data show that pit-houses are generally found in regions with colder climates at least part of the year and are usually winter dwelling associated with more sedentary ways of life and practices of storing food (Gilman 1987; Mökkönen 2011: 21). In Fennoscandia, pit-houses of this type appear to have been the predominant type of dwelling for at least two millennia (Figure 3.1). Moreover, the introduction of the house in northern Europe was associated with a range of



FIGURE 3.1 A reconstruction of a large Neolithic pit-house at the Kierikki Stone Age centre, northern Finland. Photo: Antti Lahelma.

other material and cultural changes and indeed marked significant sociocultural and environmental transformations.

Pit-houses make their appearance and become common roughly simultaneously throughout Fennoscandia, although sites in Karelia appear to be a few centuries older than elsewhere in the region (see Mökkönen 2011: 22-34). In Finland alone, several hundred sites with remains of Neolithic semi-subterranean houses have been documented, with a total number of individual dwelling remains is in the range of thousands. The semi-subterranean dwellings are dated predominantly between 4000-2300 BC and the excavation data suggest that the plan of the dwellings varied from quadrangular and rectangular to oval and round (Mökkönen 2011: 25-26). The remains of pit-houses often appear in clusters or 'villages' which in some cases include over a hundred building remains dating over a thousand-year period (Mökkönen 2011: 25). Even if all the buildings at such sites were not simultaneously in use, the use of the word 'village' seems warranted.

Although there is a substantial regional variability and changes over time in Stone Age semi-subterranean houses in north-eastern Europe, the introduction and spread of this particular type of dwellings particularly from the early fourth millennium onwards can be seen to mark significant general-level cultural and environmental transformations despite the remarkable internal diversity of the 'pit-house phenomenon'. For instance, the spread of pit-houses coincides with the appearance and spread of a new pottery style (Figure 3.2) – or rather a series of mutually related pottery styles, traditionally referred to as Typical Comb Ware (TCW) in Scandinavia and Comb-Pit Ware in Russia (CPW) - over an enormous area from the Urals in



FIGURE 3.2 Typical Comb Ware (TCW) pottery decorated with a row of schematic waterfowl from the site of Kanava, central/eastern Finland, Photo: Antti Lahelma,

Russia to north-eastern continental Europe and northern Scandinavia (Vitenkova 2002; Pesonen and Leskinen 2009).

While not a homogenous 'culture' in any meaningful sense, this 'Comb Ware phenomenon' would seem to indicate a network of new and intensified contacts between communities in the north-eastern boreal zone of Europe. This is also reflected in the use and circulation of certain artefact types and materials, such as finely polished stone tools, flint, colourful slates, amber and copper (Núñez and Okkonen 2005; Mökkönen 2011, 2014; Nordqvist and Herva 2013; Seitsonen et al. 2012). Archaeological assemblages of this period are both quantitatively and qualitatively richer and more varied than before. There is also more evidence for symbolic expression in various material forms, ranging from increased use of colourful or otherwise 'special' materials (such as the common use of red ochre in various contexts) to the production of figurative rock art.

The emergence of the house and the formation of village-like settlements indicates more sedentary ways of life and increased social complexity, which is also suggested by the construction of 'mega-structures' – large stone enclosures known as 'giant's churches' – on a strip of north-western coast of Finland around mid-fourth millennium BC onwards (Okkonen 2003; Núñez and Okkonen 2005). Although hunting, fishing and gathering remained the primary source of food, cultivation (or growing of plants in a broader sense) was also practiced and indeed appears to have significantly contributed to a changing human perception of and relationship with the world. These material, sociocultural and environmental changes become clear in the first half of the fourth millennium, but they persist into and become even more amplified in the next ceramic phase, when asbestosand organic-tempered wares (AOW) are prominently present in the archaeological record of north-eastern Europe.

Pottery, semi-subterranean houses and cultural transformation

The significant change in dwellings around 4000 BC, as represented by semi-subterranean houses, was associated with a host of other changes in material culture at the same time. The substantial cultural and environmental transformations around this time, however, must be considered in a longer perspective, and the implications of this change are arguably rather more fundamental than has previously been appreciated. The roots of these transformations can be traced to the introduction of pottery to north-eastern Europe from around mid-sixth millennium onwards (German 2009; Pesonen and Leskinen 2009). The discoveries of very early pottery in East Asia (Kuzmin 2015) lends support to the idea that pottery-making emerged independently in the Far East and was distributed across the northern boreal zone. Its introduction in northern Fennoscandia thus appears not to derive from the Levant, as traditionally assumed, but from China and Japan (e.g. Jordan and Zvelebil 2009; Hartz et al. 2012).

This Eastern wave of influence explains the otherwise curiously early appearance of pottery in the boreal zone of north-eastern Europe, a region otherwise commonly

seen as a marginal backwater in the narratives of the Neolithization of Eurasia. The established traditional idea holds that ceramic technology was adopted in the circumpolar fringes of Europe for practical reasons – the supposedly obvious usefulness of ceramic vessels - but no broader changes in local cultures and ways of life are evident in the archaeological material at the time (Núñez 1990; Carpelan 1999; Pesonen and Leskinen 2009). Although continuity seems to be a characteristic feature of the archaeological record in this region from the pre-ceramic Stone Age to the end of the fifth millennium BC in general, there is an increasing body of subtle but important changes that emerge simultaneously with the earliest pottery. These include the beginning of the North-East European rock art tradition (Lahelma 2008: 33-41; Gjerde 2010: 291-300) and signs of anthropogenic modification of the local vegetation and forest clearance (Mökkönen 2010; Alenius et al. 2013; see also Poska and Saarse 2006; Kriiska 2009), both of which hint at an incipient new way of seeing the environment and relating with it. Pottery-making itself can be seen as a reflection and agent of this reconfiguring of the human relationship with places and landscape, even though this process did not take the form of a sudden break or change.

Tracing the subsequent trajectories of these postulated first signs of cultural and environmental changes is difficult, however, due to the limited amount of research on the earliest ceramic phase (Early Comb Ware) in the prehistory of north-eastern Europe. Traditionally, the TCW-CPW ceramic phase with its rich archaeological assemblages has tended to overshadow the phases before and after it, which has obscured our understanding of what kinds of developments took place between the first adoption of pottery and the emergence of houses. Consequently, the changes taking place from 4000 BC onwards may seem more sudden than they really were. Indeed, the roots of the Comb Ware Phenomenon can be traced back to the introduction of pottery in the north-eastern boreal zone of Europe in the second half of the sixth millennium BC, which marked the beginning of a slow cultural transformation that culminated in the early fourth millennium BC (Herva et al. 2017).

Early pottery, cultivation and place making

The introduction of pottery in the boreal zone of north-eastern Europe is not associated with dramatic changes in the archaeological record, but it does coincide chronologically with new kinds of manipulation of the landscape - both symbolically and materially – even if it is at first rather slight. Although the dating of rock art can be challenging, the earliest currently known rock carvings in eastern Fennoscandia (from Zalavruga at the White Sea in Russian Karelia) can be dated fairly securely to ca. 5300-5200 BC (Gjerde 2010), given that they were covered by soil sediments that also included radiocarbon-datable material. Based on shoreline dating, the earliest rock paintings, located at Lake Päijänne in central Finland, appear to be roughly contemporaneous (Poutiainen and Lahelma 2004). Whatever the interpretations given to this early rock art, the very making of visible and

long-lasting images in the landscape indicates a new kind of 'signing' the land and engaging with particular loci.

Just as importantly, there are indications of increased altering of local environments through the manipulation of vegetation in the later sixth millennium BC, which similarly implies new ways of engaging with particular places in the landscape. There is, at present, only a limited amount of sufficiently high-resolution palynological studies that enable identifying such changes in the landscape, but some recent research indicates episodic opening of local landscapes that can very likely be associated with human activity and forest clearance. Currently the most detailed and thorough case study, which also discusses the implications of the cycles of landscape change, focuses on the small lake of Huhdasjärvi in southeast Finland (Alenius et al. 2013, 2017), which shows increased human activity around 4400 BC and pollen from Hordeum and hemp around 4000 BC. Perhaps the most intriguing, and somewhat unexpected, finding was that of buckwheat (Fagopyrum esculentum) pollen that dates to the Mesolithic/Neolithic transition ca. 5300 BC and thus coincides with the earliest pottery in Finland. Although so far a unique discovery, the fact that buckwheat was domesticated in the Far East (Janik 2002; Fuller et al. 2011) corresponds with the fact that comb-stamped pottery also derives from that region (Jordan and Zvelebil 2009; Hartz et al. 2012). These early signs of cultivation at Huhdasjärvi are accompanied by almost as early evidence for Hordeum pollen in Estonia (Kriiska 2009) and Lake Onega in Russian Karelia (Vuorela et al. 2001).

However small its scale was initially, this cultivation is another strand of evidence that people intentionally and unintentionally started imprinting signs of their presence and activity in the landscape simultaneously with pottery use. Its highly localized and episodic nature makes it difficult to identify in the palynological record, suggesting that it was most likely economically unimportant. Intriguingly, a similar pattern of small-scale temporary cultivation, which takes the form of occasional 'blips' in the environmental data, has been identified in much later Iron Age and medieval northern Fennoscandia inhabited by the Sámi groups who, in the established traditional view, never practiced agriculture (Hörnberg et al. 2014).

This very early engagement with cultigens in the North also challenges the explicit and implicit assumptions of the nature and character of cultivation. In the archaeology of north-eastern Europe, the beginning of cultivation has often been seen first and foremost as an economic transition – with the persistent underlying assumption that prehistoric communities can be divided into hunter-gatherers and agriculturalists, and that the former did not practice cultivation. In eastern Fennoscandia, it seems evident that hunting, fishing and gathering comprised the basis of local economies at least until the late Stone Age and, indeed, in many regions, throughout prehistory and into historical times. In general, the 'Neolithization' of the region did not happen in a one-off manner or through a speedy transition, as has been suggested for some other parts of Europe, but was a slow long-term process spanning several millennia. Indeed, elements of 'hunter-fisher-gatherer type' of

culture, lifeways and mentalities persisted into modern times especially in eastern and northern parts of Fennoscandia, as reflected in northern folklore and cosmologies documented in the nineteenth and early twentieth centuries.

The early instances of cultivation in the boreal zone took in all likelihood a very different form compared to the earliest central European-style field cultivation associated with the 'Linearbandkeramik' (LBK) culture. The 'LBK model' of Neolithic cultivation and agricultural practices applies poorly to the environmental and cultural conditions of the boreal zone, as in the northern environments, growing imported, 'exotic' crop plants probably had more to do with questions of cultural identity, cosmology and prestige than economy or subsistence as such (cf. Hastorf 1998; van der Veen 2014). Whatever the immediate motivations and reasons for growing crop plants, the very practice of growing plants, with its particular 'taskscapes', had broad implications and impacts to the local mode of being in the world.

While hunting, fishing and gathering required a body of intimate knowledge of, and close attentiveness to, the various aspects of the environment, cultivation focused attention on rather different qualities and features of the landscape. To successfully grow plants required a new understanding of soils, topographies and weather, as well as completely new ways of engaging with the environment. Cultivation entailed, for instance, the clearing and burning of plots of land and breaking the surface of the ground – both of them dramatic breaks from the preceding Mesolithic ways of life, which left little impact on the physical landscape. The tilling of land associated with cultivation, for instance, brought people in closer contact with soils - their consistence, texture and feel - and that 'is the closest, most intimate, scale with the land surface that can be experienced under everyday practices of living' (Evans 2003: 45). People, in other words, 'zoomed into' the land to discover its fine structure, which might also have linked cultivation on some conceptual level with procuring of mineral materials (cf. Chapter 2).

Houses and the changing relationship with the underworld

The appearance of cemeteries in the late Mesolithic and the burying of the dead at or close to settlements indicate the emergence of a new kind of attachment to places, a community's sustained relationship with and a sense of belonging to a particular place. Burying was a means of making the dead a part of the place. As bodies decomposed, the dead became literally and metaphorically incorporated in the soil and infused it with (some) properties and qualities of the buried people. Thus, people and communities became one – inextricably entangled – with the places they inhabited. The keeping of the dead close to the living also meant that the living co-inhabited the everyday world with the dead who were probably considered to have some kind of active presence in the community. This idea of ancestral presence is reflected in later folklore concerning household spirits, a tradition that may ultimately have its roots in the emergence of the house in the Neolithic.

The burying of the dead in pits is related to a number of other practices that became prominent in Neolithic Europe and suggest an increased interest in the world underground, including intensified quarrying, growing plants and the digging of pits and ditches for ritual purposes (Davies and Robb 2004; Tilley 2008; Herva et al. 2014, 2017). If, as seems likely, all manner of pit-making and digging into the ground had potential associations with burial, dead and/or engagement with a different dimension of reality (e.g. Davies and Robb 2004; Herva et al. 2014), then semi-subterranean houses would also have involved an 'otherworldly' dimension. That is, the very breaking of the ground opened an interface to the underworld in a broadly similar manner as rock-art panels have been understood as meeting points between 'this world' and an 'Otherworld' behind the surface of rock (e.g. Lewis-Williams 2000).

Ethnographic data from around the world indicates that even small-scale breaking of the surface of the ground and penetrating into it could be considered as involving engagement with the spirits and forces inhabiting the subterranean world and hence required special ritual practices or, more accurately, negotiation with non-human beings (Boivin 2004a). The inhabitants of pit-houses lived literally in touch with a subterranean dimension of reality, sharing the house with the beings and powers associated with the underground world, although it is, of course, difficult to tell how exactly they conceived this connection. However, the common presence of clay figurines in Comb Ware residential contexts can be taken to indicate that this 'otherworldly' aspect of everyday life was recognized to at least some degree. In north-eastern Europe, Neolithic clay figurines are found in association with houses, and although there is substantial variation among the figurines, many of them seem to represent dead bodies wrapped in birch bark, cloth or other kinds of 'burial wrapping' (e.g. Kashina 2009). This interpretation suggests that clay figurines – which in themselves are made of earth and soil – are material indices of the deceased or ancestors in the house.

The fact that clay figurines are literally of earth and soil would have further emphasized the association between soil and ancestral presence and the idea that there was some kind of a deep bond between people and soil; it is probably not a coincidence that various creation myths, including the biblical story of Adam, identify first people as fashioned from clay or soil (see Clark 2009: 239). The practice of clay work, in turn, can be understood as a means of working out the relationship between people and soil, as will be discussed in the next section.

Clay work as a means of restructuring human-environment relations

The amount of pottery increased significantly in the boreal zone of Europe around 4000 BC with the emergence of more permanent semi-subterranean houses. The discarding patterns of pottery also seem to change at the same time with the increased production of pottery. Pottery is very prominently present at settlement sites in the Typical Comb Ware period (ca. 4000–3500 BC) – so much so, indeed,

that it looks like potsherds have intentionally been spread around. Pottery sherds are also so prominent in the soil fills of contemporary red ochre graves that it has been suggested that the soils containing a large amount of pottery were chosen on purpose or that sherds were not just discarded refuse but a meaningful component of the burial ritual (Nilsson Stutz 2013). This apparent 'tempering' of both dwelling sites and graves with ceramics indicates that pottery was intentionally used in place-making practices. Although its more specific meanings remain to be studied, such an activity makes sense in the view that pottery embodies and represents a range of broader themes related to complex entanglements between people, pots, households, soils, fire, landscapes and modes of perceiving and being in the world (Herva et al. 2017).

The dimensions of reality perceived to exist beneath the surface of the earth – or the 'Underworld' - and their increasing incorporation as a part of human lifeworld is a central theme that unites and connects many Neolithic practices, from houses to burials to quarrying and pottery-making. Clay was certainly a substance known to northern hunter-gatherers well before the introduction of ceramics, but pottery-making necessitated a new kind of attentiveness to the real and perceived properties of clays and their sources in the landscape. Likewise, preparing the paste required knowledge about the 'behaviour' of clay. Drying and firing pottery called for attentiveness to factors such as weather suitable for firing. Ethnographic sources suggest, moreover, that pottery making has involved engagement with 'supernatural' agents, such as spirits of clay and water, which contributed to the success or failure of pottery making (Fredriksen 2011).

A second general theme that seems to be characteristic of the northern Neolithic is a fascination with exotic materials, particularly ones with visual or other sensory properties that were 'peculiar' or unusual in a Stone Age context. This could be an unusual colour of a mineral (such as the bright red or deep green of some slates), the malleability and heat-conductivity of copper or the brilliance and translucence of amber and rock crystal (cf. Chapter 9). Clay would also have been a special material in the Stone Age world, which probably explains why it became something of a 'type material' of the Neolithic (Stevanovics 1997). Its centrality had not only to do with the new cultural interest in land and soils but also the character and properties of clay that rendered it different from other materials commonly used in the Stone Age.

Clay is a characteristically ambiguous or 'indeterminate' substance: it is neither liquid nor solid, but somewhere in between; it is malleable and can be worked directly by hand; it can be worked by adding (and not only reducing) material and reworked endlessly; and it turns into a 'different' substance with very different properties when fired (Wengrow 1998; Gheorghiu 2008; Timmons and MacDonald 2008; Fredriksen 2011). These properties of clay arguably enabled and prompted the new artefact forms and the 'symbolic revolution' associated with the Neolithic (Boivin 2004b: 67-68; see also Wengrow 1998). And while clay itself may seem visually rather dull, its properties could be 'enhanced' by adding various different types of temper. For instance, Typical Comb Ware pottery is sometimes tempered with ground mica, which was probably chosen because of its gold-like sheen, and the organic tempers of Late Comb Ware – such as seashells, feathers and plant remains – probably carried symbolic references to the sea, the sky and the living world, in addition to making the vessels more durable.

It is against this background that clay work emerges as a possible means of reflecting on, and restructuring, human—environment relations. The responsiveness of clay (it engages with people working on it) is critically important to this function of clay work. That is, clay readily appears as a 'living' and sentient substance which can feel, for instance, tired, vibrating or unpredictable (Bankson 2008: 12; Timmons and MacDonald 2008: 88). In other words, there is a dialogic or social dimension to clay work. This is why clay and clay work can engender numerous different kinds of responses, sensations and emotions in people, explaining why clay work has therapeutic properties, and indeed even spiritual and magical dimensions (Foster 1997; Sholt and Gavron 2006; Timmons and MacDonald 2008; Bat Or 2010). The very practice of clay work can therefore be meaningful in itself as a kind of a meditative activity which enables gaining an alternative perspective on oneself and the surrounding world — a means of 'working out' things both literally and figuratively (see Bankson 2008; Timmons and MacDonald 2008).

Archaeologically, this existential dimension of clay work is perhaps most obvious in the making and handling of clay figurines (see Bailey 2007, 2014), as well as a

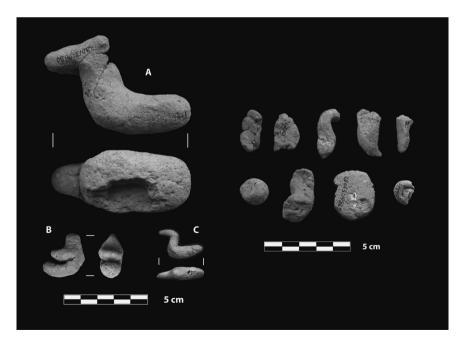


FIGURE 3.3 Neolithic clay figurines of an elk (a), an anthropomorph (?) (b) and an ornitomorph (c) on the left and miscellaneous burned clay finds (lumps, balls, discs, fragments of bars) on the right. Photo: Teemu Mökkönen.

variety of more obscure ceramic finds, such as fired clay balls and lumps, which suggest that the very manipulation of clay was meaningful in itself (Figure 3.3). The purpose of the apparently idle handling of clay can be understood as 'meditating' on human relationships with land, soils and the underground world. Touching and feeling clay – rolling clay balls and other kinds of toying with the substance – afforded developing and maintaining personal relationships with the land, which in turn contributed to knowing soils on an 'intimate' level beyond the purely physical properties of land and soils. The sense of touch produces situational knowledge about the world and breaks down the division between self and the world (Bailey 2014), which feeds an awareness of the deeply interrelated nature of reality and existence. Like animals, clay is 'good to think with' (cf. Levi-Strauss 1962) due to its properties and associations. In this view, clay figurines would ultimately be - regardless of what they were intended to represent visually – about recognizing that land and soils had such person-like qualities as sentiency and sociality.

Neolithic clay figurines and indeterminate 'lumps' of burnt clay finds can be conceived as materialized 'conversations' between people, the land and the soils, in a setting where the latter were taking on new meanings and becoming woven into the lived world in a new manner. The restructuring of human-land relations through clay work in the Neolithic can be compared to how clay sculpting, according to Bat Or (2010), facilitates the development of the mother-child relationship. Bat Or's study suggests that the engagement of first-time mothers in sculpting themselves and their child in clay activated and fostered parental mentalization. Clay would have been a particularly good medium for the broadly similar processing of humanland relations in the Neolithic not only because clay is earth but also because of its malleability and active and responsive character as a substance.

Living in an inspirited world

The notion that earth and soils have väki – a 'mana-like' spiritual power – is wellattested in later Finnish ethnographic sources. Finnish folklore describes väki as an impersonal 'supernatural' potency of material things - not only of earth and soils but also of water, forest, fire, death and iron, among others - and as spiritual entities associated with various constituents of the world. Väki illustrates in a particularly clear manner how human life in the North unfolded in relation to a rich 'enchanted' reality, which people shared with a host of non-human beings and powers and where the material and spiritual were inextricably intertwined in daily activities. Folklore accounts have been recorded mainly in the nineteenth and twentieth centuries, but the concept of the spirits of natural and cultural places can safely be assumed to date back several millennia, possibly all the way to the Stone Age.

The perception of the environment as pregnant with spiritual presence is central to the principle of mutuality and sociality that characterizes engagements with the environment in northern cultures (see Ingold 2000). Importantly, this reciprocal relationship between people and the non-human world was embedded in experience rather than abstract belief. Encountering a nature spirit, for instance, involved recognizing that a given tree or other landscape element behaved in a manner characteristic of a sentient, conscious being (cf. Ingold 2000: 90–100; 2006: 16). Things were not always what they first seemed to be: certain animals in certain situations could actually be witches, certain bodies of water could be spiritual beings and so forth. Knowing this kind of environment, and engaging with it appropriately, required continuous attentiveness to one's surroundings. Folk beliefs concerning non-human beings and the extraordinary properties of things were embedded in and arose from people's practical everyday engagement with the world. Seemingly mundane activities, such as building a house or keeping livestock, thus required that those properties were taken into account.

This is illustrated in Finnish folklore associated with the founding of a new house or farmstead, which involved various considerations that are not practical or 'rational' in a modern view. For example, certain types of places were preferred or avoided for reasons that had to do with spiritual powers of certain landscape elements, such as particular species of trees (Korhonen 2009: 262–263). It was also advisable not to build at a site where a house had previously burned down, so as to avoid the disaster from happening again. Sleeping at a prospective building site was one means of finding out whether or not the place was suitable for a house, because sleeping was a way of connecting with the spirit world. The world experienced in sleep was apparently considered quite real in early modern Finland (Eilola 2003: 178, 184–185; Vilkuna 1997), and sleeping can perhaps be understood as a means of seeing 'this world' and its spiritual dimensions from a different perspective than while awake (see also Greenwood 2009).

The inspirited house

Houses are universally invested with a plethora of symbolic and cosmological meanings and likened to living beings (e.g. Blier 1983; Carsten and Hugh-Jones 1995; Rapoport 1969). As Mariconda (2007: 268) writes,

A house provides a sense of containment, of enclosure, warmth, protection from the elements, a sense of intimacy and nurture. As such, it is an extension of the Mother archetype. Home is the center of one's existence and one's security. A profound affect inevitably accrues to one's house over time; few can leave their childhood homes without regret or feel a deep complex of emotions upon seeing it again after a space of years.

This is also true to northern cultures in which the meanings of the house must be considered against shamanistic—animistic cosmology. Combining archaeological, historical and folklore materials within a relational framework affords insights into the perception of and engagement with houses, that is, the shared lives and entanglements of people and houses in the North that go beyond a mere subject—object dualism.

Hundreds, if not thousands, of objects hidden in buildings have been documented in the Nordic world both at archaeological excavations and from buildings that are still standing. They were deposited in the course of various ritual activities related, for example, to laying the foundations of a building, averting witchcraft or offering protection from lighting. The specific functions and meanings of such deposition practices have varied, even though they have usually been understood in general terms as 'offerings' or 'sacrifices' to household spirits. But whatever the culturally specific motivations of concealing objects, they nonetheless hint at a special relationship between people and buildings in different times, places and cultural contexts.

In a recent study, Hukantaival (2016) identified well over 200 concealed finds, dating from the thirteenth to twentieth century, and closer to 800 mentions of such finds in folklore accounts from Finland alone. The total number of the known building concealments is difficult to estimate, but Swann (1996) listed over 1,000 finds from a number of European countries, the United States and Australia, in the mid-1990s. While the phenomenon of hiding objects in the foundations or elsewhere in the structure of buildings has attracted some scholarly attention since the early twentieth century, and increasingly since the 1980s, characteristically 'interpretive' and theoretically informed accounts of these finds from historical-period contexts have begun to appear only fairly recently (e.g. Houlbrook 2013, 2017; Hukantaival 2016). Although building concealments have been identified in the northern European world from (later) prehistoric to recent-past contexts, early modern finds seem to dominate the record.

The variety of concealed objects is substantial, and this variation can sometimes be observed even within single sites, as in the case of the foundation deposits documented at the excavations of seventeenth-century Tornio on the northernmost Baltic Sea coast. A number of finds, more or less securely identified as foundations deposits, have been discovered in Tornio, with the finds ranging from a broken cooking pot buried under a corner of a house to an iron bar and a set of bear claws placed in building foundations (Herva and Ylimaunu 2009; Herva 2010a; Nurmi 2011). The variety of concealments notwithstanding, certain objects are recurrently present. Shoes, garments and the so-called witch bottles were frequently concealed in Britain (e.g. Merrifield 1987; Hoggard 2004), whereas quicksilver, coins and animal remains are most commonly mentioned in Finnish folklore accounts, while tools and prehistoric objects are most common among the documented concealments (Hukantaival 2016: 75-90).

Even if it is not always readily evident why particular objects were chosen to be deposited, they must have all been considered as objects of some exceptional power or quality. Prehistoric stone artefacts, for example, have widely been conceived as materialized thunderbolts and thus, when incorporated in the structure of buildings, as providing protection from lightning (Johanson 2009). In the same vein, iron was regarded as having 'supernatural' or 'spiritual' potency in Finnish folklore, which was presumably why iron objects commonly occur as concealments. Likewise, such

seemingly mundane objects as shoes can be understood as special artefacts because they are distinctly personal: they 'retain the shape, the personality, the essence of the wearer' (Swann 1996: 56, quoted in Houlbrook 2013: 107). They can also be seen as liminal objects, which in Houlbrooks' (2013) view makes shoes as efficient 'spirit traps' and hence suitable for concealments.

In early modern times, when the making of special building deposits flourished, houses and households were considered to be permeable, porous and vulnerable, which called for protective measures to strengthen the boundaries of houses – not only physically but also through supernatural means. However, building concealments can also be considered in somewhat broader terms of 'inspiriting' houses, which in turn needs to be seen in a yet broader framework of promoting and maintaining intimate relationships between people and their houses in the North. Some of the concealed artefacts – such as shoes and clothes – would seem to relate directly to the idea of an intimate, personal relationship between people and houses by making 'parts of people' as parts of houses (Hukantaival 2016: 128). The same basic mechanism applies to the purpose of building concealments also more generally: their deposition 'infused' buildings with the special powers or qualities the deposited objects were considered to have. Concealments thus contributed to the making of buildings into something more than just a backdrop of life or objects composed of passive, 'dead' matter.

The Nordic folklore tradition of household spirits provides important insights into how people understood and related with houses in the North until a recent past (Haavio 1942; Sarmela 1994: 158-164; Jauhiainen 1999: 216-225). Spirits were active in various domains of life, as they could take part in household work as well as warn or save people in danger and guard the morals of the household (Sarmela 1994: 160, 163; Jauhiainen 1999: 216-222). Their exact character, however, is curiously vague and ambiguous. Household spirits appear as invisible forces, or they could be old men or animals, and were occasionally identified with parts of buildings themselves, most commonly with the fireplace and sometimes also with timber (Haavio 1942: 171-177, 192-196; Sarmela 1994: 159-160; Jauhiainen 1999: 225). Spirits were sometimes identified with the founder of the household and thought to have come to being, for instance, when the first course of timber was laid out or the first fire in the house was lit (Sarmela 1994: 159; Jauhiainen 1999: 216). The vagueness of the spirits notwithstanding, they were taken very seriously. Spirits were critically important to the success of a household, and good relations were maintained with spirits by, for instance, offering them food and drink (Jauhiainen 1999: 226-228).

Most importantly, household spirits were perceived, rather than merely believed, to exist. They were responsive and engaged with people, and encounters with them were reported in a matter-of-factly fashion still in the early twentieth century (see Haavio 1942: 72–109; Sarmela 1994: 162–163). In addition to occasionally seeing them, people could hear the sounds that the spirits made or otherwise become aware of their presence. In recent popular imagination, household spirits have often been understood as gnome-like beings who cohabited houses with people, but

this image of household spirits is probably of a late date, mediated by fairytale traditions (see Haavio 1942: 214; Sarmela 1994: 160; Jauhiainen 1999: 216-222). Rather than reflecting a belief in some independent, immaterial spiritual entities, the tradition of household spirits can be interpreted as reflecting the idea that houses themselves, as material things, were perceived as living beings with personlike characteristics. Houses were, in some respects, similar to people and the relationship between houses and their inhabitants thus of a social character, as befits the traditional northern animistic-shamanistic cosmology (see further Herva 2010a). In this view, concealed finds were not directed outwards to beings or forces external to households but to the buildings themselves and contributed to the making of buildings as living and social beings.

The traditional notions concerning household spirits seem to bear an interesting resonance with the theme of ghosts and haunting, which has recently attracted considerable attention especially in geography (e.g. Edensor 2005; Holloway and Kneale 2008). It is also of an interest here that ghosts, according to Davidson (2005), are a typically 'northern' cultural phenomenon (in however broad a definition of the North), and northern folklore is indeed rich in accounts of the dead residing in or visiting the world of the living (Figure 3.4).

The relationship between household spirits and ghosts – or haunted houses – remains unclear, but both express a similar basic idea that there is more to houses than just passive matter and that houses 'abduct' (cf. Gell 1998) properties from their inhabitants and thus become, to some degree, continuous with them. Like household spirits, ghosts are most often experienced through auditory phenomena – such



FIGURE 3.4 The so-called 'blue house' is one of the many allegedly haunted buildings in the northern city of Oulu, the 'ghost capital' of Finland. The author and ethnographer Samuli Paulaharju lived in the house in the early twentieth century. Photo: Vesa-Pekka Herva.

as footsteps, knocking and music – or a vague sense of presence. Both seem to be in the habit of throwing things around in fits of anger. It is also significant that haunting experiences typically take place during the night and often in derelict places, both of which can be understood as providing a setting for a heightened, or altered, sense and awareness of the environment.

Whatever the 'true' nature and causes of ghostly experiences, their embeddedness in experience, rather than blind belief, highlights the relevance of relational knowing and understanding of reality also in modern world contexts. Houses can be seen to transcend the subject—object division and can be understood as person-like beings, even if this transgression of modernist categories takes different forms and expressions contingent to their specific broader cultural settings. Although this applies to different times and cultures around the globe, it is perhaps especially clearly recognized in the northern world, where the notion of houses as conscious and sentient beings is embedded in millennia-long shamanistic—animistic understanding of the world.

FORESTS AND HUNTING

The forest in northern landscapes and mindscapes

Because woodlands comprise one of the dominant landscape types in Fennoscandia, human life on this northern fringe of Europe has always unfolded in a close relationship with forests. Woodlands have been the scene for a host of different kinds of activities, ranging from hunting, fishing, berry- and mushroom-picking to pasture, swidden cultivation, logging and tar-making. In particular, hunting has been critically important to northern ways of life and thought, and in regions outside the 'heartlands' of Scandinavia continues to be so, as indicated, for example, by the social prominence of hunting clubs in rural communities and the very high numbers of hunting weapons owned by Norwegians, Finns and Swedes. However, even though they tend to be associated with 'wild' nature and foraging societies, and may appear untouched to the untrained eye, the vast northern forests have been heavily modified cultural landscapes since time immemorial, used by both foraging and agricultural communities.

The perceptions of and attitudes to forests are, and have presumably always been, rich, diverse and contextual, but some general trends in 'northern' ways of relating with forests can be identified. Traces of various prehistoric and historical activities in northern woodlands have been identified archaeologically (ranging from the so-called stray finds of Iron Age artefacts to culturally modified trees of the historical period), but many aspects of how forests were entangled within northern lived worlds and mindscapes are still poorly understood. Forests have been regarded as a source of timber and game, but the less tangible consequences of living in a forested landscape – for example, related to movement, perception and an understanding of life in general – have not been a major concern in the archaeology of northern Fennoscandia, despite some exceptions (e.g. Holm 2002).

Northern boreal forests have never been a pristine non-human wilderness although their populace has often been overlooked in archaeological and historical narratives. For example, archaeological maps of Iron Age Finland tend to show a handful of small centres of occupation and give the impression that the rest of the country was empty – which, as we know from such data as finds of cereal pollen (e.g. Alenius et al. 2013; Alenius et al. 2017), toponyms and folklore sources is simply not true. Historical narratives offer a romanticized view of agriculturalists travelling bands of fur trappers from the South exploiting the northern wilderness and gradually establishing human presence through forest clearance – a process known by the Finnish term of *eränkäynti*. That there was a preexisting populace is not explicitly denied, but it has been generally ignored as 'wandering Lapps' of little consequence.

Historically, the northern forests have often been seen primarily as a material resource. This notion of trees and woodlands as a source of wealth – the 'green gold' of the wilderness – has its roots in the tar industry of the seventeenth and eighteenth centuries and rose to prominence with the emergence of the lumber industry in the first half of the nineteenth century. It has inevitably also affected the ways archaeologists and historians have perceived the significance of forests in human life in ancient times. For instance, commercial fur trapping has been routinely and without much reflection described as the foundation of wealth for northern communities in the Iron Age.

There can be little doubt that forests have been economically important in the Nordic world at different times. The beginnings of industrial mining in Sweden – a cornerstone of the Swedish economy and identity since the medieval period (Chapter 2) – relied not only on the abundance of mineral riches but also of wood and water. Likewise, the fact that some of the largest sawmills in Europe around the turn of the twentieth century were located in Finland demonstrates the importance of forests. However, this discourse of forests-as-wealth offers a decidedly one-sided view of the role that forests – as an integral element of northern life-worlds – have played at different times, and how northerners have perceived and engaged with woodlands.

Folklore and symbolism associated with forests is extremely rich in northern Europe, and both scholars and the general public are often familiar with it, but it tends to be viewed as mere fairy-tales and disconnected and separate from 'real' forests. In other words, archaeologists and historians have regarded the forest in 'objective' terms, as a passive resource and backdrop of northern lives, with little attention to the 'phenomenology' of forests (but see e.g. Holm 2002; Noble 2017). Yet, living in or close to a forest has inevitable implications on how one perceives and experiences the world, culturally signifies it and finds a way in a terrain where wide vistas are typically not available (e.g. Turnbull 1961; Gell 1995). Folklorists, anthropologists and geographers have explored the cognitive and experiential dimensions of forests (and trees) from various perspectives (e.g. Rival 1998; Jones and Cloke 2002) but often overlook its more practical aspects. In sum, the northern forests tend to be viewed either in purely utilitarian or symbolic terms – a

dichotomy that is likely to have been deeply alien to the forest-dwellers of the premodern period.

Northern perceptions and meanings of forests, and relationships with them, are very diverse and have varied through time. The Finns, for instance, have identified themselves closely with forests. Although partly a product of nationalist rhetoric, the close association between the Finns and forests has also been recognized by other groups of people. It is reflected in early modern Scandinavian accounts of the so-called 'Forest Finns', or slash-and-burn agriculturalists originally from the Finnish province of Savo, who migrated to the wilderness areas of northern Sweden and the Swedish-Norwegian border region in order to settle and increase the tax revenue from those regions. Finns were 'used' for this purpose by the Swedish Crown because unlike the peasants of more temperate regions, they possessed the know-how of making a living through agriculture in the boreal forests.

The same narrative adheres to the seventeenth-century Swedish colony of New Sweden in the Delaware Valley (present-day United States), where Finns according to some accounts developed unusually close relations and mutual understanding with the Native Americans because of their familiarity with living with the forest, the institution of the sauna or sweat lodge and so on. Later on, Finns migrating to Minnesota, Michigan, Ontario and other northern parts of North America gained similar repute (Dorson 2008). As a testimony to the close relationships that developed between later Finnish immigrants and the native Ojibwa, a small descendant community that identifies themselves as 'Finndians' still thrives in Minnesota and Ontario in the United States and Canada (Kettu and Seppälä 2016).

By contrast, Norwegians generally identify themselves with mountains, on the one hand, and the sea on the other, and in Norse myth and folklore, forests emerge as scary places inhabited by trolls. Both Scandinavian pre-Christian cosmology and Norwegian nationalist rhetoric since the nineteenth century have portrayed the farm as a proper domain of human life, whereas the forest is seen as a hostile and dangerous place (Holm 2002, 2005). Indeed, the tripartite world of Norse mythology – with gods living in Asgard, humans inhabiting Midgard and giants Utgard – can be seen to reflect a sedentary farmer's worldview and environmental relations and appears to reproduce the cognitive organization of the farm (Holm 2002: 67; 2005: 176). Although the dualism between the human infield and non-human outfield is probably an ideological construction, at least to a certain degree, the intimate knowledge of and relationship with forests ascribed to the 'Forest Finns' - including their alleged ability to control forests and transform themselves into animals seemed alien and frightening to historical-period Norwegians (Holm 2002, 2005).

The historically known Finnish perceptions of woodlands are quite different from those of, say, Danes although such national- or ethnic-level characterizations are necessarily somewhat simplistic and mask a wide spectrum of variation. For example, hunters and fishermen in the North of present-day Finland have related differently to forests from farmers in the south-western parts of the country and the very notion of a 'Finnish' ethnicity is a comparatively recent construct. Nonetheless, there is a real and long-standing division between the North and South in the Nordic world. Southern parts of Scandinavia – especially Denmark and Scania in present-day Sweden – have been distinctively agricultural regions since at least the Bronze Age, with strong contacts to the central and southern European cultural sphere. By contrast, the lifeways of the central and northern parts of Fennoscandia have unfolded in a closer relation to the northern circumpolar world until recently and, in some regions, up to the present day.

Agriculturalists have seen the forest as a strange and enchanted domain, as exemplified by the stories of the Brothers Grimm and H.C. Andersen (see further Jones 2011), which reflect an alienation from the forest-world. A farmer's concern is clearly reflected in, for instance, folklore themes such as domestic animals becoming magically captured by the forces of the forest, whereas the eroticization of the forest, discussed below, arguably originates in a hunter's cultural world. That such themes are found side by side in folklore is characteristic of the Nordic world, where cosmological and folklore notions are often layered and mixed, reflecting ideas from different time horizons and cultural contexts in a region that is in many ways a borderland – between farming and foraging, circumpolar hunting cultures and central European/Mediterranean influences and Indo-European and Finno-Ugric language groups.

Engaging with trees

The prehistoric and early historical period populace of northernmost Europe shared their world with a wide range of non-human beings (e.g. Pentikäinen 1995; Siikala 2013; Pulkkinen 2014). Early historical sources and folklore accounts reveal a world where, for example, plants, animals, rocks or artefacts could have characteristics such as personality, sentience, will and capacity to interact with people. This affected the way people responded to their environment and acted as part of it: it was necessary to consider also the other more or less human-like residents of the world – to negotiate one's place in the world.

Practices such as hugging trees and talking to them may sound like a New Age cliché, but in northern Fennoscandia it was an ethnographic reality until recently. In Finnish folk culture, the pine tree carried special significance: it was not only associated with the bear (see below) but also with strength and permanence more generally (Guenat 1994: 120–125; Sarmela 1994: 38–43). It was regarded as the 'tree of life', in some sense, and was typically chosen as a 'karsikko' tree – that is, a tree that was modified (branches of standing trees cut off partly or completely and crosses carved on the trunk) during funeral proceedings to mark off the boundary between the domains of the living and the dead (Vilkuna 1992; Kovalainen and Seppo 2006). The pine tree was by no means the only species of tree with cultural meanings and symbolism, however, but there is a rich body of northern lore and symbolism associated with basically all species of trees (e.g. Guenat 1994). Folklore material provides insights into the shared lives and bond between people and trees and shows that such bonds have been maintained until recently. Kovalainen and

Seppo (2006), for example, surveyed historical mentions of 'special trees' in Finland and managed to identify a number of old 'sacrificial trees' still in the late 1990s.

Tree symbolism and 'ritual' practices directed to or involving trees are by no means unique to the northern world but a universal phenomenon attested in different parts of the globe from prehistory to the present day (e.g. Rival 1998; Goodison 2010). There would appear to be something special to trees that makes them attractive to people and susceptible to cultural signifying. Anthropologists and archaeologists have long recognized the prominence of trees in the rituals and mythologies of different cultures, as extensively and most famously explored by Sir James Frazer (1890) in The Golden Bough already in the late nineteenth century. Some well-known European examples of the cosmological and ritual associations of trees include the Norse/Germanic concept of the world-tree, Yggdrasil, which supports and binds together the different planes of the cosmos, the Great Oak of Kalevala poems that has a similar function or the 'sacred trees' depicted in the Bronze Age art of Minoan Crete.

The symbolic meanings of and engagements with Minoan trees are commonly conceived in religious terms, such as 'tree worship', in one sense or the other, or as objects symbolizing divine beings. A common problem with such readings, however, is that they tend to reduce trees into mere passive objects that people 'paint over' with symbolic and religious ideas. Trees are seen as an empty canvas for cultural projections rather than contributing to the signification process (cf. Cloke and Jones 2002). Yet, in the light of northern ethnography, trees should be seen as agents and active beings, which in turn calls for a closer attention to the materiality and behaviour of trees. In other words, we should study how 'meanings' emerge in dialogue between people and trees and are thus connected to the perception and experience of trees and engagement with them in the context of the lived world.

Trees – some of them anyway – were regarded as inspirited person-like beings because they manifested person-like behaviour in certain situations the way persons do, such as taking contact with people in an apparently intentional manner. It is clear that non-human inhabitants of woodlands were regarded as real-world entities that were taken seriously and whom people could and did encounter. There are, for instance, early modern court cases where people were charged of sleeping with 'Maidens of the Forest' - spirit beings who were typically described as beautiful women seen from the front but tree-like from behind (Liliequist 1992: 131). Maidens of the Forest illustrate the broader concept of trees as potentially conscious social beings who more or less actively engaged with people, even if the social character of trees, grounded on attentiveness to trees and what they do, probably took subtler forms most of the time.

The Estonian folklorist Madis Arukask (2017) describes communication and personal rituals with trees among two small Finno-Ugric peoples living in European Russia, the Votes and the Veps, whose subsistence was until recently based on slashand-burn agriculture, with hunting and gathering as a large component. His fieldwork demonstrated that an animistic worldview (intertwined with folk Orthodoxy), in which trees could be active agents, persists even today among the older members

of the community, despite the trials of World War II, Stalin's minority policies and state-propagated Soviet atheism. In 2010, Arukask interviewed a Vepsian woman born in 1932, who described how she would make an offering of dried bread at a birch tree and ask it for strength and energy when entering the forest to pick mushrooms and berries:

I'll make an offering [...] for the master and the mistress [...]. I reach in the forest (a specific) place, I bow to this place: thank you masters and mistresses, you've given me health, given strength, given berries, mushrooms. Thank you my dear, my beloved forest, I say all this. I walk in the forest until I am tired. At big birch trees, I stop, such a hillock, [so much] to climb to the top (?) [...] I hug the birch tree – you darling birch tree, you've got fresh leaves, you've got thick branches, you're my dear (????), you give me health, give strength, help me to get home today.

[Arukask 2017: 174; question marks in the original interview transcript]

Rather than 'tree worship', this kind of special relationship with trees – whether specific individual trees or trees in general – might be better understood in terms of attentiveness and knowledge: of how trees are in the world, what they do and how they influence human life (cf. Bird-David 1999; Harvey 2005: 104–106). That is, trees were perceived to do things and behave in a particular manner, suggesting that they have special properties or powers and giving rise to the recognition of trees as social and inspirited beings with person-like qualities. For instance, the association of coniferous trees with durability, longevity and even eternity is grounded on their evergreen nature, in contrast with deciduous trees. The latter were viewed as being in some sense closer to human beings and also 'wiser' and more 'feminine' in character than the 'masculine' pine and spruce (Guenat 1994; Puustjärvi 2013: 91–94; Malinen 2015). Folklore sources also indicate that individual trees of the same species may have been regarded as males or females depending on their shape or other properties (Guenat 1994: 120–125), which reflects deep attentiveness to trees and a recognition of their individuality.

Besides individuality, it was also recognized that trees are responsive beings and affect human life, which is especially clear in the case of household trees and trees that otherwise have a special bond with particular people. Folklore-sources provide descriptions of how the destinies of a household were tied to its 'guardian tree', which could be located in the yard, a nearby field or further away. Such a tree could be of various different species – although the rowan features prominently, perhaps because the intense red of its berries that may have evoked (human) blood – but it usually had something distinctive about its shape or size (Haavio 1992: 47–49). Members of the household were expected to be 'obedient' to the tree, treat it with respect, give offerings to it and in no way harm it (Haavio 1992: 37–38, 40–42). It has been suggested that the tree itself was not subject to veneration but rather marked a household shrine where household spirits were worshipped (Haavio

1992: 42-43). However, from a relational perspective, it makes sense that the tree itself was perceived as, or developed into, a being with person-like qualities, rather than being associated with some ghost-like entity which was separate and different from the tree itself.

The relationship between the household and the tree was a very close one – the death of a branch, for example, was taken to mark the death of a family member. Likewise, there is a tradition of planting or naming a tree after the first-born of the family, which established a 'causal' link between a person and a tree with its own life-force (Malinen 2015: 51, 54). Malinen (2015: 51) quotes a story from the 1930s of an elderly woman who, in visiting her childhood home, had embraced the large rowan tree that she herself had planted in her adolescence and said that they would both die soon - and next spring the tree fell in a storm and the woman died. The sacred tree, thus, was a family tree in a very literal sense. It contributed to the success of the household, and the members of the household in turn regarded it as a person-like being, engaging in a two-way social relationship with it. In other words, social relations within the household were extended or externalized to the very land and place where people lived and intimately woven into the life of the household. Rather than symbols of the family, sacred trees were family members. This is what, in our view, the spiritual dimension of human-environment relations is ultimately about: recognizing that the relationship between people and their surroundings is deeply reciprocal in a way that cannot properly be understood in terms of subject-object dichotomy or other related dualisms.

The perceptions of trees and ways of engaging with them are significantly more difficult to assess in prehistoric contexts, but historical and folklore material can be taken to provide some clues about the general character of human-tree relations also in a deeper past of the northern world, particularly in the view of long-term cultural and cosmological continuities in the North. One of the very earliest historical sources to mention Finland, a papal bull sent out by Pope Gregory IX in 1229 to bishop Thomas of Finland, gave the latter the right to confiscate all pagan sacred groves and cultic sites (luci et delubra), indicating that the pre-Christian religion of the Finns focused on sacred groves. A second letter, sent out by the Pope in 1237, suggests that some degree of confiscation had taken place and that the areas confiscated were not small groves consisting of a handful of trees but rather large stretches of woodland regarded as sacred (Viljamaa 2017). In the sixteenth century, Bishop Mikael Agricola of Turku, south-western Finland, wrote a short poem on the old Finnish 'pagan gods' which identified Tapio as the god of the forest and game animals. At the end of the poem, Agricola observed that, besides the deities he listed, many other things were 'worshipped' as well, including 'rocks and treestubs'. The practice of 'tree worship' continued beyond Agricola's time, as indicated by the ecclesiastical law that was passed in the late seventeenth century and specifically forbade giving offerings to trees (Haavio 1992: 53-55), which proposes that the practice was still common and therefore of a concern to the ecclesiastical and secular authorities of Sweden.

The *Kalevala* poetry indicates that Finns learned the 'wisdom of the trees' from Sampsa Pellervoinen, the deity (or the guardian spirit) of the fertility of land and forest, which encompassed intimate knowledge about different species of trees and the places where they grow (Holm 2005: 177). Like certain other deities featuring in the *Kalevala* poetry, such as Tapio the forest deity, Sampsa Pellervoinen can perhaps be interpreted as a personification – possibly of a rather late date – of the lifeforce, sentience, consciousness, spirituality and agency residing in the forest and its manifold non-human constituents. In a similar manner, the various spiritual beings inhabiting woodlands, such as the Maidens of the Forest mentioned above, can be considered as reflecting, and arising from, a perception– and experience–based sense of mutuality and reciprocity between people, trees and other elements of forest environments.

Humans and animals in the North

Although agricultural practices were introduced in the northerly latitudes very early on, possibly already in the sixth millennium BC, it was slow to advance or replace hunting and fishing as the main sources of livelihood. Still in the nineteenth century AD, hunting and trapping remained a crucial complementary source of food in the more remote areas of Finland, Sweden and Karelia, and thus the impact of southern agricultural social systems remained rather low in these regions until the modern period. Wild animals continued to occupy an important role not just for livelihood but also culturally, preserving elements of an archaic circumpolar hunting culture.

Some animal species were clearly symbolically more important than others. In the prehistoric art of northern Fennoscandia, two animal species completely dominate the picture: the elk and the deer. There are some exceptions to this rule, as for example at Lake Onega swans and other waterfowl are more common than cervids (Lahelma 2012a) while belugas are prominent at River Vyg (Gjerde 2010), and in southern Scandinavia, the ox and the horse are commonly depicted in representations of the Bronze Age and later. But overall, the there is no question that the large cervid species most occupied the thoughts of hunter-gatherer populations in northern Fennoscandia (and even throughout the entire circumpolar zone). Humans and elk/deer are brought together not only as hunters and prey but as sharing the same essence, and even in some sense interchangeable. This interchangeability seems to be expressed in certain rock art images, where elks and humans are merged or transform into each other, but also sometimes in portable art, such as the bone comb from the Pitted Ware site of Gullrum at the Swedish island of Gotland (Almgren 1907). This remarkable artefact (dated to ca. 3200–2300 BC) shows an elk with a human head in the place of a tail, as if manifesting the essential sameness of elks and humans (Figure 4.1).

As observed by Eduardo Viveiros de Castro (1998), such a notion of 'sameness of the soul' of all living beings seems to be characteristic of hunter–gatherer peoples throughout the world. Viveiros de Castro takes his examples from the Brazilian



FIGURE 4.1 A bone comb from the Middle Neolithic site of Gullrum (Gotland, Sweden), showing an elk and a human seemingly merged together. Photo: Gunnel Jansson/The Swedish History Museum.

Amazon, but as emphatically pointed out by Rane Willerslev (2007), who has conducted fieldwork among the Siberian Yukaghirs, Viveiros de Castro's ideas apply, down to small detail, also to the worldview of the Yukaghirs and many other circumpolar hunting peoples. The perspectivist view holds that rather all living beings share a 'human perspective', that is, from the point of view of each species, they are humans and all the others seem like animals. While the soul is the same, bodies, however, are unstable and 'open' - an outer appearance can be changed like a piece of clothing - and when different species come into close contact (such as in hunting) this sometimes happens (Figure 4.2). A person may find him- or herself as having transformed into an elk or a reindeer, often without at first realizing it, marrying a reindeer girl, eating reindeer food with great pleasure, and so forth. Only some subtle clues, such as the food consumed by the adopted band – and realizing that it is not meat but moss (Willerslev 2007: 470) - may provide a clue that the perspectives have shifted.



FIGURE 4.2 An older carving of a wild reindeer at Alta, northern Norway, has been transformed into a bear (or a deer/bear hybrid) by the addition of a head and a back hump characteristic of a bear. The two bear cubs and a row of bear tracks leading to the animal are probably also later additions. Photo: Jan Magne Gjerde.

This essential sameness is reflected in numerous ways in the archaeology of the region. To take just one example, in the Mesolithic burial ground of Skateholm, Sweden, humans and dogs were given equally elaborate burials – the dogs receiving exactly the same kinds of burial rites as humans, with red ochre and grave goods deposited in ways that echo the human burials (Larsson 1990). Eleven dog burials have been found, and given that the total number of burials at the site is around ninety, it is clear that the practice was not rare, and the burials are not anomalous. This suggests that at Skateholm, dogs were viewed as valued members of the band and little different from the human members. Indeed, in terms of grave goods, one of the dog burials at Skateholm ranked among the richest burials at the whole site: it had been laid in a crouched sleeping position, a red deer antler by its side, a decorated antler hammer lay on its chest and three flint knives were placed on its thigh.

A second important element in the human-animal relations of the northern circumpolar hunters is a phenomenon known as animal ceremonialism, which entails the belief that if a killed animal is ritually sent to its 'spirit owner' it will be reassembled and resurrected. Because there is a limited number of animal souls in the universe, the continuity of the hunted species crucially rests on the proper treatment of the cadaver by the hunters, often, for example, including the ritual burial of the bones that must all be present. Probably the best known example of animal ceremonialism involves the rituals surrounding bear hunting, which among the Sámi, Finns and other circumpolar peoples is ritually moved to the spirit world in a complex ceremony that follows the hunt (Hallowell 1926; Elgström and Manker 1984). The ceremonial returning of animal bones to the keeper of the animal is associated especially with large and comparatively rare catch, particularly the elk and the bear. By contrast, herd animals such as deer normally did not receive such treatment, except perhaps for the first catch of the hunting season (Siikala 2013: 369).

Seducing the prey

A wide range of rock art sites associated with hunter-gatherer populations in northern Fennoscandia depict scenes where men, women and animals (usually elk or deer) are involved in a sexually charged act. For instance, at Nämforsen (Sweden) and Kanozero (north-western Russia), elks appear to be 'monitoring' a human couple having sex (Hallström 1960; Kolpakov and Shumkin 2012). Sexually aroused males accompanied by animals are found at several sites, such as Kanozero, where a phallic male figure brandishing an elk-headed staff is faced by a capercaillie. Even acts of zoophilia, or humans penetrating animals, appear to be depicted at a number of sites (Lahelma 2007).

Timo Miettinen (2000: 126-127) has noted that images of elks are sometimes also combined with human figures. This is the case with the Pyhänpää painting, Finland, where the human is merged with the back leg of the elk, but it is more common to find a human figure positioned near the hind, sometimes extending a hand towards the animal. Because of the rather suggestive position, these images are here referred to as 'bestiality scenes'. Examples of this theme are found in the Finnish rock paintings of Tupavuori, Jyrkkävuori, Haukkavuori (Kotojärvi), Vierunvuori, Saraakallio and Salmenvuori and occur also at the carvings of Nämforsen and at least two Swedish rock painting sites, at lakes Åbosjön and Skärvången (Kivikäs 2003: 146). Remarkably similar images occur even in the Siberian rock carving site of Tomskaya Pisanicha (Okladnikov and Martynov 1972), where bestiality scenes, elk-boats, horned anthropomorphs, two-headed elks and other images familiar from North European rock art are represented.

A variety of different interpretations can be offered to these strange scenes, and they are not necessarily all related to the same phenomena. In any case, it is difficult to see them as depictions of real-world acts of bestiality, as from a purely practical point of view, it is quite difficult to imagine how a human male could penetrate a living elk cow without getting killed in the process. One of us (Lahelma 2007) has earlier argued that they may be related to the notion of shamanic flight, which is often conceptualized as taking place 'riding' an elk or a deer into the Otherworld. The practice of shamanism is steeped in corporeality and sexuality (although this aspect of shamanism is often played down in older ethnographic

accounts (Mandelstam Balzer 1996)), with shamans sometimes perceived as having sexual relationships with their spirit helpers, and even the act of drumming is likened to sexual intercourse. The argument was made that scenes of zoophilia – or of touching the hind part of the elk or merging with the animal (as at sites like Pyhänpää, Finland, and Nämforsen, Sweden) – could thus represent a sense of coessence and sexual attraction between the shaman and his/her spirit helper beings.

While this still seems like a possible interpretation – especially for scenes where boats, elks and humans are all merged together – it may be enriched by considering this imagery in the light of an animistic ontology and the notion of perspectivism discussed by Viveiros de Castro (1998). Because non-human beings are deeply entangled in social relations with human beings, the nature of these relations can also be sexual. In particular, the relationship between the hunter and his (or sometimes her) prey is seen in sexual terms. As Willerslev (2007: 110) points out, the association of hunting with sex is not only found among circumpolar cultures but is reported among hunter-gatherers across the Amazon, Africa and South-east Asia. This is related to the art of seduction, where the hunter has to arouse the prey to entice to it give itself up, even at the cost of its life.

Willerslev (2007: 199) further notes that he uses the female 'her' of the elk in his anthropological account of the Yukaghir hunters 'because the hunters tend to conceptualize the elk as a female lover'. This is a highly interesting observation, because it sheds light on the ages-old problem of why the elk portrayed in rock art almost never have antlers. Some have argued that the elk are bulls in their winter or spring attire, when they drop their horns (e.g. Taavitsainen 1978; Mikkelsen 1986), but the notion of the elks as 'female lovers' of the hunter is much better in line with other aspects of rock art. In northern and eastern parts of Finland and Karelia, a similar mentality towards hunting persisted well into the historical period, as evidenced by hunting spells and ceremonies recorded in the nineteenth century (Tarkka 1994; Ilomäki 2014). The spells address both the owner of the forest and the hunted animals as persons, seeking the approval of the owner, and both are viewed as erotic beings that the hunter has to seduce.

In the rural parts of the region, the relationship to domestic animals was likewise more based on social and personal exchanges than exploitation, allowing the animals to be viewed as individuals and persons. This resulted in more intimate – and quite often sexual – relations between humans and animals. The historians Jonas Liliequist (1992) and Teemu Keskisarja (2006) have drawn attention to the curious fact that in seventeenth– and eighteenth–century Sweden (which then included Finland), bestiality was extremely harshly persecuted and viewed as a grave social and religious problem – probably to a greater extent than anywhere else in the world. Offenders were commonly brought to court and very harshly punished, exceeding even contemporary witchcraft trials in this respect.

Significantly, the animals were viewed, at least to some extent, responsible accomplices in these crimes, as in addition to many of the perpetrators, the animal partners were also executed or burnt at stake. Although the authorities justified this as a necessary act because the animals had been 'polluted', the understanding that

animals could be actively involved in seducing men is also present. For example, some court testimonies given by witnesses suggest that a mare or a cow had offered loving glances to the perpetrator. Keskisarja (2006), who bases his analysis on eighteenth-century court documents from Finland, is hesitant about speculating the role of folk beliefs and pre-Christian worldview in these events, even if he acknowledges the radically different conception of reality expressed in the court documents. He does conclude, however, that the perceived boundary between humans and animals was less clear than today, which undoubtedly contributed to the phenomenon. Ethnographers and folklorists have, perhaps unsurprisingly, been much more willing to interpret it as being related to ancient notions of the sexual encounter between the hunter and his prey, human-animal metamorphosis and totemic myths concerning animal ancestors of human clans (e.g. Laaksonen and Timonen 1997).

Elk-headed staffs – symbols of Stone Age clans?

One of the most iconic types of artefact from the northern European huntergatherer Stone Age are the so called elk-headed staffs found from contexts that date from the Mesolithic to the late Neolithic (Carpelan 1977; Lindquist 1994; Kashina and Zhulnikov 2011). Some of the artefacts have been made of stone (e.g. finds from Huittinen and Säkkijärvi in Finland and Karelia, respectively) and have been shafted to a hole drilled through the artefact – the rod, presumably made of wood, is not preserved. Others are made of antler, with the head and the rod forming a single artefact – famous finds come from the sites of Šventoji, Lithuania and Olenyi Ostrov, Karelia. The latter two are approximately 40 cm long and thus can have formed actual staffs. In addition, some authors include a number of miniature 'staffs' made of bone in the same artefact category, but they (such as a find from Zvejnieki, Latvia, that is only 12 cm long) may have served a different purpose.

Staffs such as this are found in a region that covers Finland, the Baltic States and the northern parts of European Russia. While the elk-headed staffs are mostly missing in Sweden and Norway (a single artefact made of stone has been found from Norrlövsta in Uppland, Sweden), scenes with people holding such staffs are depicted at a number of rock art sites, most famously Nämforsen in Sweden and Alta in northern Norway, suggesting that they were used more widely than indicated by the finds – and that staffs made of organic materials simply have not been preserved. In addition to the elk-headed staffs, some examples exist also of bear-headed staffs – a famous example comes from Paltamo, northern Finland – but such artefacts are never depicted in rock art.

The interpretation of these artefacts has attracted a lot of discussion over the decades. While everyone seems to agree that they are 'ritual staffs', precisely what kinds of ritual they were used for, and why, remains unclear. One of the most popular theories suggests that they are totemic emblems of prehistoric elk and bear clans, an idea apparently first coined by the folklorist Matti Kuusi (1963). Because of certain variations in Finnish-Karelian folk culture, some ethnologists and folklorists

have suspected the existence of prehistoric totemic clans related to the bear and the elk, the former being concentrated in eastern Finland and Karelia, while the latter would have inhabited areas further to the west. Other clans, including ones related to the black woodpecker (*Dryocopus martius*), the common frog and the hare, may also have existed (Sarmela 1994). The Latinist Tuomo Pekkanen (1983) referred to the work of the Roman historian Tacitus, who in the last passage of *Germania* (c. AD 98) writes about two semi-mythological peoples occupying the extreme north of Europe:

What further accounts we have are fabulous: as that the Hellusians and Oxiones have the countenances and aspect of men, with the bodies and limbs of savage beasts. This, as a thing about which I have no certain information, I shall leave untouched.

[Tac. Germ. 46,4]

Even though Tacitus wisely refrains from making conclusions based on what is clearly obscure hearsay, Pekkanen wanted to go further and suggested that the passage could refer to Baltic Finnic peoples named after their respective totemic animals: Hellusians would be western Finnish elk- or deer-people, their name derived from the Greek word for deer (ellós), while the name of Oxiones would derive from an archaic Finnic word for the bear (ohto, aksi) and refer to eastern Finns. More recently, the anthropologist Matti Sarmela (1991) and the historian of religion Juha Pentikäinen (2005) have adopted and further developed these ideas in their discussions of the role of the bear in northern cosmology.

Although the totemic reading of elk- and bear-headed staffs is not without merit, there are several obvious difficulties with it as well, and the speculative reading of ancient historians is not the only one. For instance, there is usually a prohibition or a taboo against killing, eating or touching the totem animal. This was one of the points made by Sarmela (1991), who argued that there seems to be little evidence for bear-hunting rituals from eastern Finland (the supposed region of the bear clan), but the taboo doesn't seem to work both ways, as elk-hunt has evidently been important in western (and eastern) Finland throughout the ages, and it is difficult to imagine that any restrictions were made on hunting one of the most important sources of meat in the boreal forests. This is why the species represented by group totems typically have no economic worth for the communities concerned. Moreover, group totems typically represent a large variety of different species - rather than just two - although a distinction can be made between principal totems and subsidiary ones, and elk and bear could in principle represent the 'principal' totems of the region. But the main problem is that the elk-headed artefacts are never contextualized in these discussions. While many of them are stray finds, some have been found in burial contexts, and these provide clues to interpretation. Even more importantly, the rock art evidence concerning elk-headed staffs has been largely bypassed. Elk-headed staffs occur in rock art in a wide range of significant contexts, which we now must turn to.

Sceptres of the shaman?

Another common interpretation of the staffs is associated with shamanism. The Russian archaeologist Nina Gurina (1956), who published the definitive monograph on the Olenyi Ostrov site, suggested that the elk-headed staffs were ritual 'sceptres' of the shaman, in part because they were found in what were designated as 'shaman graves' (due to their exceptional features). However, she did not specify how and for what purpose the shamans would have used them. This view was adopted also by Helskog (e.g. 1987, 2014) in discussing Alta rock art, but he likewise hesitated to take the interpretation much further, even though the Alta material offers some of the most important pointers in this respect. Tilley (1991) and Zvelebil (1997) went a bit further, suggesting that the staffs may be likened to the Evenk shaman's turu – a word that refers to a piece of wood that represents the World Tree, by climbing which the shaman could enter the Upper World. But the connection between the elk and the World Tree was never really explained, and neither of the authors discussed the rock carvings of Alta.

At Alta, people holding elk-headed staffs occur in various different kinds of situations that always seem to involve movement and action, suggesting that the staff is not simply a 'sceptre' (i.e. an indicator of status) but an object used for some purpose. For example, at the Ole Pedersen panel, two human figures bearing elk-headed staffs are juxtaposed, brandishing them in what looks like a conflict-laden situation, and accompanied by a drum-beating figure (Figure 4.3). Similar scenes of juxtaposition between two staff-wielding figures can be found, for example, at the Kåfjord panel, and they are characteristic of Phase II at Alta (c. 4800-4000 BC according to Helskog 2014). These scenes of confrontation suggest a power struggle between individuals wielding a staff; one scene, for example, shows a person wielding a huge staff confronting another one wielding a tiny one (Helskog 2014, fig. 14), perhaps indicating differences in rank or supernatural power. In other words, the artefacts may indeed indicate status (a 'priesthood' of sorts), but they are also associated with action. A second significant scene from Alta (found in the Bergbukten panel) shows a human figure touching the muzzle of an elk with an elk-headed staff. Rather than representing a physical encounter between the human and the animal, it probably represents a 'spiritual' connection with the two, in which the staff acts as a mediator. Staff-wielding humans are also associated with several hunting scenes, such as a famous one showing a bear-hunt at the Bergbukten I panel (Helskog 2014, fig. 17) and another one showing an elk hunt (Helskog 2014, fig. 64).

To wield a carved image of the elk in one's hand may have provided a somatic experience of communicating and engaging with the animal, but the staff may also have been understood as a person and a source of potency in its own right - and therefore used in the seduction of prey. At sites like Nämforsen, Kanozero, Alta and Vingen, elk-headed staffs occur seemingly alone – that is, without anyone actually holding the staff. At Nämforsen, staffs can be seen as 'crew-members' on a boat, and at Vingen (if we are to believe Lødøen 2015), they actively 'herd' the red deer across the cliff face. At Kanozero, as we have seen, a sexually aroused man juxtaposed with



FIGURE 4.3 A scene from the rock carvings of Alta, northern Norway, showing two figures holding elk-headed staffs, two drumming figures and an 'unfinished' elk that seems to emerge out of nowhere, as if summoned to a séance. Photo: Antti Lahelma.

a capercaillie is lifting an elk-headed staff in a highly suggestive scene (Kolpakov and Shumkin 2012), and at Nämforsen we find an elk-headed staff apparently studying the sexual organs of a pregnant woman (Hallström 1960). A second fascinating scene from Nämforsen shows a large boat with an elk head in the prow making contact with an elk (Hallstöm 1960, fig. 79). The occupants include people who wield an elk-headed staff, but there is also a free-standing elk staff on board, giving the impression that the staff is one of the crew members.

In an animistic context, artefacts can acquire a subjectivity and agency, especially if the artefact has a particular significance to its owner and a long history of interaction; 'soul-essence' in a sense flows from the owner to the artefact, and after the person dies, the artefact must either be destroyed, purified ritually or deposited in the grave. Significantly, several of the known elk-headed staffs have been found in a burial context. The best preserved staff from Olenyi Ostrov, moreover, shows a glossy polish on the rod (Kristiina Mannermaa, pers. comm.), apparently resulting from extensive use by its owner and supporting the notion that a deep relationship existed between the staff and the buried individual. Thus, rather than a turu, it then seems that the elk-headed staffs may represent shaman's staffs such as were used by some Siberian peoples of in the historical period to contact the spirit animals. In the ethnographic records of Siberian shamanism, animal-headed staffs emerge

widely as one of the main instruments of the shaman aside with the drum, used, for example, by the Nganasan (Znamenski 2003: 143), Ket (Znamenski 2003: 139) and Tuvans (Znamenski 2003: 266). Among the Buriats,

a staff was decorated with a horse head carved on its top and a horse hoof carved on its bottom. A few small bells were attached to this stick as well as braids of different colors, furs of small animals, and small stirrups, which made the staff resemble a horse. Like the drum, the staff symbolized a horse, which a shaman used to journey to the underworld, middle world, and upper world.

[Znamenski 2003: 44]

The fact that the staff-wielding humans at Alta are accompanied by individuals beating a drum reinforces the shamanistic interpretation. The scenes of confrontation also fit in a shamanistic context, as spiritual battles between shamans appear to have been commonplace among the Sámi of the historical period. The Danish missionary Jens Kildal (1683-1767), who was active among the Sámi of northern Norway, described these battles as follows:

When a shaman casts sorcery upon another, he uses especially Vuornes lodde ['predatory bird'], and Passe vare guli ['holy mountain fish'], for it, and also Passe vare lodde ['holy mountain fish']; or else, if it concerns great matters, he uses Passe vare Sarva ['holy mountain reindeer'], and Passe vare Olmaj ['holy mountain man'] ... and then Passe vare Sarva is used on both sides, as they are strong at fighting. The reason for this happening is that there is the custom among Lapps, that whichever noaidi [shaman] is proficient with his magic, in repulsing other *noaidis*, is chosen as the *noaidi* of the multitude, and then receives the general noaidi wage from each man [...] When two noaidis have sent their sarvas out to fight against each other, then whatever happens to these fighting sarvas as far as winning or losing is concerned, the very same happens to the *noaidis* themselves for their victory, or defeat; if the one *sarva* breaks the horn from the other sarva, then that noaidi becomes sick whose sarva's horn is broken off; if the one sarva slays the other, then the noaidi dies whose sarva was killed; it also happens in this fight that however tired and worn out a sarva becomes, the noaidi that the sarva is fighting for becomes tired and worn out to the same extent.

[Translated by *Tolley 1994: 149–150*]

In the light of these two accounts, the elk-headed staffs can rather comfortably be interpreted as shaman staffs comparable to those used by the Evenk and other Siberian peoples still in the historical period. Their first occurrence in the late Mesolithic and increased use towards the late Neolithic seems to correlate with the emergence and rock art 'mega-sites' (indicating large seasonal gatherings), emerging social complexity and stratification - and may thus be related to an early occurrence of institutionalized shamanism. The scenes of juxtaposed staff-wielders may be associated with a power struggle or ritual display between shamans (mostly men?) of a special rank, and scenes like Bergbukten may relate to contacting the elk-shaped spirit helper beings of the shaman and/or seducing the prey (these interpretations are not mutually exclusive). Finally, they also seem to be associated with human reproduction, as at both at Nämforsen (Hallström 1960), Alta (Helskog 2014: 116) and Kanozero (Kolpakov and Shumkin 2012: 344), they are associated with a scene showing a human couple: a man and a pregnant woman.

The Bear - the 'Golden King of the Forest'

If cervids reign supreme in prehistoric art, in the historical-period folklore and mythology relating to northern peoples, it is surely the brown bear (*Ursus arctos*) that occupies centre stage. This is unlikely to be a recent shift in emphasis, however, as the myths and rituals related to the bear are strikingly similar throughout the northern circumpolar zone, as demonstrated already by Irving A. Hallowell (1926; cf. Rydving 2010). Hallowell provided a detailed discussion of bear ceremonialism among such geographically diverse peoples as the Ojibwa of Canada, the Ainu of Japan, the Siberian Yukaghir and the Sámi of Fennoscandia. He suggested that these similarities are due to a common origin in the belief systems of Palaeolithic hunters. Indeed, the word 'Arctic' finds its origin in the Greek word for a bear (Gk. ἀρκτός), which in turn relates to the Arctic, as ἀρκτικός (*arktikos*) means something that is 'near the Bear', or close to the constellation of the Bear (*Ursa Major*) – or, in other words, something that is 'northern'.

Although definitive proof of an Ice Age origin of the 'bear cult' is lacking, it may be noted that one of the very earliest painted caves – the Grotte Chauvet in Southern France (ca. 30,000 BC) – features what investigators have termed a 'bear skull altar' (Chauvet et al. 1996). The 'altar' is a prominent flat boulder, on top of which a cave bear skull has been positioned in a manner that suggests it was a focus of worship. Combined with other parallels between Ice Age art and Holocene hunter—gatherer rock art (such as the prominence of large herbivores, hand stencils, 'x-ray style' and possible evidence for shamanism; see Lewis-Williams 2000), the Chauvet 'altar' offers a tenuous but nonetheless fascinating link to later practices, where the bear skull was an object of veneration.

According to traditions recorded in seventeenth-century Finland, the brains and flesh attaching to the skull were ritually consumed, because the soul of the animal was thought to reside in it, and beer was drunk from the skull. At the end of the ceremony, the cleaned-up skull was displayed in a prominent place, typically the branch of an old pine tree (Sarmela 1994: 75). Such 'bear-skull pines' are known throughout the northern circumpolar region – from northern Fennoscandia to Russia, Siberia and Canada all the way to Québec, where they were venerated by the Algonquian-speaking Ojibwa and Innu (Zawadzka 2015: 139–140). In Finnish and circumpolar mythology, the bear was in essence viewed as the forest personified (Sarmela 1994: 80). This is reflected in the myriad names given to the bear in Finnish and Sámi folk culture, used because the word 'bear' (Finn. *karhu*, North

Sámi bierdna) itself was taboo, and mentioning it could inadvertently summon the beast. Many of the names used instead refer to the forest: the bear is known, for example, as 'Forest Apple', 'Keeper of the Forest', 'Golden King of the Forest' or even just 'Forest' (Pentikäinen 2005: 9).

In the ethnographic accounts, the bear also features in what appear to have been originally totemic myths, such as a Skolt Sámi myth of a girl who spent the winter in a bear's den, became pregnant and gave birth to the first ancestor of the Skolts. Hunting bear, as noted above, was thoroughly ritualized and regulated by taboos and rules and culminated in a feast where the skull of the animal was given special attention. The bear, moreover, had a cosmic role: in myths, it had a celestial origin (the constellation of Ursa Major), was lowered down to earth in a golden cradle and resurrected back to the heavens in the course of the sacrificial feast following a bear hunt. The historian of religion Juha Pentikäinen (2005: 30-34) associates the Greek myth of Artemis, the nymph Callisto and her son Arkas - of which the latter two were transformed into bears and set among the stars as Ursa Major and Ursa Minor by Zeus – and the celestial hunting drama of circumpolar myth, likewise thought to be depicted in the constellations of Ursa Major and Ursa Minor. The link seems rather tenuous but may contain a kernel of truth, as it seems related to myths concerning Apollo and the constellation of Cygnus, which likewise find parallels in northern circumpolar cosmology (cf. Chapter 8). Moreover, Artemis – the Greek goddess of the hunt - has a special relationship with the bear: her name may be etymologically related to the Greek word for bear, and at her cult centre at Brauron in Attica, she was worshipped as the Great She-Bear (Perlman 1989).

The special significance accorded to the bear is easy to understand, as it is a powerful and potentially dangerous animal that commands respect and awe and is in some respects rather human-like. Like humans, it is an omnivorous predator that competes with the same food resources as humans do, and it also resembles humans in terms of physiology and behaviour, adding to the fascination it has always elicited among humans. It can stand on two legs and use its forepaws almost as hands, it builds dens rather like humans build houses, its anatomy (when skinned) resembles that of humans in many respects, and it is said to have facial expressions and even emotions resembling those of humans. Indeed, many of the traditional Finnish names used for the bear emphasize its perceived humanity: it is called 'Old Man of the Forest', 'Geezer', 'Big-headed' or sometimes just 'Man'. Perhaps because of this similarity, metamorphoses from human to bear and vice versa were thought to be commonplace (Pentikäinen 2005: 82–84).

In post-Ice Age rock art, depictions of the bear are comparatively rare but not entirely absent: they occur especially in large Neolithic carving sites such as Kanozero, Vyg and Alta (Gjerde 2010). The last mentioned features several scenes of bear hunt and of rows of bear tracks criss-crossing the 'hills' and 'ponds' formed by the undulations and small pools of water in the bedrock, a feature that Knut Helskog (2012) has interpreted as depicting the bear's ability to move between different levels of the cosmos. By contrast, depictions of the bear are almost completely missing at smaller sites, such as the rock paintings of Sweden, Finland and Norway. This makes

sense if, as we have earlier suggested, the large carving sites were dedicated to communal, calendrical meetings and rituals, because the ritual bear hunt was likewise a communal, calendar undertaking. It took place on an annual basis and at a set time — in early spring when nature begins to recover from the grip of winter — and was apparently not principally motivated by a desire for meat, as bear meat was widely regarded as rather foul tasting. Consuming bear meat was, instead, more akin to a sacrament, in the course of which the divine animal died and was resurrected.

Indeed, the logic behind the bear sacrifice has been compared with the rites of Dionysus, Osiris and the Christian Eucharist (Kuusi 1963), and some early missionaries to Lapland complained that the Sámi were much more convinced of the bear's resurrection than of their own resurrection at the Last Judgment. As noted, the final stage of the bear ceremony involved taking the skull of the animal to a sacred pine tree, on a branch of which it was hung (Sarmela 1994: 75). These 'bear-skull pines', which perhaps represented the world tree and thus offered a route for the soul of the bear to ascend back to the Heavens, are known from folklore and have been widely documented in northern landscapes (Figure 4.4). Indeed, there is much to suggest that a mythical relationship existed between the bear and the pine tree. For example, the *Kalevala* poems mention a spirit or a divinity called Hongotar or the 'Lady of the Pine' as the ancestral mother or protectress of the bear, a theme that according to Haavio (1967: 31) relates to the mythical first bear hunt and the first bear-skull pine associated with it.



FIGURE 4.4 The 'bear-pine' (Finn. *karhupetäjä*) of Häkkilä at Saarijärvi, central Finland, is one of the few that still stand in Finland. In the 1880s, five bear skulls were recorded as hanging on its branches. Photo: Mikko Lemmetti.

To facilitate its resurrection, it was crucial that each bone of the bear was meticulously collected and ceremoniously buried. In Finland, the burial was made at the foot of the bear skull pine, while the Sámi of northern Sweden and Norway buried their bears in rock cairns (Schanche 2000). Archaeological research of bear-burials in Sweden and Norway has shown that the earliest of such cairns date to the Roman Iron Age (c. AD 0-400), while historical sources indicate that the practice continued at least until the late nineteenth century AD. According to Schanche (2000: 269-270), these 'bear cairns' resemble, in most respects, contemporary human burials in cairns, both with regard to the burial rite and their chronological and geographical distribution (cf. also Jennbert 2003). This special treatment accorded to bear bones may account for the fact that – with the exception of claws and teeth – they are almost completely missing the osteological record throughout Fennoscandia, from the Mesolithic until the historical period (Helskog 2012; Ukkonen and Mannermaa 2017). Together with the circumpolar distribution of the bear ceremony and the rock art depictions of bears, this may be counted as evidence for the extreme antiquity of the 'bear cult' in the northern hemisphere.

Although the hunt itself was conducted by a few skilled hunters, the cadaver was taken to the site of the feast in a large procession that involved singing ritual songs and - according to one seventeenth-century account from Viitasaari in central Finland - could even be accompanied by the ringing of church bells. Upon arrival, a ritual 'wedding' that repeated many of the customs of ordinary weddings was celebrated between the bear and one of the girls of the village, thus joining the animal with humankind through bonds of kinship (Sarmela 1994: 76). It should be noted here that regardless of the actual sex of the animal, the bear was conceived as a 'male' being - much as the Yukaghir perceive all elks as 'female'. Once the skull of the bear had been boiled and the meat and brains had been extracted from it, and divided between the hunters that participated in the kill, the teeth of the bear were removed and distributed among the hunters and their families. The rationale seems to have been that just as the soul of the bear resided in its skull, the supernatural power (väki) of the animal was concentrated in its teeth and claws and could be acquired by wearing them as amulets.

In the archaeological record of northern Fennoscandia, bear tooth pendants are a recurring type of find that in an interesting way reflects the complex web relationships between humans and animals, as well as the incredibly long-term continuities in northern cosmology. Bear-tooth pendants occur already in the Mesolithic burials of Olenyi Ostrov in Karelia, and their use seems to continue practically without a break until the historical period. Bear-tooth pendants have been found for example in the medieval strata of the town of Turku in south-western Finland, and bear teeth feature prominently in folk magic and 'sorcerer's equipment' as recorded in the nineteenth century and early twentieth century. During the Iron Age, imitations of bear teeth cast in bronze appear in burial contexts in Finland (Figure 4.5). These artefacts, which are a distinctly Finnish type, are according to Henrik Asplund (2005) found only in women's graves and are thus 'gendered' objects. Interestingly enough, they do not appear to have been hung around the neck but were positioned on the hips



FIGURE 4.5 An exhibit at the Finnish National Museum featuring prehistoric artefacts related to the bear: perforated bear-head 'maces', a dagger made of Scandinavian red slate, a bear-tooth pendant and bear claws found in a burial context, possible clay representations of bears and bronze imitations of bear teeth attached to women's clothing in late Iron Age Finland. Photo: Antti Lahelma.

or the abdominal area, suggesting that they may be associated with female sexuality and reproduction (Riikonen 2005).

In general, there seems to be a curious relationship between bears, sexuality and women, evident in the ethnographic accounts, such as the myths concerning the sexual union of an ancestral woman and a bear, or the 'weddings' arranged in association with bear feasts. The bear-hunt was preceded by a period of celibacy, and when the slain bear was taken to the site of feasting, women - particularly those who were pregnant or in a fertile age - were expected to hide from the procession. It was, moreover, 'common knowledge' among both Sámi and Finns that bears would not attack women as long as they recognized the person as a woman. Exposing the female genitalia was thus believed to expel bears (Sarmela 1994: 82).

PART II

Sea

COASTAL LANDSCAPES AND THE SEA

Living with the sea

For a long time, Scandinavia was thought to be an island – at least, this is how the extreme North or Ultima Thule is usually described in classical literary sources. In early and later medieval sources, names such as Scandia or Scandza come up – probably referring to the southernmost tip of Sweden or Scania – which, however, from a continental perspective continued to be viewed as an island. This notion is perhaps most famously recorded by the Gothic historian Jordanes, who in *Getica* (ca. AD 551) described it as the original homeland of the Goths. The idea was repeated by numerous subsequent authors and persisted until the early modern period, when Olaus Magnus's *Carta Marina* first presented the shape of Scandinavia in a generally correct geographical manner in 1539. In Olaus' map, Fennoscandia is connected to the North Sea in the west, the Arctic Ocean in the North, the White Sea in the East, and the Baltic Sea in the middle. The vast lakes of Onega and Ladoga delimit it in the East. In essence, although no longer conceived as an island, the North was still seen as maritime world surrounded by water on all sides.

Different regions of Fennoscandia and their inhabitants have had varying relations and engagements with maritime worlds, with Norway and Denmark perhaps particularly closely associated with the sea, whereas the northern interior of Sweden and the northern and eastern interior of Finland are more indirectly connected to maritime worlds. The regional differences notwithstanding, in general, the sea has been very prominently present in Fennoscandian life-worlds, with coastal regions comprising a central arena for human activities from the Mesolithic to the present. Coastal areas and perspectives have indeed in some respects dominated the archaeology of Fennoscandia – and the understanding of prehistoric and historical processes – over inland regions. This bias is problematic, but at the same time there can be little doubt about the significance of the sea and coasts in northern landscapes and mindscapes in a broad and long-term perspective.

People have always had an ambivalent relationship with the sea: it has fascinated and terrified human minds throughout the recorded history (Cunliffe 2017: 1–13). The sea is the 'other' - a different world, which contrasts with the land in many ways. It is apparently timeless and yet constantly moving and changing. Unlike the terrestrial world, the sea does not show or preserve traces of past human generations (though this has recently changed due to large-scale pollution). The sea is a dangerous and distinctively non-human domain, home to strange creatures and ultimately unknown. The fundamental difference of the sea from the land has given a birth to a wide range of cultural meanings about the sea and coasts around the globe especially within premodern cultures (e.g. Gillis 2003; Rainbird 2007). Westerdahl (2005) has even argued, in the context of the northern Baltic Sea, that the entire cosmology in the region revolved around the land-sea division from the Stone Age to early modern times. The sea has been subject to a rich symbolic construction in northernmost Europe in the form of, for example, ship imagery in rock art, or boat and ship burials from different periods. The Baltic Sea region comprises a particularly interesting setting for exploring the human relationship with the sea and coast because coastal landscapes in the region have been undergoing a constant and observable transformation due to postglacial land uplift and the associated environmental processes.

The case of seals and sealing illustrates the enchanted character and perceptions of the sea in the North. Sealing has been practiced on the Gulf of Bothnia from the Stone Age until recent times, and the ways of engaging with seals, as described in ethnographic and historical sources, reflects also perceptions of and attitudes to the sea more generally. A euphemism-based 'sea language' has traditionally been used when operating on the (Baltic) sea to avoid referring directly to taboo subjects and drawing their harmful powers onto ships (Westerdahl 2005; see also Hole 1967). In the specific context of seal hunting, it was particularly important for hunters to use euphemisms and speak only indirectly about their intentions, because seals were regarded as sentient and intelligent beings who could understand human speech (Ylimaunu 2000: 351).

This was at least partly connected to the idea that seals were, in some sense, drowned people – either in general or more specifically associated, for example, with Pharaoh's soldiers drowned in the biblical story of Exodus (Edlund 1989: 34–35; Ylimaunu 2000: 95; Westerdahl 2005: 9–10). Seals were related to mermen and mermaids and so intimately connected with the sea that, according to Olaus Magnus, the fur on the seal hide mirrored the weather on the sea. The sealskin provided protection from lightning, whereas placing the right flipper of a seal under the head 'teased dreams' (Olaus Magnus 1998 [1555]: XX, 4–6). Yet it was the seal head or skull that was a particularly powerful object, for it could be used to drive unwanted spirits away from a lake when dropped in it or to protect domestic animals by hiding it in the animal shed (Edlund 1989: 36–37). While all these concepts could be regarded as isolated superstitions, they are better understood as a more overarching connectedness and animistic relationship between people and the maritime environment (Herva and Salmi 2010).

The two Mediterraneans

The Baltic Sea is an inland sea and as such bears a certain resemblance to the Mediterranean. Throughout its 12,000-year existence, diverse peoples and cultures have gravitated on and engaged with the Baltic Sea world. The southern shores of the Baltic Sea are strongly affiliated with the Central European world, its eastern shores manifest long-standing East European and even circumpolar connections, the West is associated with the Scandinavian domain and the northern end of the sea stretches to the threshold of the Arctic. The Baltic Sea thus connects, but it also separates: this northern sea and, in particular, the northern and north-eastern zones of boreal forest have functioned as something of a buffer for southern and continental cultural influences, rendering the northern and eastern inland regions of Fennoscandia a remote and relatively isolated or 'peripheral' area in a wider European perspective.

The Baltic Sea has been called by many local names, which reflects the diversity of the peoples, and their respective languages, living by this body of water. While the Mediterranean was the birthplace of the 'European' civilization, the Baltic Sea has played an important role in later transformations of the European world. The Vikings first made the unknown northern fringes of the continent subject to a wider European attention and concern, whereas the Hanseatic League emerged as a northern European power in the Middle Ages. The Swedish Empire likewise grew around the Baltic Sea in the sixteenth and seventeenth century to ultimately march victoriously into the Thirty Years' War (1618–1648) in the lands of the Holy Roman Empire. In the beginning of the eighteenth century, Russia – a state born out of the principalities established by the Vikings - defeated Sweden and broke into the Baltic and European world, thus making the Baltic Sea a meeting zone of what would today be identified as the 'Eastern' and 'Western' worlds. In particular, the founding in 1703 of the city of St Petersburg at the eastern end of the Gulf of Finland as the new, Europe-oriented capital of the Russian Empire – as well as its first major seaport - heralded the development of Russia into a global maritime power.

Cultural diversity is one of the key things that connects the Mediterranean and the Baltic Sea, but they have also been merged - or pulled together and superpositioned - on a mythological level. Curious as this intertwining may seem, it is actually quite fitting in the light of the many similarities between the two inland seas. At the same time, it also speaks of the appeal of the unknown North, which enables employing northern Fennoscandia as a canvas for cultural projections. The visions of the North conceived in classical Greece have gradually become anchored on the actual northern geographies, but ancient imaginaries have percolated through time up to the present day, blending classical motifs with the 'northern Mediterranean'. Classical imaginaries and northern realities have become deeply commingled in cases such as the northern sun worship (Chapter 9). Because the North has been a domain of myths since ancient times, it is only appropriate that the eleventh-century German bishop Adam of Bremen placed the land of the Amazons in Scandinavia (Chapter 7), that Olaus Rudbeck the Elder (1630–1702) situated Atlantis in Sweden and traced the journey of Jason and the Argonauts all the way to the northernmost Gulf of Bothnia or that his son Olaus Rudbeck the Younger (1660–1740) searched for the landing place of Noah's Ark in the northern Swedish mountains.

This mixing and blending of the Mediterranean and Baltic Sea worlds is not as strange as it seems, as in an early modern relational understanding of reality, time and place were conceived very differently from the modern understanding (e.g. Herva and Nordin 2013, 2015; see also Nagel and Wood 2005; Wood 2008). Accordingly, the scholarly work of people like Rudbeck the Elder should not be seen as fabricating history but as an attempt to reveal previously hidden or unrecognized affiliations between early modern Sweden and ancient Mediterranean peoples and cultures. This mindset is neatly expressed in the frontispiece of his Atlantica (1689), which shows the Rudbeck in front of the globe, peeling away the modern surface of Scandinavia to reveal the location of Atlantis in Sweden. He is surrounded by classical scholars, such as Tacitus and Plato, who are gesturing excitedly and debating this revelation (Figure 5.1). Rudbeck's work, moreover, was not based solely upon interpreting classical sources or linguistic speculations, but there was also a serious attempt to uncover history through excavations and other observations of antiquities in the real world (Eriksson 2002; King 2005).

Identifying sympathies and correspondences between things was central to the early modern knowledge of the world and the past. Everything in the world was thought to be interconnected, with meaningful links between myths and pasts. Thus, for instance, the ancient town of Uppsala in Sweden was linked to Atlantis and Troy (Eriksson 2002; Herva and Nordin 2015). Alternative-historical explorations focusing on the connections and conjunctions of the Mediterranean and Baltic Sea worlds did not die out after the early modern period, however, but have continued to modern times. In the early twentieth century, the Finnish artist and eccentric Sigurd Wettenhovi-Aspa (1935) developed a theory of the Finnish origins of the ancient Egyptian civilization, although it is difficult to be sure how serious he was about his sometimes rather comical etymological speculations (Halén and Tukkinen 1984). A somewhat more serious example of the genre was published in 1976 by Lennart Meri, the Estonian historian and film-maker and later president of Estonia (between 1992 and 2001). Titled Höbevalge ('Silver-White'), the book blends ancient written sources, folklore and creative imagination into a reconstruction of the Baltic Sea region in ancient times and Estonia's place in it. For example, Meri identifies the Estonian island of Saaremaa with the 'Ultima Thule' mentioned classical sources and argues that the Greek explorer Pytheas sailed in the Baltic Sea and visited Saaremaa in the fourth century BC (Meri 1976). The Greek myth of Phaethon - son of the Sun God Helios who lost control of the Chariot of the Sun and burned large parts of the earth - he associates with the meteorite impact that produced the Kaali crater on Saaremaa (see Chapter 9). Significantly, he, too, spends much time with etymological reasoning.



FIGURE 5.1 Olaus Rudbeck 'exposes' Sweden in the frontispiece of his great work Atlantica as the original location of the legendary Atlantis. The constellations of *Ursa Major* and *Ursa Minor*, symbolizing the North, are depicted above his head.

In the Scandinavian archaeological discourse, the connection between the Mediterranean and the Baltic has been a recurring theme throughout the twentieth century and continues to be so. To highlight just one line of scholarly investigation, the Swedish archaeologist Oscar Almgren (1927) argued in an immensely influential study called *Hällristningar och kultbruk* ('Rock carvings and cultic activity') that southern Scandinavian rock art reflected Mediterranean fertility cults in the North. This line of investigation has continued in an essentially unchanged form by many later Scandinavian archaeologists, such as Kristiansen and Larsson (2005; cf. also Kristiansen 2010), who associate it with the Mycenaean world, as well as Flemming Kaul (2004), who finds a connection with ancient Egypt.

Perhaps the most intriguing modern example of drawing together the Mediterranean and Baltic Sea, however, is the work of the Italian amateur historian Felipe Vinci, who has identified the Baltic Sea and North Atlantic as the setting of the events described in the *Iliad* and the *Odyssey*. Vinci's book *The Baltic Origins of Homer's Epic Tales: The Iliad, the Odyssey and the Migration of Myth* (published in several editions since 1995; for an updated version of the argument, see Vinci 2017) suggests that the ancient (Mycenaean) Greek world was originally located in the Baltic Sea region, but the worsening climate forced the Mycenaeans (or their ancestors) to migrate to the eastern Mediterranean around 1500 BC. When they settled their new homeland, the newcomers named places after the original northern toponyms, and thus the Homeric Troy (Troia), for example, originally stood in the Finnish village of Toija, the original Mycenae was in present-day Copenhagen, Athens near the Swedish town of Karlskrona and Odysseus's adventures unfolded along the Norwegian coast.

The Trojan War, in Vinci's view, took place in this Baltic Sea world sometime in the early second millennium BC, and the two epics were passed on orally for many centuries before they were transcribed in the Mediterranean. Vinci's fanciful hypothesis builds on the long-known incongruences between the Mediterranean geographies and those described in the epics, on the one hand, and the (seemingly northern) climatic and weather conditions of the Homeric tales, on the other. The recurrent conflating of the historical and mythological Mediterranean and Baltic Sea worlds, however fanciful specific forms it may have taken, illustrates the more general issue of how northern lands have always lingered between myths and reality and how the classical tradition has affected the perceptions of the North in both ancient and modern times

Engaging with changing coastal environments

The Baltic Sea is a young sea, formed after the Ice Age by glacial meltwaters in the hundreds of metres deep dent that the more than 2 km thick glacier pressed on Earth's surface. The Baltic Sea has gone through consecutive stages of varying salinity, which have caused environmental changes and also affected human populations. The dent has been rebounding ('isostatic uplift') since the melting of

the glacier, which renders the Baltic Sea region as highly dynamic and constantly transforming environment (e.g. Breilin et al. 2005).

One implication of the rebound has been that, as the land rose, the outlets of the Baltic to the North Sea have changed several times. It began as a freshwater basin (Baltic Ice Lake), was connected to the North Sea during the Yoldia phase, once again became a freshwater basin in the Mesolithic (Ancylus Lake) and was transformed into a sea yet again in the late Mesolithic (Litorina phase) when the Danish Straits formed a new outlet to the ocean. In addition to land uplift, other glacial and postglacial environmental processes have shaped the landscapes of northernmost Europe in a multitude of ways. The ice sheet grinded and polished northern bedrocks, the melting of the glacier assorted soils and formed certain landscape elements, such as eskers and boulder fields. Huge inland lake systems were formed when the coastline retreated, clayey soils developed in ancient seafloors (forming fertile lands that are, however, hard to till) and glacial rivers formed ridges and fluvial planes and moved about the huge erratic boulders that dot the Fennoscandian landscape. The legacy of the Ice Age can be seen and experienced everywhere in Fennoscandia.

Regional and temporal variation in the process notwithstanding, land uplift has generally been fast enough to be readily observable over the lifespan of a single human individual. This was so particularly in the prehistoric period – in the early Holocene the uplift could be as much as a metre in a decade - but the phenomenon is still notable in some parts of the Gulf of Bothnia, where the current rate of uplift is 7 mm per year (Påsse and Andersson 2005). Within a lifetime of eighty years, the land thus rises more than half a metre, and because the Ostrobothnian region is famously flat, the shoreline can easily recede by 10 m or more, eventually making harbours unusable, the location of dwellings impracticable and once-good fishing-waters overgrown shallows. But not all effects were negative, of course, as the uplift also generates more land. Because its ownership was unclear, court records from early modern Ostrobothnia record quarrels over ownership of newly exposed land.

One impact of land uplift on the archaeological record of the central Baltic Sea region is that originally shore-bound sites have gradually become removed from their coastal settings and can nowadays be found at a considerable distance in the forested inland. This has also contributed to the preservation of prehistoric sites, as inland regions tend to have been subject to less intensive land use in modern times than the coastal zone. There is, in other words, a 'halo' of ancient shore-bound sites of about the same age around the present-day central and northern Baltic Sea basin. Although the local and regional dynamics of land uplift have varied, older sites are generally found on higher elevations than more recent ones. This relationship between elevation and age has been recognized for a long time and shore displacement chronology has been subject to an intensive interest for decades in Finnish and Swedish archaeology (e.g. Ailio 1909; Europaeus-Äyräpää 1930; Mökkönen 2011) and continues to produce fundamental, new data. To cite just one example, the recent shift from an 'agrarian' paradigm towards a maritime understanding of South Scandinavian rock art was initiated by Johan Ling's (2014) careful study based on precise elevation measurements and updated shoreline curves.

Some attempts have recently been made to grasp the significance of changing coastal landscapes in sociocultural and systemic terms. Núñez and Okkonen (1999) proposed a scenario which linked sociocultural changes in Ostrobothnia (the north-eastern coastal region of the Gulf of Bothnia) between 4000-2000 BC to environmental changes associated with land uplift. They argued that the emergence of villages, large stone enclosures (so-called 'giants' churches') and other manifestations of social complexity during this period were linked to the specific topography of Ostrobothnia, which resulted in a particularly rapid exposure of new land between the early fourth and early third millennium BC. Although they postulate a connection between environmental and cultural change, Núñez and Okkonen (1999: 111) admit that it is not clear precisely how one led to the other. They suggest that the expanding deltas of river mouths, with their floodplains and estuaries, would have been resource-rich environments, which 'could have been responsible for the powerful rise of cultural manifestations that took place in the area around 3500 BC'. The disappearance of floodplains around 2000 BC, which resulted from the local topography, may conversely have 'led to the observed rapid decline of North Ostrobothnian society' (Núñez and Okkonen 1999: 114).

Samuel Vaneeckhout and others (2008, 2010; Costopoulos et al. 2012) have pursued this scenario further in a more detailed and less deterministic (or economydictated) manner and with more emphasis on social factors. They observe that the specific reverse-S shape of the eastern side of the Gulf of Bothnia resulted in the shortening of the coastline in the northern part of the area (and lengthening in the South), which in turn brought resource-rich river mouths, where village-like settlements emerged, closer to one another. This resulted in higher population densities in certain hotspots – without necessitating significant population growth – which promoted the rise of social complexity and the birth of 'house societies' on the north-eastern coast of the Gulf of Bothnia.

The impact of shore displacement was not limited to coastal environments but affected also the inland lake regions due to the tilting of the Fennoscandian landmass associated with land uplift. Changes in lake water levels were generally slow and gradual but every now and then resulted in rapid and singular 'catastrophic' events, when the level of a lake could drop by metres almost overnight. Probably the best known of the latter is the formation of River Vuoksi around 4000 BC, which today connects the great lakes of Saimaa and Ladoga. When the rising waters of Saimaa discharged through a new outlet, the event affected a vast area around Lakes Saimaa (which regressed) and Ladoga (which transgressed), with major consequences to both the natural environment and the human populations that depended on it (Mökkönen 2011; Oinonen et al. 2014). At Ladoga, the event would have submerged dwellings and forced people on higher ground, while at Saimaa it created thousands of square kilometres of new residual wetlands, opening new grazing grounds for elks, new shallows for water birds and in general enriching the ecosystem. Such abrupt changes undoubtedly shook human societies and may

also have triggered cultural changes, even if the argument for a direct causal relationship (e.g. Oinonen et al. 2014) between the event and the spreading of Typical Comb Ware seems rather weak. The reasoning follows the familiar pattern of identifying an environmental 'crisis event' (a volcanic eruption, a climatic cold spell or similar) which can be dated, checking the archaeological record for any possible contemporary events and concluding that one follows from the other – even though completely unrelated factors may be at play. In the case of Typical Comb Ware, the reasons for its spreading appear not to be local but rather related to developments in western Russia (Mökkönen and Nordqvist 2014).

The temporality of Baltic coastal landscapes

In his classic article, 'The Temporality of the Landscape', Tim Ingold (1993) sought to replace the naturalistic and cognitivist-symbolistic understanding of the landscape with

a 'dwelling perspective', according to which the landscape is constituted as an enduring record of - and testimony to - the lives and works of past generations who have dwelt within it, and in so doing, have left there something of themselves.

[Ingold 1993: 152]

In this view, human life and landscape are understood as processes. Ingold has developed this line of thought further in his subsequent work, arguing that the world, and all entities that it is composed of, are in a constant process of coming into being, rather than simply existing, and that this coming into being is profoundly dialogic or reciprocal in nature - entities and their environments co-generate each other (e.g. Ingold 2000, 2011, 2013).

While Ingold's view applies to all things and environments, the idea that the landscape or environment is constantly coming into being fits the situation at the Baltic Sea particularly well, as it is characteristically 'moving' and 'alive'. As noted, in certain times and places, the change in Baltic coastal landscapes has been so rapid that observable changes in the environment have taken place almost overnight. There can be little doubt that the continuous transformation of northern Baltic coastal landscapes was recognized in prehistory just as it was recognized in historical times, and there are some indications that non-coastal landscapes were understood to represent ancient coastal landscapes (Holmblad 2010: 104). The instability or dynamism of the coastal and lacustrine environments must have had a significant impact on the how people perceived and related with their environments, but this aspect of shore displacement has so far mostly been ignored (but see Herva and Ylimaunu 2014; Ling 2014).

It is indeed striking how northern European archaeologists seem to have viewed land uplift in purely geological, economic or 'ergonomic' terms. It has been understood narrowly as affecting the practicalities of coastal life, such as possible travel routes, available land or food resources. It has forced communities to repeatedly move their houses, villages and towns closer to the receding shoreline. Living close to the shore has been understood, albeit mostly implicitly, as some kind of a practical-economic imperative, but there is not much thoughtful reflection on the metaphysical implications of this shore connection. The cultural meanings of the landscape have been addressed, especially since the 2000s and particularly in relation to 'ritual' places, such as rock art sites and burial sites (e.g. Helskog 1999; Lahelma 2005; Wessman 2009; Gjerde 2010; Ahola 2017b). However, the more fundamental or rudimentary 'deeper level' issue of what it means to live in a highly dynamic and rapidly changing environment has attracted less attention. How did living with a constantly changing environment affect the ways of life and thinking of coastal communities? How did meanings attributed to various landscape elements stem from – or resonate with – the observed dynamics of the environment?

In Finno-Ugric mythology, the world was born from the primeval sea. There are two main versions of Finno-Ugric cosmogonic myths, but water-birds play a central role in both (Siikala 2013). One version holds that the world came into being when a duck dived into the bottom of the World Sea and brought back mud of which land was made. The other main version holds that the world was born when a waterfowl laid an egg on a mythical island on the primordial sea. The egg broke in an upheaval, and the world was formed of the contents of the egg. Neither of these myths is specific to Finno-Ugric peoples but have a much wider Eurasian distribution, with the earth-diver motif finding interesting parallels also in North America (Berezkin 2010). However, the myth has a particularly close relation to the archaeological materials of eastern Fennoscandia, as well as the dynamics of environmental change in the Baltic Sea region.

Birds, and especially water-birds, are prominently present in the symbolic expressions (and diet) of Neolithic cultures of eastern Fennoscandia (see Chapter 8). In particular, avian imagery dominates the important concentration of rock art sites on the eastern shore of Lake Onega in Russian Karelia (Lahelma 2012a: 15). Most intriguingly, the notion that the world came into being from a water-bird's egg appears to be reflected in one scene made on the little island Bolshoy Guri (Figure 5.2).

The dating of Onega rock art is not entirely clear but current estimates place it between ca. 5000 and 2000 BC (Gjerde 2010: 395), and there are, then, thousands of years between the Onega rock art and the historically recorded Finno-Ugric myths. While the Onega rock carvings rarely feature obvious narrative content, there is an image which can plausibly be interpreted as reflecting the cosmogonic myth where the world comes into being from a bird's egg (Lahelma 2012a: 16, 27). This scene, furthermore, is located on a rocky island which has smooth, rounded and shiny bedrock that make the island look like it was made of gigantic eggshell fragment (Lahelma 2012a: 27–28). This is a typical feature to the Onega bedrock also more generally which, moreover, often fractures in large sheets of rock (again



FIGURE 5.2 A scene possibly depicting the ancient Finno-Ugric creation myth at the carvings of Lake Onega, Karelia. Photo: Antti Lahelma.

recalling shells) due to frost action and occasional small earthquakes (Figure 5.3). The interpretation may thus be put forward that 'the egg-shell shaped cliffs and islands would have actualized the myth' where the world is born from an egg, and that 'the cliffs may have been viewed as a place where the world was created' (Lahelma 2012a: 28).

The geological factors and mechanisms behind the rebound-related landscape transformations were of course unknown to prehistoric people, but since the process had such a significant impact on their lived world, it surely must have inspired cultural explanations. Islands were seen to emerge from the sea, to grow larger, become joined with the mainland and gradually turn into hills off the coast. Cosmogonic myths that explain the land emerging from the primordial sea would certainly have resonated with the actual perceived dynamics of environmental change.

Observing the life cycle of shore formation - how islands emerged, became peninsulas and turned into hills - afforded a metaphorical link between the life cycles of people and coastal landscapes. It is widely accepted that dwellings at coastal sites were generally located near the shoreline, as demonstrated, for example, by the successive rows of buildings at slightly different elevations (e.g. Kankaanpää 2002; Vaneeckhout 2008; Mökkönen 2011; Costopoulos et al. 2012). When the first buildings at a site grew old – in perhaps two or three decades – new buildings were constructed closer to the retreated shoreline. Based on northern ethnographies, Kankaanpää (2002: 74-75) suggests that they were built closer to



FIGURE 5.3 A view from the rock carvings of Gazhi Nos on the eastern shore of Lake Onega. The rounded and fractured bedrock evokes the shape of gigantic eggshell fragments. The lake itself is large enough to give the impression of a limitless ocean or 'World Sea'. Photo: Antti Lahelma.

the shoreline by each consecutive generation, while the parents and grandparents continued to live in the old houses a bit further away. Moving closer to the shore would thus have marked a transition in life and recreation of social identities (Gerritsen 2008: 158; Holmblad 2010: 102-103). When the old houses eventually became uninhabitable, they could still be used as a storage or working space. Later still, when the houses were reduced to ruins, their remains would have served as visual and material signs of land ownership (Kankaanpää 2002: 75), or at least signified continued inhabitation of – and association with – the site by a particular group of people.

Building new houses and abandoning old ones inscribed landscapes with memory and tangible cues of the temporalities of landscapes, where the direction away from the sea - with its ruined houses and other 'fossilized' marks of human presence - may have come to be associated with ancestors and conceived as an ancestral landscape. In the same way, geologically 'young' formations like islands had become old 'fossilized' hills further inland. Moving in a coastal environment, then, was not just about moving in a physical space but also involved moving in time, which was spatially or 'horizontally' present in the landscape. The lives of earlier generations and ancestors could be observed in the form of abandoned house sites, burials, scatters of pottery, cairns and other tangible traces of past activities (cf. Gerritsen 2008: 156-158).

Cairns in northern coastal landscapes

The coastline of the northern Baltic Sea has been subject to archaeologically visible symbolic construction since the emergence of more permanent settlement around 4000 BC (e.g. Núñez and Okkonen 2005), and cairn building is a paramount example of this (Figure 5.4). Cairns have been constructed in the region from the Neolithic to modern times (Okkonen 2003; Mökkönen 2013). Although the forms, functions and meanings of coastal cairns vary, on a general level they arguably reflect 'the importance of the mental image of a boundary between land and sea, and perhaps between other states of existence: the journey between different worlds, between a state of life and death' (Rönnby 2007: 78). The millennia-long practice of building coastal cairns provides important insights into how people understood and related with places where the land and sea meet. Cairns bring together different dimensions of reality and different time horizons, or '[pull] together different points in the temporal fabric' (Nagel and Wood 2005: 408), in a particularly distinctive manner. They thus also comprise an arena where archaeology, history and folklore meet in the context of the 'temporality of the landscape'.



FIGURE 5.4 The monumental cairn of Bredarör at Kivik, southern Sweden, is the largest surviving cairn of the Scandinavian Bronze Age and features a cist grave with elaborately carved scenes. The curving passageway and gate - which seem to echo Mycenaean tombs – have no prehistoric antecedent but were built in the 1930s to enable visiting the inner chamber. Photo: Antti Lahelma.

In other words, the millennia-long tradition of constructing and signifying cairns has created a setting in which different time horizons and meanings are fused.

Cairns come in many forms and sizes and have been constructed for various reasons on the northern Baltic coast over time. Yet regardless of their age or specific purposes and meanings, they were also a constant element of the lived Fennoscandian landscapes; something that binds together people living in coastal environments across time, forming meeting points between the past and present. There are reasons to believe, as will be seen below, that people in later times – and quite probably also in prehistory – have associated cairns with past generations and identified in them some kind of a link between their own lives and past lives, as they unfolded in relation with the dynamic coastal setting.

In northern Fennoscandia, cairns are typically associated with the Bronze and Iron Ages and often identified as burials, even though we know that cairns have been built for many other purposes as well (e.g. Muhonen 2008) and that cairnbuilding began already during the Stone age and continued into the historical period (Mökkönen 2013; Muhonen 2010). For field archaeologists, cairns often present a difficult problem. Unless a cairn can clearly be identified as a burial, as in the case of many excavated Iron Age cairns, the nature and function of the rock heap can be very elusive. Cairns with an 'unclear purpose' have thus been interpreted as, for instance, territorial or border markers or other reference points in the landscape, sacrificial sites, middens or rubbish heaps and field-clearance cairns (Baudou 1968; Taavitsainen 1992, 2003; Tuovinen 2002; Okkonen 2003; Wessman 2010).

Some cairns have apparently been built in one go, whereas others have accumulated or grown gradually. If the cairn was a site of burial, a new burial may have been added to the fringes – resulting in a larger cairn – while in the case of sacrificial cairns or cairns associated with wayfaring, visitors and passers-by have added stones to the cairn over an extended period of time (Muhonen 2008). There is also evidence of various secondary uses of prehistoric cairns. As noted, burials were sometimes made in the monumental early Bronze Age cairns; in much later times, smaller cairns were constructed in their vicinity, and small sacrifices (such as stones, twigs and coins) were made at prehistoric burial cairns still in the historical period (Okkonen 2003: 33, 41).

The meanings associated with the cairns come from different directions: they were associated with the perceived qualities of rock as a substance; their type of construction was associated with death, the supernatural and fireplaces (cf. the Finnish word for a cairn, hiidenkiuas, meaning 'troll's hearth'), and the loci where they were built (such as high cliffs, islands and peninsulas) were liminal spaces between the domestic sphere and the wilderness. The simple structure of the cairn probably accounts to the fact that they have been cross-culturally evocative and attracted diverse interpretations. Cairns have almost universally been associated with the supernatural and otherworldliness (e.g. Varner 2004), and this is the predominant theme in the northern folklore concerning cairns as well, but they are also ambiguous by nature. Even cairns that were originally purely 'profane' in character have been treated as if they were burials (Okkonen 2003: 40), but they have also

been associated with past dwellings, that is, identified as remains of old fireplaces (e.g. Rundqvist 1994).

It is not quite clear why cairns have been so prominently associated with death and the supernatural in historic times. Drowned people have sometimes been buried in cairns still in the nineteenth century (Westerdahl 2005: 11), and the tradition of 'strengthening' border-mark cairns by depositing human bones in them has been recorded in historical times (Taavitsainen 2003). Building cairns at various spatial boundaries in the landscape further added to the perceived liminal character of cairns. A sense of an ancestral presence was perhaps associated also with the cairns conceived as the remains of the fireplaces of houses that had otherwise vanished, and thus indirectly linked to past generations and dead people (Muhonen 2008: 311). It is conceivable, furthermore, that a memory of burying people in cairns in a deep past persisted in some form through centuries from the Iron Age to a recent part. It seems likely that prehistoric burial cairns have been opened now and then in later times – in search of treasure, for instance, or to acquire building material for other stone constructions - and subsequently interpreted as ancient graves.

The idea that cairns were infused with a special power was partly embedded in the perceived qualities and agency of stone, as reflected in folklore which attributes väki to stones. Muhonen (2013) has discussed the mythical birth of stone, as described in Finnic poetry, which links stone to a primeval non-human entity known as Kimmo or Kammo. According to Christfrid Ganander's (1741-1790) eighteenth-century treatise of Finnish mythology, Mythologia Fennica (1789), it was a fearsome and horrific spectre that was believed to dwell in cairns (Ganander 1984: 31). There was duality, or neutrality, to stone in that its special powers could be tapped for harmful as well as beneficial purposes; the heaps of used sauna-stove stones, for example, could be a source of diseases but also suitable for healing practices. Stones were considered as having intentionality and agency, as their 'wraths' could hurt people, and stones were also thought to grow in the soil, which lent to the notion that

at one point within the sphere of traditional agriculture, clearance cairns were not just piles of inanimate matter removed from the field. Their stones rather were parts of living nature, born in the earth and providing an abode for a supernatural being when they were first heaped up.

[Muhonen 2013: 118]

A significant aspect of cairns is their long-term presence in northern landscapes and their ability to draw different times and dimensions of reality together. Cairns allude simultaneously to houses, burials and fields in the past and represent important nodes in 'congealed taskscapes' (Conneller 2010) co-authored by generations of people. Moreover, according to folklore accounts, various non-human beings were associated with cairns and were involved in the formation of many other features of ancient landscapes. Cairns supported a sense and memory of continued inhabitation through time, but they were not only about the temporality: as loci of non-human spiritual power on the border of the different dimensions of reality, they vibrated with a living presence of an ancestral past and the otherworldly in the landscape.

The specific placing of cairns in the ancient landscape and their association with topographic features, as reconstructed through shore displacement studies, varies considerably. Baudou (1968; cf. Forsberg 1999: 254–255) showed in a pioneering regional study that cairns tend to be clustered and occur predominantly close to ancient seashore in three main types of locations: passageways between two islands, between islands and mainland and loci oriented on the sea. More precise and detailed spatial analyses of cairns have subsequently been conducted in different areas of the northern Baltic Sea region (e.g. Tuovinen 2002; Okkonen 2003). The variation in the specific loci of cairns and their other characteristics notwith-standing, it seems clear on a general level that cairns were closely associated with the shore in terms of spatiality and meaning, in some cases demonstrably constructed on the very waterline (Forsberg 1999). It also appears that prehistoric cairns were recurrently built on off-shore islands, and this island connection provides some interesting perspectives on the possible meaningful relationship between cairns and the changing coastal landscapes.

Otherworldly islands

Speculating on the origins of the cairn-building tradition on the northern Baltic Sea region, Bradley (2009: 178) takes up the possibility that cairns might imitate, or could have been inspired, by the rocky islands that the Ice Age glaciers had carved and rounded up into mound-like shapes. This is a compelling suggestion, as it contributes to an understanding of why cairns were frequently constructed on islands, and it opens up a host of other meaningful connections between cairns, landscapes and northern cosmologies. As noted, most prehistoric cairns around the northern Baltic Sea are places of burial and have been associated with death (even in many cases where the cairn was not originally a burial), which resonates with the perception of islands as places of death, liminality and the supernatural in northern cultures (e.g. Brink 2001: 92–98; Westerdahl 2005). Islands have recurrently been used as burial places in the North, all the way from the later Mesolithic to the later historical period (see Bradley 2000: 5, 143; Rainbird 2007: 12–15; Manker 1957; Westerdahl 2005: 4–6; Broadbent 2010: 196; Ruohonen 2010).

Islands were not only perceivably 'apart' from the proper land and the primary domain of human life, but the dynamics of coastal change in the northern Baltic Sea region would have underlined the link between islands and underworld especially in prehistoric times when burying in cairns was a common practice. That is, islands could actually be seen to emerge from under water due to land uplift, which suggested a connection between islands and the shamanistic notion of an Underworld. An association between the Underworld and the world under water can be identified already in Neolithic and Bronze Age rock art, and islands continue to be perceived as otherworldly places (from a mainland perspective) in later poetry

and folklore. One of the most important mythological topoi of Kalevala poetry is known simply as Saari or 'The Island', a place beyond distance and a manifestation of otherness (Ahola 2014). This has sometimes been interpreted as referring to the Åland islands that lie between Finland and Sweden, but even if that were so, the Island is clearly also a mythical locale. It is associated particularly with the story of the hero Kaukomieli ('Far-minded'), who escapes his enemies to the island and seduces all of the women there ('Laid a hundred maids, knew a thousand brides') and is then of course banished by the men of the island. Ahola (2014: 64-65) points out that the mythic theme of a wandering hero having erotic adventures on an island is rare in both Old Norse and medieval European sources but well known in Mediterranean myths such as that concerning Odysseus and Circe.

Islands on the northern Baltic Sea literally arose from the Otherworld beneath the surface of water. The process of land uplift tied maritime, coastal and terrestrial landscapes – as well as different time horizons – together. Accordingly, even cairns that were constructed on elevated loci on the mainland may have been associated with 'fossilized islands'. Bradley (2000: 136-145) has argued that some Bronze Age ship imagery in the rock carvings of Bohuslän, in south-western Sweden, was associated with inland cairn sites and meant to convey the idea that water surrounded the burial sites even when they were located in the inland.

In northern cosmology, the Land of the Dead was thought to lie both along a vertical and horizontal axes - that is, it could be located 'down' (e.g. bottom of a lake), but at the same time also 'up north' and accessible by travelling far enough north (e.g. by following a river or sailing across the sea). The latter or a 'horizontal cosmology' has contributed to a notion of an Island of the Dead, which according to the comparative research carried out by Napolskikh (1992) is one of the elements of Finno-Ugric cosmology that can be traced all the way back to the Proto-Uralic period - or possibly as far back as the Neolithic - although the dating of Proto-Uralic is a contested issue. In his reconstruction, the Proto-Uralic Land of the Dead was an island located at the mouth of the 'world river', high up in the North. Archaeological evidence lends credence to the great antiquity of island burial, as some (though not all) of the most famous Stone Age burial grounds – such as Olenyi Ostrov ('Deer Island') on Lake Onega and Zvejnieki in Latvia - were located on islands. As noted, the tradition of island burial persists in Bronze Age cairn burials, and at least in the inland regions extends to the Iron Age, where so called 'Lapp cairns' and cremation cemeteries are often located on islands (e.g. Saipio 2015).

In the historical period, the practice of island burial persisted among both Finns and the Sámi, especially in remote areas where churchyards were few and far between (Ruohonen 2010). This practice may in part have been dictated by necessity and hygiene, as particularly during spring and autumn - with weak ice and bad roads - transporting a dead body to faraway consecrated ground would have been well-nigh impossible. However, as Marek Zvelebil (1997: 45) has observed in his discussion of Olenyi Ostrov, the historical-period island burials may also bear an echo of prehistoric island burials and circumpolar cosmology with roots going as

far back as the Mesolithic. The Catholic Church certainly rejected island burial as a 'pagan abomination' and sought to sanction the practice (Ruohonen 2005: 256).

Coastal mazes in the North

Stone mazes (or labyrinths) are prominently present on the northern Baltic Sea coast, with some 350 mazes known from Sweden and 200 from Finland, dating from the Middle Ages to the early modern period (Westerdahl 1995: 267). Their size varies but is typically several metres in diameter, although the largest known one, located on the island of Bolshoi Zayatskyi in the White Sea, is about 25 m in diameter (Figure 5.5). Some writers make a distinction between a 'maze' (with an entrance and an exit) and a 'labyrinth' (in which the entrance leads to the centre), but here the two words are used as synonyms. While some mazes are known from inland contexts, associated with Iron Age burials, they are typically a coastal phenomenon in northernmost Europe. More specifically, labyrinths tend to be associated with sites associated with maritime-oriented activities – particularly fishing and sailing – and are historically linked to the expansion (and Christianization) of the Nordic states into the central and northern parts of Fennoscandia from the thirteenth century onwards (Westerdahl 1995: 267-269). Northern mazes are also attested in Sámi burial sites on the coast of the Arctic Ocean and in the White Sea region in north-western Russia (Olsen 1991; Shumkin 2000). Northern stone and turf mazes comprise an intriguing category of archaeological sites for a number of reasons.

First, there is no direct historical information about their purpose although they are quite common and of a relatively young age (Olsen 1991). Second, mazes mix up different time horizons and regions in various different ways and weave together different temporalities, geographies and dimensions of reality. The labyrinth motif is known from contexts spanning from the Neolithic to the Bronze Age and up to



FIGURE 5.5 One of the stone and turf labyrinths of Bolshoi Zayatskyi island on the White Sea. Photo: Vitold Muratov/Wikimedia Commons.

modern times, from the pre-classical Mediterranean world to medieval ecclesiastical contexts and all the way to the northernmost reaches of early modern Europe and they are widely known outside the European world as well (Kern 2000). The origins of the word 'maze' (as indeed that of 'labyrinth') remains uncertain, but it is likely of a Scandinavian origin, with the original meaning referring to a state of being confused, bewildered or losing consciousness (Russell and Russell 1991: 77; McCullough 2005: 15), which may indeed give a clue about the meaning of mazes.

In modern European mindscapes, the maze is most prominently associated with Crete, Classical Greek authors identified Daedalus as the inventor of maze, in which the Minotaur was imprisoned on Crete, and associated mazes with cavern systems in Cretan mountains - indeed Daedalus's design was supposed to have been fashioned after the maze leading to Underworld (Ingold 2007: 53). Although there is no historical information about the use of mazes in the northern world, they do feature in folklore which indicates that the maze retained its eastern Mediterranean associations. One of the popular names used for labyrinths in Swedish was Trojaborg or 'Troy Castle' (English turf labyrinths were similarly known as 'Troy Towns'), a name that occurs already in seventeenth-century antiquarian accounts, while a second term recorded in the Swedish-speaking coastal areas of Finland was jungfrudans or 'Maiden Dance'. The name is probably related to a game known from ethnographic accounts, where the boys of a village tried to drag a maiden from the centre of the labyrinth (Kraft 1985), but the theme of a maiden in a labyrinth raises an obvious parallel with the Greek myth concerning Theseus, who rescued Ariadne from the Minotaur's labyrinth.

This theme finds a pictorial representation in a fifteenth-century fresco from the church of Korppoo in the archipelago of Turku, south-western Finland, where a woman has been painted in the middle of a labyrinth. The association of labyrinths with Troy may perhaps be explained by the fact that in both Troy and the Cretan labyrinth there was a 'damsel in distress' that was rescued by a hero. Confusing the two is thus understandable, and in any case both the labyrinth and the town of Troy refer to a mythologized faraway place in the Mediterranean. Other names occasionally used for the labyrinths include Jerusalem, Jericho, Babylon, Viborg, Trondheim and even 'Paris in France' (Pietiläinen 1999); the name of the faraway place was thus of little consequence. In continental churches, mazes were nonetheless also identified with the mythical labyrinth of Crete (Russell and Russell 1991: 78), and it is worth pointing out that classical and Hellenistic coins minted by the city of Knossos in Crete often feature a labyrinth with a cross-shaped centre - exactly the same form as in the Korppoo fresco – and that the ground plan of the Minoan palace of Knossos, the ruins of which may have been visible in antiquity, resembles a maze. A labyrinth with a cross-shaped centre design also decorates an Etruscan vase from the seventh century BC, in which the labyrinth is associated with the word 'TRUIA'.

It is probably unrealistic to assume that the northern labyrinths had a single, definite meaning and purpose (Olsen 1991). The period of constructing mazes lasted for at least 500 years and covered a vast geographical region. If the labyrinths

had Mediterranean and maritime associations in the Baltic, their purpose may have been quite different further up North. Spangen (2016: 91–92) cites early written accounts, according to which both the Sámi reindeer herders and North Swedish farmers used the labyrinths in rituals to protect their herds from predators and evil spirits, as well as for 'offerings and sorcery', especially to affect other people's reindeer herds.

Journeying and movement, in their different forms, emerge as a central theme related to mazes in the North. For example, Westerdahl (1995) has considered the possible connection between coastal mazes and maritime navigation in the context of the medieval and early modern Swedish expansion northwards. On a more symbolic level, names like Troy and Jerusalem indicate a connection with distant and (semi-)mythical lands, although journeying itself is not directly implied, whereas terms like 'Maiden Dance' (jungfrudans) suggest movement. Likewise, mazes as designs are effectively pathways implying movement through them (Eichberg 2009). Eichberg has mapped the possible impacts of engagements with mazes. He observes that the maze design induces visual confusion, while 'walking in a labyrinth, with its turns creates an unconscious rhythm', which in turn induces altered states of consciousness (Eichberg 2009). Or as Artress (1995: 97) puts it, chronicling his own and observed religious-spiritual experiences:

Small miracles can happen in the labyrinth. We can strengthen ourselves by shedding tears, feeling the anger and hurt that keep us from experiencing our soul level' (p. 75) [...] 'people on the labyrinth seem to gravitate toward what I have come to call a process meditation' [...] We enter the terrain of memory and dreams (p. 77) [...] It works through the imagination and the senses, creating an awareness of how we relate to ourselves, to others, and to the Holy.

All this resonates with the etymological association of the word maze with bewilderment (see above). Mazes, then, are not merely symbols but devices of spirituality, which supposedly explains their appearance and use in Christian religious contexts. However, mazes as loci of spirituality would also have had a meaningful relationship with northern non-Christian cosmologies which rendered the coast as a liminal zone – a meeting place of different worlds, particularly the land and the otherworldly sea (e.g. Westerdahl 2005). The handful of mazes known on the Arctic Ocean coast in Norway are associated with Sámi burial grounds and Olsen (1991: 53) argues that the meaning of these mazes has to do with the boundary between the domains of the living and the dead, or a transition from one to another. This idea is not specific to Arctic Sámi, but mazes are widely associated with way-faring in the world of the dead; they 'are portals that take the traveller to someplace else' (Ingold 2007: 56). Or as Olsen (1991: 55) puts it, 'in the labyrinth a person is outside normal time and place and outside society'.

Moving in a labyrinth can induce altered states of consciousness, which in turn are associated with journeys to the Otherworld, which in the liminal setting of the coast was particularly close to 'this world'. For this reason, various magical practices

were considered to be particularly powerful at the seashore (Westerdahl 2005; Cunliffe 2017: 7). Like venturing into a cave, entering a maze marked dissolving the boundary between oneself and the world – an integral element of an 'alternative' perspective on reality offered by altered states of consciousness (see Greenwood 2009; Luke 2010). Transgressing the boundaries between the worlds is an elementary component of shamanic travels into other planes and dimensions of existence. It is of interest here that, in folklore, circular movement in general – in the form of circular dances for example - has been associated with moving between different worlds or planes of existence, as 'unscrewing the barrier between the natural and the supernatural' and thus opening a portal to an otherworld (Menefee 1985: 9).

While it seems plausible that northern labyrinths are meaningfully connected to the boundaries between the worlds – the terrestrial and marine world, or this world and the Otherworld - their more specific meanings still remain elusive. On a general level, mazes make sense in both their pan-European Christian and northern non-Christian spiritual contexts. They even adapted to Christian notions with ease, when the maze came to be associated with pilgrimage (or, more generally, the 'Pilgrim's Progress'). This is all grounded on the very lived and experienced properties of mazes, and moving in them. They could be interpreted in a similar fashion as Neolithic pottery-making, discussed in Chapter 3, in that engagement with mazes brought together bodily practices and more abstract concepts about the world.

Many aspects of the mazes remain unclear, including reasons why mazes were constructed in the specific locations where they were constructed, and there seems to be little consensus on any aspect of the phenomenon – a state of affairs that seems rather fitting when researching labyrinths. Westerdahl (2014) has explored the possible connection between the historically known shipwrecks and the construction of mazes in specific locations of the coastal landscape on the northern Baltic Sea world, but the results remain speculative at best. At the same time, however, he is probably on a right track in that there seems to be something 'special' (in terms of historical events) to the loci where mazes were constructed. Mazes comprise a type of archaeological sites that, even if their specific meanings elude us, demonstrates the cosmological significance of the coast also in more recent historical times - and are thus comparable to, say, the tradition of building cairns. Mazes bring together a number of different worlds and offer evidence of a deep link to the 'European' world, while at the same time reflecting northern traditions and worldviews.

BOATS AND WATERWAYS

The mystery object from a Lapland bog

In the fall of 1955, a temporary workhand at a farm in the village of Lehtojärvi, close to the Arctic Circle in Finnish Lapland, was digging a ditch into a bog on the shore of Lake Lehtojärvi. At the depth of ca. 60 cm, his shovel hit a carved wooden object resembling an elk head. He dug up the artefact, which was damaged in the process – for example, the lower jaw and one of the earlobes went missing – and left it lying on top of a pile of mud. A few days later, the master of the house he was working for came and collected the find, placing it in a barn attic, where it lay for a few years until purchased by the Finnish National Museum in 1957. A small investigation carried out by Aarni Erä-Esko (1958) at the find site failed to produce any more remains associated with the find, but based on the bog sediment stratigraphy, established that the object must be Mesolithic. A subsequent 14C-dating has narrowed down the dating at 5790 cal BC.

The object is outwardly rather humble looking, partly because it was damaged when it was dug up, but it is really one of the most remarkable discoveries of the North European Mesolithic. Because it portrays an elk head and has been painted with red ochre, one might think that it is related to the ritual staffs with carved elk-heads, such as the famous discoveries from the roughly contemporary late Mesolithic burial site of Olenyi Ostrov at Lake Onega, north-western Russia (Gurina 1956). However, details of the carving differ from all known elk-headed staffs: the neck of the elk has been hollowed for insertion into a stem of some sort, and it also features a drilled hole, probably for attaching the object with a cord to some larger structure. Together with the fact that it was found on the boggy shore of a lake that lies along the Ounasjoki river system – a major travel route from the Gulf of Bothnia to the Finnish interior, these features have been taken to mean that the Lehtojärvi elk head originally adorned the prow of an 'elk-headed boat'.

Elk-headed boats are a characteristic feature of northern European rock art, occurring in great numbers at most major hunter-gatherer rock art sites, such as Alta in Norway, Nämforsen in Sweden and Lake Onega, River Vyg and Kanozero in north-western Russia (see e.g. Gjerde 2010). The distribution is not limited to northern Europe, as scattered examples of elk-headed boats can also be found in Siberian rock art, even as far to the east as Chukhotka near the Bering Strait (Devlet and Devlet 2005; Kulikova 2014; Lahelma 2017). The sites are dated between the late Mesolithic and late Neolithic periods and thus cover a period of at least 3,000-4,000 years, although some of the Russian and Siberian sites could be much younger and the timeframe thus wider. Together with the immense geographic distribution, the longevity of the image attests to its potency as a symbol and crucial significance among the northern foragers.

For a long time, it was anyone's guess whether the elk-boats of rock art depicted real or mythological boats, although this did not stop the issue from being hotly debated. The Lehtojärvi find, which still remains a singular discovery, demonstrated that such boats really did exist. But while the Lehtojärvi find shows that elk-boats could be concrete objects (Figure 6.1), the rock art also offers evidence pointing to a wholly different, spiritual or mythological notion of elk-boats. In some cases, for instance, we encounter elk-boats that feature not just the head of the elk but also the legs of the animal (Lahelma 2007), and it seems doubtful that such boats will ever be found in bogs. Others feature the boat integrated into an elk figure, forming its antlers as it were. Such images must mean that the 'real' and 'mythological' were intertwined in a complex manner – as is so often the case in the North.



FIGURE 6.1 A reconstruction of a skin-boat with an elk or deer effigy in the prow being paddled in the Alta fjord, northern Norway. Photo: World Heritage Rock Art Centre - Alta Museum.

Water and the Otherworld in a northern context

The primordial forests of northern Fennoscandia made overland travel challenging, a situation that persisted well into the historical period. This, however, was compensated by an extensive network of water routes formed by the rivers and labyrinthine lake regions of especially Sweden and Finland. With lightweight watercraft that can be carried over portages and rapids, the water routes offer access from the Baltic Sea to the Arctic Ocean, the North Sea and the White Sea, as well as all the huge freshwater basins of Sweden, Finland and Karelia – Lakes Vättern, Vänern, Päijänne, Saimaa, Onega and Ladoga. For more seaworthy vessels, the relatively placid and narrow Baltic Sea formed an inland sea with countless opportunities for long-distance trade and contacts. When land hunting failed, fishing, sealing and whaling provided a reliable basis for subsistence. It is not surprising, then, that the boat emerged as the central symbol Stone Age hunter societies in the North – and continued to remain so for the Bronze and Iron Age farming cultures, persisting in some respects to the present day.

But why did the Stone Age hunter–fishermen choose to depict an elk – a land animal – on the prows of their boats? This is a question that has puzzled the maritime archaeologist Christer Westerdahl, who has pointed out that in recent Scandinavian folklore the large land animals (especially the horse) were 'taboo' to mention or name at sea – but were still regularly used in navigation and name-giving in connection with dangerous passages (e.g. Westerdahl 2005). Images of elk could thus be seen as liminal agents at the sea, which had an apotropaic or protective and averting effect when associated with watercraft. The choice of elk as the depicted animal underlines the central role played by the animal in circumpolar cosmology, although, as pointed out by Gjerde (2010), in some cases wild reindeer and birds appear to have been depicted as well. In Bronze Age rock carvings of southern Scandinavia, the horse seems to take over the role of the elk, as some of the carved ships feature a horse head in the prow (but others perhaps still continue to represent an elk). Although difficult to prove, the famous animal heads of Viking Age 'dragon ships' may well continue the same archaic tradition dating back to the Mesolithic.

Boats and waterways offered great benefits to Stone Age forager societies, but the acute danger of drowning was the flip side of the coin and must not be forgotten when investigating boat symbolism. To board a vessel was to tightrope between life and sudden death. Although rock art portrays seagoing vessels used for hunting whales, sometimes with more than twenty people on board, the most common type of boat were likely simple dugout canoes or *haapio*-type boats (dugouts extended by adding a couple of planks on the sides) that could easily topple over or be filled with water even by smallish waves because of the low gunwales. Although such boats float even when filled with water, a plunge into the chilly sea or lake could easily lead to hypothermia. The famous early Mesolithic find of Antrea in the Karelian Isthmus, which included a fishing net and various types of hunting equipment buried in the clayey sea bottom, probably represents just such an incident (Pälsi 1920). Even the large boats used for whale-hunt, such as depicted in rock art at Vyg

and Kanozero - probably skin-boats resembling Inuit umiaks - could be punctured and broken in the heat of the hunt, or be overturned in a sudden storm, causing mass drowning. And yet, at the same time, water is the prerequisite of all life, and lakes and seas provide an invaluable source of food – making it a deeply ambivalent element.

Perhaps it is due to this ambivalence and the everyday association of water with death, as well as life, that has made water the liminal element par excellence for northern peoples. In particular, the Land of the Dead is typically located under water or accessed through a navigable body of water, such as a river. The Sámi of Finnish Lapland, for instance, held that certain lakes had a hole in the bottom (Figure 6.2), through which the Land of the Dead (saivo) could be reached (Pentikäinen 1995: 146-149). Everyday observance was thought to support this notion, as in saivo-lakes the fish could suddenly disappear – having escaped the fishermen through the hole in the lake bottom.

In the Finnish-Karelian Kalevala-poems, in order to access the Land of the Dead (Tuonela), the River of Tuonela needs to be crossed. The main protagonist of the poems, the sage Väinämöinen, accomplishes this by transforming himself into a snake and swimming through the nets in the river. The far-off mythical country of Pohjola or 'Northland', to which the heroes of Kalevala poems venture in search of adventure - and which in effect is another version of the Land of the Dead - is in turn accessed by a sea journey on board a ship. Among Finno-Ugric peoples, these notions of the Otherworld lying beyond water are according to Napolskikh (1992) among the most ancient components of Finno-Ugric cosmology. Scandinavian myths are less coherent in this respect, describing various realms of afterlife for various groups of people (warriors, seafarers, etc.), but water is nonetheless a frequent component. For example, the realm of the goddess Hel was separated from the land of the living by the fast-running river Gjöll, not unlike the River of Tuonela, while people drowned at sea were caught in the nets of Rán and taken to her underwater realm (Ellis Davidson 2013).

Travelling as a spirit fish

The liminal character of bodies of water is reflected in accounts of shamanic travel, which often either feature transformation into a fish or take place using a 'boat of song'. The very first surviving account of a Sámi shamanic séance, recorded in the twelfth-century Historia Norvegiae (Tolley 1994), involves shamans transforming themselves into 'water beasts'. The lively story describes how a Sámi shaman attempts to resurrect a woman, the hostess of a friendly get-together between Norwegian and Sámi traders, who suddenly falls dead in the middle of the party. The Sámi are not at all worried about the situation and proceed to resurrect the lady by a shamanic séance, but then the shaman sent to fetch her soul also dies in the course of the séance, his stomach ripped open, mouth foaming and face black. A second shaman follows him in order to find out what had happened and tells the audience that

the deceased sorcerer had perished by the following sort of accident: his *gandus* [spirit helper being], transformed into the shape of a water beast, had by ill luck struck against an enemy's *gandus* changed into sharpened stakes as it was rushing across a lake, for the stakes lying set up in the depths of that same lake had pierced his stomach, as appeared on the dead magician at home.

[Tolley 1994: 136–137]



FIGURE 6.2 The canyon lake of Pakasaivo in Finnish Lapland is one of the *saivo*-lakes which the Sámi thought provided access to the Underworld. The lake is exceptionally deep (ca. 60 m), and its water is crystal clear. Photo: Vesa-Pekka Herva.

The same account also describes the drum of the shaman, on which were depicted 'diagrams of whales and deer with bridles and snow-shoes and even a ship with oars, vehicles which that devilish gandus uses to go across the depths of snow and slopes of mountains or the deep waters' (Tolley 1994: 136–137). Since, as Tolley (1994) points out, the setting of the aquatic journey is a freshwater lake, the Latin term cetus, above translated as a 'water beast' or a 'whale', may in fact refer to a pike (Esox lucius), as this seems to have been a fish species particularly associated with shamans in later accounts. In the ethnographic accounts, the Sámi shamans were widely believed to be able to transform themselves into fish (Itkonen 1946: 332-333). For instance, folklore accounts of the early twentieth century collected by Samuli Paulaharju describe how a powerful noiaidi (shaman) called Päiviö of Peltovuoma – a semi-legendary figure who may have lived in Kittilä in Finnish Lapland during the seventeenth century - commonly transformed himself into a pike in order to reach faraway places. According to some accounts, he once swam as a pike across the Gulf of Bothnia to cure the Swedish king in Stockholm. On the return journey, he is said to have been caught in a net and almost drowned. According a second account, he finally met his fate while travelling in the shape of a pike, because his assistant – a young boy – fell asleep during the séance and did not wake him up – causing the shaman to rot to death inside the guts of the fish.

Knud Leem (1697-1774), a Norwegian missionary active among the Sámi of Finnmark in the eighteenth century, confirms that one of the main spirit helper beings of the Sámi shaman (noaidí) was a spirit fish or passevare guelie ('holy mountain fish'), the shape of which the noaidi could assume in his otherworldly travels (Leem 1767; see also Bäckman 1975). The account given in Historia Norvegiae suggests that this notion goes back at least 1,000 years, but images found in Finnish rock paintings suggest that the notion of shamanic travel in the shape of a fish has been around much longer. For example, the rock painting of Juusjärvi, near Helsinki, shows a human figure depicted in a 45-degree position, accompanied by a fish that can probably be identified as a pike. The tilted pose of the person may reasonably be associated with a scene of falling into trance – a shamanistic séance, that is – with the pike representing the summoned spirit-helper being (Lahelma 2008: 53). Other sites, such as Haukkavuori at Mäntyharju or the Hahlavuori painting at Hirvensalmi, feature scenes where a human being is depicted upside-down – as if diving into the lake below the painted cliff. Finally, the site of Kapasaari in Finland appears to show a scene from an aquatic underworld, with a human being surrounded by a shoal of fish (possibly pike). Taken together, these sites can be taken as a sequence depicting the various stages of the séance, perhaps intended to commemorate a journey or pass on information to apprentices (Lahelma 2008: 52-53).

The reason why both Neolithic and much later Sámi shamans ventured under water is of course related to northern cosmology, where a notion of an underwater Land of the Dead was common, but it may also relate to universal experiences related to trance. Shamanic trance has been claimed to include universal features, such as particular types of geometric visual hallucinations ('entoptics') deriving from the visual cortex (e.g. Lewis-Williams and Dowson 1988). If such diagnostic geometric and metamorphotic shapes can be identified in prehistoric art, the proponents of the theory argue, this may indicate that the art was inspired by trance experiences. Because of widespread and sometimes misguided use of the 'neuro-psychological theory', this line of argument has been viciously attacked by some researchers (e.g. Bahn 2010) and as a result has fallen out of fashion. Critics have accused the neuropsychological model of relying on clinical tests made using LSD or other hallucinogenic substances and interpreting prehistoric art in terms of such drug-related 'visuals' – only to be expected of the representatives of a generation of scholars who graduated in the 1960s.

But regardless of how the visual effects of trance may or may not manifest in art, it needs to be acknowledged that a state of trance involves not only visual hallucinations but also certain somatic experiences and shared sensations also derive from the central nervous system (Chippindale et al. 2000), and this observation is not based on drug-induced experiments. Among the most common somatic phenomena associated with altered states of consciousness are experiences of weightlessness, breathlessness and the mental perception of departing from the physical body. Interpretations given to these experiences are culturally determined but are almost universally described as being akin to flying and diving, and are in shamanistic traditions usually interpreted as such. The under-water journeys related in Sámi ethnographic accounts and apparently depicted in rock art may thus be related to the universal characteristics of trance experiences.

Blue elks and flying boats

Knud Leem also offers us a second important clue related to the liminal nature of water in northern cosmology. He writes that the Sámi shamans of Norwegian Finnmark began their séance singing: 'Valamastit herke: sjaattjalit vanas' ('harness the reindeer bull, push the boat to water') (Leem 1767: 475; our translation). In the ethnographic sources, the spirit reindeer bull (saiva sarva) almost always occupies centre stage, but in the song cited by Leem, a boat has an analogous role as a spirit helper being. As we have seen, the same situation is described already in the twelfth-century Historia Norvegiae, where the Sámi shaman drum is said to have featured images of reindeer, water-beasts, snow-shoes and 'a ship with oars', all of them said to be 'vehicles of the gandus'. In other words, in Sámi pre-Christian religion, all of these vehicles used for travel were seen as spirit helper beings capable of taking the noaidi to faraway places. In later historical sources, the Sámi sometimes likewise described the shaman drum as a boat (Itkonen 1946: 121).

The notion of travelling to the Otherworld both in the shape of an elk and onboard a boat can also be found in Finnish pre-Christian religious tradition. The main protagonist of *Kalevala* poetry, the shaman Väinämöinen, commonly mounts a 'blue elk' or a 'stallion of straw' on his journeys to the Otherworld. In a poem relating a shamanic battle, he is ambushed by Sámi rival while riding his elk on the open sea:

Now comes Väinämöinen Galloping along On the back of a blue elk, Stroking its back, Patting its hide, Steadfast old Väinämöinen. [The Sámi] Spied a black speck on the sea, A bluish speck on the wave: Now comes Väinämöinen: He flexed his bow [...] Did not hit Väinämöinen But hit his horse Under its arms Through the warm flesh.

[SKVR I: 11, lines 19–29, 35–38; our translation]

The image of Väinämöinen riding a blue elk on the sea has baffled generations of folklorists but seems less impenetrable in the light of the archaeological record. As noted above, elk-headed boats were depicted in rock art and probably existed as real vessels as well, but people riding elk and deer are also portrayed at a number of rock art sites, such as Alta in Norway, Skärvången in Sweden and Verla in Finland (Lahelma 2007). As Felix Oinas (1985: 154-159) has correctly observed, Väinämöinen's blue elk is to be understood as the supernatural steed of the shaman, comparable to the saiva sarva of the Sámi shaman. But why is the elk flying above water?

Here, again, Leem's note about the introductory words of the shamanic séance come useful: for the eighteenth-century Sámi shaman, the reindeer bull and the boat fulfilled the same function and were thus, in some respects, interchangeable. In the Kalevala poems, Väinämöinen's magical boat-building is a recurring theme. His boat is described as being made of animal bones belonging to a bird, fish or reindeer (Kuusi et. al. 1977: 532) – an obvious parallel with the zoomorphic spirit helpers of the noaidi – and he makes it through magical singing:

Sturdy old Väinämöinen Made a boat with his knowledge Built a craft with his singing: Three words were lacking.

[Kuusi et. al. 1977: 183]

The missing esoteric knowledge ('three words') he acquires by visiting the grave of Antero Vipunen, the mythical first shaman (Haavio 1952: 106-139). At first Vipunen swallows Väinämöinen but eventually has to give in and utter the words that allow Väinämöinen to 'finish off his boat' (Kuusi et. al. 1977: 185). That this was no ordinary boat but a vessel for otherworldly travel is indicated by a poem in which Väinämöinen

Sang a copper-bottomed boat Plunged to the depths of the sea To the earth-mothers below Up to the heavens above Into the whirlpool's gullet.

[Kuusi et. al. 1977: 279-280]

Väinämöinen typically sings or plays 'on a rocky hill by the shore, or on a joy-stone, sometimes on a music-boulder or on a play-rock' (Haavio 1952: 157). Remarkably, he is described as sitting on a large boulder even while he is on a boat journey – a rather bizarre image that makes it clear that the boat journey is not to be taken literally but is in fact a shamanic metaphor. In the same vein, the carving of the boat is described as taking place on a cliff, mountain or rocky hill (Haavio 1952: 215) – strange locations for building boats but easier to understand if 'building a boat' is understood as a metaphor for the shamanic séance. Singing and playing at boulders and rocky cliffs also suggests a comparison with the Saami *noaidi*, who sometimes visited sacred rocks or cliffs (*sieidi*) in order to sing and fall into a trance. This was done because the spirit helpers of the *noaidi* were thought to live in such places (Bäckman 1975).

In rock art, the boat evidently occurs in various different roles; some of them more mundane than others. The large whaling scenes of RiverVyg, which show boats and crews co-operating in killing the belugas, seem to celebrate the strength of different communities working for a single goal. They belong to a ritual context (Gjerde 2010), but the ships depicted are not spirit boats but real life vessels. But even at River Vyg, most boats have an elk-head in the prow, and the semantic association of elks and boats – with its roots in shamanistic thinking – provides a much better explanation for this fact than simply arguing that the elk figurehead has an apotropaic function (which may also be true). It also neatly explains some of the stranger images of rock art boats, such as the large painting of Pyhänpää in central Finland, where a boat, a human and an elk are merged into a single image (Lahelma 2007), or the painting of Ruominkapia in south-eastern Finland, where a boat is shown moving on a vertical axis, either up or down. It could depict a boating accident, of course, but that seems highly unlikely, as unlike at RiverVyg scenes of mundane activities never appear to be depicted in Finnish rock art. A more viable interpretation is that this is a 'spirit boat' on its way 'into the whirlpool's gullet' or the 'heavens above', as sung by the Karelian bards and depicted by Finnish National Romantic artists (Figure 6.3).

In the same vein, while some of the boats depicted at Alta in northern Norway seem to be participating in hunting and fishing, other can be readily associated with shamanism. A few images of boats carry people who appear to be beating drums, with a round object in one hand and the other hand raised, while one panel at the carving locale of Apana Gård seems to show a man flying above the boat; the hands of both the flying man and the occupants of the boat suggest wings, and the shape of their heads suggests a beak.



FIGURE 6.3 The sage Väinämöinen embarks his flying boat in a painting by Finnish national-romantic artist Akseli Gallén-Kallela (*Väinämöinen's departure*, ca. 1893–1894). Photo: Finnish National Gallery.

Solar boats in razors and rock art

A boat is an apt symbol for movement, travel and transition – both in this world and to the World Beyond. Indeed, the notion of a spirit boat as a shamanic vessel is a circumpolar concept (Vastokas and Vastokas 1973; Lahelma 2017). But because the boat was the primary means for movement in the North, it came to be associated also with the movement of the heavenly bodies – in particular the sun. This image of the cosmic 'sun ship' also seems to arise from a circumpolar background.

Depictions of what have been interpreted as sun ships are among the most famous motifs of south Scandinavian Bronze Age rock art, although they are in fact quite rare (Coles 2005). Typically they consist of a globular device – or sometimes a ring-cross - attached to a boat by a line or hovering directly above it. No doubt contributing to the fame of this motif is the fact that it seems to provide a link between southern Scandinavia and the ancient civilizations further south, thus lending the carvings an air of prestige quite unlike the hunter's art of the North. In the course of nearly a century of research into the carvings, authors like Oscar Almgren (1927), Flemming Kaul (2004) and Kristian Kristiansen (2010) have rested heavily on this particular motif in forging their narratives concerning the links between Bronze Age Scandinavia and the Mediterranean world. The sun ship is indeed a mythological theme well known especially from ancient Egypt, where the sun-god Ra was thought to journey across the skies in a solar boat. The theme is commonly depicted in frescoes and other art forms, and actual wooden vessels interpreted as solar barks have been discovered at several Egyptian sites, most famous of them being the Khufu ship that dates to ca. 2500 BC.

In addition to Bronze Age rock art, images of sun ships are a recurring motif in contemporary bronze razors. In his careful and widely acclaimed analysis of razor iconography, Flemming Kaul (1998) has been able to identify a narrative of the sun's journey across the sky on a 'day-ship', its descent beneath the sea at dusk as a 'night-ship' and continued journey again at dawn, accompanied variously by a snake, a fish or a horse. Kaul initially declined to relate the myth to any historically known myths, but Kristiansen and Larsson (2005) have connected it to elements of Indo-European mythology, associating it particularly with the Twin Gods (the Dioscuri of classical mythology), who rescue the sun maiden from the monsters of the night on their divine ship.

Yet, even if one acknowledges the links to the Mediterranean, it is striking how throughout this long history of research, Scandinavian scholars appear to have been unable (or unwilling) to consider the option that rather than being first-hand imported from the South, South Scandinavian rock art may in fact be a northern phenomenon with its roots firmly in the older, Stone Age rock art (Lahelma 2017). The most obvious argument for this is, of course, the prevalence of boat imagery. Even though many of the boats depicted in Bronze Age rock art appear to be plank-built sea-going ships rather than humble dugouts, and there is a fair amount of variation in the way the ships are depicted, the basic iconographic rendition remains the same. The animal at the prow is perhaps sometimes a horse, as

maintained by Scandinavian scholars, although it is often difficult to identify the species with any certainty. The depictions are schematic, but many of the animal heads in fact have a strongly curved muzzle that more evokes an elk than a horse. However that may be, one thing is clear: boats do not have anywhere the same centrality in the artistic traditions of the contemporary Mediterranean world – and in the rock art of central and southern Europe they barely occur at all. Boat images are thus a characteristically northern element of rock art.

As for solar boats, it is not necessary to search for parallels in Ancient Egypt, because like boat imagery in general, rock art depictions of sun ships appear to be a circumpolar phenomenon. This argument was made already by Joan and Romas Vastokas (1973) in their discussion of the Peterborough petroglyphs of Ontario, Canada. One of the central images of that carving site is a large (105 cm long and 75 cm high) image of a boat with a 'mast' topped by a globular or solar device. Because it closely resembles South Scandinavian rock art images, such as a famous solar boat from Bottna in Bohuslän, Sweden, theories have emerged of Bronze Age 'Vikings' reaching America and producing the Peterborough carvings (Vastokas 2004). But as Vastokas and Vastokas have observed, similar imagery can be found in rock art throughout the northern circumpolar zone, and what is more, the motif itself finds a logical explanation in circumpolar notions of shamanic travel on a soul boat. The Cosmic Axis, along which the shaman ascends to the celestial realm, may be topped by an image of the sun: 'Hence, the soul-boat becomes also a vehicle of the sun' (Vastokas and Vastokas 1973: 127).

Admittedly, while boat figures are extremely common in the circumpolar region (e.g. Kulikova 2014), images identifiable as solar boats occur only sporadically along this vast region. Boats and solar images appear commonly together in Karelian rock carvings, as well as those of Kanozero on the Kola peninsula, but they are never joined by a line into a single figure. However, in western Siberia, the large carving site of Tomskaya Pisanicha does feature boats with globular devices (Okladnikov and Martynov 1972), as do the sites of Shalabolino and Shishkino in eastern Siberia (Devlet and Devlet 2005: 216). One of the most remarkable sites in this respect is that of River Olekma (Okladnikov and Mazin 1976), where the boats appear to fly among the heavenly bodies, and at least one boat is integrated with a circular figure (for a more comprehensive review, see Lahelma 2017). Even if such images are rare in Siberia and North America (as they are in Scandinavia as well), they provide sufficient evidence for arguing that solar symbolism associated with boats may arise from a northern circumpolar tradition.

Boats for the dead

If the boat can carry the sun on its daily journey, and thus assume a cosmic role, it seems only fitting that it has also become associated with the most fundamental of all transitions: from life to death. As with elk-boats, here too the earliest evidence can be found already in late Mesolithic burials, and the association of boats with death continues almost to the present day. Underwater investigations at the site of Møllegabet II in Denmark brought to light a boat burial of a young man wrapped in birch bark and placed in a dugout canoe, which was 14C-dated to 4790 cal BC (Grøn and Skaarup 1991). The most astonishing aspect of this discovery is the fact that the site had been submerged already at the time of burial: the boat had been fastened to the bottom of a shallow bay with wooden stakes. Remains of artefacts, including fragments of two paddles, were found associated with the boat – as if placed there for the deceased for his last paddling journey to the Land of the Dead.

A similar find is known from Øgård, also in Denmark, where a Neolithic (3360 cal BC) dugout canoe was found in the course of peat extraction (Troels-Smith 1946). There was a small hearth in the stern of the boat, located in a layer of clay, and this boat was likewise held in position by wooden rods. A skeleton of a man was found immediately in front of the boat and appears to have originally been placed inside the boat. The great similarity of the two burials is striking, given that they are separated by 1,500 years, and a testimony to the longevity and conservative nature of the boat burial rite. Finds of wooden boats, of course, require exceptional conditions, so one should not be surprised that they are few and far between but may have been fairly common. At several Stone Age burial sites, such as Skateholm (Larsson 1988) and a number of sites in Finland (Ahola 2017a), 'shadows' of blackened soil – possible remains of a dugout canoe – have been observed in the burial pit.

The tradition seems to continue, in a somewhat altered form, during the early Bronze Age, when in Denmark in a large number of cases a boat-shaped burial pit was made underneath the round barrow (Artelius 1996). They have been well preserved because the Danish barrows are constructed of turf, whereas elsewhere in the region rock cairns were prominent, and if boats were present in cairns they have long since disappeared. It should be pointed out, though, that in several instances in Sweden, images of ships are associated with rock cairns, such as that of Hjortekrog in Småland, where fourteen ships had been carved in the bedrock before the cairn was built on top of the carvings (Bradley and Widholm 2007). Images of ships were also among the motifs depicted in the carved slabs of the famous cairns of Kivik in Sweden (Goldhahn 2013), Mjeltehaugen in Norway (Goldhahn 2008) and the barrow of Sagaholm in Sweden (Goldhahn 2016). In some cases, a boat-shaped stone setting has been found inside a cairn.

A more durable type of boat burial emerges in the Middle Bronze Age (Montelius' period III), when the first 'ship settings' (Sw. skeppsättning) are found in the southern parts Sweden, and to a lesser extent also in Denmark and Norway (e.g. Capelle 1986; Artelius 1996; Skoglund 2008). The ship settings are essentially elongated, boat-shaped cairns that in addition to their oval shape sometimes feature elements that further enhance the resemblance to ships, such as tall blocks of stone at each end, giving the impression of a prow and a stem (Figure 6.4). They coincide with a transition from inhumation to cremation among the farming societies and sometimes feature urn burials. In one case at least, the urn was decorated with a drawing of a boat (Ballard et al. 2003: 389). Ship settings become more common in the Iron Age, when they sometimes reach monumental proportions (the one



FIGURE 6.4 The monumental Iron Age ship setting of Ale Stenar in southern Sweden. Photo: Antti Lahelma.

at Jelling, Denmark, seems to have been 354 m long; Randsborg 2008), and may well have been a burial type restricted to the highest elites. The same is of course true of the famous ship burials of Oseberg and Gokstad in Norway, which yielded sumptuous grave goods, but especially in Norway, ship or boat burial spread among all social levels during the Viking Age, with vessels ranging from seaworthy ships to humble rowing boats.

With the advent of Christianity, ship burial came to an end in those parts of northern Europe that fell within the Catholic sphere, but in the more remote parts of Finland, Lapland and particularly in Greek Orthodox Karelia, aspects of boat burial were preserved in a Christian context almost until the present day. In the White Sea region, the Karelian populace would still in the nineteenth century sometimes place a boat or a part of a boat on top of the grave. According to Zhulnikov (2006), if the deceased was a woman, a prow of a boat was placed on the grave, and if it was a man, the aft part was used. Drawings and photographs taken in the 1930s by the ethnographer Auvo Hirsjärvi at the village cemetery of Suistamo, Karelia, show whole wooden vessels on top of graves, as well as Greek Orthodox grave crosses featuring a miniature boat and paddle on top of the cross (Figure 6.5). Even the Karelian language, which is closely related to Finnish, preserves a memory of boat burial. In Finnish, the word ruuhi refers to a dugout canoe, but in Karelian it means a 'coffin' (Siikala 1992: 103).

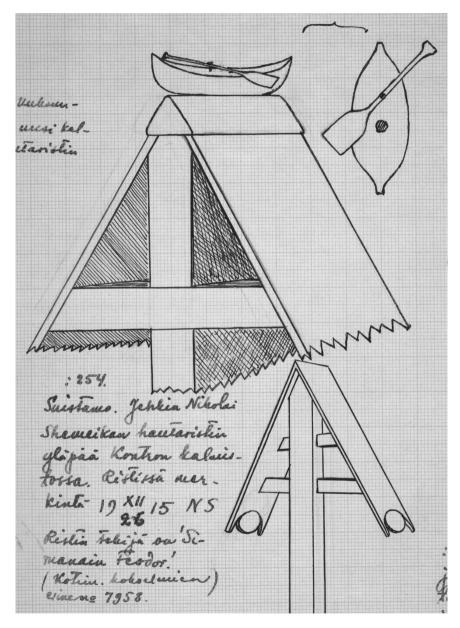


FIGURE 6.5 A drawing made in 1935 of a Greek Orthodox cross topped with a boat and a paddle at the village cemetery of Suistamo, Karelia. The cross marked the grave of Jehkin Nikolai Shemeikka who died on 26 December 1915. Image: Auvo Hirsjärvi/Finnish Heritage Agency.

RIVER MOUTHS AND CENTRAL PLACES

The real and mythical rivers

In the northern, boreal world – dotted with innumerable lakes left behind by the glaciers – rivers were links not just between different lake systems but also between different worlds in both a geographical and spiritual sense. They structured movement and thus also the perception and experience of the world (e.g. Korpela 2011). The rich northern folklore concerning 'water spirits' – such as the Swedish lore concerning näcken, a spirit who plays a violin at rapids and sometimes captures humans to his underwater realm - mirrors the importance of 'waterscapes' in the lived environment, as well as the manner in which human lives were entangled with them. It is interesting and rather surprising to note that the main culture-hero of the Kalevala poems, the sage Väinämöinen (whose instrument is not a violin but the 'Finnish zither' or kantele), is etymologically associated with a riverine landscape, as the word väinä is an archaic Finnish word for a stream pool or a river mouth. The names of several major rivers in northern Europe, such as Dvina (Finn. Vienanjoki) in Karelia and Daugava (Finn. Väinäjoki) in Latvia are derived from the same word. And while Väinämöinen's weapon is typically a sword, he strangely enough uses a paddle to defeat the mythical bird Kokko (cf. Chapter 9). It is thus conceivable that in some very remote prehistoric past Väinämöinen may in fact have been a 'water-spirit' associated with rivers, or perhaps the 'first paddler' and a protector of travellers along the northern rivers.

It is rather easy to see how rivers may appear as living and inspirited entities, as they move and behave in ways that suggest intentionality and will. Rivers are in a constant process of transformation: they change seasonally – of which flooding is the clearest example – and shift their courses gradually over longer periods of time. Moreover, as campers know, rivers and springs may appear to start talking when one spends time alone by them. Living close to and with rivers required attentiveness

and a deep knowledge of their behaviour. The 'ritual' deposits of axes, adzes and other types of artefacts made in the rivers of north-eastern Europe since the Stone Age reflect this intimate and multidimensional relationship between people and rivers, even if the specific rationale of the depositional practices is unknown, though the traditional explanation is that they are sacrifices to 'river spirits'. Rapids and waterfalls attracted special attention, as exemplified by the site of Nämforsen in northern Sweden, which in addition to being a major rock carving site also features one of the largest Neolithic residential sites of northern Sweden (Baudou 1992). Many 'stray finds' of stone artefacts have also been recovered from the rapids of Nämforsen. The Losevo rapids and the Kivach cascade (Figure 7.1) in Russian Karelia are similarly associated with dozens of axe and adze deposits of the Stone Age, as well as an unusual number of residential sites (Seitsonen et al. 2016: 123; Nordqvist et al. 2019).

Associated with the significance of rivers, river mouths have likewise become invested with cultural meanings and continuous settlement in Fennoscandia. They were ecologically rich environments and acted as gateways between different regions but were also symbolically fertile as places where the land and the sea meet (Helskog 1999; Westerdahl 2005). In addition, they connected coastal worlds to faraway lands in the inland, serving as entry points to completely different cultural and environmental realms. River mouths linked, for example, the eastern Baltic Sea coast to the White Sea and Karelia; the Gulf of Finland with Lake Ladoga,



FIGURE 7.1 With its 11 m fall, the Kivach cascade is perhaps the most impressive of its kind in the relatively flat landscape of Karelia. Photo: Travel Pictures, Russia/Wikimedia Commons.

the Russian river systems and ultimately all the way to the Black Sea; and the southern shores of the Baltic with central Europe and the Mediterranean. These river connections have been integral to various cultural phenomena and changes from the Neolithic to the Iron Age and up to modern times. Rivers featured prominently in, for instance, the 'Typical Comb Ware phenomenon' (cf. Chapter 3), which marked a significant cultural transformation from northern Fennoscandia to the Urals in the early fourth millennium BC and were central to the east-bound expansion and commercial activities of the Vikings.

The emergence of a strong Russian state effectively put an end to Scandinavian travels along the Russian rivers, but rivers remained important travel routes particularly in the Swedish and Finnish interior, connecting the labyrinthine lake systems, and retained their mythological associations well into the historical period. As an example, we may consider early modern theories concerning the travels of Jason and the Argonauts. If the Vikings had used the river systems of European Russia such as the Don and Volga to reach the Black Sea, the argument went, then perhaps the ancient Greeks could have used the same rivers to reach the North. This was the reasoning on which the early modern Swedish antiquarian Olaus Rudbeck based his theory that the voyage of Jason in search of the Golden Fleece – far from being mythological - was a real historical event that moreover brought the Greek hero to the shores of the Baltic Sea.

Rudbeck had stumbled upon the Greek poem Argonautica Orphica, today dated to the fifth or sixth century AD but in Rudbeck's days thought to predate Homer and indeed to have been written by none other than Orpheus himself (King 2005). Its description of Jason's travel routes mesmerized Rudbeck, who believed he could identify Swedish place names among the sites visited by Jason; for example, 'Leulo' was Luleå and 'Pacto' Piteå, both of them located in northern Sweden. He even proceeded to build three boats that – in addition to being used for commercial passenger transport - were used to carry out experiments set out to prove his hypothesis. Because moving from one major river to another sometimes required crossing dry land, something done by Viking voyagers in the past and by Russian peasants still in Rudbeck's day, various means of transporting large seaworthy vessels across stretches of land were tried out in order to calculate how many men were required for the task and how much time it took. A close reading of the Argonautica gave an approximate distance covered by the Argonauts in a journey that took twelve days. The aim of Rudbeck's experiments was to establish whether it was possible to travel from the Mediterranean to Sweden and back within the said time limit (it turned out to be).

As King (2005) points out, in spite of all their 'crazy' outlandishness, Rudbeck's ideas and the method by which he tested them anticipates what we now know as experimental archaeology. In particular, they predate but, in many ways, resemble the highly publicized voyages of the twentieth-century Norwegian explorer Thor Heyerdahl, aimed to demonstrate the prospect that similarly 'incredible' ancient voyages actually took place. Heyerdahl is best known for his sea voyages across the Atlantic on rafts of various type, but on his last investigation project before his death in 2002, he set out in Rudbeck's footprints to trace possible early Germanic contacts between the Black Sea and Scandinavia via the river systems of European Russia. Heyerdahl was fascinated with the rock carvings of Gobustan in presentday Azerbaijan, believing that especially the so-called 'sun-ships' depicted at the site were related to similar images in South Scandinavian rock art (Heyerdahl and Lillieström 2001; for a detailed, critical examination of the argument, see Roggen 2014). He became convinced that the account given by the medieval Icelandic chronicler Snorri Sturluson on how the Aesir - one of the mythological 'families' of gods of Old Norse myth - migrated to Scandinavia from a 'country called Aser' located somewhere in the South, was in fact a real historical event. They were according to Snorri led by their chieftain Odin, whom Heyerdahl (in line with Snorri) believed to have been a historical person rather than a god or character of mythology. In addition to having an archaeological and experimental element, Heyerdahl's investigations on the matter closely resemble those of Rudbeck also in drawing heavily on etymological speculation. He suggested, for example, that the name of the Sea of Azov, located east of the Black Sea, derives its name from an Old Norse word As-hof, or the 'temple of the Aesir', and he associated the Udi people of the Caucasus with Odin.

Both Rudbeck's take on Jason and Heyerdahl's exploration of the wandering Aesir resonate with a more general association of rivers with mythical elements and illustrate how rivers have been considered to connect, or transgress, times and places. The best known 'purely mythological' river is perhaps the River of Dead that separates (and connects) the ordinary world with the underworld in both Ancient Greek mythology (River Styx) and the Kalevala poems (River of Tuonela). However, in northern cultures moving along real rivers was inextricably entangled with the mythological dimension of rivers and has therefore involved engaging with different dimensions of reality. Napolskikh (1992: 7) offers an example from the ethnography of the Udmurts, a small Finno-Ugric people living adjacent to the two major rivers of Kama and Vyatka in eastern Russia. In an Udmurt ritual, a tame pair of swans was sent upstream to carry prayers to the sky-god Inmar, equipped with silver coins tied across the necks of the birds that were offerings to the god. However, if the birds turned downstream, the prayers ended up in the Lower World (thought to be located downstream), which was considered an ill omen. Thus the River Vyatka, in addition to being a real-world river also acted as a route to different levels of the cosmos.

Similar notions concerning rivers as connecting this world and the Land of the Dead may be reflected in the Neolithic practice of making burials in association with rivers. This is evident for example at the Neolithic red ochre burial sites of Tainiaro in northern Finland, where the burials clearly follow the banks of River Simojoki, the rich burial site of Kukkarkoski rapids in south-western Finland (Torvinen 1979), and the Jönsas burial site at the mouth of River Vantaa close to Helsinki (Ahola 2017b), to name a few. Many of the graves at Jönsas, moreover, featured water-worn cobbles taken from the nearby riverbed – evidently a symbolic reference to the cosmic role of the real-world river running close to the graves.

Occasionally, the notion can perhaps also be glimpsed in contemporary rock art. Gjerde (2006) has drawn attention to a small elk-headed boat figure at the rock carvings of Besov Nos at Lake Onega, Karelia. The image is otherwise unremarkable, but is given new meaning by its context in the bedrock: it has been clearly intentionally carved inside a black lava feature that resembles a swirling river. A few hundred metres to the south of the carving, a river known as Chernaya Rechka or 'Black River' flows into Lake Onega. The name is no doubt recent, but it derives from the colour of the water of said river, which is unusually dark because it flows through marshlands. The lava formation may thus conceivably refer to said river, and the boat floating in it to travels both in this world and to the worlds beyond (cf. Chapter 2).

River mouths as liminal spaces and central places

While rivers in general were pregnant with mythological and cosmological associations, such meanings were particularly concentrated on river mouths, which have functioned – both literally and metaphorically – as gateways to distant lands with mythical or otherworldly dimensions (cf. Helms 1988). They saw the earliest formation of Neolithic-type village settlements in the northern Baltic Sea region around 4000 BC, a process that was the westernmost manifestation of an essentially 'eastern' Neolithic, rather than reflecting the 'western' or southern Scandinavian and central European developments. Since then, river mouths have always been as central places in the northern world, eventually forming 'hubs' of northern trade in the later Iron Age and primary locations for market places and towns in medieval and early modern times. River mouths served as arenas for diverse encounters of people with different cultural backgrounds. Such meeting places existed, to a certain degree, outside the norms of everyday society, with plenty of evidence (including rock art) for ritualized exchanges ranging from the Neolithic to the modern period.

The ancient mouth of the River Ii (which according to Rudbeck received its name from the goddess Isis), which flows into the northern end of the Gulf of Bothnia, exemplifies the significance of rivers as channels of East-West influences in the longue durée. The mouth of Ii comprised a particularly intensive area of cultural activity in the Neolithic, as evidenced by the rich find assemblages from the extensive excavations conducted in the area since the 1990s. An unusual abundance of amber finds - indicating accumulation of wealth and coordination of amber trade - is a characteristic of the Neolithic assemblages of the mouth of River Ii and demonstrates the wide contact networks of the communities settled in the area (Núñez and Franzén 2011). Amber has been viewed as an emblematically 'northern' substance in the European world at least since classical antiquity (Chapter 9), even though from a northern Baltic Sea point of view its origins lie in the 'South'. Intriguingly, although amber is fairly commonly found as far north as the Arctic Circle, the mouth of River Ii nonetheless stands out as an exceptionally rich concentration of amber finds (Franzén 2009). For example, finds from sites along the

River Kemi, a second important artery that runs some 70 km to the north of Ii, are numerically far fewer than those from Ii.

It is not clear why the mouth of River Ii (rather than mouths of some other major rivers of the North) developed into what is clearly a special 'hub' of northern Fennoscandian Neolithic settlement, but it nonetheless demonstrates the importance of river mouths as central places in the fourth and third millennia BC. Moreover, there appears to be rather prominent differences between the specific sites and their find profiles at the area of the river mouth. One site that particularly stands out is the river island of Kierikkisaari, which was excavated in the 1960s and was already then recognized as puzzling and anomalous. The main excavated structure has been reconstructed as a Neolithic, timber-built 'fortress' measuring ca. 32 m x 32 m, with an inner court of 20 m x 20 m (Koivunen 2002). Because the island was partially submerged during spring floods, the 'fortress' was evidently a pile-dwelling located above ground. Numerous finds of stone projectile points from the site have been interpreted as evidence of a prehistoric battle, as they represent two different types (made of flint and slate, respectively) that have distinct distribution patterns.

Moreover, the Kierikkisaari site has produced a special type of pottery that was originally designated as 'Kierikki Ware' (Siiriäinen 1967). However, more recent research by Mökkönen and Nordqvist (2018) has shown that finds of this ware in Finland are essentially limited to Kierikkisaari island and do not represent a distinct type of pottery but is rather the outcome of the special nature and function of the site, and reflects qualities that find parallels in the Russian Karelia, in pottery types known as Voynavolok Ware and (to a lesser extent) Orovnavolok Ware. Although this research is suggestive rather than conclusive at the moment, the available data can be taken to indicate that Kierikkisaari was inhabited by a Neolithic community with roots in what is today Russian Karelia. The settlement may thus represent a group of people who travelled along the northern river-ways and established a settlement at the mouth of River Ii near the Gulf of Bothnia, among people with a different cultural background and an apparently hostile attitude towards outside intruders.

As noted, rivers connected different worlds in a geographical sense, but river mouths were also contact points between worlds in a metaphysical sense, as demonstrated by a number of important rock art sites. Indeed, most of the major hunter-gatherer rock art sites of Northern Fennoscandia – Alta in Norway, Nämforsen in Sweden, Kanozero in Kola Peninsula, Vyg and Onega in Karelia – are associated with major rivers and were all probably sites of yearly congregations of people from the surrounding region. Most are associated with large residential sites, and indeed Alta was a site of yearly gathering by the Sámi still in the historical period. In his important paper on the 'soundscape' of the Nämforsen carvings, located at what during the Neolithic was the mouth of the Ångerman river, Goldhahn (2002) argues that river mouths were 'natural' entry points or gateways between different worlds in part due to their unusual perceptual and experiential qualities. The deafening sound of rapids, such as Nämforsen, promoted a sense

of detachment from 'this world' and mediated - like drumming and other mindaltering techniques – a transition to an altered state of consciousness central to traversing into otherworlds within a shamanistic setting. The rhythmic 'breathing' of the rapids, moreover, would have resonated with the rhythmic pecking of carvings, and the liminal nature of the carving sites (some of the central ones being located in places that were dangerous to access) further contributed to the special nature of sites like Nämforsen and Vyg.

As signs of social complexity and long-distance trade diminish in northern Fennoscandia towards the end of the third millennium, so does the role of river mouths as trading sites and population centres. Whether this reflects a significantly decreased population, the rise of more mobile lifeways or some other significant change remains unknown. The Nordic Bronze Age reached its first blossoming in the first half the second millennium BC, but with the exception of a thin strip of Baltic coastline, much of northern Fennoscandia was left outside this cultural sphere. While much less studied and more poorly known than the contemporaneous Bronze Age of southern Scandinavia, it seems that influences from European Russia continued to be important in north-eastern parts of Fennoscandia, as exemplified by the spread of the so-called Textile Ware in the region (Lavento 2000). The available material is limited and difficult to interpret, but there are some indications that these northern reaches were connected to vast contact networks and that river mouths to some extent retained their role as significant places.

For instance, the earliest evidence of bronze-working in Finland (dated to ca. 1800 BC) has been found from the site of Halosentörmä, located by what was then the mouth of the river Oulujoki. Halosentörmä has produced rich and diverse finds, with imported stone material featuring prominently, but no remains of buildings have been identified and the character of the site remains elusive (Herva and Ikäheimo 2002). Indeed, this is a common feature of Bronze and Iron Age sites in north-eastern Fennoscandia in general: hundreds of sites are known, but they have been fairly little studied, and the excavated material is usually difficult to interpret. Distinctively Scandinavian influence was more strongly felt along the western and southern coastal regions of Finland, and local centres developed particularly at the valleys of rivers flowing into the Baltic. They bear some hallmarks of social complexity, such as rock cairns that sometimes reached monumental proportions, as well as the occasional bronze artefact of South Scandinavian type. However, they remained what Tapio Seger (1982) called 'emerging chiefdoms', never amassing material wealth or human resources on a scale comparable to the central regions of Denmark and southern Sweden.

Towards the end of the Bronze Age, clusters of cooking pits appear on northern river mouths, possibly associated with periodic seal oil production and/or feasting (Kuusela 2013), but again, little is known about the wider sociocultural context of this phenomenon. Likewise, the peculiar site of Rakanmäki at the mouth of River Kemi provides an isolated example of river mouths as special places during this time. Rakanmäki was an offshore island when it was used between ca. AD 0 and 400, and it has yielded signs of metalworking and trade - with evidence for

contacts towards the Lake Mälaren region in Sweden – in addition to which there were burial cairns on highest point of the island. However, there is no evidence for permanent occupation, leading the excavators to suggest that it may have been an early marketplace. Such market places at river mouths regained a much more conspicuous role as central places in the northern Baltic Sea world in the following, late Iron Age and the early medieval period (Kuusela et al. 2016, 2018; Kuusela 2018).

Mythical kingdoms in later prehistory

The increased significance of northern river mouths in the later first millennium AD was connected to a much broader restructuring of the European world following the fall of the Western Roman Empire. The emergence of distinctive central and market places around the Gulf of Bothnia in the late Iron Age and early medieval period has been known from historical and archaeological evidence for a long time. However, the nature, significance and implications of this process have recently become subject to a reassessment, and this holds a promise of opening novel insights into the place of the North in the continent-wide transformations, on the one hand, and the more local myths, folklore, histories and archaeologies on the other.

Real and imagined northern lands have fascinated European minds since the dawn of history. An expression of this interest is the locating of various imaginary or semi-mythological realms in the North, ranging from classical Greek Hyperborea to the present-day portrayal of the Finnish Lapland as the homeland of Santa Claus. While for the Greeks Hyperborea was an utopian land of plenty, where the sun always shone on its peaceful and happy inhabitants, in early Christian imagination the North was transformed into the dark land of Satan populated by heathens and monsters (Andersson Burnett 2010). Similar themes recurred in the later medieval period, when Scandinavia began to be incorporated in the European world through incipient state formation and Christianization. It was in this context that Adam of Bremen, the eleventh-century 'Apostle of the North', reported in his work Gesta Hammaburgensis Ecclesiae Pontificum (Deeds of Bishops of the Hamburg Church, AD 1075) that there was a Terra Feminarum or a 'land of women' (or Amazons?) that lay on the coasts of the Baltic Sea, east of the realm of the Swedes and not far from an island called Aestland. Adam's description consists of a few brief anecdotes that could easily be dismissed, were it not for the fact they appear to be connected to a wide web of similarly obscure references and observations concerning northern Fennoscandia at the dawn of history.

Medieval Norse and Anglo-Saxon accounts make references to the elusive people and realms of Bjarmaland (Old English *Beormaland*) and Kvenland, whose character and territories – and indeed their historical reality – have intrigued scholars for centuries. Even though its location was never very clear, Bjarmia features prominently still in Olaus Magnus' sixteenth-century map of northern Europe (Figure 7.2). Mythical lands or realms are also known from northern folklore, some of the prime examples of which are *Kalevala* ('The Land of Heroes') and Pohjola ('Northland') described in the Finnish *Kalevala* poetry. Some of these



marina was the first map to represent the geography of the Nordic world in a generally correct manner. It also included rich information about FIGURE 7.2 Northern parts of Fennoscandia, as portrayed in Carta marina et descriptio septentrionalium terrarum (1539) by Olaus Magnus. Carta place names and 'ethnographic' insights into northern cultures.

realms are obviously fabulous, even if the recurrent mixing of classical and northern geographies and cultures in such contexts is intriguing and important in its own right. It demonstrates how different worlds and times have converged in the context of the northern world, resulting in an amalgam of reality and fantasies, which has characterized the perceptions of the European North. At the same time, northern scholars, too, have contributed to these speculations. The prime example is, again, Olaus Rudbeck who discussed the question of Kvenland and Bjarmaland, but this tradition continues in one form or another until the present day. For example, Finnish academics have argued for and against the historical reality of places mentioned in the *Kalevala* from the days of its compiler Elias Lönnrot (1802–1884) – who situated Pohjola to the east of the White Sea – at least until the 1980s, when renowned historians such as Matti Klinge (1983) and Kyösti Julku (1986) explored the topic in extensive treatises. Even if the debate has since waned in academic circles, it is certainly alive and well on various Internet forums dedicated to various forms of (pseudo-)historical speculation.

The historical sources alone do not allow for many firm conclusions to be drawn, of which historian Kyösti Julku's (1986) study of Kvenland is an illustrative example. He produced a scholarly and careful analysis of all the relevant documents from different periods related to Kvenland, including Adam of Bremen's notion of a northern Terra Feminarum, which according to him may stem from a misinterpretation of the Old Norse word kven ('woman'). Rather than a 'land of women', Adam's informants may have spoken of a 'Land of the Kvens', as the word cwenas occurs already in the ninth-century account of Ottar - a Norwegian seafarer who visited the court of King Alfred of Wessex – as the name of a people living in cwena land that was located to the north of the Swedes. Adam of Bremen's interpretation may also echo a similar notion derived from the Roman historian Tacitus, who in Germania (AD 98) maintained that the sithones - who lived next to the sueones (possibly svear or 'Swedes') - were otherwise similar to their neighbours, but had become 'degenerated' to such an extent that they were ruled by a woman. The Kalevala poetry likewise describes Pohjola or Northland as a 'matriarchy' ruled by the witch-queen Louhi - an aspect that may relate to Pohjola's mythical role as a Land of the Dead, which in northern myth was often overseen by a Mistress of the Dead, such as the Old Norse goddess Hél. Even so, it seems like a curious parallel to the historical accounts.

Whatever lies behind the stories of a *Terra Feminarum* ruled by women, Julku (1986) concluded that Kvenland as such probably really was an actual proto-historic realm located around the northern Gulf of Bothnia but was forced to leave open many questions of its nature and character. In addition to the historical sources, he also briefly considered the potentially relevant archaeological material, including some of the then-recently excavated central places on northern river mouths, such as the Iron Age site of Rakanmäki at the mouth of River Tornio, but he admitted that it was scarce and, in some ways, incongruent with the historical snippets of information about Kvenland. The recent discovery of more such sites dating to the late Iron Age and early medieval period has, however, prompted a rather

fundamental reassessment of the character of river-mouth sites and how they are linked to the semi-mythical northern realms, on the one hand, and historical realities on the other (Kuusela 2013, 2018; Kuusela et al. 2016, 2018).

Changing views about the North have been facilitated by postcolonial thinking and the associated scrutinizing of the southern vantage point, which has traditionally dominated the understanding of northern pasts. Not only northern lands and people but also pasts have effectively been colonized by the Nordic states since the early modern period, a process that has shaped the way northern (pre)histories have been seen and represented since the days of the seventeenth-century antiquarians onwards (e.g. Herva et al. 2017, 2018). Northern parts of Fennoscandia - or areas largely beyond the sphere of intensive field cultivation and medieval urbanization – have been regarded as subordinate to the South and developments taking place there. Practically all (pre)historic sociocultural changes in the North have been taken to passively reflect events taking place in the South or even brought about by southerners forcing those changes on the North – and this also applies to our traditional understanding of sites at northern river mouths.

The traditional and still largely prevailing view holds that the emergence of central places at northern river mouths resulted from increased activities of southerners in the northern 'wilderness', attracted by rich fishing waters and fresh opportunities for fur trapping. A second explanation has attributed them to the expansion of the Swedish kingdom towards the North – particularly from the thirteenth century onwards - but recent research has shown that the central places of the Gulf of Bothnia came into being long before that, perhaps around ninth century AD onwards, but with roots perhaps extending all the way to the Neolithic, as discussed earlier in this chapter. This is roughly contemporary with the first Viking raids and the emergence of Viking trade centres, such as Ribe and Hedeby in Denmark, suggesting that both phenomena can be related to much broader processes in the Eurasian world.

The 'trader kingdom' of the birkarls

The enigmatic but undoubtedly historical group of people known as birkarls, who apparently controlled – or at very least acted as important middlemen in – northern trade in the Middle Ages, have similarly been regarded as tradesmen originating in south-western parts of present-day Finland. They had the exclusive right to trade with the Sámi, granted by the king of Sweden, but somewhat paradoxically also forcibly collected taxes from them on behalf of the king, thus seemingly undermining a trust-based relationship required in trade. Birkarls as tax collectors and agents of the king is probably a later development, however, and the birkarl institution was likely an independent and indigenous northern trading 'organization' in the Middle Ages, and not originally under the Swedish king's control (Bergman and Edlund 2016).

Birkarls feature in very early Swedish documents and are mentioned still in the seventeenth-century sources, but they are poorly known archaeologically – partly no doubt because it is unclear what 'birkarl material culture' should look like. Only one site associated with a historically known *birkarl* chief has been excavated: a dwelling at Oravaisensaari, an island close to the mouth of River Tornio that served as the abode of the sixteenth-century tradesman and bailiff of Swedish Lapland Nils Orawain (or Niilo Oravainen, ca. 1520–1597; see Niskanen 2007). Ingela Bergman and Lars Edlund (2016) have recently analysed in depth the character and different aspects of the birkarl trade and its organization. Their study shows that *birkarls* — who were apparently elected by their communities — divided their time and operated between the northern Baltic Sea coast and inland and were in charge of constructing and maintaining the infrastructure that the trade required. This system presumably operated in a more or less similar manner already in the Iron Age under the semi-mythical Kvens (see also Kuusela et al. 2018).

The late Iron Age and early medieval finds from northern Fennoscandia indicate connections to different directions and faraway lands. While these finds have traditionally been attributed to non-locals operating in the North, they should probably be rather understood as indications of northerners themselves operating within a vast exchange network. Whatever the ethnic background of the *birkarls* or the more elusive Kvens (though Sámi seems most likely; see Bergman and Edlund 2016), their subsistence was evidently based on traditional non-farming economies, and their relationship with the other indigenous communities in the North was one of mutual dependence (see Kuusela et al. 2018). It should be noted, too, that the birkarls and Kvens may have been one and the same group of people; this, in any case, seems to have been the view held by the sixteenth-century Swedish bishop and chronicler Olaus Magnus, who had personally travelled in Lapland.

The trade system run by the birkarls obviously predates the thirteenth-century Swedish documents in which they are first mentioned, leading us back to the sources concerning Kvens and Kvenland, which give the impression that Kvens were in control of a territory that covered much of northern Fennoscandia. Kuusela and his colleagues (2016) have recently shown based on archaeological evidence that there was a clear boundary between Swedish and 'northern' territories in the first centuries of the second millennium, which suggests that there was indeed a local power in control of the North. Snorri Sturluson's Egil's Saga relates how the Norsemen struck a deal with Kvens so as to arrange a raiding party against Karelians. According to the saga, the Kvens summoned a substantial group of some hundreds of armed men, led by a 'king' called Faravid ('Far-Wanderer'). While Egil's saga emphasizes the military force of the Kvens, their power may actually have been embedded in knowledge of the environments, conditions and people in the vast interior of northern Fennoscandia, which also made them unconquerable by force. It was this knowledge that provided the Kvens, and later birkarls, with the competence to organize and run the trade of northern goods such as furs.

In the context of historical master narratives of northernmost Europe, the key implication of the above is that northern Fennoscandia was not simply a playground between the emerging states of Sweden and Novgorod, but that there was an indigenous 'third power' in the North in the late Iron Age and medieval period. Although it was ultimately overtaken by the expanding kingdom of Sweden, it probably looms behind Adam of Bremen's notion of the land of the Amazons, as well as the references in Norse and other sources to the Kvens and Kvenland - a case that again demonstrates the intriguing fusing of an actual northern world and its long-standing cultural imaginaries and fantasies. Sites at river mouths were integral to this 'trader kingdom', as they marked gateways to the northern interior. Archaeological material from the excavated river-mouth 'hubs' provide, at the moment, only glimpses into the activities at these sites, but it is worth noting that they often feature cemeteries. There was thus an ancestral presence at the central places, and the markets arranged there similarly carried otherworldly connotations; they could, for example, be symbolically separated from the 'normal space' by outlining the borders of the market with fresh birch branches. The same basic idea continued into the medieval and early modern period, when the earliest churches in the North were built at the ancient marketplaces.

Marketplaces

Trade has been an important part of northern cultures and societies in different times, but trade in the late Iron Age and early Middle Ages - or indeed any period - was not simply a practical and economic question, but intertwined with broader cultural and cosmological matters, including the significance of mobilities, intercultural encounters and the symbolic capital accumulated in exotic goods. Northerners could be understood as 'natural' traders inasmuch as their traditional mode of being in the world involved moving over long distances and co-inhabiting their world with myriad entities - that is, interacting and negotiating with beings 'other-than-themselves'. The various activities involved in trade would thus have readily resonated with these more general characteristics of northern cultures.

The notion of rivers separating different worlds is perhaps also reflected in the spatial organization of certain historical period sites, as in the case of the Hedenäs-Kainuunkylä complex (see Wallerström 1995 for further details of the site). This medieval and early modern site is located on the river Tornio, on both sides of the modern Finnish-Swedish state border, some 40 km north of the present-day river mouth and the town of Tornio. River Tornio has been a main route from the Baltic Sea to the interior of the Lapland and the Arctic Ocean since ancient times - it is still locally known as 'The Route' (Finn. väylä) – and therefore a highly significant landscape element. The site of Hedenäs-Kainuunkylä was inhabited from the early second millennium AD to the early modern period and represents an early phase of colonization of the North by farming communities from more southerly parts of Fennoscandia. What makes it particularly interesting in this context is that different types of activities are associated with different sides of the river: the actual dwellings are on the eastern bank, whereas the graves and the marketplace - as well as the first church of the community, built in 1617 - are on the western bank. Situating



FIGURE 7.3 The marketplace of Tornio, located on an island at the mouth of the river Tornio, an important route from the Baltic Sea to the interior of Lapland and ultimately to the Arctic Ocean. A vignette from Olaus Magnus' *Historia de gentibus septentrionalibus* (1555).

graves and a marketplace adjacent to each other may at first seem rather peculiar, as markets could be rowdy and noisy, while respectful and restrained behaviour is typically expected at burial sites, but makes sense in that the two share a 'liminal' association and were separated from everyday life, both concretely (by the river) and symbolically.

Fairly little can directly be said about the specific activities that took place at coastal hubs in the Iron Age and Middle Age, but later historical accounts of northern marketplaces and fairs provide some insights into the character of these events in earlier times as well. Most importantly, historical accounts show that fairs were seasonal special events, which gathered people with different cultures from near and far around Fennoscandia and the Baltic Sea world. Beside their commercial and economic purpose, the northern fairs had administrative, social and religious functions (Ylimaunu 2007: 26-28; Symonds et al. 2015) and were generally comparable to early medieval central European fairs discussed by Theuws (2004), who characterizes them as 'a total social phenomenon'. Olaus Magnus (1973 [1555]: XX.1) provides a brief, personal account of the important fairs and marketplace of Tornio (Figure 7.3) - which he describes as a town - in the sixteenth century, highlighting its busy and multicultural atmosphere, whereas the nineteenth-century priests and scholars Jakob Fellman (1980) and Mathias Castrén (1954 [1802]) offer vivid and reprehending narratives of misbehaviour and drunkenness at the fairs in Kemi in the nineteenth century.

These and many other similar accounts indicate that the normal social order broke down or did not quite apply at fairs. Besides establishing and maintaining relationships, people practiced vices such as drinking and in general behaved differently from ordinary everyday life (Cleve 1955;Ylimaunu 2007: 27–28). In other

words, fairs comprised spatiotemporally bounded special events, associated with dimensions of liminality and 'otherness'. It may not be a coincidence, then, that northern marketplaces were often located on islands close to river mouths. Islands have long been associated with liminality and otherness in northern cultures (see Chapter 5) and beyond, which perhaps rendered them as particularly suitable arenas for special activities, with cemeteries and churches at or near marketplaces further emphasizing the otherworldly dimensions of fairs.

PART III

Sky

BIRDS AND COSMOLOGY

Migratory birds and changing seasons

Although migratory birds can be seen at all latitudes, their presence and absence is nowhere felt as concretely and acutely as in the North. Birds migrate because the coming winter renders food resources scarce. Especially water-birds and waders are forced to leave, as the lakes and the sea freeze over. For humans, their departure thus signals the coming of autumn and the lean times of the year, months of cold and frost that posed a very real threat of death by starvation (Zvelebil and Jordan 1999: 199). Although this threat is no longer real, the mass migration of birds can inspire awe and a sense of melancholy at the passing of the summer even today. In prehistory, the effect must have been more pronounced, as bird populations were much larger and fowling was an important source of food.

Conversely, the return of migratory birds indicated spring and life – both concretely, in providing an important food resource for fowlers and egg poachers, as well as symbolically, with the courtship rituals and calls of birds reaffirming life and fertility. Migratory birds flying in large formations, such as ducks, swans and cranes, have thus been intertwined with the cyclical character of life, which is particularly prominent in high latitudes – reflecting the perception of the North as the world of extremes and contrasts. It is not surprising that several northern peoples (such as the Nganasan, Enets and Dolgans) have special rites for welcoming migratory ducks and swans in the spring (Napolskikh 1992: 9). It may even be that the migratory routes of birds are in part responsible for the general association of South with life and North with death, so omnipresent in northern circumpolar cosmologies. The ancient roots of this notion are represented in the orientation of graves in northern Fennoscandia, which almost throughout prehistory were oriented roughly along the north–south axis. Only with the advent of Christianity towards the late Iron Age did an east–west orientation become standard.

However, not all migratory birds inspired similar interest, either economically or symbolically. Although there has undoubtedly been much regional variation – for example, at some sites jays and ospreys seem to have been symbolically significant (Mannermaa 2013) – the emphasis seems to lie in those species that mass migrate in V-shaped formations consisting of thousands of birds, such as ducks, geese, cranes and swans. From a southerly perspective, swans particularly have been regarded as symbols of the North. For instance, in myths concerning the Hyperborean Apollo (i.e. Apollo of a northern origin), which go back to Homer and Hesiod, the god of light left Greece in the fall to spend the winter in the Far North and returned in the spring in a chariot drawn by northern swans (Figure 8.1).

Osteological studies (e.g. Mannermaa 2003; Mannermaa and Lõugas 2005) demonstrate the significance of fowling in the northern Baltic Sea region throughout prehistory, and while egg collecting is more difficult to attest, ethnographic sources indicate that it likewise formed an important part of the diet. Various ducks, gallinaceous species (such as grouses and capercaillies) and swans clearly dominate osteological material and appear to have been the species preferred by hunters, but the same species also feature prominently in iconography and various ritual contexts, indicating that the relationship between humans and birds went far beyond that of hunter and prey.

As we have seen (Chapter 5), water birds feature in the very birth of the world in Finno-Uralian mythologies and are possibly depicted in that function in Neolithic



FIGURE 8.1 Apollo depicted as riding on a swan on a Greek red-figured krater (c. 400–380 BC). Photo: British Museum.

rock art of Lake Onega. It is interesting to note that their depiction in rock art is mostly restricted to eastern Fennoscandia, where bird imagery occurs also in contemporary Typical Comb Ware pottery decoration (see Figure 3.2). Moreover, the ability of water birds to both fly, walk on dry land and dive underwater resonated with the circumboreal notion of a tripartite universe, rendering them the messengers par excellence between the different levels of cosmos – both real and imagined, geographical and spiritual.

In shamanistic understandings, travels to the upper world often take place in the shape of supernatural bird (Bäckman 1975), called sáiva leddie by the Sámi, whereas divers such as the common goldeneye (Bucephala clangula) were associated with the subaquatic lower world (Napolskikh 1992). The supernatural spirit-helper bird was often a capercaillie (Tetrao urogallus), and a recurring story recorded in Lapland relates a 'hunting accident', where a hunter shoots a flying capercaillie, but when he inspects the place where the bird fell, he finds a dead shaman instead. This folklore motif appears to have a very long history, as one of the scenes at the complex Bergbukten 1 panel at Alta (dated to ca. 4200 BC) may describe a similar incident. It shows a group of eight human figures arranged in a row, one on top of the other, with the last one touching the head of the second-to-last figure and oriented in a different way (Figure 8.2).



FIGURE 8.2 A scene from the rock carvings of Alta, northern Norway, which may be interpreted as showing a shamanic flight interrupted by an archer. Photo: Antti Lahelma.

Rather than a group of people walking, this may well be a case of time-sequenced action, as Gjerde (2010: 128) has suggested. Some reindeer figures are nearby, and Gjerde interprets the scene as representing a flying shaman who transforms from a reindeer to a shaman and then back into a reindeer. The two reindeer figures may or may not be associated with the scene – it is hard to be sure. However, it seems certain that a large human figure wielding a bow and arrow facing the group is, in fact, a part of the scene, because the fifth human figure in the 'flying' group appears to have an arrow embedded in the stomach region. The scene thus appears to depict a person shooting another person flying in the air and subsequently falling down from the sky.

Birds as persons

Swan bones feature particularly prominently in the Danish Mesolithic faunal material of the Ertebølle period, both as refuse and in burial contexts. For instance, the site of Aggersund has been suggested to be specialized camp for hunting swan (Møhl 1978), as all of the faunal material found consisted of Whooper swan bones, and swans occur also in Finnish Mesolithic and Neolithic finds (Ukkonen and Mannermaa 2017). This seems natural, as swans are large birds and, because they are slow and not very afraid of humans, fairly easy to catch. An adult Whooper swan yields about 5 kg of meat and was an important source of nutrition in Lapland until the early twentieth century when it was nearly hunted to extinction (Leinonen 2000). The Sámi also used swan bones, skin and feathers to produce various utensils. At the same time, though, there is much to indicate that the interaction between humans and birds such as swans and capercaillies was just as complex as – and in many ways resembled – that between humans and elk, as discussed in Chapter 4.

The famous Danish Mesolithic burial site of Vedbæk Bøgebakken, which is roughly contemporary with Aggersund, shows evidence of a very different or 'non-economic' relation with swans (Albrethsen and Brinch Petersen 1976). In Grave 8, the archaeologists uncovered a double burial of a roughly 18-year old woman and a newborn baby that had been placed on a swan's wing. Overton and Hamilakis (2013) have discussed the Danish sites in their 'manifesto' for a social zooarchaeology as an example of the sensuous and affective relationship between two different – but sentient and autonomous – species, in an effort to move beyond the notion of animals as an exclusively nutritional or symbolic resource for humans. According to them, skinning a killed swan was an emotionally charged event, which involved sensory experiences such as seeing the red blood on white plumage, touching the skinned corpses with soft white skins and in general engaging with the dead animal (Overton and Hamilakis 2013: 218). Placing a dead baby on the wing of the animal, however, suggests a nurturing and protecting relationship.

The Neolithic carvings of Lake Onega are dominated by images of waterfowl, with at least 44% representing either swans or geese (Poikalainen 2004). Their 'meaning' evidently varies greatly depending on the compositional context, details of execution and relation to the physical features of the rock (see Lahelma 2012a), but some of these images seem to imply a co-essence between swans and humans.

Poikalainen (2006) has identified a series of images that seem to represent different stages of metamorphosis from swans with human features (such as a human foot instead of a webbed foot) to humans with swan features (such as a beak and a curved shape suggesting a swan's neck), signifying a type of ontological fluidity between the two species. Zhulnikov (2006: 42) also cites an example of a site from Neolithic Karelia, where all other faunal remains were buried scattered in the same refuse pit, while a skeleton of a swan was deposited complete in a separate pit - in effect given a proper burial.

Just as hunting elk was a sexually charged act, in which physical metamorphosis was an ever-present danger, fowling may likewise have involved imitating and seducing the prey. Tubular bone artefacts interpreted as flutes have been found in both Mesolithic and Neolithic contexts. While the interpretation of these artefacts is sometimes uncertain, experimental research carried out by the Rainio and Mannermaa (2014) on perforated artefacts found at the Middle Neolithic hunter-gatherer site of Ajvide on the Swedish island of Gotland confirmed that at least in that case they have indeed formed a two-piece flute. Use-wear analysis and ethnographic parallels from North America suggest that this type of flute was used for imitating bird calls.

The authors suggest that the flutes of Ajvide were used in fowling to attract birds towards the hunter but also consider the possibility that birds were imitated in religious rituals (Rainio and Mannermaa 2014: 96), as is common among Siberian foraging peoples (e.g. Siikala 1978: 134-136, 167-170). However, these purposes are not mutually exclusive, and the fact that the flute is made of swan bones seems significant as it brought the flute-player into intimate sensuous contact with the bird's physical remains. Mimicking a bird may have formed a part of both shamanic séances, ritual dances or plays and the effort of 'courting' the animal in connection with fowling. Such courting may be depicted in a famous rock art scene from Kanozero, Kola Peninsula, where a sexually aroused man wielding an elk-headed staff is shown facing a capercaillie (Kolpakov and Shumkin 2012).

Birds as guides and soul-birds

In most Indo-European languages, the name of the Milky Way associate its stars either with a road consisting of either milk (e.g. Via Lactaea in Latin) or snow (Sw. Vintergatan, or the 'winter road'), but among the Finno-Ugric peoples, the Milky Way was conceptualized as a huge flock of migratory birds (Kuperjanov 2002). Each star in the galaxy was thought to represent a bird-shaped human soul on its way to the otherworld that lay beyond the horizon, at the south-western end of the 'Pathway of Birds' (Finn. Linnunrata). The Estonian folklorist Andres Kuperjanov (2002: 52) cites a folklore account recorded at the parish of Keila, close to Tallinn, according to which:

The birds are led by a white bird, similar to a swan, with the head of a pretty maiden that all birds of prey fear. Hawks and eagles hide in the clouds from it. In the summer it lives on top of a boulder in the North, watches the midnight sun and is fed sweet northern berries by big birds. My grandmother's third husband, Jüri Nõmberg, was an old seaman and he saw how this white bird led a big herd of birds over the great sea towards land. It flew so low that its young maiden's face could be seen and a big tired hawk flew away from the ship's mast in fright.

It is worth noting that the constellation of Cygnus or Swan lies on the plane of the Milky Way, and the maiden-faced 'lead bird' mentioned in the story above may conceivably refer to the constellation. Its shape is readily recognizable as cross- or bird-like, and its stars are among the brightest in the night sky. Its present name and association with a swan is derived from the classical world, but Finno-Ugric peoples appear to have likewise recognized it and interpreted it as a long-necked water bird, and interestingly a second major constellation – that of the Great Bear – likewise finds a similar identification and interpretation in both Ancient Greece and the Finno-Ugric world (cf. Chapter 4). Heikki Simola (2001) points out that the orientation of the constellation, as it were, seems to 'show the way' to migratory birds, because the migratory path of Arctic geese at Lake Onega goes from south-west towards the north-east. In the April night sky, Cygnus lies close to the northern horizon and is oriented towards the north-east, whereas in October it lies close to the zenith and 'flies' towards the south-west.

In a Uralic context, water birds emerge both as symbols of the soul and as messengers between this world and the other. The Udmurts, for example, capture swans and send them swimming along the River Vyatka to deliver prayers to the Supreme Deity (Napolskikh 1992: 7), and the Khanty place carved wooden birds in graves to guide the deceased to the Otherworld (Zvelebil and Jordan 1999, fig. 6.11). Zhulnikov (2008: 41) describes a different type of present-day Khanty death ritual, in which a small hut was constructed to house a wooden effigy of the deceased. A duck was then killed and left in front of the doorway of the hut, its head oriented towards the north or the direction of the Land of Death. At the end of the ritual, the hut and the effigy were burned and the duck was boiled and eaten.

The Vepsians of southern Lake Onega region still maintain beliefs concerning swans and ducks as 'soul-birds' and taboos against hunting them (Vinokurova 2005). When a person slept, his or her 'free-soul' was thought to fly about in the shape of a bird, and when a person died, the soul escaped in the form of a bird. Wooden bird-sculptures that represent the soul of the deceased can sometimes still be seen on top of the wooden Orthodox crosses at Vepsian and Karelian cemeteries (Figure 8.3). In modern Finnish cemeteries, images of birds (typically small bronze sculptures of sparrows or swallows) are one of the most common symbols on tombstones, even though they bear no relation to Christian symbolism. While this may in part be rooted in national-romantic imagery, such as Zachris Topelius' (1818–1898) popular poem on a 'sparrow at Christmas morning' – in which a girl's deceased little brother appears as a sparrow – it nonetheless echoes ancient beliefs



FIGURE 8.3 A Greek Orthodox cross at the village cemetery of Suistamo, Karelia, with a bird symbol or 'soul bird' on top. Photo: Auvo Hirsjärvi/Finnish Heritage Agency.

and practices concerning soul-birds that were part of Finnish folk culture still in the early twentieth century (Haavio 1950).

Archaeologically, similar notions related particularly to water birds appear to emerge already in the Mesolithic, as exemplified by the burials of Vedbæk, Zvejnieki and Olenyi Ostrov, where bird body parts - and in some cases complete duck skeletons – have been argued to reflect the role of these animals in guiding the dead to the Otherworld (e.g. Zvelebil 2003; Mannermaa 2006). Bird's wings and duck feet found at the Mesolithic cremation burial of Gøngehusvej 7 at Vedbæk (Brinch Petersen and Meiklejohn 2003) may have served a similar purpose. The trend seems to continue into the Neolithic, as most finds of bird bones at Ajvide derive from wings of water-birds (Mannermaa 2008). In addition to bird bones, small carved figurines representing birds are occasionally found in Neolithic graves (Antanaitis 1998), such as Tamula in Estonia, where a bird figurine and two wing bones of a crane were found near the hands of a child (Jaanits et al. 1982; Kriiska et al. 2007).

Various early and later Neolithic pottery styles in the region also refer to waterbirds, the most obvious examples being the occasionally occurring rows of swan or duck motifs in Typical Comb Ware pottery decoration (Utkin 1989; Pesonen 1996). In a few cases the birds are accompanied by human figures, as at the Kolomcy sherds found near Novgorod in Russia (Äyräpää 1953), where the anthropomorph has horns in its head, recalling highly similar figures in Finnish rock paintings. Images of birds and anthropomorphs cease to be made in the following late Comb Ware, but the association seems to persist, as feathers and eggshell fragments are sometime used as a temper in late Comb Ware (Huurre 1998). Moreover, the shape of both Typical and late Comb Ware vessels evokes the shape of an egg. Precisely why or how pots and waterfowl are related is difficult to guess, but it may be noted that the elk- and waterfowl motifs also manifest in the handles of contemporary wooden spoons, which Immonen (2002) suggests were used in communal food-sharing rituals following a hunt. Perhaps the pots decorated with water birds were likewise used in communal feasting associated with birds, such as the present-day Siberian rituals that celebrate the arrival of the first flocks of ducks and geese (Napolskikh 1992: 9) or the Khanty burial ritual described above.

Later manifestations of the significance of waterfowl can be found in Iron Age jewellery, where ducks and swans (and their feet in particular) are a common theme throughout the entire Finno-Ugric area, and in ethnographic materials such as traditional Karelian embroidery (*käspaikka*), which show several motifs – such as double-headed water-birds – that are thought to derive from a very distant past, possibly even related to the Neolithic carvings of Lake Onega (Säppi and Oino 2010).

Cranes and dwarfs

In Finno-Ugric cosmology, a paradise-like island known as the 'Home of the Birds' (Finn. *lintukoto*) lay beyond the south-western horizon, to where the Milky Way seems to lead. This otherworldly place where migrating birds fly to is known for instance among the Finns, Komi, Khanty and Mansi and seems to belong to the oldest stratum of Uralic myth (Napolskikh 1992). Because heaven and earth met here, the place was so low that a grown-up person could not stand straight. For this reason, it was populated by small human-like creatures (Finn. *lintukotolaiset*), who in some myths stole the eggs of the birds and waged a war against cranes (Berezkin 2007). The Finno-Ugric myths bear an astonishing resemblance to Ancient Greek myths concerning the state of war between Pygmies (Gr. $\pi u \gamma \mu \alpha \tilde{i} \alpha i)$) – a race of dwarfs – and migrating cranes, a theme known as Geranomachy, which makes its first appearance already in the *Iliad* (Book III:5). According to Homer, the Pygmies



FIGURE 8.4 Dwarfs fighting cranes in Greenland. A vignette from Olaus Magnus' *Historia de gentibus septentrionalibus* (1555).

faced the cranes each winter in their homeland on the southern shores of the earth, by the shore of the World River or Oceanus (Gr. 'Ωκεανός). The myth is subsequently reported by authors such as Herodotus, Aristotle and Pliny the Elder as an ethnographic fact, and it also features prominently in Ancient Greek and Roman art (Dasen 1993; Ovadiah and Mucznik 2017). In the sixteenth century, it is repeated by Olaus Magnus who places the struggle in Greenland – a place that (from a Swedish perspective) lay at the extreme outer edge of the inhabited world (Figure 8.4).

According to Ovadiah and Mucznik (2017: 152), it appears that Greek and Roman authors have never offered an explanation to the somewhat bizarre myth concerning Pygmies and cranes, and that modern authors have likewise failed to do so. Their interpretation is that it relates 'a real and true event, clothed in mythical vestment, in the Greek and Roman worlds, in which the Pygmies hunt the birds in order to consume their flesh' (Ovadiah and Mucznik 2017: 165). In other words, it would describe real African hunter-gatherer tribes hunting cranes for food, an ethnographic reality perhaps witnessed by Greeks stationed in Egypt and later transformed into a myth. However, as Berezkin (2007: 68) points out, because 'the study of classical antiquities had been poorly integrated into the mainstream of anthropological research, the Pigmies [sic] and cranes motif was considered by many to be peculiar just for the Greeks'. The Finnish linguist Yrjö Toivonen (1937) demonstrated already in the 1930s that the same theme can be found in Finnic, Siberian and North American myths, and that a 'heliocentric' Greek origin for such a wide-spread motif seemed unlikely. If anything, it is more likely of a northern circumpolar origin.

Several observations can be brought about to support this notion. First, the Pygmies are described as minuscule in size, which fits well with the notion of a people living beyond the horizon where the world (in a flat-earth cosmology)

was very low. Significantly, the Greek authors generally located the Pygmies in the Upper Nile, that is, to the south of Greece and at the extreme reaches of the known world, while Strabo specified that since 'Oceanus stretches along the entire southern sea-board, and since the cranes migrate in winter to this entire sea-board, we must admit that the Pygmies also are placed by mythology along the entire extent of that sea-board' (cited in Ovadiah and Mucznik 2017: 155). In other words, he perceived them as a people located vaguely at the edge of the southern horizon, not in a specific geographic location. This suggests that the Greek myth may likewise be related to myths concerning the Milky Way as a pathway to a mythical land beyond the horizon – in Greece thought to lie in the south while in the northern regions generally located in the north-east end of the Milky Way.

The Common crane (*Grus grus*) is not just any bird but stands out from the crowd already because of its anomalously long legs and beak. As Russell and McGowan (2003) point out in their discussion on the symbolic role of cranes at Çatal Höyük, cranes resemble humans in a number of ways. They are bipedal, grow considerably tall (reaching ca. 120 cm in adults), and have a long lifespan (sometimes over 40 years) and social structure resembling that of humans. Most importantly, cranes dance. The dancing often takes place in formation, which can be initiated by a crane but also by a human imitating a crane. Moreover, cranes are by nature curious beings and can form a bond with humans, as testified by Jouko Alhainen, a Finnish birdwatcher dubbed by the press as 'the crane-whisperer', who has maintained an 'orphanage' for wounded cranes for over thirty years (Saarinen 2008).

Moreover, in Finno-Ugric myths, cranes also have a cosmological role. Cranes were thought to hold up the heavens, possibly because they are so tall and stand in an upright position (Lehikoinen 2009). This belief is reflected in contemporary Finnish language, where the ridgepole supporting the roof of a timber-built house is still known as kurkihirsi or 'crane beam'. Since buildings, whether conical teepees or rectangular houses, shape and replicate cosmology (see Chapter 3), the association of cranes with the ridgepole situates them in the very centre of the universe. The conflict with the 'dwarfs' at the outer extreme of the cosmos may perhaps be seen as a conflict between the centre and periphery, life and death or order and chaos. The theme of Geranomachy thus appears to be neither a burlesque parody nor a case of ethnographic observance of African tribes transformed into myth, but probably reflects the ancient cosmological notions of northern peoples adapted into a Graeco-Roman context. It may have been later elaborated based on explorers reports from the Upper Nile or Africa's west coast, as suggested by Dasen (1993), but such information hardly reached Greece in the age of Homer, when the myth already seems to have been commonly known by the Greeks.

In spite of this mythological importance – or perhaps because of it – cranes are rather invisible in the rich osteological and rock art material of the northern Stone Age, even if a few individual cranes are depicted at the carvings of Kola peninsula and Karelia (Kolpakov and Shumkin 2012). This puzzled Kristiina Mannermaa (2008: 67), who surmised that the 'rarity of these species in the archaeological data may be the result of hunting restrictions or taboos'. Indeed, although swans have

commonly been hunted in Lapland, taboos appear to have existed further south in the historical period, and particularly in eastern Finland and Karelia swans were either revered or regarded as foul-tasting. In some folklore sources, killing a swan was compared to killing an angel, and among the Vepsians of Lake Onega swans were known as 'Gods' birds' (jumalanlind) (Vinokurova 2005). Such taboos may relate to the association of the swan with the Underworld, or the Land of Death, which it could reach thanks to its long neck.

Devil's swans

In addition to its pure white plumage, the exceptionally long neck of the swan is perhaps its most distinctive feature. It is, incidentally, also one of several features (such as monogamy, longevity and flying in V-shaped formations) that it shares in common with cranes. The long neck allows swans to reach water plants and their roots at depths not reached by other members of the Anatinae family, but among northern peoples, it has also associated the bird with the subaquatic Underworld. This association has been immortalized by the Finnish composer Jean Sibelius (1865-1957) in the tone poem called The Swan of Tuonela, a rather sinister avian swimming in the river that separates the land of the living from that of the dead ('Tuonela' being one of the mythological names in Finnish for the Land of Death). This association of swans with death and as messengers between the worlds also seems to be encountered already in classical literature: in Phaedo (84D-85B), Plato has Socrates saying that although swans sing in early life, they 'sing especially well when on the point of death, because they are about to go off to the god [Apollo] whose servants they are' - hence the association of 'swan song' with death. And because, being Apollo's birds, they are granted with the gift of prophecy, they do not sing from grief as they 'know beforehand that what is in Hades' realm is good - and they take delight in a different way that day than they have ever delighted before'.

The neck of the swan clearly fascinated the Neolithic inhabitants of Lake Onega, who sometimes depicted in rock art swans with an almost ridiculously long neck. The necks and heads of the swan figures, moreover, bear a special relation to cracks and fissures in the bedrock. For instance, at the cape of Besov Nos ('Devils' Cape'), two disembodied necks of a swan emerge from a rift, as if entering our world from underneath, while at the Karetskyi Nos locale a swan with a neck seven times the length of its body appears to plunge into a crack in the rock. Some images of swans have even incorporated a crack into the image so that a natural crack forms the neck of the swan (Lahelma 2012a).

Although the Finno-Ugric Otherworld could be reached through various means, such as diving into a lake bottom or travelling far up north, in Finnish-Karelian shamanistic folklore cracks in the rock commonly serve as portals into the world of the dead (cf. Chapter 2). This is reflected, for example, in the Finnish expression langeta loveen, 'to fall into a crack', which in traditional Finnish-Karelian Kalevala-metric poetry refers to falling into a trance. Swans entering a crack or



FIGURE 8.5 A Neolithic carving of a swan at Lake Onega has been superimposed by a Greek Orthodox cross probably in the late medieval period. Photo: Antti Lahelma.

emerging from one thus appear to symbolize the passage of the soul (either of a deceased person or of a shaman) between this world and the Lower World.

Because swans were associated with the Lower World, which in a Christian interpretation might be understood as equivalent with Hell, the images of swans may have been viewed as pagan or even 'evil' by medieval Christian missionaries entering the region. This is indicated by the fact that, in addition to the central figure of the Lake Onega complex (a large human figure locally known as Bes or 'The Devil'), one of the swan figures at Besov Nos has been superimposed by a carved Greek Orthodox cross (Figure 8.5). The crosses have been dated on stylistic grounds to the fourteenth or fifteenth century AD, and it has been suggested that they were made by the monks of the nearby monastery of Muromsk.

Solar swans?

In addition to the swans, one of the most emblematic types of motif at Lake Onega are so-called lunar and solar symbols. Most are the shape of the crescent, circle or semicircle, from which one or two straight lines project, sometimes forming a loop. There is much variation (at least twenty-five different types can be identified), and their interpretation has raised some discussion, but the suggestion made by Ravdonikas (1936) that they are associated with the sun and the moon has today won wide acceptance. They are not found everywhere at the carving area, but are

concentrated on specific locales, such as Peri Nos. This has prompted Zhulnikov (2006) to suggest that those locales were devoted to observing astronomical phenomena. The orientation of the 'rays' is likewise not random. At Peri Nos, three groups can be identified - one with rays toward the north, the other towards the east, and the third towards south-west - possibly signifying orientations of cosmic significance. East, of course, is the direction of sunrise, and north that of the Finno-Ugric Land of the Dead. South-west may have acquired significance as the direction to which the Milky Way seems to lead and from which, as noted above, migratory water birds arrive to Lake Onega.

The sun also affects the manner in which the carvings can be observed. At noon they are barely visible but become increasingly visible in oblique light and are best observed at sunset, in a sense making them alive and active. As the position of the sun shifts, new figures become visible, while others disappear. Moreover, the granite of Lake Onega is extremely smooth, polished by countless glaciations, and can be shiny and luminous when not covered by lichen, as is the case at the rock art locales located immediately on the lakeshore. Since luminosity and shininess is cross-culturally associated with supernatural power, the cliffs themselves may have carried associations with light and sun.

One of the best-known carvings of swans at Besov Nos differs from the rest in that a solar symbol is clearly intentionally attached to its neck (Zhulnikov 2006), raising a question if swans were also associated with the sun. As suggested by the composition of Bolshoy Guri (see Chapter 5), they appear to have been associated with the Creation, where according to folklore accounts the yolks of the Cosmic Egg formed the sun in the sky. The so-called 'cosmic swans' that occur throughout the Onega carving region, with a body consisting of three concentric semicircles, may belong to the same theme of swans and cosmogony. However, the figure of Besov Nos may also refer to myths and associations that are lost to us. A mythical solar deer or elk, which carries the sun between its antlers, is widely known among the northern circumpolar peoples (Jacobson 1993) and may have been preceded by other solar creatures. It is intriguing that, as already noted, in classical myth Apollo – who is strongly associated with the sun - rides in a chariot drawn by swans, and in some myths, Phaeton, the son of Helios or the divine sun – is associated with the constellation of Cygnus. This might seem like a vague correspondence, but perhaps worth considering since the number of parallels between northern cosmology and Greco-Roman myth seems to be surprisingly high.

THE SUN, LIGHT AND FIRE

People of the Sun

At least since classical times, the sun has been closely associated with the North and northerners, as evidenced by Greek myths concerning Hyperborea, Ultima Thule and other northern, otherworldly places. The Greek explorer Pytheas of Massilia gave the first first-hand account of the northern world ('Ultima Thule') in the fourth century BC, describing phenomena such as the midnight sun and the sea freezing over during the winter. Although he was widely accused of being a liar because of such seemingly incredible claims, his account (which has not survived) made a lasting impression on classical geography and was quoted by subsequent authors such as Plato and Pliny the Elder. In these accounts, the North was a place where even the most dependable of all phenomena, such as the rising and setting of the sun, did not follow their 'natural' course, but were strange and different.

In the late medieval and early modern period, literary accounts of the North written by northerners themselves began to make their way into the central and southern European consciousness, most importantly through the work of the Swedish bishop and historian Olaus Magnus (1490–1557), whose encyclopaedic work *Historia de gentibus septentrionalibus* (1555) ('History of the Northern Peoples') was translated to most major European languages. This account of northern marvels made a great impression on many Renaissance scholars and authors, such as Cervantes, whose last published novel *The Travels of Persiles and Sigismunda: A Northern History* (1617) relates the northern exploits of the 'Prince of Thule' and the Princess of Friesland. From the eighteenth century onward, a steady flow of European scholars and aristocrats began to make their way to the specific places in the north, such as Aavasaksa in Northern Finland and Nordkapp in northernmost Norway, to observe and admire the strange phenomenon of the midnight sun (Figure 9.1).

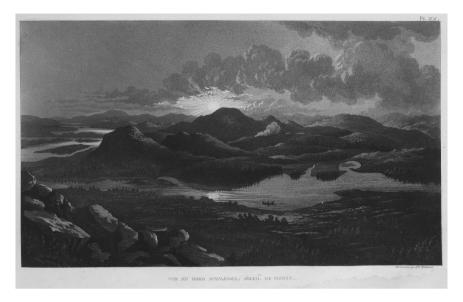


FIGURE 9.1 A view of the midnight sun from the mount Aavasaksa ('Avasaxa'), drawn by A.F. Skjöldebrand in June 1799. Published in Giuseppe Acerbi's Voyage pittoresque au Cap Nord (1801-1802). Image source: Finnish Heritage Agency.

Olaus Magnus maintained that the Sámi worship the midnight sun and make sacrifices to it, because it brings light and warmth to the darkness and 'inconceivable frosts' they have endured during the winter (III, 2). In Sámi mythology, the Sun (Beaivi) is indeed a central divinity, as indicated by the fact that in many Sámi shaman drums it occupies the centre. Some myths maintain that the Sámi are descendants of the sun-god, a notion put forcibly forward by the twentieth-century Sámi poet Nils-Aslak Valkeapää in his lauded work Beaivi, Áhcázan ('The Sun, My Father') (1988). The persistence of the idea of northerners as sun-worshippers is understandable, as even if it is to some extent a construction of 'outsiders', it resonates with the experienced northern realities. The importance of the sun is expressed in the northern festivities of the Midsummer Eve, still a vital part of folk culture, and the special significance of the sun is also sometimes evident in the prehistoric archaeological record, particularly in the case of Bronze Age Scandinavian iconography.

Like the sun, fire is crucial to survival in the North, which explains the symbolic and ritual dimensions of the hearth in both prehistoric and historical times. The hearth connects the different dimensions of reality, as expressed by the association of the hearth with the world-tree or pillar that supports the cosmos. The earthly fire is thus a cousin of the heavenly fire of the sun. The emergence of solar imagery in the latter part of the Bronze Age may be linked to the increased significance of pyrotechnology and fire-induced transformations, related to the rise of metallurgy and the introduction of cremation burials in Scandinavia.

Transformation is indeed a key theme related to the sun and fire: it connects with northern ideas of transformation, or shamanic practices and the transformations associated with them.

Amber and Apollo

In addition to being a bleak, dark and barbarian land, the North has also been conceived as a place of light, sun and treasures, including the peculiar and highly valued substance that is amber (Davidson 2005: 25). Amber has fascinated people for thousands of years and has among other things given the name to electricity (amber is ἤλεκτρον or 'electron' in Greek) because, when rubbed with wool, it produces a strong charge of static electricity. Amber has been associated with the sun and assigned with magical and curative powers in many different cultural contexts (Ragazzi 2016). It features in Homer's epics and is mentioned or discussed by several Greek and Roman authors, all of whom testify to the allure of this peculiar substance. It is also a distinctively 'northern' material in the European world and has been recognized as such since ancient times — indeed, amber is perhaps the single most long-standing material symbol of the northern reaches of Europe.

Significantly, amber, the sun and the North are combined in Graeco-Roman mythological themes. The story of Phaethon and the sun chariot explains the mythical origins of amber in Greek mythology, as given in Roman written accounts. Phaethon persuaded Helios, his father and sun-god, to let him drive the sun chariot but failed to control it and was about to burn the Earth, leading Zeus to strike down the chariot and kill Phaethon, who fell in the river Eridanus. Struck with sorrow, Phaethon's sisters were transformed into trees and their tears were turned into amber by the sun and fell in Eridanus which, according to some traditions, was located in the Far North (Olcott 2013: 6–7). Similar associations between amber, the sun and the North are present in the figure of Apollo. Apollo is a complex and multi-layered figure, but there is a long tradition, originating in classical antiquity, which regards him as a Hyperborean deity. This 'northern' identity of Apollo in his role as the sun-god is reflected in his emblems which include amber and the whooper swan (cf. Figure 8.1) – a bird with distinctively northern associations due to its breeding range in sub-Arctic Eurasia (Ahl 1982).

The richest deposits of amber in Europe are located on the south-eastern shore of the Baltic Sea, with a majority of amber nowadays mined in the Kaliningrad region in Russia, in addition to which amber can be found along the Danish coasts (Butrimas 2001). In prehistoric times it was mostly found washed ashore on the sandy beaches of the southern coast of the Baltic sea, as pieces were torn from the seafloor by wave action. Baltic amber has been distributed far and wide since the Neolithic. It has famously been found in Troy, Mycenae and other eastern Mediterranean late Bronze Age sites where amber suddenly appears around the mid-sixteenth century BC (Hughes-Brock 1985; Kristiansen and Larsson 2005: 125), and the desire for amber continued into classical times and beyond (e.g. Vīkis-Freibergs 1985: 324).

Archaeologists have long been interested in the 'amber routes' and the mechanisms of amber exchange, which has been viewed as a proxy of various other aspects of ancient cultures and societies. However, in addition to trickling down South to the Mediterranean, amber made its way from the south-eastern shores of the Baltic Sea across northern Europe already in the Neolithic, including the circumpolar boreal regions, where it appears in the archaeological material from around 4000 BC (Zhulnikov 2008; Núñez and Franzén 2011). The distribution of prehistoric amber in present-day northern Fennoscandia, moreover, must be seen as a part of much wider contacts networks which channelled Baltic amber around European Russia as well (Beck 1985: 207; see also Nordqvist 2018).

More than thirty years ago, Markley Todd (1985: 188) observed that the East-West relations have tended to dominate the understanding of intercultural relations in prehistoric and ancient Europe. The study of amber could balance the picture by focusing attention on the importance of the North-South axis, which 'forces scholars to ask new questions about cultural contact' (Markley Todd 1985: 188). Núñez and Franzén (2011) identify three possible Neolithic 'amber routes' to the North: one route along the eastern Baltic coast, a second one across the Gulf of Finland and northwards along inland waterways and a third route that reached northern regions through Lakes Ladoga and Onega and all the way to the White Sea following River Vyg. Some of the sites far up North are extremely rich in amber finds. For instance, the cluster of Neolithic sites at Kierikki, in the mouth of river Ii on the northern coast of the Gulf of Bothnia, has yielded some 200 amber finds from sites dating from fourth and third millennia BC (Núñez and Franzén 2011: 13, 16).

Amber is a relatively common type of grave goods in Typical Comb Ware graves, and at some sites such as Kukkarkoski in south-western Finland, amber finds are accumulated in just a few graves, suggesting that it was associated with rank and prestige (Ahola 2017a). Anthropomorphic amber figurines have been found in underwater excavations in front of the rock painting of Astuvansalmi in central Finland, evidently presented as offerings at the site (Grönhagen 1994). Amber was thus clearly regarded as a special and valuable substance in northern Fennoscandia already in the Neolithic, much as it was later in the Mediterranean, even if the specific meanings associated it may of course have differed.

More importantly in this context, however, Markley Todd (1985: 188) observed that amber is a substance 'linking the study of symbols, myths, and cult practices with modern scientific studies'. This provides an important cue for appreciating amber and its appeal also in the ancient world. Due to its unique material properties - and the 'mythical capital' it acquired through being imported from a faraway, unknown sea in the North - most things related to amber lay between myth, reality and imagination for the Greeks and Romans; amber was a mythical world materialized. In addition to its capacity to produce static electricity, its properties as a substance include shininess, hardness, translucency and a general gem-like character. The mineral-like qualities, however, were contradicted by other qualities that distinguished amber from other gemstones: it feels warm to the touch, it is

surprisingly light, it emits a pine-like smell when rubbed, insects and plant remains can sometimes be seen trapped inside it and it burns when exposed to fire.

In a pre-modern context, these properties of amber rendered it a deeply ambivalent and anomalous substance, which has contributed to its many mythical and magical associations. The fifth-century BC Athenian politician Nicias, for example, characterized amber as 'the "juice" or essence of the brilliant rays of the setting sun, congealed in the sea and then cast up upon the shore' (Kunz 1971 [1913]: 56). For the Greek philosopher Thales, amber was 'a stone with a soul' because of its (electric) ability to attract objects towards itself (Markley Todd 1985: 185), while Demostratus maintained that it originated from the urine of lynxes. The mythical association of amber with the tears of mourning women (in Greek myth Phaethon's sisters, known as the Heliades) is of particular interest, because it has parallels in both Baltic and Scandinavian mythologies. The Norse goddess of love and fertility, Freyja, is said to long for his absent husband (the god Óðr), and when her tears fall to the sea they turn to amber. Similarly, in a popular Lithuanian legend concerning Jūratė and Kastytis – the goddess of the sea (Lith. jūra, 'sea') and a mortal man – the goddess is said to weep tears of amber after Kastytis, who was slain by the thundergod Perkūnas. Some folklore sources, moreover, seem to associate amber with sunmyths on the southern shores of the Baltic Sea (Vīkis-Freibergs 1985).

Towards the beginning of the Common Era, such mythical explanations began to give way in the classical world. For instance the Roman naturalist Pliny the Elder (AD 23–79) set out in his *Naturalis Historia* to correct 'the many falsehoods that have been told about amber' and to 'expose the frivolities and falsehoods of the Greeks' concerning the substance. He writes at length about the qualities and possible origins of amber, concluding that 'there can be no doubt that amber is a product of the islands of the Northern Ocean' and that it is 'produced from a marrow discharged by trees belonging to the pine genus', which is gradually hardened and washed on the seashores (Pliny *Nat. Hist.* 11, 3). Yet he, too, devotes an entire chapter to the 'remedies derived from amber', which according to him include curing fevers, maladies of the ear, stomach diseases and preventing delirium. Interestingly, many of the Neolithic finds of Baltic amber have been carved into the shape of a double-axe (*labrys*), which resonates with the Minoan world (where the *labrys* is a recurring symbol) and with labyrinths (cf. Chapter 5).

As shown by Pliny's account, there was a certain awareness of the northern origins of amber in the ancient world, even though knowledge of the actual geographies of the North was hazy at best. The Greek explorer Pytheas wrote in the fourth century BC that a Germanic people called Gutones (sometimes identified with Goths) collected amber at the shores of an island called Abalus in the northern sea, where it was washed up by waves. They burned it for fuel and also sold it to the Teutones. Pliny agreed that it was collected by the Germanic tribes, who sold it further to Pannonia (present-day Hungary), from where it was transported by the Veneti to the Adriatic coast and the Mediterranean world. The most detailed account is given by Tacitus, who in AD 98 writes of a people called Aestii, who

search the deep [sea], and of all the rest [of the Germanic tribes] are the only people who gather amber. They call it glesum, and find it amongst the shallows and upon the very shore. But, according to the ordinary incuriosity and ignorance of Barbarians, they have neither learnt, nor do they inquire, what is its nature, or from what cause it is produced. In truth it lay long neglected amongst the other gross discharges of the sea; till from our luxury, it gained a name and value. To themselves it is of no use: they gather it rough, they expose it in pieces coarse and unpolished, and for it receive a price with wonder.

[Tac. Germ. 45, 4]

As already mentioned, in addition to being associated with the North and northern lands, amber was widely associated with the sun. For Homer, amber was 'shining as the sun' (Gimbutas 1985: 248), and amber was an emblem of Apollo the sungod, who was also associated with the North and with Hyperborea. The Greek geographer Hecatateus of Miletus claimed that Hyperborea was an island located beyond the North Pole and that its inhabitants were devoted to Apollo in his role as the sun-god (Davidson 2005: 23-24).

The association of the North with the sun may appear peculiar, but it makes sense from the ancient Greek point of view. With nightfall, the sun was considered to journey beyond the Ripaean Mountains (a mythical mountain range vaguely located in a general northern direction), and therefore, when the sun was not shining on the Mediterranean world, it was thought to reside somewhere among the northerners (Davidson 2005: 23–24). Although this special relationship between the sun and northerners is grounded in Greek imaginaries, it has persisted into the modern times and represents an amalgamation of southern imaginations of the northern realities. Thus, while the intertwining of the sun and the North is related to the exoticizing of the unknown mythical land, it also strikes a curious resonance with actual northern practices and mentalities revolving around solar themes.

Worshipping the northern sun

Amber begins to feature prominently in the northern archaeological record around the Middle Neolithic, together with other colourful and exotic materials (Herva et al. 2014). Already Oscar Montelius (1843-1921), the 'father' of modern archaeology, argued that Stone Age miniature amber axes found in Scandinavia were 'symbols of the sun god' (Montelius 1910: 68), and amber discs discovered in the Baltic countries have similarly been interpreted in terms of prehistoric sun worship (see Ahl 1982: 395). Gimbutas (1985: 251) proposed that amber discs associated with the Neolithic Globular Amphora culture in central Europe were 'undoubtedly regarded as imbued with the divine power of the God of the Shining Sky', and represented 'a personification of the light of the sky and the sun, well-known from comparative Indo-European mythology and linguistics' (Gimbutas 1985: 248). The attribution of such discs with sun worship is not



FIGURE 9.2 A Bronze Age 'sun-holder' from Denmark (exact find location is unknown), with a bronze frame and a disc of amber, which shows the solar 'wheel-cross' when illuminated from behind. Photo: Roberto Fortuna and Kira Ursem/National Museum of Denmark.

unreasonable (a Bronze Age 'sun-holder' found in Denmark likewise features an amber disc, which, when held against the light, reveals the shape of a 'sun cross'; see Figure 9.2) but according to present knowledge, the Globular Amphora culture probably was not Indo-European. The earliest mythological associations of amber are thus probably lost in the fogs of prehistory. These early associations between amber and the sun roughly coincide with the first emergence of solar imagery in rock in rock art. The Neolithic rock carvings of Lake Onega feature a vast number of globular and crescent-shaped symbols, interpreted by Ravdonikas (1936) as being related to worshipping the celestial bodies, particularly the sun and the moon.

According to Zhulnikov (2006), the 'rays' emanating from these symbols suggest astronomically significant orientations, and some of the peninsulas at the Lake Onega rock art complex may indeed have been devoted to observing celestial phenomena. Because they bear a stylistic similarity to later, South Scandinavian rock art imagery possibly related to the sun, Hallström (1960) argued that they should



FIGURE 9.3 The rock carving of Aspeberget in Tanum, Sweden, showing what appear to be the sun and two long-haired 'sun-worshippers', as well as other figures such as roe deer and a halberd Photo: Antti Lahelma

be seen as a possible Neolithic precedent to the Bronze Age 'sun cult' of southern Scandinavia.

In the Bronze Age, solar symbolism is very conspicuously present in Scandinavian visual culture, suggesting that the sun did have a prominent position in ancient northern societies and ideologies (Figure 9.3). The sun motif occurs both in metalwork and rock art, and is connected with various other motifs, such as horses and ships (see Bradley 2006). The most famous example of this complex of motifs is the Trundholm 'sun chariot' found in Denmark, one face of which is plated with gold (possibly representing the sun), while the other is unplated (representing the moon). The same imagery is replicated in contemporary bronze razors and rock art (Kaul 1998; Kristiansen 2010). It also brings together a number of broader cultural phenomena that were integral to Bronze Age societies or their elites, including the symbolic meaning of bronze, long-distance travelling, the horse and chariot as symbols of aristocracy and the esoteric knowledge associated with travelling to faraway places and with the manipulation of metal (e.g. Kristiansen and Larsson 2005).

The association of the sun with the chariot and the ship can be interpreted in terms of the journey of the sun, drawn across the sky in the chariot in the day and then disappearing into the sea where it travels in the night, as well as with the 'mythical capital' related to long-distance travel. Thus, the sun descends into the Underworld, the Land of the Dead, as associated with the sea and underwater, to reappear in 'this world' again in the morning (Kaul 1998; Kristiansen and Larsson

2005). This mythology is even found in Old Norse sources, such as the Icelandic poem *Vafþrúðnismál*, which mentions the horses of the day and night, Skinfaxi and Hrímfaxi ('shining mane' and 'rime mane'), who pull the chariot of the day ('Dagr') across the sky every day and the chariot of the moon ('Nótt') during the night (Ellis Davidson 1964). The association of the sun with a ship is probably even older, as the notion of a 'sun-ship' appears to have a northern circumpolar background (Lahelma 2017).

The Bronze Age marked significant social and cultural changes in southern Scandinavia, including connectedness to the vast Eurasian contact networks and the associated flow of cultural influences, but it is not quite clear why the sun and solar symbolism became so prominently visible specifically in the Bronze Age. Speculatively, this might have something to do with the new role that fire and pyrotechnology came to have in the Bronze Age, as related for instance to metallurgy and the adoption of cremation burial. Be that as it may, the archaeological material from later periods does not show similar celebration of the sun as in the Bronze Age. But this being said, the long-standing idea about the cultural importance of the sun in the North does make sense on some level due to strong contrasts which are particularly acutely experienced in northern regions: the sun is very prominently present in the summer, shining through the night, and largely hidden during the polar night. It is the journeying of the sun — as perhaps also depicted on Bronze Age rock art — that renders the sun particularly meaningful in the North.

While working on his magnum opus, Atlantica, which was supposed to demonstrate Sweden's place as a cradle of civilization, the Swedish seventeenth-century scholar Olaus Rudbeck learned about an enigmatic monument, a 'runestone' located far in the northern wilderness of Sweden well above the Arctic Circle and much farther north than any other known runestones in the realm (Figure 9.4). Excited about this discovery, Rudbeck reflected that the stone was located 'where our eldest forefathers observed the movements of the sun and the moon' (quoted in Pekonen 2005: 24, our translation). He believed that sun worship had been practiced at this particular site because it was located on the Arctic Circle, or the latitude which marked the southern border of the true polar day where the sun stayed above the horizon in the summer (Enbuske 2011: 101). Upon later investigation, the monument that so excited Rudbeck turned out to be a natural, albeit a peculiar and interesting rock (see Herva et al. 2018). But even though classical and early modern ideas about the importance of the sun in the North were speculative - and, of course, ultimately more about southern ideas of the North - there are some indications that the sun did feature prominently in the northern world in prehistoric times.

The marriage of fire and earth

In the traditional Finnish healing magic, an incantation concerning the 'origin of fire' was recited in healing wounds related to fire (e.g. SKVR:VII3 1388). Knowing



FIGURE 9.4 The main face of the Vinsavaara 'runestone' in Swedish Lapland, located some 200 km North of the Arctic Circle. The curious grooves on the different sides of the stone have been interpreted as an ancient (runic) script but are actually products of nature. Olaus Rudbeck the Elder thought that the stone marked a place where the ancients observed the movements of the sun and moon. Photo: Vesa-Pekka Herva.

the 'origins' of an illness was essential to healing the ailment, and in the Kalevala poetry the most common explanation to the origin of fire related it to the supreme god Ukko ('Old Man'). He was thought to strike the first light using his stone weapon or the feathers of the Thunderbird ('Kokko'), a mythological motif with a circumpolar distribution. From this first fire, the tinder fell 'through the six heavens' into the mythical lake of Alue, made it boil and was eventually swallowed by a fish recalling the Germanic Bronze Age solar myth reconstructed by Flemming Kaul (1998), where the setting sun is accompanied by a fish.

The Estonian historian Lennart Meri, and later president of the Estonian Republic, suggested that this mythical episode relates a memory of a meteor strike that hit the Estonian island of Saaremaa sometime in the Neolithic or Bronze Age, which resulted in the Kaali crater (Figure 9.5) and at least eight other craters nearby (Meri 1976). The main crater is today a small pond with a diameter of ca. 110 m and is thought have been created by an iron meteorite weighing 20-80 tonnes that hit the island around 1500 BC (Losiak et al. 2016), although many other dates have been suggested as well. Regardless of the exact dating of the impact, it appears to have taken place in relatively recent prehistory, and the likelihood that some memory of the impact may be



FIGURE 9.5 The Kaali meteorite crater in the island of Saaremaa, Estonia. Photo: Väino Poikalainen.

preserved in folklore seems conceivable. Stone walls surrounding the pond may be prehistoric and related to cultic practices related to the meteor strike. Meri suggests that the word *Thule*, used by Pytheas for the extreme North and later repeated by countless scholars up until the sixteenth century (but which has no commonly accepted etymology), is derived from the Baltic Finnic word 'tuli', which means fire, and that the event is reflected in both the Greek myth concerning Phaethon and his Chariots of Fire and the Finno-Ugric myth concerning the origin of fire.

The notions concerning the origin of fire appear to differ depending on the means of livelihood. For hunter-gatherers, the first fire was shot onto the earth from the skies by non-human agents such as Thunderbirds – a notion rooted in northern circumpolar mythology – whereas in the cosmology of early farmers, the mythical striking of fire was conducted by an anthropomorphic deity (Sarmela 1994: 306–307). The Finnish archaeologist Unto Salo (1997) associates the latter with the worship of the Indo-European thunder-god, who in literary sources occurs by names such as the Greek Zeus, the Roman Jupiter, the Lithuanian Perkūnas and the Scandinavian Thor. Salo suggests that the thunder-god is first manifested in finds such as Neolithic perforated battle axes', which in Finnish folk culture were known as 'vaaja' and were thought to protect households from lightning strikes. The word 'vaaja' is according to Salo of Indo-European origin and related to the 'vajra' of Vedic texts, or the mythical thunderbolt-weapon of the god Indra.



FIGURE 9.6 A Sámi marriage ceremony featuring the use of a strike-a-light. A vignette from Olaus Magnus' Historia de gentibus septentrionalibus (1555).

In the later (Iron Age) archaeological record, the presence of the thundergod manifests according to Salo in the form of oval strike-a-lights made of quartzite. These objects have a wide distribution in northern Europe from the first to the eight millennium AD, and because of their oval shape accompanied with a vertical cut, many archaeologists have associated them with the female sexual organ. Salo (1997) suggests that they symbolically express and reproduce the mythical origins of fire, the hieros gamos or 'sacred marriage' between a sky-god and a Goddess of the Earth, whereupon lightning struck by the sky-god makes the Earth fertile - an act replicated in using a strike-a-light. In Salo's view, fire was born in the heavens when Ukko - the sky-god of Finnic mythology - was having intercourse with his wife (Rauni), which produced lightning. This notion finds some support in the account of Finnish heathen religion given by the Finnish Bishop Mikael Agricola in 1555, who associates Ukko and Rauni with the harvest (Harviainen et al. 1990), and it also seems to be reflected in the account of the sixteenth-century Swedish historian and bishop Olaus Magnus (IV, 7), who visited Lapland in the course of his travels (Figure 9.6).

Olaus noted that the Sámi forged their marriages through a fire ritual:

In the presence of friends and relatives, parents forge the marriages of their children by striking flint and steel. For a marriage thus agreed upon is by its omens more auspicious than under any other type of custom, and is so wellestablished and widely accepted that it could as well have had its origin in Greece or Italy. [...] For as flint preserves itself as a hidden fire that derives from its nature, which flares up when struck, so do both sexes conceal a life that in union eventually produces a living offspring.

[Olaus Magnus 1973: 51; our translation from Finnish]

However, the historical sources do not really explain the distribution and archaeological contexts of the oval strike-a-lights, which tend to be found outside the regions that have traditionally been considered as permanently inhabited – that is, in the 'wilderness'. Their find contexts suggest that they were deliberately deposited in particular spots of the landscape, apparently in water or wet places. This resonates with the more general and long-standing northern European practice of making ritual deposits in water and wet places.

Whatever the specific meaning of depositing strike-a-lights, the practice can generally be understood as a means of incorporating fire in the land or particular spots in the landscape. This echoes the broader northern European tradition of depositing objects in water and wet places (e.g. Bradley 1993) and the traditions of symbolic and magical fires pertaining to the northern world. It is worth noting that wetlands have been subject to substantial cultural imaginations in the European circumpolar North, where wetlands in different forms comprise a common landscape – associated with extraordinary light and fire phenomena – and perhaps unexpectedly therefore also feature prominently in northern mindscapes. This is reflected in folklore which suggests that bogs were regarded as strange and otherworldly environments, a scene for extraordinary events, experiences and beings (Meredith 2002).

Fire and the hearth in northern cultures

In Finnish folk poetry, fire is described as the 'son of the sun' (Sarmela 1994: 303), and both fire and the sun may have been more generally associated with a lifeaffirming warmth that human life in the North depends upon (Westerdahl 2002: 195). According to David Anderson, 'if there is one idiom that is common all across the circumpolar North, it is the centrality of the hearth in social life and of commensality with the home fire itself' (Anderson 2013: 262). In a cold climate, the hearth sustains life in a very concrete sense, but its centrality in northern cultures extends beyond straightforward 'practical' matters. In northern cosmologies, the hearth is also closely associated with the world-tree or world-pillar, connecting the different levels of cosmos (Anderson 2013: 272). Thus, according to Westerdahl (2002: 184), 'The constructing of the hearth can itself be considered as a renewal (re-creation) of the microcosm or as a repetition of creation'. He suggests, moreover, that charcoal collected from the hearth was ritually deposited at particular loci in the landscape, possibly to symbolically or magically to strengthen borders of a farmstead.

Anthropologists and historians have sometimes envisioned 'fire rituals' among northern peoples, but there are no indications that fire in itself would have been 'worshipped' in any meaningful sense, even if it has evidently played an instrumental role in various cosmologically important practices (Sarmela 1994: 307). Fire was viewed as a powerful elemental force, and specialized techniques intertwining 'practical' and 'ritual' or 'spiritual' dimensions were required for controlling and

engaging with it in various contexts. Fire-related practices with a particular cultural meaning involved, for instance, preparing slash-and-burn fields, the lighting of the smith's furnace and protecting buildings from fire (Sarmela 1994: 307). It was, for example, inadvisable to build a house on a spot where one had previously burned down, lest the same might happen again, and objects such as Stone Age axes and adzes, thought hit the earth in the tips of thunderbolts, were sometimes concealed in buildings to protect them from fire and lightning (Hukantaival 2016: 51, 102). This pan-European association between stone axes and lightning ultimately relates to the ancient Indo-European thunder-god, whose descendants included Indra, Zeus and Thor – as well as the Finnish Ukko, whose weapon the folk poems is typically a stone axe.

The special powers and properties of fire – as denoted by its supernatural power or 'väki' - indicate that fire was a wilful and inspirited entity with its own agency, thus rendering the relationship between people and fire as social and reciprocal. That fire has been conceived as a person-like entity in northern cultures is still today reflected in such notions as fire needing to be fed, indicating that fuelling a fire was not simply a question of burning anything that burns. Instead, fire should be fed with specific kinds substances, such as particular types of wood or, as in the case of the Inuits, with fat - just like people eat fat (Anderson 2013: 272). This can be taken to reflect the recognition of reciprocity between people and fire: people give food to fire in order to maintain it, and fire likewise supports human life by providing warmth and light. This may go some way towards explaining why burnt animal bones are regularly found in hearths in Fennoscandia, from sites ranging the Mesolithic until the early Iron Age when the practice of burning bones becomes rarer. The bones could be used as fuel, even if they do not burn very well, but a complementary reason may have been to feed fire with remains of human food.

In addition to its usual 'explicit' form, fire could be encountered and engaged with in other forms in prehistoric and historical times. Quartz and flint were thought to contain 'hidden' fire, as indicated by their capability to spark and give a birth to fire (e.g. Olaus Magnus 1973: 51). Both flint and quartz produce sparks when hit with iron, and quartz, moreover, features piezoelectric sparks of light within the stone when struck. This association between flint and fire - 'fire incorporated in stone' - was apparently recognized already in the Neolithic, which perhaps explains why flint artefacts were sometimes purposefully exposed to fire (Larsson 2011: 76-77). Although fire has probably always carried cultural meanings, the Neolithic likely marked a significant change in people's perception and understanding of and relationship with fire, including the ways of using it. Pottery-making brought fire and its transformative power - the ability to turn clay into a stone-like substance (see Chapter 3) - to the fore. This would have been further amplified by the introduction of metallurgy and cremation burial, both of which carried deep cultural and cosmological meanings and implications.

Fire and transformation

Appropriating the transformative nature of fire is one of the defining characteristics of the Neolithic period. In addition to the obvious cases of pottery-making or cremation, and the practice of burning flint mentioned above, it has been argued that Neolithic houses were transformed at a certain stage of their cultural life – towards the end of their active use – by deliberately burning them down. Stevanović (1997) argues that transforming daub-built houses into a ceramic-like substance was imbued with symbolic potential, as ceramics was central to the symbolic world of the Neolithic. In north-eastern Europe, we find similar evidence for burned Neolithic houses (see Zhulnikov 1999; Katiskoski 2002), and it is possible that this was a result of intentional destruction and thus linked to a changing cultural meaning of fire in the Neolithization of north-eastern European boreal zone. However, other interpretations (such as endemic warfare, see Sipilä and Lahelma 2006) have been put forward, and the remains of northern Neolithic houses have not really been investigated from this point of view (but see Herva et al. 2017).

The palynological record suggests that fire was increasingly employed as an means of altering the landscape in northern Fennoscandia since the introduction of pottery in the sixth millennium onwards, particularly through the emerging slash-and-burn cultivation (Alenius et al. 2013, 2017). This increased fire activity was most likely of an anthropogenic origin, and in addition to opening up the landscape, it would have made fire more conspicuously present as part of human landscapes and mindscapes. Fire thus took on a new role and meaning in the life of northern people in the Neolithic, and the incipient pyrotechnology made transformation (of the landscape, or of clay, the human cadaver, etc.) a central cultural theme running through the Neolithic.

In the Bronze Age, fire became even more conspicuously incorporated in ritual practices and was also linked to various 'mundane' practices (that is, ones with less obvious ritual underpinnings), binding together different taskscapes. Metalwork and cremation rituals comprised the most obvious ritual arena and a cosmological focal point associated with fire, together with rock art demonstrating the centrality of fire in the Bronze Age world (e.g. Østigård and Goldhahn 2008). A similar complex of meanings and interlinks between different sociocultural domains has been identified in the Iron Age practices related to fire. Due to their dual character of being both regenerative and dangerous, fire and iron were also associated with such aspects of life as procreation and fertility (Giles 2007: 409). Thus, for example, both Thor and Ukko – the Scandinavian and Finnish gods of thunder – were associated with fertility, and still in the sixteenth century AD, the Finnish bishop Mikael Agricola complained that Finns celebrated May feasts in honour of Ukko (Harviainen et al. 1990). The feasts ('Ukon vakka') featured heavy drinking, as a result of which 'many shameful acts' followed.

The contemporary Finnish May Day or Walpurgisnacht (Finn. Vappu) is a fair match to Agricola's description, as – rather than being associated with the



FIGURE 9.7 A traditional Midsummer Eve celebration featuring a bonfire or 'kokko' in Pitäjänmäki, a suburb of Helsinki, in 2011. Photo: Antti Lahelma.

international workers movement - May Day as celebrated in Finland is a carnival of drinking and loose relationships. Symbolic and ritual uses of fire have likewise continued to recent history, for example in the form of 'purifying' certain loci in the landscape with fire and burning bonfires at certain times of the year (Hukantaival 2016: 144). May Day bonfires are a tradition cherished in the western coast of Finland, whereas in the rest of the country, bonfires are mostly lit during Midsummer Eve (Figure 9.7). The Finnish word kokko used of these bonfires carries an interesting reference to ancient beliefs concerning fire, as kokko is also a word used of the Thunderbird who is associated with the Origin of Fire (cf. above).

Strange lights in the northern sky

The word 'Arctic' is derived from the North Star, which since classical antiquity has been known as the star Arcturus (Gr. 'Αρκτοῦρος, or 'Guardian of the Bear'; in astronomical terms, '\alpha Bo\"otis'), the only fixed point in the northern night sky, around which the other stars appear to revolve. Because of its position, it has been subject to various cosmological meanings in circumpolar and Arctic cultures around the globe, most likely since the earliest prehistory to the recent past. In addition to the North Star and the midnight sun, the Aurora Borealis, or northern lights, have

always been a 'quintessential symbol of the far north' (Friedman 2012: 115) and one of the best known marvels of the polar regions. For centuries, there was no scientific explanation to the phenomenon, and to European eyes, these veils of light in the darkness of the polar night 'resembled nothing ever seen on earth, except perhaps in dreams' (Falck-Ytter et al. 1999: 9). Theories about the nature and character of the northern lights abounded, but their origin remained a mystery until the twentieth century (Friedman 2012).

Everything about the Aurora Borealis was unclear and elusive for a long time. Why did it take place only in the polar regions, how high up in the sky did it occur, where did the lights and colours come from, and why did they move and chance the way they did (Falck-Ytter 1999: 15–16)? The mystery was further underlined by the sounds that the Aurora Borealis were reported to emit, contributing to the sense of enchantment caused by the fires in the sky (e.g. McCorristine 2016). The secrets of the northern lights were thus one reason why Lapland became a subject to and scene of scientific pursuits from the eighteenth century onwards (Pihlaja 2012).

The northern skies continue to yield more mysteries, as even though northern lights are today fairly well understood, the so-called 'Hessdalen lights' of central Norway are not. These 'UFO-like' ghostly lights floating or dancing in the airspace continue to defy scientific explanations. They can be

as big as cars and can float around for up to two hours. Other times they zip down the valley before suddenly fading away. Then there are the blue and white flashes that come and go in the blink of an eye, and daytime sightings that look like metallic objects in the sky. It is little wonder that when they started appearing up to 20 times a week in the early 1980s, UFOlogists hailed the Hessdalen valley as a portal to other worlds and flocked there to celebrate. [Williams 2014: 40]

Whatever the scientific explanation of the Hessdalen lights is, they contribute to the centuries-old notion of the North as a land of light and dark, of contrasts and ambiguity. Whether related to light seen through amber, or 'lightning' seen within quartz or flint, or the will-o'-wisps hovering over the bogs, the midnight sun or northern lights, the North has always been associated with the sun and mysterious lights of unknown origin.

10 EPILOGUE

A world full of life

If there is a central message to this book, it might be the observation – repeated again and again in various different contexts – that the modern ('Cartesian') division of the lived world into such dichotomies as material and spiritual, human and non-human, organic and inorganic is deeply misleading if applied to the premodern northern world. Rather, when we zoom closely into the pre-modern past of northern Fennoscandia, with archaeology, history, folklore and ethnography as our guides, we encounter a world where *everything* is bubbling with the potential of life and sentience. In this world, there is no 'either/or': anything can be a living thing, even if not everything is – at least not always or in every situation. Nor does it mean plunging into a chaotic fantasy world of trolls, ghosts and talking trees. As Bird-David (1999: 77) writes, in an animistic context

To 'talk with a tree' [...] is to perceive what it does as one acts towards it, being aware concurrently of changes in oneself and the tree. It is expecting a response and responding, growing into mutual responsiveness and, furthermore, possibly into mutual responsibility.

Applying this notion of animism (or 'new animism', as some would have it) to ethnographic or archaeological data is not a novel or original thing as such, as anthropologists like Irving A. Hallowell (1960) and Tim Ingold (2000) have made the same argument decades ago, and many archaeologists have similarly embraced the 'relational ontology' of anthropological theorists and reinterpreted archaeological datasets in its light (e.g. contributions in Watts 2013). If there is any novelty to our approach, it lies in concentrating on a single region and its archaeological past, studying it in the long term and in fairly great detail, and from a consistently relational viewpoint.

Most previous studies on the topic have been case studies on a wide spectrum of time periods and geographic regions, providing useful data for discussion but also resulting in a rather fragmentary view of individual, 'special cases' – whereas we have attempted to reach a more holistic reading of the archaeology of a single region, from the Mesolithic to the present day. As noted in the introduction to this book, the European North offers a unique prospect for this kind of analysis: the archaeological research carried out is impeccable (Scandinavia is, after all, the birthplace of scientific archaeology; see Trigger 2006), historical records extend back for more than a thousand years, and the folklore and ethnography of the region has been studied and recorded in minute detail.

Many of the arguments made herein are likely to raise objections with those who encounter our line of argument for the first time. It is an argument that, like quantum physics, runs counter to our fundamental, 'common sense' understanding of the world. Most readers of this book are likely to be academics trained in 'Western' modes of thinking, and Western academics are a breed who is weaned since early childhood from animism and taught to view it as a mindless superstition – even if, as demonstrated already by the psychologist Jean Piaget (1928), a type of 'animism' is a natural phase in every child's development and experience of the world.

Relational ontology dissolves the boundaries between organism and environment and subject and object, thus challenging basic modernist assumptions about the workings of the world. Consequently, we thus tend not to *really* accept animism or consider its full consequences in prehistoric situations. It is hard to imagine that people in the past *really* thought that a stone or a river could be a person, just like you and I, and how that might have affected everyday life. Perhaps what they were *really* doing, we would like to think, is that they were engaging in some sort of a playful make-believe, acted out faithfully but without a deep conviction that it represented reality. And in some respects, that may be so. Relational ontology is not a philosophical conviction but a mode of being-in-the-world based on observation and situated in a specific relational context. It does not necessitate a deep conviction about the 'true nature' of things: it can involve performance, it can be inconsistent and yes, it can also be playful – all of which, of course, does not mean that it should not be taken seriously. The Danish anthropologist Rane Willerslev observes that 'taking animism seriously' means taking seriously

what the people themselves take seriously. This is not usually done in anthropology. Spirits such as those the Yukaghirs claim to exist out there in the world alongside humans and animals and with whom they interact in both waking life and in dreams are generally not accepted by anthropologists as having any reality other than as mental representations, imposed upon the world by indigenous minds as a means of grasping it conceptually and appropriating it symbolically within the terms of a culturally constructed worldview.

For archaeologists, 'taking animism seriously' offers new perspectives on material culture and thus encourages a thorough reassessing of the meanings of things and phenomena, which is something we have attempted in this book. Animism is an inextricable element of the entire northern Fennoscandian archaeological record whether one examines Neolithic rock art depictions of elk or bears, the burial rites of Iron Age farmers, or such deceptively 'mundane' artefacts as seventeenth-century fragments of pottery and clay pipes (cf. Herva 2009). For humanity as a whole, as some have argued (e.g. Harvey 2005), taking animism seriously offers a perspective for critical self-examination: of how we relate to other animals, plants and trees, the physical environment and - in general - our place in the world in an era of planetary environmental crisis.

The North and the South

We had of course a pretty clear idea of the structure and main themes of the book before we embarked on writing it, and much of it builds on the research that the two of us have conducted over many years, but writing is always a creative process that conjures up new ideas and fresh insights. And so it happens that some destinations to which this book led us to took us pretty much by surprise. For example, although from reading the book it might perhaps appear that it is our agenda to 'demonstrate' points of contact between the Mediterranean and the Baltic worlds, or between the northern periphery of Europe and classical antiquity, this was never our intention or a point that we consciously sought to pursue - it simply happened.

Quite the contrary, one of us (Lahelma) has recently argued that the centurieslong tendency to search for parallels to certain aspects of Scandinavian archaeology (specifically South Scandinavian rock art) in the Mediterranean world is to some extent politically motivated and even racist. While such parallels and contacts undoubtedly exist, as exemplified by the excellent work of Kristiansen and Larsson (2005), we thought they were too pronounced. They follow a line of scholarship that has viewed the agrarian cultures of southern Scandinavia as 'our' tradition, as belonging to a grand European story, impregnated by contacts - whether direct or indirect - with the classical civilizations of the South. Sometimes they have been explicitly been identified as 'Aryan' or as bearing evidence of the superiority of the 'Nordic race' (Pringle 2006). In its more muted form, this discourse has maintained a hermetic North-South dichotomy, where influences may trickle from the South to the North, but never (or extremely rarely) the other way around. The North, in this view, has been 'associated with the primitive Other, usually identified – either explicitly or implicitly – as the Sámi' (Lahelma 2017: 166–167). More nature than culture, it has always been at the receiving end of 'higher' cultural forms or 'civilization'.

Yet, here we are, exploring northern cosmologies but finding parallels with Apollo and his swans, Ariadne and the labyrinth, the myth of Phaethon and the Chariot of the Sun, the tears of Heliades and the Homeric myth concerning Pygmies and cranes – hypothetical contacts between the North and the classical world that seem unexpected, to say the least. Are we, then, subconsciously trying to vindicate the significance of the Fennoscandian periphery by finding contact points with the classical tradition, the unwitting disciples of Olaus Rudbeck the Elder, for whom the northernmost fringes of Europe were the birthplace of civilization? As much as we both respect and admire the breadth of his scholarship and the lasting legacy of this 'mad genius' (cf. King 2005) of northern antiquarianism – whose prominence in our discussion is, incidentally, another curious and unexpected turn – we would like to think that these points of contact are not purposefully chosen but rather illustrate the wide contact networks of the ancient North.

Early modern antiquarian studies of northernmost Europe unfolded in a colonialist setting, with the North seen as a land of both material wealth and symbolic capital. The latter involved, for instance, opportunities to discover material for re-envisioning ancient times and the relationship between classical and northern worlds, as expressed by Olaus Rudbeck the Elder's pursuit for the evidence of the world's oldest writing in Lapland, associated with his grander vision of Atlantis – the supposed cradle of civilization – located in the North. Such views built on ancient classical imaginings of the North and have also been replicated in later times in, for instance, the form of placing Homeric stories in the Baltic world.

Such classically and biblically influenced reworkings, however, have effectively served to cast the northern worlds and their pasts in a 'southern' mould, conquering and colonizing them through assimilation into 'European' cultural spheres and narratives, instead of assessing the North in its own terms. Thus, even when seemingly focusing on the North, antiquarian and later archaeological narratives have actually tended to be more about the South (or the 'European world') than the North. Rudbeck's argument of the northern origins of writing, for instance, was about Sweden's role to the grand narrative of history with Lapland merely functioning as a resource for repositioning Sweden within the European domain, past and present. Distant, unknown and exoticized, the northern fringe of the Europe served as an arena for projections and fantasies and had the potential for wondrous and unexpected discoveries.

High mobility is one of the characteristic features of northern, circumpolar cultures. As noted already in the early twentieth century (e.g. Gjessing 1944), this resulted in exchange networks that already in the Stone Age spanned thousands of kilometres – indeed quite possibly across the entire northern circumpolar world along the east—west axis (Westerdahl 2010). If they did that, it should not come as a huge surprise that influences may have spread also along the North–South axis, from the classical world to the extreme North and, quite probably, also the other way round. It would be more surprising if such contacts did not exist, even if that is by and large what contemporary archaeological narratives (e.g. Scarre 2005) tend to suggest by excluding the North.

In that sense, perhaps this book does continue a line of scholarship initiated already by the sixteenth-century Swedish archbishop Olaus Magnus (whose follower Rudbeck in many respects was) and the other northern antiquarians who perceived a lacuna in central European knowledge pertaining to the North and

sought to rectify the situation through their own 'northern exposures' – Olaus offering an all-encompassing, encyclopaedic review of nearly all things northern in his *Historia de gentibus septentrionalibus* (1555), and Rudbeck 'exposing' it (with a Baroque flair) as the *vagina gentium*, or the womb of all nations, in his *Atlantica* (published in four volumes between 1679–1702). Our form of 'northern exposure' pursued in this book has admittedly much more modest aims but can be seen to contribute to the same aim of highlighting the role of the North in phenomena that have affected the entire European subcontinent.

The study of the northern world, we argue, can make a significant contribution to the understanding of continent-wide prehistoric and historical processes, such as Neolithization and modernization, as well as current theoretical discussions in archaeology. Northern Fennoscandia comprises an excellent arena for exploring the nature and significance of relational ontologies and epistemologies in a long-term perspective, especially because 'ethnographically informed approaches' can be employed to trace cultural and cosmological continuities and changes over centuries and millennia. Northern cultures have for long provided anthropological examples for discussions of relational ontologies and epistemologies, but they tend to lack the deep-time perspective provided by combining archaeology, history, ethnography and folklore studies. A dialogue between these different disciplines, and the datasets employed by them, lies at the heart of the approach taken in this book. By the same token, the book interrogates the mythical and actual northern worlds that are intertwined in many curious (and sometimes surprising) ways.

In both written sources and local perspectives, the northern fringe of Europe is an enchanted land of marvels and magic. We hope this book, and our encounters with northern phenomena, will retain some of that sense of marvel – as well as contributing to a better understanding of how the North of Europe, rather than being isolated and cut off from the rest of the subcontinent, has always engaged in an active cultural dialogue with regions further south.

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INDEX

amber 156-160, 160

Note: Page references in italics indicate figures.

animals: animal ceremonialism 72–73, 80, 83; bears 80–84, 82, 84; burial of dogs 72; depictions of sexual encounters between humans and 73–75, 145; elk-headed boats 108–110, 109; elk-headed staffs 75–80, 78; human/animal interchangeability and 70–72, 71–72; seals and sealing 88; shamanic travel in shape of animals 111–113, 112, 143–144, 144; shamanic travel in

shape of a fish (Sámi) 111–113, 112; water-birds in Finno-Ugric mythology 96, 97, 142–143, 145–148; see also migratory birds

animistic-shamanistic worldview of North 10-11, 15: book structure of land, sky and water themes (traditional three-tiered northern shamanistic understanding of world) and 20; concealed household artefacts and household spirits and 58-62, 61; depictions of sexual encounter between humans and animals and 73-75, 145; elk-headed staffs and 75-80, 78; human/ animal interchangeability and 70–72, 71-72; islands and 102-103; land, water and sky themes and 20-21; midnight sun worship by Sámi peoples 155; rock formations and 27-28; seals and sealing and 88; shamanic trances 113-114;

shamanic travel in shape of animals 111–113, *112*, 143–144, *144*; shamanic travel in shape of a fish (Sámi) 111–113, *112*; swans and 151–152

artefacts 14; concealed household artefacts 58–62, *61*; of red and Onega green slate 32

Arctic resources 25–26 Atlantis 90–91, *91* Aurora Borealis (northern lights) 169–170

Baltic Sea: birds and eggs as food and 142; burial on islands and coastal landscapes of 102–104; cairns and 99, 99–102; connection between the Mediterranean and 89–90, 91, 92; impact of changing coastal landscapes and 93–96; marketplaces and fairs and 135–37; stone mazes and labyrinths and 104, 104–107; see also sea and coastal landscapes bears 80–84, 82, 84

bears 80–84, 82, 84 birkarls, trader kingdom of 133–135 boats and waterways: burial and gravesites and 120–122, 122; discovery of elk-head artefact in Lehtojärvi, Lapland 108; elk-headed boats 108–110, 109; shamanic travel in shape of a fish (Sámi) 111–113, 112; underwater land of the dead folklore 111, 112; see also rivers and river mouths; sea and coastal landscapes Bock, Ior 44 Bolshoy Guri, B. 96, 153
Bonge, Hermann Daniel 11–12
burial 167; of bears 83; boats and 120–122,
122; of dogs 72; engagement with
underworld and spirits and 53–54; graves
and gravesites spatial orientation in
Fennoscandia 141; on islands and coastal
landscapes 102–104; swans and 144–145;
see also graves and gravesites

cairns, on northern coastal landscapes 99, 99–102 clay figurines 54–57, 56 climate change, arctic resources and 25 Comb Ware pottery phenomenon 17, 32, 49, 49–53 crater 90, 163–164, 164

de Castro, Eduardo Viveiros 70–71 Denmark 16; hunting and use of swan feathers/bones and 144; relationship with the sea in 88; swans at burial site of Vedbæk Bøgebakken burial site in 144 dwarves and pygmies 148–150, 149

elk-headed boats 108–110, 109 elk-headed staffs 75–80, 78

fairs 136-137

Fennoscandia (geographic region) 3–5, 15–16, 131; brief outline of geological and historical past of 17–20; crystal cavities of eastern 30–32, 31; fire practices in 168–169, 169; graves and gravesites spatial orientation in 141; Hermann Daniel Bonge and 11–12; irrationality and utopian dimension to in early period of mining industry 35–36; map of 4; marketplaces and fairs and 135–137; pit-houses of 48, 48–50; race for access to resources of 25; rock art explosion in 26; water and water travel in 20–21, 88, 110

Finland: bankruptcy of Talvivaara mine in northern 40; economic import of forests in 64; Finnish folklore surrounding houses and dwellings 58; fire practices in 162–163, 168–169, 169; geographic terminology and definition of 16; giant's churches (mega-structures) in 50; language of 16; relationship with maritime worlds in 88; väki ('mana- like' spiritual power) of earth and soils in folklore of 57–58;

water-birds in Finno-Ugric mythology 96, 97, 142–143, 145–153; see also Kalevala poetry

fire 155; fire practices and cultural beliefs 167–170, 169; folklore and mythology on origins of fire 163–166; Sámi marriages and fire rituals 165, 165 fishing 110

folklore and mythology: association of the sun with the chariot and the ship 161–162; Atlantis in Sweden 90–91, 91; burial and digging into ground and 53-54; cranes and dwarves and pygmies in folklore 148-150, 149; depictions of sexual encounters between humans and animals and 73-75; Finnish folklore surrounding houses and dwellings 58; forests and 64-70; hearth and 166; islands and 103; midnight sun mythology and worship (Sámi peoples) 155; in mining industry 38-45, 39, 45; origins of fire in 163-166; rivers and river mouths and 123-127, 130-133, 131; rock formations, stones and minerals 32-35, 34; swans as symbol of North in Greek myth 142, 142; underwater land of the dead 111, 112; väki ('mana- like' spiritual power) of earth and soils in Finnish 56, 57-58; water-birds in Finno-Ugric mythology 96, 97, 142-143, 145-148, 145-153; see also spirituality and magic in Northern world

forests: economic importance of 64; folklore of 64–70; hunting and activities in 63; Northern perceptions of and attitudes to 63–65; *see also* animals

Gell, Alfred 11, 14

geographic terminology 16 ghosts and hauntings: concealed artefacts and household spirits and 58–62, *61*; non-linear time and 14–15

graves and gravesites: boats and 120–122, 122; orientation of in Fennoscandia 141; see also burial

Greek myths: sun's association with North and northerners in 92, 153, 156–159; see also folklore and mythology

hearth 155, 166; *see also* fire; sun Hedenäs-Kainuunkylä complex 135–136 *Historia Norvegiae* 111, 114 houses and dwellings in Northern world: on banks of river Tornio 135–136; clay

figurines and 54-57, 56; on coast and shorelines 97-99: Comb Ware pottery phenomenon and 49, 49-50; concealed artefacts and household spirits and 58-62, 61; cultural and environmental transformations via pottery and semi-subterranean houses (4000 BC) 49, 49-53; deliberate burning of Neolithic 168; environmental perception, cosmological concepts and modes of engaging with the world and 46-48, 135-136; Finnish folklore surrounding 58; pit-houses of Fennoscandia and 48, 48-50 hunting 63, 70; animal ceremonialism and 72-73; of birds and eggs 142; by

Ingold, Tim 10, 95, 171

Kalevala poetry 19–20, 42, 103; geographies of eastern Fennoscandia in 33, 44; Great Oak and trees in 67, 70, 82; origin of fire in 163; river crossing to reach Land of the Dead (Tuonela) and 111; rock art and 27; see also Finland; folklore and mythology

boat 110; of seals 88; of swans 144

Lapland: discovery of elk-head artefact in Lehtojärvi, Lapland 108; irrationality and utopian dimension to in early period of mining industry 35–36; Lapland gold rushes and gold rush folklore 40–43, 41; mysterious runestone of Swedish Lapland 162, 163

Leem, Knud 113–115 Linnaeus, Carl 35 Lönnrot, Elias 132; see also Kalevala poetry

Magnus, Olaus 154-155, 165

Malaparte, Curzio 7
Mariconda, Steven 58
marketplaces and trade 135–136, 136
mazes and labyrinths 104, 104–107
Mediterranean: connection between the
Baltic Sea and 89–90, 91, 92
Meri, Lennart 163–164
migratory birds: avian art at Lake Onega in
Russian Karelia 96–97, 97–98, 144–145,
151–152, 152, 153; cranes and dwarves
and pygmies in folklore 148–150, 149;
human-bird relationship and interactions
and 144–145; shamanic travel in shape
of 143–144, 144; as soul birds and guides
to the otherworld 145–148; spiritual

symbolism of 141, 143; swans as symbol of North in Greek myth 142, 142; water-birds in Finno-Ugric mythology 96, 97, 142–143, 145–148, 145–153

mineral resources 25–26, 32, 64, 156–160, 160; see also rock formations, stones and minerals

mining industry: bankruptcy of Talvivaara mine in northern Finland 40; irrationality and utopian dimension to in early period of 35–36; Lapland gold rush 41–43; magic and folklore in 38–45, 39, 45; modernizing and ordering influence of 37–38

mythology *see* folklore and mythology; Greek myths

Nordic, as geographic term 16 North 5; Arctic resources and historical race to the North 25-26; connections with Northern Exposure (TV show) and 10–13; defining geographic boundaries of 15-17; Fennoscandia (geographic region) and 3-4, 4; irrationality and utopian dimension to in early period of mining industry 35-36; Northern Exposure TV show and 1-3, 2, 5; sun's association with in Greek myth 153; see also animistic-shamanistic worldview of North; Fennoscandia (geographic region); houses and dwellings in Northern world; spirituality and magic in Northern world

Northern Exposure (TV show) 1–2, 2, 3, 5–6; connections between people and Northern environment and 10–13; spirituality and magic in Northern world and 7–10, 12–13; theme of alternative pasts and utopias projected on the North in 14

northern lights (Aurora Borealis) 169–170 Norway 16, 18; bear burials in 83; mazes in 106; as part of Fennoscandia 3, 4; quarries in 28, 29; relationship with the sea in 88, 109; rock formations and cave paintings in 26–27, 27, 75, 81, 115

Olaus Rudbeck the Elder (1603–1702) 12, 90–91, *91*, 125–126, 162, *163*, 174–175

perspectivism 9, 74 pottery: bird motifs in 148; clay figurines and 54–55, 56; cultural and environmental transformations via 49, 49–53 quarries and quarrying 28–29, 29, 30

relational thinking 3, 5–6; connections between people and the environment and 10–11; perspectivism and 9; relational Renaissance–Baroque view of and 11

rivers and river mouths 124; real and mythical 123–127; river mouths as liminal spaces and central places 127–130, 135–137, 137; semi-mythical northern realms vs. historical realities of 123–127, 130–133, 131, 135; see also boats and waterways; sea and coastal landscapes

rock formations, stones and minerals 25-26; artefacts of red and Onega green slate 32; avian art at Lake Onega in Russian Karelia 96-97, 97-98, 144-145, 151-152, 152, 153; cairns on northern coastal landscapes and 99, 99-102; crystal cavities of eastern Fennoscandia 30-32, 31; depictions of sexual encounter between humans and animals 73-75; folklore and 32-35, 34; giant's churches (mega-structures) 50; irrationality and utopian dimension to in early period of mining industry 35-36; mysterious runestone of Swedish Lapland 162, 163; quarrying and 28-29, 29, 30; quartz and flint as containing fire and 167; rock art explosion 26-28, 27, 50; solar symbols on rock carvings 152-153, 161, 161; stone mazes and labyrinths on Baltic coast 104, 104-107; see also mineral resources

Salo, Unto 164-165

Sámi: in Fennoscandia 4; hunting and use of swan feathers/bones and 144; midnight sun worship by 155; sacred site of Ukonsaari in Finnish Lapland 33; Sámi marriages and fire rituals 165, 165; shamanic travel in shape of a fish (Sámi) 111–113, 112

Scandinavia, geographic terminology and definition of 16; *see also* Fennoscandia (geographic region)

sea and coastal landscapes 20–21, 87–88; burial and 102–104; cairns and 99, 99–102; houses and dwellings near 97–99; impact of changing coastal landscapes and 92–96; marketplaces and fairs and 135–137; sea and water-birds in Finno-Ugric mythology 96, 97; stone mazes and labyrinths on 104, 104–107;

see also Baltic Sea; boats and waterways; rivers and river mouths seals and sealing 88 Sibelius, Jean 151 sleeping, folklore on 58 Solovetsky monastery (Russia) 7, 7 spirits see ghosts and hauntings spirituality and magic in Northern world: burial and digging into ground and 53-54; clay figurines and 54-55, 56; concealed artefacts and household spirits and 58-62, 61; fire practices and 166–167; healing magic for wounds from fire in Finland 162-163; human/animal interchangeability and 70-72, 71-72; migratory birds and 141, 143, 146, 147; in mining industry 38-40, 39; Northern Exposure (TV show) and 7-10, 12-13; seals and sealing and 88; stone mazes and labyrinths on coastlines and 104, 106-107; väki ('mana- like' spiritual power) of earth and soils 56, 57-58; see also Finland; folklore and mythology stone mazes and labyrinths 104, 104-107 sun 163; amber and 159-160; association with the chariot and the ship of 161-162: association with North and northerners in Greek myth 153, 156-159; midnight sun 154, 155; midnight sun mythology and worship (Sámi people) 155; solar symbols on rock carvings 152-153, 160-161, 161 swans see migratory birds Sweden: Atlantis and 90-91, 91; bear burials in 83; economic import of forests in 64; irrationality and utopian dimension to in early period of mining industry 35-36; modernizing and ordering influence of mining industry in 37–38; mysterious runestone of

time and temporality 13; artefacts and 14; ghosts and hauntings and 14–15
Typical Comb Ware (TCW, Scandinavia)
17, 30–32, 49, 49–50, 58, 143; see also clay figurines; pottery

Swedish Lapland 162, 163; relationship

with maritime worlds in 88

väki ('mana-like' spiritual power), of earth and soils 57–58; of fire 167

water 20–21; see also boats and waterways; rivers and river mouths; sea and coastal landscapes Willersley, Rane 71, 74



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