

Northern Worlds
– landscapes, interactions and dynamics

Research at the National Museum of Denmark

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Copenhagen 28-30 November 2012

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Hans Christian Gulløv

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Northern Worlds – landscapes, interactions and dynamics
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PREFACE

Per Kristian Madsen
Director General, National Museum of Denmark

Northern Worlds is the name of the National Museum's interdisciplinary research initiative, launched in 2009. *Northern Worlds* has been deliberately chosen as the name because the indefinite plural form reflects the infinitely rich potential that lies in the exploration of the planet's northern worlds, of their living conditions, people and culture in general; from the largest to the smallest, because even in the smallest of all, there is a distinct world that will never be an isolated enclave. A common characteristic of the northern worlds in particular is their vital, mutual relationship and the decidedly important avenues for exchange with areas outside the geographical northern part of the globe, regardless of the period in question.

Even in the very structure of the research initiative, a requirement was deliberately included for collaboration between the National Museum's research units specialising within history and ethnology, archaeology, ethnography, numismatics, natural science, conservation and environmental history, all of them branches of the museum's cultural-historical activities. In addition, fixed links out of house were to be established to related research institutions and researchers. The thinking around this is expressed in the National Museum's research strategy from 2007, where the interdisciplinary research initiative is presented as a means of strengthening the quality of the museum's research and increasing its scope,

while basing it in the museum's core areas, i.e. the material as well as the non-material cultural heritage. Extensive preparations went into planning and contracting, but with a finished project catalogue as a basis, we were successful in 2009 in being awarded such a generous grant from the Augustinus Foundation that it alone secured the implementation of *Northern Worlds* in an eminent way. The National Museum can never express enough gratitude for this grant – also because the support contributed to attracting further funding and thereby opened up further possibilities for collaboration and new research environments.

Throughout the research period, the museum's research coordinator, Birgit Rønne, has safeguarded the economic management and I would like to express my warm thanks to her for this fundamental work.

The regular annual reports for four years and the arranged, prestigious seminars and workshops reflect this, in line with numerous peer-reviewed articles in domestic as well as international journals. In addition, there is the series of monographs and general dissemination in the form of lectures and exhibitions, in which the National Museum's special exhibition entitled "Fur", on the clothing of the northern worlds, which will be exhibited in the autumn of 2014, should be included.

Hans Christian Gulløv from the National Museum's Ethnographic Collection has been the coordi-

nating head of Northern Worlds since its inception, and it is in the highest degree him who has guided the format and operation of the project in practice. He has led the seminars and meetings, including the conference which took place in November 2012 with the participation of a large number of Danish and international professionals, from whom the various contributions printed in this book under his editorship are now available. Hans Christian Gulløv deserves a big thank you for his comprehensive and knowledgeable leadership of Northern Worlds, but thanks also go to all those who contributed in any way to Northern Worlds' 22 projects, from the youngest student to the most experienced senior re-

searcher. As chairman of Northern Worlds' steering committee, it has been a great pleasure for me to follow the project's breakthroughs and the inspiration it has yielded, which bodes well for the next time the National Museum is going to launch an interdisciplinary research initiative.

The National Museum's roots lie in the Enlightenment ideals of making knowledge available to the public, represented by the individual, critical and societally minded citizen. Knowledge and its dissemination requires research, and Northern Worlds is one of the National Museum's contributions to this.

INTRODUCTION

Hans Christian Gulløv

Northern Worlds is the name of an interdisciplinary research initiative at the National Museum of Denmark which has included projects from 2009 to 2014 from most of the museum's departments. A significant part of the museum's extensive collections comes from the northern worlds or derives from periods – centuries or millennia back in time – when present day Denmark represented the far north, 'ultima Thule'. It was on the basis of these collections that *Northern Worlds* was implemented and all of the museum's disciplines, from archaeology and history to ethnography, ethnology, conservation and environmental history, were represented and could be brought into interaction. The research initiative thus had in mind the opening of new avenues for an understanding of human beings in an environment of constant change and, not least, for an understanding of the strategies on which people and societies have at all times relied for their actions.

The north, in other words, is a concept which, with its museum-based content, has a geographical frame of reference within which collection and research has taken place. This means that the north becomes synonymous with the Northern, with the North, i.e. Scandinavia. We are therefore trying to understand the northern world from the Nordic perspective as it emerges for us in culture, landscape and mentality (see Hastrup 1992; Jones & Olwig 2008).

But the concept also includes the idea of times that lie long before the north became Nordic, back when the northern world became bigger because changes in climate allowed for expansion. With the introduction of agriculture, the north took on a new religious dimension which was marked by megaliths and later described in a rich world of rock carvings. It is our task to interpret this world of signs and place in its geographical space.

Across the ages, ideas and objects have come to the northern world that have created the basis for social structures that characterise the changing periods. Prehistory can thereby be understood archaeologically and refer to concepts such as social structures and exchange systems, both of which emphasise a movement and a dynamic, and which, using the focus of anthropology on individuals, strategies and processes, have been fundamental to our understanding of the prehistoric northern world (see Barth 1966, 2007).

Studies of the distribution of agriculture, of communication and of cultural networks have a prominent place in the National Museum's research and, with the *Northern Worlds* initiative, studies have been carried out of religious, social and occupational conditions which can be detected from Denmark northwards to sub-Arctic Norway and out into the North Atlantic to Arctic Greenland.

This publication presents the projects that constituted the museum's research initiative. They were

all presented at the Northern Worlds conference which took place from 28 to 30 November 2012, with the participation of a number of visiting scientists who, with their contributions, could shed light on the three main themes of the conference: landscapes, interactions and dynamics.

Landscapes

This theme focuses on our use and perception of the landscape. Throughout prehistory, this has been characterised by natural and anthropogenic environmental changes, the importance of which is significant for our understanding of landscape and culture. In his introduction, *Peter Emil Kaland* describes a landscape type, the heathland, the distribution of which includes the greater part of Western Europe's coastal regions. Heathlands are one of western Europe's oldest man-made landscapes. Stone Age farmers cleared the primeval forest with fire, axes and grazing livestock to create heathland. The clearance began as far back as the Early Neolithic, but it was not until the Viking Age that western Europe's entire coastline was converted into an open landscape. This cultural landscape thus binds eleven countries along the Atlantic coast together through a shared history and utilisation of agricultural resources. There is a suite of land-use methods pertaining to heathlands that are unique to this cultural landscape.

Use and traces in the landscape are closely linked to agriculture. Examples have been taken here from Shetland, within the period 4000-3000 BC the northernmost area in Europe with a Neolithic population and having the same elements as found among the Neolithic societies in South Scandinavia, such as megaliths, the use of the ard, ornamented pottery and polished stone axes, and ritualistic behaviour, like depositing artefacts in wetlands, or even ritual gathering sites, as *Ditlev Mahler* describes. However, the evidence relating to the earliest Neolithic presence in Shetland is sparse and, in some cases, problematic, as *Alison Sheridan* emphasises in her contribution, but Shetland constitutes one of the most exciting areas in which to undertake prehistoric research, given the excellent state of preservation of buildings and land divisions, and it is hoped that the project will continue to be a catalyst for the fieldwork and analysis that needs to be done. Traces

of Norse Greenland also clearly appear in the agrarian landscape, which is described by *Christian Koch Madsen* as one of the most intriguing episodes of the European Middle Ages, that with its dispersed resources was facilitated by an extensive pastoral farming strategy and seasonal shieling activity.

The landscape is also connected to the concepts of *cosmos and perception*. *Flemming Kaul's* landscape analysis, as far north as Alta in Finnmark, has demonstrated that the rock carvings, as well as the other finds, are all situated close to the best arable land of today, underlining the agricultural context, where they clearly manifest themselves as part of a common northern tradition which gives evidence of wide use in the religious art of the Nordic Bronze Age. *Lars Jørgensen* sets his focus on the Norse religion and the ritual sites where he finds it possible to build an interpretative model that provides a more specific account of the function of the elite, i.e. the magnates' residences, and the organisation of the pre-Christian cult, and he concludes that archaeology shows that in all probability it was the elite of the Viking Age who were responsible for most of the rites and rituals of the pre-Christian religion. *Ulla Odgaard* discusses questions about Greenland hunting rights and hunting ethics which seem to constitute dilemmas concerning the use of the landscape by different groups of generations when newcomers go hunting in areas where others hold traditional prescriptive rights. This divide is, however, not dependent on ethnicity but on the foraging or non-foraging way of life.

Concepts such as *environment and changes* focus on changes in the landscape in time and space and have been discussed by *Morten Fischer Mortensen et al.* They scrutinise the development of vegetation in the late glacial period and call attention to the open pioneer landscape around 14000 BC in Southern Scandinavia which may have been an important reindeer calving region and probably the initial reason for human immigration into the area, with the first reliable and well dated traces of humans in Denmark belonging to the Havelte phase of the Hamburgian Culture. *Kevin Edwards* analyses early farming, pollen and landscape impacts from northern Europe to the North Atlantic and points out that the whole scientific process inherent in the forensic research which seeks to reconstruct past human-environment-landscape interactions will inevi-

tably lead to uncertainties arising from the incompleteness of our data. In his study of land use and environment change in medieval Orkney, *Richard Oram* suggests that a complex interplay of human socio-political and environmental factors resulted in a protracted socio-economic depression where Orkney's farmers experienced very real social and economic distress as their traditional agricultural and fishing regime buckled under the impact of global-scale climate change. *Noémie Boulanger-Lapointe* and *Claudia Baittinger's* study makes it clear that northern ecosystems are fragile and generally less resilient than those at lower latitudes, and herbivores may have a great impact even at low density, but also that the growth patterns seen in the different vegetation types indicate that the dry, barren conditions of the semi-desert sites are more favourable for Arctic willow growth than richer, more vegetated areas.

Interactions

This theme sets a focus on the interactions and networks between individuals and society. *Charlotte Damm* illustrates in her introduction, 'When people meet', how the interaction is expressed in the archaeological material and emphasises that by focusing on shared practices, as demonstrated through a number of individual objects or other material remains such as rock art, burials or dwellings, we will be able to distinguish a number of collectives, here referred to as communities of practice. These are constituted by a number of individuals, but often not by all of the members of a residence group. Due to the difference in the logistical organisation of various practices, and to kinship, marital patterns etc., contacts and interaction will differ for each of these collectives. These practices would have constituted the basis from which identities could spring.

Networks and communication are discussed by *Christina Folke Ax*, who in her case from the North Frisian Islands points out that networks connected to hunting whales and seals in the Arctic waters were based on kinship and community ties and that the shipowner also benefited in turn because a skilled captain and crew was a prerequisite for a successful whaling or sealing season. She concludes that the local network was an integrated part of the international network and neither of the two

worked independently of the other. *Einar Østmo* focuses on the communicative significance of the ship and underlines that, given the geography of Scandinavia, it was hardly ever possible to gain or exercise power without ships, and he thinks that the close connection between progress in shipbuilding and the emergence of powerful aristocratic societies over the course of more than three thousand years demonstrates this. *Lisbeth Schmidt* describes the Arctic fur clothing in the National Museum collection and notes the close social and religious context of the clothing for both the communities and the prey, in that, among the Inuit, it was important to wear beautiful clothing in order to please the animals and make them return and survive. *Peter Andreas Toft* examines how European objects are received and used in the material culture of Greenland and how they can change meaning from the profane to the sacred, in that the frequency of sacralisation of foreign objects rises in areas, or in periods, in which their use has not been communicated by people from their point of origin or are viewed as new and exotic.

Interaction can be described from the concepts of *objects and exchange*, and *Anne Pedersen* focuses on the Viking Age, concluding that the archaeological finds and the contexts in which they are preserved can be viewed both as concrete evidence of exchanges within the local and regional networks and, as attested by, for instance, high-status burials, as a meaning-bearing and communicative element that could be used actively in the efforts of individuals, groups and communities to promote their interests. *Helle Winge Horsnæs* describes the coins of the Roman times and their imitations as an expression of interactions across the Roman-Barbarian *Limes* and, by focusing on the role of the users in innovation and on the remaking of the meaning of an object that undergoes a transformation process, she shows that some Roman coin types were adapted for new purposes, as symbols of power. *Gitte Tarnow Ingvardson*, with her description of the largest Viking Age silver hoard on Bornholm, gives an interpretation of trade and power relations in Denmark which supports the idea that Bornholm was not under the protection of a strong ruler, but functioned as an independent economic and political unit in the late Viking Age. *Lisbeth Imer*, with her examination of the preserved rune inscriptions from Norse Greenland, demon-

strates that there was a rather widespread knowledge of writing, since objects with runes have been found at even the smallest farms, and writing included practice inscriptions, name tags, and verses, but the paramount use of writing was religious, which shows similarities with finds from other parts of the North Atlantic and Scandinavia. *Maria Panum Baastrup* looks at the contexts in which imported objects occur in Viking Age Denmark and finds that there was a strong desire to integrate foreign impulses into society through communication and cultural encounters and ultimately to make them a part of one's own cultural identity.

Interaction is also seen in the interplay between *preservation and decay*, i.e. between the conservation of cultural relics and disintegrative effect of nature. *Inger Bojesen-Koefoed et al.* describe methods for reducing the disintegrative processes for wooden objects, in that the ideas behind the present work took off from reports on the possibility of open-air freeze-drying of archaeological materials in cold regions, but whether the results will be put into use in an open-air project is hard to say. However, it does seem realistic that they will be put into use in the laboratory or conservation workshop if further validated and approved. *Henning Matthiesen et al.* describe the results of their study of a permanently frozen midden on Greenland, where the main purpose of the monitoring project was to make a risk assessment of erosion, thawing and degradation today and in the future. Based on their evaluation, the Greenland National Museum will now be able to decide how to manage the site.

Dynamics

This theme focuses on continuity, movement and technique as concepts describing the dynamics of society and culture. In their introduction, *Christian Wichmann Matthiessen* and *Richard Knowles* give an example of bridge projects that can change the infrastructure of a society and hereby direct our attention to the importance of this kind of dynamic approach to the understanding of social change in a more distant time for which our basic source material is much more modest. As the authors point out, the potential for change brought about by strategically located fixed links should not be underestimated.

The relationship between material innovation and occupational adaptation as examples of cultural dynamics is illustrated through the study of *continuity and discontinuity* with cases from Greenland. *Bjarne Grønnow et al.* trace the earliest history of open fires and blubber lamps by addressing archaeological data from the dynamic pioneering societies and conclude that the formal, portable soapstone blubber lamp was invented in West Greenland at least five centuries after the initial peopling of Greenland and that the production of heat and light from open fires and the different blubber lamps was not only a practical pre-condition for the continuity of human existence in the Arctic, it was also a matter of cultural, psychological, and spiritual importance. In his contribution, *Peter Steen Henriksen* sheds light on the Norsemen's unsuccessful attempt to cultivate cereals, even though they arrived in Greenland with a tradition for farming going back thousands of years; they had to adapt to the new and different surroundings which can be understood as a discontinuity in a tradition. However, he concludes that the occurrence of barley in the oldest layers of four out of the seven thoroughly investigated middens suggests that barley was fairly common in the households of the earliest Norse settlers in southern Greenland, and that the warmer climate during the beginning of the Norse period would not have prevented barley cultivation.

The dynamic society is characterised by *mobility and organisation*, as illustrated by *Einar Lund Jensen* who focuses on the change in the settlement structure, which in southern Greenland was a result of the transition from seal hunting to fishing and the fishing industry, and which was decided and implemented by the Greenlanders' own political council. The high mobility among the population had an influence on development, as had decisions from central authorities; however, the councils only had an advisory capacity and, in principle, the Danish colonial authorities agreed to the expressed objectives for the development of Greenland, but seemed to be unwilling to take the necessary steps and to grant the necessary resources. With his contribution, *Christopher Prescott* gives an overview of the spread and context of early agro-pastoralism in southern Norway, i.e. north-western Scandinavia, and hereby emphasises the importance of the study of two of the most

important institutions of the farm society, namely the farmhouse itself and transhumance, as significant factors in the understanding of the dynamic agrarian society. He concludes that, to understand this historical development, numerous sociological and anthropological mechanisms are suggested in different landscapes and times, which include neo-geographical concepts of migration as process, the variable impact of different types of knowledge systems, the stresses found in small scale “egalitarian” societies, the social embeddedness of maritime practices, the threat of the use of force and hierarchical ideologies. *Lasse Sørensen* also discusses the expansion of agrarian societies during the Neolithic and Bronze Ages in Scandinavia but focuses on radiocarbon dating connected to agrarian activities to scrutinise the various reasons behind the introduction of agrarian activities in different regions, and concludes that the impact of the pioneering farmers within the archaeological record is dependent on the ability and desire of the local hunter-gatherers to integrate with the incoming farmers, making the neolithisation process different from region to region.

Techniques and environment are fundamental concepts in the dynamic society and they are illustrated with examples of activities that are entirely dependent, in the first case, on external sources of information and, in the second case, on material supplied. *Jens Fog Jensen* and *Tilo Krause*, in their contribution, begin at the outbreak of World War II, when Germany had to establish her own network of manned and automatic weather stations throughout the north Atlantic in six recorded German attempts. The authors conclude that the weather war in North-East Greenland was a miniature war involving relatively few Allied, as well as *Wehrmacht*, participants, but the material remains left *in situ* add a landscape dimension to the drama as expounded in the historical records, and it makes clear to the spectator that the isolation and the harsh environment were the third and fourth actors in this drama. *Niels Bonde et al.*, in their contribution, describe how, in the early colonial period, the lack of building timber in Greenland was compensated for by imports from Europe and examine where the timber originally came from, in that the characteristic building technique that was used is Norwegian. The authors, on the basis of historical and technical studies, are

able to conclude that the design of the buildings followed a Norwegian tradition, but with the new realisation that the timber was imported from the Baltic, i.e. in most cases – nine out of twelve houses – from the northern regions of present-day Poland; Sweden and Finland are also represented, the timber coming from Norway in only two cases, which was a surprise to the investigators.

Northern Worlds

Based on the available presentations, the northern worlds appear as a very tangible concept that denotes north-western Europe, where the centre of gravity for the research lies in the Nordic region. The idea of the unknown that could stimulate people’s curiosity and motivate Europeans on often perilous expeditions to the north (see Davidson 2005; McGhee 2004) has today become quite concrete; we focus on the objects that are the foundation of the museum-based research and whose meaning is constantly challenging us.

In *Northern Worlds*, there is also a religious dimension that is admittedly specific in its expression in the landscape and in writing (see contributions by Jorgensen, Kaul, Mahler, Sheridan and Imer), but whose meaning remains unknown; in other words, we are trying to understand the meaning of the selected code which the object appears to contain (see Bateson 1972: 130).

The special traits of the Northern Worlds can be seen and felt in the light and the dark and in the cold and the warmth (see Hastrup 2011; Olsen 2012), and here get their own visible cultural expression in the use of fire and fur (see the contribution of Grønnow et al. and Schmidt) (Schmidt & Pedersen 2010). The perception of the physical world is revealed here, in glimpses, through the object but it doesn’t get its clear expression until we are confronted with people’s own experiences (see contributions of Lund Jensen and Odgaard).

The recognition of climate change as a prerequisite for migration and for the agrarian expansion is implicit in many of the presented research projects (see contributions by Madsen, Edwards, Oram, Henriksen, Prescott and Sørensen) and the impact of climate change on nature and on human behaviour is also clearly expressed here (see Mortensen

et al., Boulanger-Lapointe & Baittinger, Folke Ax, Bojesen-Koefoed et al., Matthiesen et al., Jensen & Krause and Bonde et al.). However, crossing the climate limits, for example between the temperate and the Arctic, which seems to belong to the expeditions of a later time, has never been under discussion; on the other hand, the studies within the *Northern Worlds* research initiative have been directed at the changing climatic limits which made the expansion to the north possible, and the results of this research initiative have hereby given us new knowledge (see Mahler & Andersen 2011; Mahler 2012; Kaul & Sørensen 2012; Mahler 2013).

The north has thus become a historic site that can be defined on the basis of the external contacts and cultural relations which are reflected in the archaeological record (see Østmo, Toft, Pedersen, Horsnæs, Ingvarson and Bastrup).

In what follows, the north is described on the basis of human landscapes, social interactions and dynamic action; these concepts form the book's three parts, each of which begins with a discipline-specific perspective – landscapes are described biologically (see Kaaland), interactions presented archaeologically (see Damm) and dynamics exemplified geographically (see Matthiessen & Knowles), and it is the content of these themes that defines the National Museum's research initiative *Northern Worlds*.

It has been made clear that *Northern Worlds* as a concept can be analysed phenomenologically; that the discursive approach (cf. Hastrup 2011) and an intuitive approach (cf. Olsen 2012) to the concept are both necessary to our understanding; and that it is in the context of the interaction of human beings, landscapes and histories that we must see the new results of the research initiative of the National Museum.

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