

Anna Parczen

Identity at the Edge of the World

Contribution of cultural identity to the collapse of
the Norse settlements in Greenland

Master's thesis in Archaeology

Supervisor: Marek E. Jasinski

Co-supervisor: Terje Brattli

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Norwegian University of Science and Technology
Faculty of Humanities
Department of Historical Studies



Kunnskap for en bedre verden

Cover photo: Dry-stone masonry remains in Garðar (Igaliku) interpreted as the bishop's tithe barn. In the background modern Greenlandic residential buildings which re-used building material from surrounding Norse structures (Vésteinsson 2016: 74)

Abstract

The Norsemen settled in Greenland ca. 985 AD and inhabited the island for some 500 hundred years far from the cultural hub of the European continent. These settlers left behind settlement concentrations containing a high density of church buildings, residential dwellings, and structures connected to animal husbandry. Sometime in the 15th – 16th centuries, Norsemen gave up these settlements under uncertain circumstances. Since then, researchers have attempted to find detailed explanations on the demise of the Norse settlements in Greenland. Among others, climatic changes, diseases, external and internal conflicts are brought up, aiming to explain what caused the deterioration in this Arctic environment. Recently human impact and its interferences are continually gaining ground in the archaeological research of Norse Greenland.

My research and questions are focusing on this human impact to study and unfold the different decisions and responses Norse settlers made or *did not make* in the changing milieu of the 14th -15th centuries. First and foremost, I intend to concentrate on the Greenlanders identity as this could have affected their decision – making process, namely *why* they responded in such a way. My study aims the *religious sphere* of their identity and the tangible material which mediates their belief influenced by Christianity. The Roman Church determined and controlled almost every aspect of the settlers' life in the Middle Ages from hierarchy and economic matters to behavior and decision – making concerning the whole Christian community.

Besides studying past identity, I would also like to address the subject of the cultural heritage in present-day Greenland. This study field is fascinating and complex because of the various cultural elements that form the island's cultural landscape. In my thesis, this multi-colored attribute of cultural heritage is represented through the case study of Kujataa World Heritage Site. In the five component- areas of Kujataa, several different branches of cultural heritage (pre-Eskimo, medieval Norse, Inuit, and Colonial Danish) meet and interact with each other. This case study can contribute to the research question on how the local Inuit population perceives these old Norse elements – analyzed previously in the first section - from the Middle Ages.

The study identified that the settlers' decisions had a considerable contribution to the fall of the Norse settlements in the Middle Ages. Instead of using their resources to accustom the environmental and climatic changes, the settlers enhanced their identity in order to avoid exclusion from the Christian- European world. Their ethnic purity and European farming traditions were more crucial than the survival of their whole community on the island.

Furthermore, the research found out that present-day Inuit inhabitants consider these Norse elements as part of a foreign culture differing from their legacy. On the other hand, current tendencies display that particular Norse features are continuously entering into Inuit cultural heritage, such as farming and sheep grazing traditions.

Sammendrag

Den norrøne befolkningen bosatte seg på Grønland i ca. 985 e.Kr. og bebodde øya i rundt 500 hundre år, langt fra det kulturelle knutepunktet på det europeiske kontinentet. Disse innbyggerne etterlot seg bosettingskonsentrasjoner som inneholder høy tetthet av kirkebygninger, boliger og strukturer knyttet til jordbruk og fehold. En gang i det fjortende eller femtende århundret, ga grønlenderne opp disse bosetningene av ukjente årsaker. Siden den gang har forskere prøvd å finne forklaringer på nedgangen til den norrøne bosetningen på Grønland. Noen av de mulige forklaringene har vært sykdommer, endringer i klimaet samt interne og eksterne konflikter. I senere tid har menneskelig påvirkning fått stadig større armslag i den arkeologiske forskningen på norrønt Grønland.

Mitt forskningsfelt og min problemstilling fokuserer på denne menneskelige påvirkningen for å studere og avdekke de forskjellige avgjørelsene som norrøne innbyggerne tok eller *lot være å ta* i det skiftende miljøet fra 1300- til 1500-tallet. Først og fremst har jeg konsentrert meg om grønlendernes identitet, da dette kunne ha påvirket beslutningsprosessene deres og, hvorfor de svarte på endringene på den måten de gjorde. Denne studien tar sikte på den religiøse siden ved deres identitet, og det håndgripelige materialet som formidler deres tro påvirket av Kristendommen. Den Romerske Kirken kontrollerte og satte preg på nesten alle aspekter av bosetternes liv i middelalderen, fra hierarki og økonomiske forhold til oppførsel og bestemmelser om det kristne samfunnet.

I tillegg til å studere fortidens identitet, tar jeg også opp temaet rundt dagens kulturarv på Grønland. Dette studiefeltet er virkelig interessant og sammensatt på grunn av de forskjellige kulturelle elementene som danner øyas kulturlandskap. I min avhandling er denne mangfoldige kulturarven representert gjennom casestudien til Kujataa UNESCO verdensarvsted. I de fem komponentområdene til Kujataa møtes flere forskjellige retninger av kulturarv (palaeo-eskimo, middelalderens norrøne, Inuitter og dansk) og samhandler med hverandre. Denne casestudien bidrar til problemstillingen min om hvordan den lokale inuitbefolkningen oppfatter disse gamle norrøne elementene - analysert tidligere i første seksjon - fra middelalderen.

Studien identifiserte at bosetternes beslutninger hadde et betydelig bidrag til kollapsen av den norrøne bosettingen i middelalderen. I stedet for å bruke ressursene sine til å tilpasse seg til de miljømessige og klimatiske endringene, fremhevet de deres identitet for å unngå utestengelse fra den kristen-europeiske verden. Deres etniske renhet og europeiske jordbrukstradisjoner var enda mer avgjørende enn overlevelsen av samfunnet på øya.

Videre tyder forskningen på at dagens Inuitter anser disse norrøne elementene som en del av en fremmed kultur som skiller seg fra deres kulturarv. På den andre siden viser dagens tendens at spesielle norrøne trekk inngår kontinuerlig i Inuit - kulturarv som for eksempel arktiske jordbruk-; og beitetradisjoner.

Foreword

It has just struck me like a thunderbolt that, after five years of studying archaeology, in two different countries, in two different languages, two theses, many exams and essays I could soon call myself officially an archaeologist. Finishing master studies is a milestone in my life, which I never believed it could come true a couple of years ago. If somebody told me that I would study archaeology in Norway in a foreign language, I would have probably laughed about it. It seemed impossible that I could achieve this even though I have always been a motivated and perfectionist student. Frankly, it had not been an easy process until I got here, sometimes it was challenging but, at the same time, instructive and entertaining just as writing my master thesis. I was lucky enough to be supported by many different people; teachers, friends, and family without whom this thesis would have never born.

A famous Hungarian proverb professes, *"A good priest learns until his death"* is something that I wish to live up for. I intend to learn new things and venture further in the sea (of archaeology in my case) as the Norsemen did some 1000 years ago. My thirst for knowledge is indeed drainless, which probably can be indulged, gaining a PhD. in archaeology. Who knows, maybe it is time to add one more country and language to the list of "languages and countries where Anna studied archaeology." While this part of the future is yet unsure, I am certain that the following people will support me in pursuing my further dreams. They were the ones who believed in me and reassured me that I could do it when I sometimes lost my motivation and hopes during writing my thesis. Therefore, this paper is just as their merits as mine.

First and foremost, I would like to thank my supervisors, Marek. E Jasinski and Terje Brattli, for all of their help. On our longspun meetings personally and then virtually, I always got useful tips and comments from both of my supervisors. I wish to express my gratitude to Marek, who introduced me to the subject and always encouraged me and to Terje, who always had some keynote ideas on these meetings. These were crucial in the process as they made me see the subject also from other perspectives.

I would also thank my teachers and the participants of our "Masterkonferanse" even if it was organized only once during my master studies due to the Covid-19 pandemic. I am incredibly thankful for Hein Bjartmann Bjerck organizing this conference and giving fruitful suggestions regarding my thesis.

Honestly, I have to conclude that this thesis is the result of many researchers' contributions across the North Atlantic region. I wish to thank Jette Arneborg, Hans Harmsen, and Jan Brendalsmo for providing literature lists and useful information understanding particular processes, phenomena, and objects in a Greenlandic context. I would like to particularly thank Elizabeth A. Pierce for providing me her Ph.D. dissertation. I am obliged to Alibak Hard and Christian Koch Madsen for being my interviewees in order to acquire information about cultural heritage in Greenland. Without the help of these specialists, this thesis would have never born.

I am grateful to my classmates for accepting me in their enclosed Norwegian class. Even if we could not meet personally in our "lesesal", it was always helpful that we could discuss and exchange essential matters on the thesis in the "master chat".

Fortunately, I have a wonderful family in Hungary, whom I am immensely thankful for. They have always supported me no matter what, from the far distance upon our daily calls. Even if they sometimes thought that I am a little crazy to move so far from home, they showed comprehension and concern. I love you more than anything, Mum, Dad, Dóra, Csabi, and my cute nephew Marci. I hope we can meet soon.

My friends were also of great help, even though they cannot understand my great passion for archaeology entirely. Thank you for your help, and that you made my day so many times!

Last but not least, I would like to thank my boyfriend, Levi, who has been my greatest supporter since we met almost six years ago. He encouraged and believed in me, particularly when I myself lost my faith. Without him, I would not have moved to Norway, and I would have given up on the first occasion when we hit an obstacle.

Auna Pawczen

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1. Introduction

1.1 Preface

Greenland (*Kalaallit Nunaat*)¹ is the world's largest island, situated between the Arctic and the Atlantic Ocean. It has been inhabited since ca. 2500 BC. when the first population wave of Paleo-Eskimo cultures migrated to Greenland, from the territory of present-day Canada. The last phase of these palaeo-cultures disappeared sometime 1300 AD in Greenland, and the neo-eskimo Thule-culture emerged from the 12th century. After the setting and re-setting of different Arctic cultures through 3500 years, the Norsemen arrived and settled at the previously uninhabited south-west coast in the 10th century, ca. 986 AD. Their settlements thrived for nearly 500 years when sometime in the 15th century, these Norse colonies lost contact with the rest of the world and disappeared in history.

As a result of this mystery of the settlements' demise, the medieval Norse colony in Greenland has always been central to the Nordic archaeological research. It demonstrates the classic result of a full biological and cultural desolation very well, namely that the island was depopulated and disappeared from written sources in the 1500s. Although Greenland's history and material culture can be regarded as a well-researched subject, we have not yet got a definitive, complete explanation of the collapse or what eventually happened to the Norse population.

After the downfall, the Norse settlers left behind various cultural traces, which are dispersed in two settlement concentrations: the Western and the Eastern Settlement. These cannot be regarded as settlements in a modern sense; they were more likely loosely conjoined farms with adherent buildings, churches, pastoral grounds, and other cultural materials bearing testimony the presence of their culture. These cultural elements can provide us valuable information about what life was in this arctic environment, how the society was organized but at the same time can contribute to study the collapse from an archaeological perspective. Although these tangible traces do not come out of anything: they are the products of different practices, traditions, and roots, thus the outcomes of the settlers' cultural identity. Studying this identity will be the main focus of this dissertation.

I have always been interested in how different ethnical groups define themselves, to what extent they keep and tend their cultural identity primarily upon migration to another territory. I can relate to this situation as I myself, am a Hungarian living and studying in Norway, a country which, although laying in the same continent, differs from my native land to a greater extent. How does this re-location change my cultural identity, and in what way? Does it have an impact and affect my decisions? Although Greenland does not differ from other countries in the North Atlantic as much as Hungary from Norway, the Norse settlers could experience and face slightly different circumstances in Greenland than the ones they got used to in their homeland. How did this change their concept about the world? At all, what extent does cultural identity influence our decisions in every-day, ordinary things and more serious, changing matters such as a collapse?

Many-times, climate and nature are described as harsh and challenging for their inhabitants in the North Atlantic region along with Greenland, where drift-ice is another aggravating factor. When I first heard my supervisor, Marek E. Jasinski presenting the

¹ Meaning the "land of the Kalaallit" in indigenous Greenlandic language. *Kalaallit* means "people" in Greenlandic, the self-appellation that Inuit use for themselves.

Norse settlements in Greenland as a possible thesis subject, I immediately thought: how was that possible to build a medieval colony in such harsh climatic conditions and on an apparently solitary island? As I have always been fascinated about human adaptation in extreme circumstances such as alpinists who climb the highest peaks or divers who submerge to the deepest point of the ocean, I have become genuinely keen about this topic. Moreover, just after I learned that these settlers left behind prominent church architecture and religious objects, I got enthusiastic. It is an open secret that I have a soft spot for medieval churches in my heart: their constructions and sacred spheres have been fascinating me ever since my childhood. It is indeed outstanding what human beings could build or create out of religious devotion.

Afterward, I began to read and gain knowledge about Norse traces; then I started to think about today's cultural heritage: what is the situation today in the island? My supervisor kindly introduced me to the so-called *Greenland case* a political debate between Norway and Denmark over the legal right to the island (see chapter 2.2.3) and the position of cultural heritage in Greenland, i.e., that three cultural sectors make present-day Greenland's heritage: the Inuit, the Norse, and the Danish. That was the point when I have become honestly interested in the subject, and after a couple of exchanged emails, I found out that little has been published about these matters from an Inuit perspective. I find the situation genuinely fascinating: living in your own country and tending your traditions and cultural heritage, which additionally contains a legacy owned by a different ethnicity.

1.2 Short history of Greenland

The first pre-Eskimo migrants moved to Greenland from Alaska ca. 2500-900 BC. This was the Pre-Dorset culture, which is known in two related variants: the Independence I culture and the Saqqaq culture (figure 1). Members of these cultures were Arctic hunters focusing both on marine and terrestrial mammals. As the zooarchaeological remains show, their main preys were seals, walrus, and polar bears. They rapidly moved eastwards across the Arctic and from around 2400 BC, forming a simultaneous, uniformed culture with the same lithic technology and traditions from Alaska to Greenland, often called the Arctic Small Tool Tradition. This Pre-Dorset culture can be found all over Greenland with the main concentration of sites in Northeast and on the mid-west coast. Their settlements situated typically on gravel beaches from where people would have great views to the sea and thus their prey. Although regional differences and details are furthermore not known for researchers, whereas the reasons for the culture's disappearance c. 1000/900 BC (Andreasen et.a. 1999: 65-66, Andreasen 2003: 287-288, Gulløv 2004: 39-41, 51).

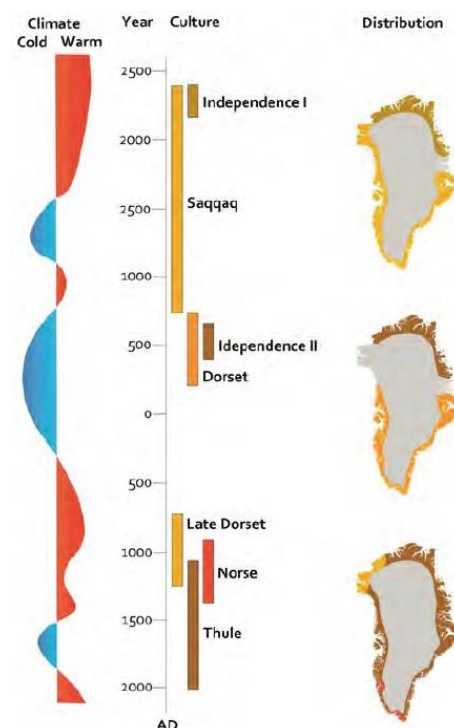


Figure 1 - Population movements and expansions from ca. 2500 BC (Gulløv 2004: 22)

From ca. 800/900 BC onward, the Canadian Dorset-culture - also called *Independence II* culture - arrived and settled mainly in the same areas as members of the Pre-Dorset culture (figure 1). They exploited the same marine resources with some local variations. They brought new architecture features and new types of equipment. This culture also disappeared c. 0/200 AD. From this period till circa 800 AD, there is a hiatus in human occupation in Greenland, which raises questions about the development of cultures among researchers (Andreasen 2003: 291, Grønnow & Sørensen 2006: 70-71).

After this interval, between 800 AD and 1300 AD, a late Dorset-culture appeared in the northwest part of Greenland (figure 1). It is still a debate on whether this culture is a result of migration or local development of the present population; it is unknown what relation late Dorset and Independence II cultures had. When the Dorset-culture disappeared in the 1300s, they left behind the last paleo - Eskimo traces (Andreasen 2003: 297, Gulløv 2004: 173, 200, Petersen 2000: 340).

The last archaeologically known neo - Eskimo culture, the Thule-culture, appeared in Greenland in the 12th century. Their cultural history goes back two thousand years, when in the Bering Sea region, the first neo-Eskimo culture, the old Bering Sea culture emerged. They hunted first and foremost large sea-mammals such as the baleen whale. At the end of the first millennium, they followed the routes of such animals eastwards, through the Canadian Arctic Archipelago, and eventually reached Greenland in the 12th century. From this period onward, they made several contacts with the Norsemen (see next paragraph), which resulted in a high number of exchanged (or obtained?) objects in Thule sites. (Andreasen et al. 1999: 66-67, Grønnow & Sørensen 2006: 71-72).

Although geographically, the island belongs to the American continent, culturally and politically, Southern Greenland has been part of Europe since the Middle Ages. The Norse colonization of Greenland happened from Iceland under the leadership of *Eiríkur Rauði* (Erik the Red). According to the sagas Erik was originally from Rogaland, Norway the land which his family had to fled because his father was accused of homicide. After the family settled first in Iceland Erik growing up was also exiled and journeyed further westwards in Arctic waters. He established the first Norse colony in c. 985/986 AD by landing on the island today called Greenland. Erik together with other colonization families settled along the inner fjord areas in south-west Greenland which have been the best pastoral lands for grazing and crop production (GHM I:206).

The religion of these settlers is a well-disputed subject: the only sure thing is that Greenland became the subject of Nidaros Archbishopric in 1125. It was that date when Arnald, the first Bishop of Garðar (today's Igaliiku), Greenland, was ordained. From that time onward, only bishops of Norwegian origin were appointed to serve as clergymen in Greenland. Interestingly, it was only after this date, in 1261, when the Norse settlements in Greenland voluntarily became the subject of the Norwegian king, Håkon Håkonsson. Until ca. 1250-1300, Greenland was an essential body in the North Atlantic trading network, importing skin of different Arctic animals, rope, and even high prestige goods such as narwhal and walrus tooth (Arneborg 2015: 143-144).

From the 14th century onward, Europe got into a financial decline with rising food prices and descending luxury items fares. This situation was worsened by the several waves of the Black Death, causing high population loss. It is not sure whether these outbreaks ever reached Greenland, but it surely affected its hinterlands: both Norway and Iceland suffered substantial damages in different periods of the disease. Thus even if not directly, Greenland was influenced through its trading network, which provided income and everyday utensils and mediums (iron, timber, clay) lacking on the island. Additionally, walrus-

ivory trade was gradually replaced by the elephant - ivory market upon discovering new commerce routes to the Mediterranean (Keller 2010: 15-17).

In 1350 the Western Settlement was reported to be deserted. Its cause was referred to as the attack of the *Skrælinger* (the Norse term used for people from the Thule-culture). Several written sources account for ambushes of Inuit people causing casualties in the Norse population (McGovern 2000: 336).

The last resident bishop of Greenland, Alf died in 1378, whereafter no successors were ever appointed as bishop and sent to Greenland. At the same time, written accounts report on that the Christian beliefs of the Norsemen were somewhat weakened: news describes people performing pagan rituals and worshipping foreign gods on the island (Arneborg 2015: 147).

The last written record about Norse Greenland is from 1408, which accounts for a wedding happening at Hvalsey church. This source also mentions the somewhat adulterous nature of Norse Greenlanders as two Icelanders were present to oversee the wedding being performed according to Christian practices. After this date, Norse Greenland did not appear in written sources, and contacts vanished with the rest of the world. Afterward, the Thule-culture gradually spread south along east and west of Greenland. From the 16th century, they can be found all over the country (figure 1) (Keller 1989: 30-31).

From centuries onward, Norwegian kings and clergymen were engaged by the cause of Norse Greenland: missionaries and expeditions were sent and launched to find living descendants of the Norse settlers and win the presumed pagan population to Christ. Fragmentary records concerning Greenland were produced by seafarers who infrequently wandered in the near of the Greenlandic coast. It is uncertain whether they reached and ever set foot on the island. It was until 1721, when a Norwegian-born priest Hans Egede landed on the island and thus started the process of modern colonization of Greenland (Krogh 1982: 20-21).

Due to this Danish colonization from the 18th century, today the demography of the island is composite: beside the majority of Thule-Inuit population (some 88 %) including Inuit-Danish mixed, the minority of Danes and other European ethnicities (mainly Norwegian) is existent in Greenland. Nevertheless, Greenland is currently subject to the Kingdom of Denmark, it is an autonomous territory with its own parliament and thus decision rights. Among others it has the authority to manage and tend these diverse cultural identities and heritages occurring in modern Greenland (Hard; Madsen, personal communication).

1.3 Subjects and aims of the thesis

The main subject of my thesis is this divergent cultural identity, which bound together the two main sections discussed in this dissertation. However, dealing elaborately with every aspect of this subject would exceed my thesis. Therefore, I have narrowed down my dissertation to two discussions. In the first half of my thesis, I intend to concentrate on the contribution of the Norsemen's identity to the collapse of the Norse settlements in Greenland. For this I cannot omit discussing adherent theories created to find the possible cause of the demise. Of these, I intend to focus primarily on one aspect: the human decisions made in the deterioration. From my point of view, these decisions were crucial in the process of the settlements' demise. My aim is though not responding to the "what question" – what were these decisions- but rather to the "why question" – why

they reacted in this way. Decisions – either made in every-day matters or more serious issues – were indeed the products of the settlers' cultural identity. I acknowledge Vésteinsson's opinion that the Roman Church had a dominant role in the Middle Ages (Vésteinsson 2000: 1-2) and was the most prominent channel through which ideas and traditions were transmitted and got to even more remote areas, like Greenland. Religion affected almost every sphere of peoples' lives in the Middle Ages: from daily objects, like loom weights with the adherent Christian interpretation and beliefs to large, stone churches, the sacred space where these notions were practiced.

As one's identity in the Middle Ages was defined by religion, that is, Christianity, to a great extent, it is essential to study the religious atmosphere and particular ecclesiastical objects. When I write religious objects, I imply artifacts that are associated with religious meanings or practices, were found in the ecclesiastical context, and/or used for religious purposes. In addition to the tangible material, I intend to study the spiritual spaces of that religion, namely medieval church buildings, their traditions, and influences. I hope that analyzing ecclesiastical structures will give me a better understanding and new perspective about identity. My thesis aims to uncover different aspects of the settlers' cultural identity and to what extent Norse retained this "European" identity sprang from Christianity through studying ecclesiastical objects and constructions, which are the physical materializations of personal and liturgical devotions. My main research question addresses this aspect: the role that cultural identity played in the Norse Greenlanders' decisions regarding the deterioration of their settlements.

Hence, I have formulated my central research question as follows:

- To what extent and how did the settlers' cultural identity contribute to the deterioration of the Norse settlements in Greenland?

I intend to study identity and how peoples define themselves, but not only in the past but also in the present. In the second section, the thesis I am writing will address the issue and the research field around today's cultural heritage in Greenland. Likewise, in the first section, the focus will be placed on identity, which is created by the cultural heritage and the feeling of belonging to a particular group with the same identity. The aim is to study how this cultural heritage is perceived and practiced by Modern Greenlanders. The situation today is very interesting and complex due to the different branches of cultural heritage that form the island's cultural landscape. On the one hand, cultural heritage incorporates medieval Norse traces found in the Eastern and Western Settlement. Some of them are still visible above ground despite the local utilization of the buildings' material. Secondly, different elements of pre and neo Eskimo dwellings and activities from ca. 2500 BC make the second branch of the cultural heritage in Greenland. Lastly, as the island of Greenland belongs to Danish sovereignty today, and therefore heritage also covers cultural elements of Danish origin from the 18th century onward.

Accordingly, my supplementary research question is created along these lines:

- What role does the cultural heritage of Norse settlements in Greenland play in today's national narratives of this cultural-historical phenomenon?

How do Inuit perceive these medieval Norse cultural traces? Have these become a part of modern Greenlanders' cultural heritage? Does the present-day Inuit's cultural identity differ from their predecessors'?

After I discussed identity concerning both past and present matters, I intend to compare the two components. However, identities of past and present Greenlanders do not

compound i.e., different influences and circumstances affected them, both bear common features: the two had/have to manage in the arctic conditions of Greenland, and they share mutual cultural elements. Herewith, I deal with my terminal field of research: could Norse settlers survive the downfall if they would have adapted a present-day like cultural identity? What can we learn from the deterioration in the past in the light of current climate changes? Do modern Greenlanders face the same consequences as their predecessor in Norse Greenland?

1.4 Limitations

The subject, the geographical expansion, and the volume of the archaeological material are all three wide-ranging and extensive. Hundreds of books and articles discuss the Norse settlements in Greenland; a great many researchers deal with the subject from all around the world. Matters concerning this field of research would fit in a Ph.D. or even a doctoral dissertation. Thus I attempted to lay down boundaries that could correspond to the requirements and the frame of a master thesis.

Time

Regarding the period, my thesis is mainly limited to the Middle Ages (1030-1537), although the first Norse colonist could settle on Greenland already in the 10th century. According to the *Landnámabok* (*The Book of Settlement*), this had happened in 985 AD.; thus, the first settlement period (985-1030) took place during the latest phase of the Viking Age (800-1030). The exact ending date of the Norse settlements in Greenland is ambiguous, but most likely, it does not exceed the boundaries of the Middle Ages.

At the same time, matters discussed in the second section go beyond historical periods: studying the cultural heritage of today's Greenlanders is a contemporary field of research.

Geographic

In general, my thesis will concern the whole area of Greenland, as the concept of identity does not have physical boundaries; it occurs wherever human beings and their cultures are present. However, cultural material analyzed in studying identity is geographically limited: my thesis will focus on these sources recovered at both the Eastern and the Western Settlements. The Eastern Settlement is situated on the south-west coast of Greenland, between ca. 59-61° north, which areas now compromise the municipalities of Nanortalik, Julianehåb (Qaqortoq) and Narsaq. Approximately 450 km up North, the Western Settlement is located at the west coast in the Godthåb (Nuuk) area, between ca. 63-65° north. The two settlement concentrations enclose ca. 20.200 km²: while the Western Settlement is some 7900 km², the Eastern settlement extends to 12.300



Figure 2 - Map displaying the Eastern (Østerbygden), Middle (Mellebygden) and Western (Vesterbygden) Settlements (Gulløv 2004: 224)

km². In the archaeological research sometimes a third settlement concentration is referred to: the Middle Settlement (figure 2). The presented case study in chapter 9. – Kujataa – incorporates several sites, and their buffer zone situated alongside the inner fjord area of the Eastern settlement (see chapter 9.) (Keller 1989: 27, Madsen 2014: 28).

Material

Identity can be recovered and reflected through a vast amount of objects, practices, and buildings. In order to fit the volume of the material in the boundaries of a master thesis, I needed to narrow down the material: from the above described religious objects valued personal items are chosen which together with the sacred spaces will be in focus. On the other hand, in section two, the world heritage site of Kujataa will provide the required material to study the cultural identity of modern Greenlanders.

1.5 Definitions and appellations

Several concepts and definitions used in this thesis have ambiguous meaning or are employed differently in each context or by different research fields. Therefore, I need to clarify which interpretations and in what way they are exploited in my dissertation.

The term *landnám* is used upon several occasions, which in this context implies the period of the colonization hence the process in which Greenland was settled from Iceland by the Norsemen. Additionally, in research *landnám* also indicates a short period following the settlement era.

Norsemen is the most used phrase when matters and dwellers in the Middle Ages are described. This term indicates people living in the North Atlantic in the Middle Ages who spoke Old Norse language. Occasionally, the variations of *Norse settlers* or *past Greenlanders* are utilized. I have avoided using modern terms like Norwegians or Icelanders, however there is no doubt that these were the homelands to many settlers in this period.

For today's inhabitants in Greenland, I refer to the appellation *Inuit* (or eventually *Kalaallit*). Sometimes the phrase, *present* or *modern Greenlanders* are used although these terms indicate all people living in today's Greenland including Inuit, Danish, mixed Inuit-Danish and other ethnicities. In the matter of past issues, I employ the appellations *pre-Eskimo* and *neo-Eskimo* terms, simply because they are the most commonly used in scholarly literature.

In every case I have adopted the Old Norse spellings of place-; and personal - names such as *Brattahlíð*, *Garðar* or *Eiríkur Rauði*. These will be always followed by their present-day appellations or anglicised versions.

Regarding *ruinegrupper* (ruin-groups) in the Norse settlements, I choose to adopt the original denotations used in Scandinavian scholarly literature. Therefore, ruin group-numbers start with Ø can be found in *Østerbygden* (the Eastern Settlement), and remains begin with V are situated in *Vesterbygden* (the Western Settlement).

1.6 Thesis structure

In general, my thesis can be divided up for two main sections: the discussion of the past and the analysis of present identity. However, these are conjoined matters possessing similar aspects which intersect with each other over time.

Chapter 2 will display the history of research up to now in Greenland. Here I intend to present a short research history of general Greenlandic research, and more detailed subsections of research in Christianity and religious material and cultural heritage. In Chapter 3 theoretical approaches - used in this thesis - will be covered, while Chapter 4 discusses methods that I intend to work within my dissertation. The position of the medieval Norse settlements in Greenland in the North Atlantic region is the main subject of Chapter 5. In this section the settlements' colonization, structure, trading network, and church organization will be discussed. Chapter 6 will discuss the Norse settlements' collapse and the adherent theories. The physical materialization of the Norsemen' identity will be in focus in Chapter 7 and 8: the former deals with valued religious objects while the latter is covering medieval churches. Chapter 9 appoints today's cultural heritage on the island along with its adherent case study, Kujataa. Subsequently, Chapter 10 will serve as a discussion and conclusion of the whole thesis. First, the Norse settlers' identity and its contribution to the demise will be discussed here. After that, the identity and cultural heritage of present-day Greenlanders will be studied. Lastly, Chapter 11 will serve as an anticipation and outlook to the future research and position of cultural heritage in Greenland.

2. History of research

2.1 Preface

The beginning of the medieval settlements' research in Greenland goes way back in time; it already started in the late middle ages. People have always been curious about the Norse inhabitants in Greenland, who settled at the "far edge of the world." The depopulation of the Norse settlements is still a heavily debated subject; scholars argue about when and how it happened and what the triggering cause was. The only certainty is that the rest of the world lost definite contacts with the island sometime in the 15th century. After this period, the acquaintance about Greenland was inadequate and unclear (Mitlid 2006: 53; Keller 1989: 3).

2.2 General review

2.2.1 The beginning

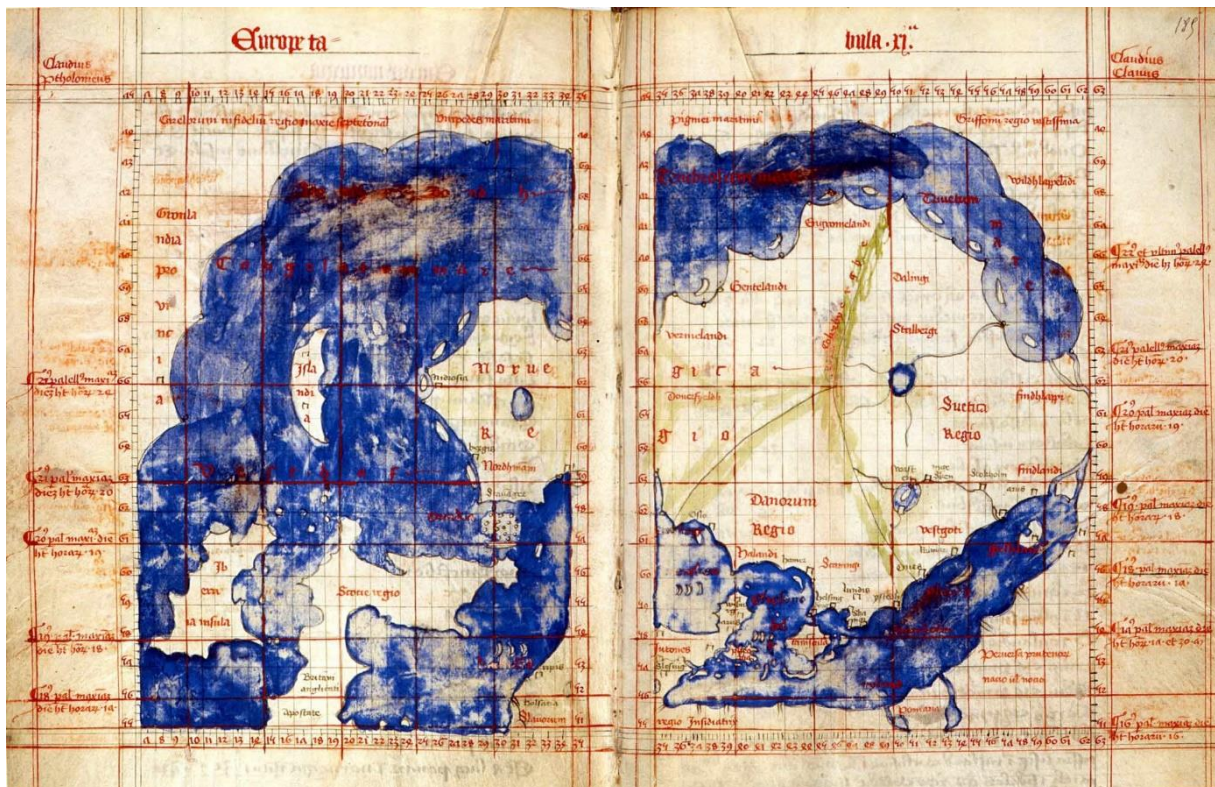


Figure 3- Claudius Clavius, Map of the North (1427-1427), showing Greenland (Gronlandia provincia) at the upper left margin (Seaver 2013: 73)

In the period between 1420 and 1721 was knowledge of Greenland based on classical authors and reports written by travellers who infrequently approached the Arctic. Until that period, maps of the world were based on the classical works of Claudius Ptolemy, an Egyptian astronomer who lived and worked in the 2nd century BC. However, Ptolemy's maps did not originally include Nordic countries. Therefore, it is generally assumed that these parts of the maps were added to the classical works during the Late Middle Ages. The maps constructed in the 15th century depict and locate Greenland in two different positions. The so-called B-type map places the island north of Norway, while on the A-type map, Greenland is situated in its correct position, west of Norway. The cartographer producing these maps has been subject to massive debates. However, recently most scholars seem to agree that the author was the Danish cartographer Claudius Claussøn Swart usually called by his Latinized name Claudius Clavius. He was probably the first to include Greenland on his map and to introduce the Norse appellation *Grønland* into

European cartography (figure 3). Both maps survived through numerous copies, which make their reliability somewhat questionable. It is also debated whether Claudius Clavus ever visited Greenland, or he simply gained his information at second hand, from travellers or other written sources (Bjørnbo & Petersen 1904: 49-50 in Keller 1989: 52-53, Seaver 2013: 72-74).

In this period, a handful of expeditions were sent out in the hope of reaching the coast of Greenland. It is not much we know about these expeditions, the results, or whether they reached the coast of the island at all. They may have also confused Greenland with other territories such as Svalbard, the Faroe Islands, or even North of Norway. These travellers and explorers were often accused of piracy and thus contribution to the downfall of the settlements. Otherwise, they were sent to discover Greenland by Danish and later English kings or members of the clergy. In spite of that, they did not contribute too much to the mapping of the island. These journeys show that the interest in Greenland and the traditions of its colonies did not disappear entirely. Among the first explorers, members of the clergy had an essential role in mapping Greenland; they were usually the first ones who reconciled and gathered whatever written material they could find. Several concepts and theories regarding Greenland emerged during this period and even influence present-day research (Ísleifsson 2011: 52-55, Keller 1989: 52-61).

2.2.2 Modern colonization and the first investigations

The next era - from 1721 to about 1831 - is the period of the modern colonization in Greenland. An increased interest in the Norse colonies resulted in a significant number of journeys to the island. One of the travellers was Hans Egede, a Norwegian born clergyman from Northern Norway. The priest worked from about 1708 to launch a Christian mission to Norse Greenland and find living descendants of the medieval settlers. He managed to persuade merchants in Bergen to sail to the assumed direction of the island. Egede left Bergen and landed on Greenland in 1721, and by this, he started the process of recolonization and rediscovery of the island. Although his original aim - recovering living descendants - was never achieved, he unknowingly rediscovered what we call today the Eastern Settlement. He also recorded a high number of ruins on the west coast of Greenland. One of them was the ruins of Hvalsey Church, where he carried out the very first archaeological survey on the island. After Hans Egede's journey, several other missions were launched in the hope of finding the Eastern Settlement, but none of them was successful (Arneborg & Seaver 2000: 281-282).

These failed expeditions were due to severe misinterpretations; people believed that the Eastern Settlement could be found on the east coast, as its name suggested. This assumption caused debates and disagreements among scholars until 1831. This date was the turning point in the research of Greenland. From this period onward, researchers could concentrate on the actual remains of the settlements on the west coast of Greenland (Ísleifsson 2011: 52-55).

2.2.3 Introducing systematic research

Until the 1920s, the research was dominated by Danish and occasionally Norwegian scholars and was biased by political and diplomatic issues. The most significant improvement was the establishment of *Grønlands Historiske Mindesmærker* (Greenland's Historical Memorials) (furthermore referred to as GHM), a collection of all written sources on the subject. This was the first attempt to study the material and the history of the island holistically. On the other hand, Denmark tried to use information in GHM to prove

its legal right on Greenland against Norway. Not only Danish scholars but also Norwegian historians were politically biased and tried to prove Norway's claim on Greenland using these written sources. The discussion culminated in the so-called *Grønlandssaken* (The Greenland case) at the beginning of the 20th century, which involved decades of debates and dialogues on the question of whether Greenland is legally part of Norway or Denmark. In 1921 Denmark declared that all of Greenland is of Danish territory, which statement escalated the conflict between the two countries. This resulted that Norwegian hunters were issued to boycott a planned Danish navy expedition to the area. Furthermore, these troops occupied different areas of Greenland in the name of Norway, which activity was ratified by the Norwegian government. As a response, Denmark brought the case to the International court of justice in Hague. At the end of this process, The International court ultimately recognized Denmark's authority over Greenland in 1933 (Eriksen 2010: 133-134, GHM III: 117-119).

There was limited knowledge of Norse Greenlandic material, due to the lack of comparative material from the North Atlantic region. Overcome this, the newly founded *Commission for the Direction of the Geological and Geographical Investigations in Greenland* sent several scholars, mainly trained military men, to study the Norse settlements in Greenland. The commission's periodical review the *Meddelelser om Grønland* (Messages about Greenland) has since published journals which allow researchers to study all kind of material from Greenland (Arneborg 2000a: 113-114).

A prominent figure in the Greenlandic archaeological research was Daniel Bruun. He was a trained military man who was able to plan and perform precise excavations. Bruun was the first who could differentiate the different types of buildings, such as dwelling, byres, stables, and storage houses. Referring to these remains, he introduced the terminology *ruinegrupper* (ruin-groups), which has been in use up to this day. His work with the Greenlandic material is of high quality by contemporary standards due to his analogous observations in Iceland and the Faroes. His records established comparative material and proved to be valuable also for Greenlandic archaeology (Arneborg & Seaver 2000: 284, Bruun 1915).

2.2.4 Initial period of professional excavations

Between the year of 1920 and 1940, the first professionally conducted excavations were carried out partly due to political purposes and were heavily influenced by National Romanticism. These investigations gave bases to many research fields and areas still relevant today, and hence in archaeological research, they are often referred to as the "classical excavations." The Danish Government wanted to justify territorial claims using archaeological results. This aim contributed to an increased amount of expeditions and investigations on the island. One of the most active researchers was Poul Nørlund, a Danish medievalist from the Danish National Museum. He was sent to collect datasets and was issued to bolster Denmark's terrestrial claimes in the Greenland case. He carried out a significant number of excavations such as the excavation at Herjólfssnes site, where he excavated the ruins of the church, the churchyard, and further houses (Nørlund 1934). Additionally, Nørlund and his team performed excavations at the Brattahlíð (Quassiarsuq) site. They tried to establish a house chronology with finding the oldest phase of the settlement. During excavation of Garðar (Igaliku) site in 1926, a trained architect Aage Roussel assisted Nørlund, and they later coo-excavated what was believed to be the Sandnæs farm, at Kilaarsarfik of the Western Settlement. Later he conducted excavations alone at the Western Settlement and published articles and books on his own (McGovern 1990: 334, Roussel 1941: 20-22).

2.2.5 New approaches and present-day research

After the end of the Greenland case (1933), we can recognize changes in archaeological research. Political biases have less impact on both the subject and the presentation of Greenlandic research. In the period until 1981, *The Commission for Scientific Investigations in Greenland* reduced its influence in Greenlandic research and functioned only as a consulting organization. By this time, the preservation and research of Greenlandic sites were commissioned by the Danish National Museum (Keller 1989: 94-95).

This period gave a spark in the international research and projects of Greenland. Several expeditions were organized, such as the Nordic Archaeological Expedition in 1974-1977 or The Inuit-Norse Project in 1976-1977. The latter was a huge collaboration between the Danish National Museum and *Kalaallit Nunaata Katersugaasivia* (The Greenland Museum) and was a multi-disciplinary approach to study the material from Greenland. A new paleoecological perspective was born, which differed from previous approaches concerning historical literature based on the text of the sagas. This undoubtedly marked a shift in the research of Greenland and since then more and more researchers have studied the material who are not Danish, or not even from the Nordic countries (Keller 1989: 94-99, McGovern 1990: 341-342).

At the same time, a new department emerged in Copenhagen: the SILA - The Greenland Research Centre in Copenhagen. This institute has been functioning as a collaboration centre between researchers in Denmark and Greenland. Owing to this department, a great number of projects have been established recently, consisting of researches from all over the world. These collaborations make it possible to approach subjects from a new interdisciplinary perspective, which gives extensive results in Greenlandic archaeology. A similar cooperative organization is the NABO (North Atlantic Biocultural Organization), which includes and organizes field schools, seminars, projects involving not only academics but Ph.D. students and early career academics. Through this active collaboration in the North Atlantic region, interdisciplinary research was born. This perspective is far from the previously Danish- dominant, politically biased research of Greenland. (Larsen 2006: 7).

2.3 The organization of the Church and the religious material

From the very beginning, researchers were particularly interested in studying churches, cemeteries and the adherent material. Corresponding this interest, the very first excavations - as early as in the 18th century - were focused on these kinds of cultural materials. Although, expeditions and investigation were not only concerned with such matter in the past but also contemporary issues: after the recolonization of Greenland, expeditions were launched due to the purpose of converting Greenlanders to the Christian faith. Hans Egede, "Father of Greenland," was on the same mission when he first discovered and carried out a small-scale archaeological excavation at the ruins of Hvalsey church (Fyllingsness 1990: 40-41).

In the earliest period, scholars managed to correspond church sites with the depictions of the sagas, thus draw together the written and the archaeological sources. Daniel Bruun (1896) suggested that identification of these church sites would be a primary source for the reconstruction of the topography. His quality of work defined the standard of later surveys and the view of researchers. Later he abandoned his perspective and presented a full topographical reconstruction, but this time based on place-names and not on church sites (Arneborg 2000a: 115, Bruun 1896 in Keller 1989: 75-76).

Nørlund stated (1928) that matching these place-names depicted in the written sources with the church sites is the biggest aim of the Norse Greenland research. Studying this aspect, he took part in several excavations conserving church sites, churchyards, and their material. One of his most significant achievements was the Ikigaat (Herjólfssnes) excavation from 1921 to 1924. At this site, Nørlund and his team excavated the church ruin, the nearby houses, and the churchyard. In the cemetery, they studied both the human remains and garments found in the graves such as wooden crosses, dresses, and dress garments. He used a comparative approach to study and characterize the material. (Nørlund 1924: 1-10). Nørlund studied not only the material, but also the organization of the Church in Greenland and its relation to the Roman Church in Europe. He was also interested in the privately - built churches owned by chieftains and the churches retained by the Roman Church. Together with Aage Roussell, they conducted the excavation at Garðar (Igaliku). Here they also investigated the church, the churchyard, and several Norse houses. In one of the graves, they found the most notable and famous ecclesiastical find: the famous bishop's crozier of walrus tusk. The two practicing archaeologists also carried out smaller excavations at several other sites in the Eastern Settlement, such as in Qorlortup Itinnera, where they located two small churches (Ø-33 and Ø-35) later identified as the Qorlortoq/bænhus type. Incorporating also the latter investigation, Nørlund began to deal with church-chronology in the Norse settlements. He argued - using parallels from the British Isles - that the rectangular churches such as Brattahlíð III (Quassarsuq) or Hvalsey belong to the oldest settlement period, and hence they can be dated to the first part of the 12th century. Due to political biases, he overlooked unambiguous examples in Iceland and Norway, and thus later, his statements were disproved (Arneborg 1991: 143-146).

Aage Roussell turned Nørlund's chronology upside down in his thesis (1941), basing his analysis on stylistic and metrological studies. He stated that the churches with rectangular chancel were built in an earlier phase of the settlements as they were plotted in Carolingian-Greek feet, which characterized the Gothic period. Furthermore, Roussell argued that the churches with narrow chancel were the oldest because they had been built with Romanesque feet (Roussell 1941).

Christen Leif Vebæk also carried out investigations at the Eastern Settlement in 1950-1951 concerning different ecclesiastical sites. One of his most significant achievements is finding the ruins of a church at Sillisit (Ø-23). With this excavation, the number of excavated buildings exceeded the amount of those mentioned in the written sources. Due to the discovery of this church, Vebæk's work disproved Nørlund reconstruction about Greenlandic church topography. Vebæk argued that the small churches of the Qorlortoq-type could be annex - churches and hence they were not recorded by name in the written sources. After the Brattahlíð I church (widely known as Tjodhilde's church) was dated to the 11th century, Vebæk changed his concept and assumed that on the contrary, the small churches belong to the earliest phase of the settlements (Keller 1989: 94-95).

It was Knud Krogh who proved Roussell's church-chronology to be right. Krogh, like Nørlund, also dealt with the privately-owned churches and the extent of power and influence of bishops in Greenland. He assumed that over time Greenlandic bishops gained the majority of power both in secular and ecclesiastical matters. Krogh joined Jørgen Meldgaard in 1962 to excavate the so-called Tjodhilde's church which re-dated the Qorlortoq-type to the 11th century. This assumption was based on the curved walls known from the Viking period and the orientation of the graves in the churchyard. He built his statement on Icelandic parallels and did the same when he created his concept

of the Greenlandic Church organization. In his famous book *Erik den Rødes Grønland* (1976), Krogh argued that contrary to Vebæk's presumption, the churches of Qurlotoq-type could be proprietary churches or prayer-houses. Thus they did not receive tithe like the bigger ones, and that is why they were not depicted in the written sources. Krogh (1976) presented ground plans for all then-known churches in Greenland, which is still the principally-used figure for present-day researches. Based on his excavations in the Faroe Islands, he stated that some of the churches had had wooden constructions bolstered by an outer protective wall of stone and turf (Arneborg 1991: 143, Krogh 1976: 307).

On the contrary to Nørlund and Krogh – who emphasized the relation between church and farm regarding the question of private churches – Joel Berglund brought in a new group of archaeological sources: the festive halls. In his article (1982), he discussed the social implication of long-halls in that subject. Like Krogh, he also saw these festive halls as a physical manifestation of the social and economic power of the Greenlandic bishops. As these long-halls are all found on farms with churches, Berglund assumed that it had to do something with the bishop's administration of the diocese (Arneborg 1991: 143; Keller 1989: 101-102).

Thomas H. McGovern proposes the same point of view regarding the position of the central power in Norse Greenland. He emphasizes the influence of the Roman Catholic Church in Greenlandic society and its role in the demise of the settlements. He was the first one who studied the Norse settlers' 'European identity' and its aspects in different subjects (McCullough 2016: 28-29).

Like McGovern, Christian Keller also dealt with the question of religion, beliefs, and the medieval churches in Norse Greenlanders. In his doctoral thesis (1989), he discusses matters such as the relation between Greenlandic and European Church, the organization of the Church, church types, and chronology. Discussing the circular churchyard, he eventually concluded that this type indicates the impact of the tradition of Celtic Christianity. Keller then assumes that stone churches with rectangular chancels demonstrate the authority of the Roman Church, establishing roman-styled building traditions over local traditions (Keller 1989: 316-317).

Jette Arneborg is one of the most productive and cited archaeologists in matters like the Roman Church and the religious material in Greenland. She has been excavating in Greenland and has been publishing articles and books since the 1980s. In the 1990s and 2000s, Arneborg concentrated mainly on the settlers' identity, culture, and religion. She is one of the central figures of several long-term projects and studies of Norse Greenland, such as The Vatnahverfi Project between 2004-2010 and the Churches, Christianity, and Chieftains in the Norse Eastern Settlement Project (McGovern 1990: 342-343).

Jess Angus McCullough (2016) wrote his doctoral thesis about the belief, religion, and identity of the Norse Greenlanders. He placed his focus on the physical materialization of the settlers' identity, such as the ecclesiastical material and the church buildings. In his thesis, McCullough uses parallels in the North Atlantic region, such as from the Faroe Islands, Iceland, and Scotland (McCullough 2016).

Most recently, it is Elizabeth Pierce (2011) who studies the question of cultural identity in the North Atlantic region and its physical expression in the archaeological material. She uses three case studies from the North Atlantic, one of them is the Herjolfsnes site in Greenland. In her Ph.D. dissertation, she compares the cultural material, church

buildings, and other structures from Greenland to two other sites in North Atlantic, drawing conclusions on identity and cultural relations (Pierce 2011).

2.4 Cultural Heritage of the island

The subject of cultural heritage caused lengthy discussions in the early 20th century concerning the need for cultural heritage for educational and enlightenment purposes. After Greenland gained partial autonomy in 1908, voices demanding cultural heritage amplified. In the period between 1913-1954, Greenlanders argued that younger generations did not have the opportunity to learn about their ancestors directly, as tools and objects from this period were always transported to Copenhagen. A possible repatriation would have been favourable in a time when modern western techniques began to take over pre-colonial practices such as the use of kayaks and Inuit hunting methods. These traditional practices were regarded to be beneficial in recognition of Greenlandic identity.

The request for returning Greenlandic objects to Greenland did not receive first a positive response in Denmark. Danish authorities questioned Greenland's liability and the quality of storing and administrating of the collections on the island. In 1953 Greenland lost its status as a colony and became a Danish county. Danish citizenship was extended to Greenlanders and a cultural assimilation began in Greenland. With other words, a de-Greenlandification was launched which resulted in the loss of Inuit cultural legacy. On the other hand, at this period, self-determination and independence movements started to surface, which forwarded negotiations between Denmark and Greenland. In 1966 Greenland eventually established its first museum - The Greenland National Museum and Archives (NAK). Archival research for information began to take place and the NAK sent out survey- groups in order to map buildings and sites. These scientific troops usually consisted of professionals (mainly Danes) who worked together with local experts, and students from Greenland. Among others, they taught survey techniques, methods to locals and interviewed them about their folklores and histories. After a big modernization in 1978 in the museum, scholars at the Greenlandic museum were ready to administer, store and exhibit objects in a proper manner. A high peak of the reasserting of the Greenlandic cultural identity culminated in 1979: this was the introduction of home rule. With this legislation, cultural heritage administration and research responsibilities were transferred to Greenland, and its museum gained national museum status. Along with the establishment of a national museum, a need for an extensive museum collection was also intensified. This was the catalyzer of the process of repatriation, which spanned over two decades from 1982 till 2001 (Gabriel 2009: 30-33).

During the period of repatriation, a vast amount of material - nearly 35.000 archaeological, ethnographic artifacts and photo archives - was flown back from the National Museum of Denmark to the *Nunatta Katersugaasivia Allagaateqarfialu* (Greenland National Museum and Archive), and a systematic rearrangement of the material began. New departments and collections were emerged managing this large amount of documents containing archaeological objects, photos, drawings, archives, and their copies. This process is usually referred to as the process of *Utimut*, in Greenlandic the world for *Return*. A committee of six unbiased members was established to supervise and make decisions regarding the repatriation. Both Inuit and Norse artifacts were returned to Greenland, except for human remains regardless of ethnic origin. As this material consists of a vast amount of human remains, and the National Museum in Greenland lacks appropriate storing facilities, the parties decided solidly that the entire skeletal material should have remained in Denmark. The main result of this successful partnership today is that both museums own a considerable amount of archaeological and ethnographical items, and they organize joint exhibitions, projects, and future collaborations. Under the whole process and since then, the close connection between cultural heritage and identity has been enhanced several times. As Jonathan Motzfeldt - the head of Government of Greenland in that time - stressed out ideally: „*Psychologically, it is of great importance to have your own past right outside*

your door. It is very important to get your identity right. Everybody is interested in questions such as: who am I, where do I come from, and what is my history?"(Gabriel 2009: 32-36).

Nowadays, several projects, programs, organizations, and international teams focus on studying, protecting, administering, and mediate different aspects of cultural heritage in Greenland. The list of literature; books, articles, posters, and pamphlets are endless. Due to recent climate change and its impacts, an urging concept has emerged of them all: the preservation, protection, and management of Greenland's heritage. Without sustainable, international, well-managed programs² and the enormous effort made by researchers and volunteers, buildings, remains, and other cultural elements would perish for good and disappear in history. Preserving, managing, and administrating Norse and Inuit sites was also the primary commitment of the Kujataa project. This program started in 1996 with a proposal to nomination to UNESCO and ended in 2017 with the implementation of the UNESCO World Heritage Convention. (Hollesen et al. 2019: 1-2, Larsen 2006: 7, Kaslegard 2011: 11-12).

Although there are a lot of projects which deal with the cultural heritage of Greenland, a few scholars are concerned with its roots: namely the relation between past and present Greenlanders. Hans Christian Petersen (2000) is one of the few who slightly studied this field of research and discussed the Norse legacy in modern Greenland. He investigated and tried to record the intangible and tangible Norse cultural elements in everyday cultural practices of the Greenlanders. In his book chapter, he also focuses on how different cultural traditions interact with each other and influence modern Greenland (Petersen 2000: 340-341).

² Without being exhaustive these are for example: Activating Arctic Heritage Project, Greenland RESPONSE Project, REMAINS Project (REsearch and Management of Archaeological sites IN a changing environment and Society), Arctic Viking Field School, Alluitsoq Project, Effekter av klimaendringer på kulturminner og kulturmiljø project, Adapt Northern Heritage Project

3. Theoretical Approaches

„Identity is not a static phenomenon but rather a shifting concept which is affective to external circumstances“ (Werbart 2006: 84)

3.1 Preface

Although my thesis is structurally divided up for two main sections, the research field of identity bound the entire content of this master thesis. Studying identity lets us obtain information about the similarities and differences between past and present matters. In other words, not only it reveals a dynamic and diverse understanding of past identities, but it also connects this to modern identity by drawing to eternal bygone forms. It is generally assumed that studying modern concepts of identity one cannot omit to investigate historical notions (Harris: 2016, 17-18).

This perception can be easily applied in the matter of my thesis, which deals with identity both in the past and in present Greenland, but not as two distinctive phenomena but rather a conjoined and dynamic matter. Hence cultural identity, ethnicity, and the adherent theoretical approaches will be discussed in this chapter to a considerable extent. Moreover given the geographical location of Greenland, island theory will be discussed as it influenced and had an impact on the settlers' cultural ethnicity in no smaller degree.

3.2 Cultural identity and ethnicity

The literature on the subject has been continuously increasing and evolving since the 1990s, including topics such as nationalism, politics, globalism, and cultural heritage (see below). For several researchers, these two terminologies are interchangeable; it is indeed very challenging to describe their exact definitions. Identity and cultural ethnicity are abstract concepts that cannot be easily derived from a diagram or data sets. Although it is crucial to address this research field concerning archaeology as it can provide information about not only *what kind of* objects people made and possessed, *why* they obtained particular church ornaments, wooden crosses, or specific gravestones. However, in several cases, there are no clear boundaries between ethnic groups about what type of artifacts they used (Pierce: 2011, 56). We can reflect on modern globalization where particular objects can be obtained almost all over the world. The situation was neither different in the middle ages; for example, silver dirhams were found in Scandinavia due to trading relationships, or along the Silk Road, new materials, religions, and philosophical tendencies were established even in far distances.

As we do not usually possess contemporary depictions about different identities, archaeology is indisposed to study the physical manifestation of cultural ethnicities. Ethnic/cultural belonging is inherently connected to identity and so as the role of archaeology in the reconstruction of identities. Through studying the content of 'things,' archaeology can give us an insight into people's notions about their world. However, we have to be careful as researchers tend to project their subjective conceptions and attitudes into past intentions and meanings of objects (Pierce 2011: 56-57).

3.2.1 Identity

Previously, *ethnicity* or *ethnic identity* were the preferred terminologies, but these have been gradually replaced by *cultural identity* in modern research as the idea of ethnicity in

the sense of race became too problematic after the World War II. Identity is one of the most dynamic and progressive study fields in archaeology in recent years. Identity itself is a complex phenomenon due to several definitions and concepts that it incorporates. On the one hand, *identity* can mean a community's or things' shared character - in the way that they are *identical*. On the other hand, *identity* can indicate the uniqueness of a particular group of being or things - that is to say which traces are *distinctive* from the others. Identity can be studied in many scales, i.e., the individual, the family, ethnic or social groups, nation, and worldwide. (Fowler 2010: 353). For a group or an individual, it is the *belief* in that common notion, that determines their cultural identity.

Although identity has been a favoured research field within archaeology since the 1990s, dealing with the phenomenon already emerged in the late 18th century. These studies refer to identity as 'defining essence' of a person or a group and consider identity in archaeology as 'objective, inherent and primordial'. Nowadays, recognition of the individual and personhood in the archaeological record, made identity significant to the study of the past. While the culture history approach sees cultures just as groups of artifact assemblages, modern-day research integrates human agency into past societies (Pierce 2011: 57).

Brubaker and Cooper (2000) criticize archaeologists' approach towards identity - emphasizing the fluid, personal characteristic of identity. They state that archaeologists made identity impossible to study by moderating the definition to the point of irrelevance. However, it would be incorrect to approach the field in Brubaker and Cooper's positivist way and apply an imagined cultural simplicity regarding past societies. If we practiced Brubaker and Cooper's specific categories, we would omit from our research the changing nature of identity, i.e., that is based on human impressions. Identity by nature is impossible to study applying quantitative methods. In this matter, quantifying artifacts, drawing distribution maps, and constructing typologies are informative, but it would be unbecoming to base our research solely on these methods. These approaches do not incorporate the notion of human agency into identity, which in turn has a vast influence in shaping identities: the same type of objects and practices can obtain distinctive meaning in different social contexts (Brubaker & Cooper 2000: 1-2).

3.2.2 Ethnicity

Like in the case of identity, the definition of *ethnicity* has not been defined thoroughly. The subject is quite relevant in recent years, mainly regarding social sciences and discussions. Although it is principal to use ethnicity in modern societies such as nationalism, most researchers tend to omit its practice in historical matters. Ethnicity includes the notion of a community (group, family, tribe, nation, global) with a common background and culture (language, religion, clothing, traditions, behaviour), the belief in this standard practices, and its chosen symbols (Pierce 2011: 60).

Barth (1969) argues that besides we study the cultural differences, we also need to discuss the nature of boundaries between societies. Changes - which create these boundaries among particular groups - does not necessarily occur due to geographical isolation. They can usually be recorded when stable and regular mercantile relations are established between communities. Norse Greenland experienced both periodical isolation and constant trading contacts; the latter contributed to external changes just as much as occasionally the remoteness of the island (Barth 1969: 9-10).

Traditionally culture historians like V. Gordon Childe located cultural ethnicities within particular geographical areas with clear barriers. Such a monocultural notion is modern-day construction, but it was already used by Greek and Roman authors when they described the different tribes according to their geographical location, not ethnic boundaries. Accordingly, settlers in the North Atlantic Region cannot merely be depicted as Norwegians or even Scandinavians because they became subjects to the Norwegian King or Archbishopric of Nidaros. Even if they continued to use the same ecclesiastical objects, Norse language and other traditions, the environment, and the interactions with foreign travellers had a considerable impact on shaping their cultural ethnicity. It is not known when they ceased to be Norwegians and started to regard themselves as 'Greenlanders.' It was though more than a person's origin that determined someone's cultural ethnicity (Pierce 2011: 60-61).

The way people define ethnicity has changed over time. In the Middle Ages, ethnic boundaries were created for inclusion in a specific social or cultural class. Geary (1983) argues that it is the most important to study these categories by which people were determined. In medieval sources, language, law, religion, origin, and customs are mentioned as determining factors. However, the representation of ethnicity in archaeology is sometimes different due to the lack of portrayal of categories on several occasions. Regarding Norse Greenland, we do not possess such material that can contribute to discuss law or customs, but for example, through DNA studies and saga stories, one can study origins or discussing runic inscriptions, researchers can gain information about the language (Geary 1983: 16-25).

Besides ethnic groups share a common culture and ancestry, it is essential for them to display and demonstrate to the outside world in order to show the inherency. Groups tend to show their identity and distribute it more publicly when they feel the boundaries between their identity and other group are threatened (Fenton 2003: 6-7 in Pierce 2011). That is the case in the matter of the Norse settlers' notion towards their neighbors, the Inuit's cultural material. On the other hand, these Norsemen were afraid that a boundary would have placed between them and the rest of the Christian world, identifying them as *Others*.

3.3 Cultural material and identity

I intend to study cultural ethnicity and identity through their physical manifestation, hence studying the cultural material left behind by past societies is inevitable. In order to understand identity reflected through archaeological material, I cannot overlook seeking out different theoretical approaches regarding cultural material and studies. As the above citation displays perfectly, archaeology carries difficulties regarding interpretation through cultural material. To overcome these obstacles, one has to observe the subject from every possible angle, including inspection of past tendencies and their development until recent years.

The relationship between objects and identity has always been fundamental for archaeology and other associated disciplines, such as anthropology. Although dealing with the physical materialization of things has been approached in different ways through the centuries. In the 19th and early 20th-century, material culture was so principle in the progression of archaeology and anthropology that objects were often regarded to reflect that particular culture. Such view pervaded the work of General Pitt-Rivers, who arranged different cultures and societies chronologically based on the evolution of artifact typology. In similar aspects, Durham professed that material objects were

infrastructural; in other words, the formation of these artifacts gave basis to social patterns (Fowler 2010: 354-355). Mauss (1931) also thought that objects were the most reliable evidences which, with their authenticity, characterize the past better than anything else. These researchers in the early period ignored the effect of non-human elements in the shaping of identities.

Material culture alongside language and traditional practices are not merely the reflection of cultural identity as culture-historical anthropologists and archaeologists assumed. Discussed by researchers such as V. Gordon Childe (1926), material culture played a central role in characterizing of that particular society. An archaeological culture was regarded as an accumulation of different elements of material culture. In Childe's view, identities are regarded as constant, static phenomena that can change only if a socio-economic crisis or a complete population replacement occurs. Culture historians thought that long-term patterns in material culture are always correlated to the histories of ethnic groups. While there are truth and value in identifying assemblages of cultural practices and their outcomes, it should never be limited to the boundaries of a particular ethnic group (Fowler 2010: 356).

For researchers, like Malinowski (1922), material things were important only as an equipment in the study of an overlying and more meaningful social structure. In contrast with that view, processual or New Archaeology school focuses densely on material culture, which they considered as the principal source for studying past societies. According to processual tendencies, culture was interpreted as the way its members extend their influence in order to adapt to changing conditions and fulfill human needs. Accordingly, material culture was studied in terms of its adaptive function operated in such as environmental, economic, social, ideological, or other areas. Cultures were still described through different long and short patterns in material culture, but adjustment occurred due to some social organization. Identities were described as cultural responses to changing external conditions – for example, such replies when people move to the coastal region from the inland (Fowler 2010: 356-358).

In these approaches, material objects reflected that particular culture, which was regarded as impressions emerged from human practices or as an ecological development responding to the environmental changes.

Perspectives that emerged in the 1970s and 1980s changed these concepts and stated that approaches in the past did not engage with material culture and identity in social and political terms. One principal element was the changing perspective on how identities were negotiated. Anthropologists argued that ethnic groups were self-defining entities that tried to provide ethnic bonding. So practices and objects became relevant within an ethnic community when members of that society start to define themselves concerning other groups. Other artifacts overstep these ethnic boundaries and are practiced over large areas. Another critical element is that things embody cultural ideas and that societies' identities are shaped according to consuming, producing, experiencing, and exchanging those particular objects. Identities are also produced during the interactions between things and humans, not just between different groups of people. A good example can be when a pottery maker made a type of pottery using both his studied traditions and techniques, but he also placed his personality into the object. In this way, this became the process of personification through the process of objectification (Fowler 2010: 359-360).

This idea that objects and subjects are inevitably connected in a relationship placed emphasis on the practices that interact in the formation of subjects and objects. This

tendency gave base to theories such as Pierre Bourdieu's practice theory (1970, 1977) or Anthony Giddens' structuration theory (1984). They suggested that non-human and human elements i.e. *agencies* of the world were affected equally. From this period, rather than seeing the material culture as the primary reflection of identity – identity is also dependent on social, political, and cultural relationships, which change upon interactions of different ethnicities. The recognition of *agencies* culminated in *post-processual archaeology* and within other *post-structuralism* approaches. According to Tilley, we cannot regard the remains of past societies as single "text" with a single definition, because these objects are always created by multiple agents - and just as in the present – they were interpreted in many different ways (Tilley 1989). For researchers professing post-structural approaches, identity is repeatedly deferred, contextual, and inter-referential. For archaeologists within these tendencies, it means that the material culture of complete past identities is impossible to recover. Instead, they can reveal those type of objects which people manipulated in processes in order to mediate their identities (Fowler 2010: 360-364).

3.4 Heritage as identity

In recent years, heritage is inevitably connected to identity; people with shared identities usually regard the same practices and cultural elements as their shared heritage. Heritage strengthens and produces identities that can exist on different levels: our home, neighborhood, town, region, nation, continental, and the universal level. Some significant identities and heritages cannot be understood geographically. The major outcome of heritage management, conserving, and interpreting is to provide identity to a smaller or larger community. There are some other purposes as well, both with positive and negative outcomes, but the most important is to create, provide, maintain, and manage identities. Negative fallout can, for example, be when the conservation, interpretation, and designation of heritage happens at the expense of other groups. Like a family can decide whether a certain member is equipped with particular practices which made him/her a member of that family, a state or other organization can determine identity by the acquisition of heritage or its destruction (Smith 2006: 48).

Not every notion of identity can be defined or regarded as heritage. Through its ratification became heritage, an acknowledged thing, which people want to save, conserve and collect. There are many things which never be called as the subject of heritage because they were not recognized and entered into the heritage process. Typically, identities and their practices become more important when they are under threat. Such as the very first thought of a modern Greenlandic heritage was developed when Greenlanders were suppressed by the Danish government, and they were pressured to assimilate to European ways (Petersen 2000: 348).

Another interesting aspect of heritage is the elements that a particular community does not wish to conserve in the process. This phenomenon raises serious questions such as whether Auschwitz is a part of German heritage or slavery is correlated to the legacy of colonizer countries in the past. In a milder range, the matter of Norse cultural elements in Greenlandic heritage is related to this subject. It is one of my research questions whether Greenlanders acknowledge these traces as their cultural heritage, they are doing it from external demand, or it is their choice to include these elements in their legacy. The concept of *Otherness* is also associated with this subject, some ethnicities, and nations define their identities towards *another* group or nation. In studying any groups' heritage, we cannot let out the identification of the other (Howard 2003: 150-159). This

notion is also strongly related to my studied subject as I intend to observe modern Greenlanders' perceptions of Norse elements.

However, identity is more than heritage; these two concepts do not entirely cover the same area. Although most elements of identity can become heritage, people are responsible for choosing their heritage, within limits. Among the different kinds of identity levels, the national one has been the most significant and debated in recent years because it is the most capable of imposing its identity than any other level. The human interpretation of cultural heritage sites is a vital aspect of expressing this identity. The notion of the visitors - whether they are tourists or local people - determines the outcome, and can easily change the meaning of such heritage sites and their place in the national narratives.

3.5 Geographical approaches

The North Atlantic region with Greenland was regarded as a marginal/periphery area, according to contemporary writers. These territories were often depicted as "the end of the world" and placed beyond the European continent. The geographical location and the natural contexture of Greenland had a significant impact on cultural identity i.e., how Greenlanders defined themselves in this milieu. Hence, I have chosen to elaborate different aspects of Island theory, which could contribute to understanding these environmental factors and their impact and shaping nature in the cultural identity of past Greenlanders. In this matter, island theory will be discussed in the following paragraphs.

3.5.1 Island theory

North Atlantic inhabitants lived in marginalized places, often far away from the cultural hub in that time i.e., the European continent. Some outdated aspects of island theory assume that these vast distances resulted in remoteness, isolation, and scarcity in continental material culture, relations, traditions, and other practices. Traditionally, islands were considered to be remote, lonely communities, or inhabitants on these areas were often labeled as savages with only hostile behaviour. Monasteries, hermits were regularly settled on islands as an exodus from the "social norms" and everyday life, allowing them an intentional separation. Based on the archaeological assemblage, we can easily profess that these notions need to be re-evaluated. Societies on islands are indeed active parts of a broader social, trading, and cultural system.

In the matter of identity, the concept of islands is not an apparent phenomenon because it often varies according to different situations. Besides geographical islands, we can also distinguish cultural or psychological island. Such an example can be different tribes deep in the Amazonian forest who try to be self-dependent communities restricting cultural restraint with the outer world. Islands are often settled in favour of the exploitation of a desired material, natural resource; therefore, islanders have bounded their environments, water, and its sources (Pierce 2011: 72-74).

Despite studying islands in a greater context, as segments of a bigger system, we cannot automatically treat them as mainland. Although the sea cannot be regarded as a clear physical boundary between cultures - as it is an aquatic highway for transporting and exchanging cultural elements - the journey on it is not necessarily an easy one. The management and process of sea travel often require a more thorough knowledge than in the case of inland journeys. Travel through vast distances on the sea can include several dangers and unpredictable factors such as the changing nature of weather or threatening reefs in an unknown harbour. After a long journey in this dangerous environment, one can quickly feel that upon stepping on dry land, they arrive in *another world*. This *otherness* also contributes to the uniqueness of an island: these territories have always been equipped with the attribute of *being different*.

Rainbird (1999) argues that the sea must be seen as an expanded cultural horizon rather than a clear boundary between different societies. Such communities rely on sea-borne import and export, which connects them with the outer world. However, in most cases, islanders have been capable of maintaining a self-supplying way of life except for importing indispensable products (for example, iron or grain), which they suffered shortage. Besides these materials, contacts could probably provide the feeling of inherence to the rest of the civilized world, and so to Christian Europe. Access is probably the most influential factor on an island culture: the use of boats as bodies of that access. The frequency and the nature of these meetings contribute to the shaping and changing of the island's society to a large degree. Sea-bore connections must have been a more significant impact and made a bigger impression on these fairly-habited islands than in more densely populated areas. In the North Atlantic region, where islands were days or weeks away from each other, every ship could represent new ideas, objects, traditions which strengthened their cultural and psychological inherence to continental Europe (Pierce 2011: 74-76).

4. Methods

4.1 Preface

As my thesis involves several facets, I choose to utilize a handful of methodological approaches considering the theoretical frameworks outlined in chapter 3. First of all, I intend to retrace the contribution of settlers' identity in the demise of Norse settlements in Greenland. To scrutinize this, I wish to study the different aspects of identity both in the past and in modern times. Once again, I formulated my research question as follows:

- To what extent and how did the settlers' identity contribute to the deterioration of the Norse settlements in Greenland?

- What role does the cultural heritage of Norse settlements in Greenland play in today's national narratives of this cultural-historical phenomenon?

Studying the significance of the settlers' identity in the demise, I cannot leave out the discussion of the different theories regarding the collapse. First of all, I have chosen to look at the history of Norse Greenland itself, the organization of the Norse society and the written sources in order to gain a basis and understanding of what was going on there, what processes and particular decisions shaped the growth and decline of the settlements. As there is an adequate amount of theories regarding the deterioration, I have utilized a critical approach in order to eliminate irrelevant arguments and to focus on the most relevant and credible ones. Primarily written sources and results from previous researches were in use to debate and discuss these theories. However, these written materials mention and discuss Greenlandic matters from an external point of view, so I take into consideration the possibility of false information. Moreover, the above mentioned written sources usually handle information from second or even third-hand. Due to these facts, I also adopt a critical attitude towards the written sources depicting the different theories.

To investigate the identity of past Greenlanders and its role in the deterioration, the best and most obvious way to scrutinize different cultural practices and archaeological assemblages. Cultural practices are challenging to study regarding past societies unless we have a very comprehensive depiction of them in various written sources. In the matter of Norse Greenland, we do not possess such outlines, authors rarely depicted cultural processes in Greenland. So I mainly focus on the cultural material of the medieval settlement. Through this material, identity can be expressed and reveal its different roots, sources, and traditions. However, material culture includes a vast amount of objects in Greenland, both organic and inorganic, so I need to narrow down the studied assemblage. From the material record, I choose to study those objects and cultural practices, which, through identity, can be communicated in the best possible way (see chapter 7).

As I mentioned above, I would like to concentrate on the identity and how modern Greenlanders define themselves up against or in cooperation with the medieval Norse elements. In this way, the thesis I write will also unearth the phenomenon and the research field around today's cultural heritage and its aspects in Greenland. Although studying heritage is having a renaissance – also in Greenland-, the amount of written material in certain matters is surprisingly adequate. So I have to rely on information obtained from contacts and personal accounts.

4.2 The material

4.2.1 The archaeological assemblage

As I described above, I intend to carry out an analysis of a selected archaeological material regarding identity in the past. As one's identity in Europe in the middle ages was defined by religion hence Christianity, in no small degree, I choose to study the different religious objects. Under "religious objects," I imply commodities which dispose of religious meaning, practices, were found in ecclesiastical context and/or were used for religious purpose. I categorize these objects by the medium describing the fabrics' possible meaning additionally in Christianity and ecclesiastical matters.

For discussing this, I have to limit my studied assemblages, in order to correspond to the magnitude of my master thesis. I have chosen personal valued objects which hold great potential for studying an individual's or community's identity as their actions and decisions reflect choices in the material culture. In some cases, the origin and the traditions of particular artifacts will also be studied as these factors would have a contribution in shaping identity. Additionally, I intend to review the raw material (local adequacy or import), the purpose, and the significance and additional meaning in Norse Greenland.

4.2.2 Collection and procession of the material

Cultural material recorded in Greenland provides the foundation for my study. Half of the recorded artifacts are stored and exhibited in the National Museum of Denmark in Copenhagen, and the remaining objects are situated in the National Museum and Archive of Greenland in Nuuk. Although most of the artifacts were revealed and found mainly in the late 19th and 20th centuries, they are well documented and illustrated in the literature by contemporary standards. Besides studying the assemblage in excavation reports and other written matters, I established several contacts at the museum in Nuuk, where experts kindly handed over information about these objects. When it is provided, artifacts were included the date, context, and the number of ruin-group where it was recorded.

As I mentioned above, a considerable amount of Greenlandic objects can be found in Copenhagen, at the National Museum of Denmark. I also established several contacts with archaeologists at this museum regarding relevant material. Additionally, I utilized the museums' digital collection online (<https://samlinger.natmus.dk/>), which has been handy in finding and studying different objects. Moreover, I have exploited the provision of a virtual tour that is available in the whole area of the museum. The National Museum has a particular exhibition on the Norse settlers in Greenland, where objects are arranged thematically. Due to this service, I have been able to analyze objects which otherwise would not be obtainable in written material.

4.2.3 Medieval churches as sources for discussing identity

Besides the tangible material culture, medieval churches contribute to another aspect of studying identity. Studying ecclesiastical architecture, its traditions, and influences can give me a better understanding of the settlers' identity. Churches are the most apparent and visible sources of expression in connection with Christianity and the settlers' cultural ethnicity. On the other hand, differences in the building traditions can display a local, specific comprehension of identity. I intend to study whether the prior or the latter was more crucial in Norse Greenland.

I have chosen to debate and discuss these buildings on a regional scale, focusing mainly on Greenlandic material as discussing church sites in the whole North Atlantic region would exceed my dissertation. The material in Norse Greenland contains so far 20 medieval churches which can be divided into three phases:

- Landnám phase
- The Roman phase
- The Gothic phase

I intend to study these ecclesiastical buildings in the matter of architectural style, building material, date, and location in the settlements. These structures will be presented in a table (Appendix 1), and a distribution map (figure 23-24) is created for visualization of their disposition.

As a general principle, I determine to study identity through archaeological assemblages and churches to get insight into the motivations of the Norse settlers. Employing this, I attempt to explore the contribution of the settlers' decisions in the downfall of the settlements. One's decisions and choices sprang from their cultural ethnicity, which is best indicated through material culture and ecclesiastical architecture.

4.3 Cultural identity and heritage of modern Greenlanders

Cultural heritage on the island is a rather complex phenomenon containing medieval Norse, Danish, and Inuit cultural elements. In the initial phase of my project, the intention was to meet local inhabitants and carry out a comprehensive interview personally. However, the high costs of accommodation and traveling prevented me from performing these actions, so I rely mainly on exchanged emails and other virtual solutions. As a part of this, I have decided to establish several contacts at the National Museum and Archive in Nuuk and to require information about the nature of the cultural heritage management and its perception. To study that, I have chosen to carry out so-called open-ended interviews in the matter of two subjects in Greenland.

An open-ended interview can be an effective method to gather relevant information in matters which otherwise are not so well documented or studied. This type of information gathering means that although questions can be scripted, the interviewer usually does not know what the outcome of the answers will be. These interviews cannot just contribute to fulfilling primary objectives, but they can focus more on the participant's feelings, experiences, and perceptions. This method can lead the interviewer and researchers in a new orientation, allowing them to experience different perspectives. I intend to perform two structured open-ended interviews, both containing constructed questions in advance (Monroe: 2002, 101-102).

The interviews will concern questions about the cultural heritage and its perceptions in Modern Greenland. One interview will involve inquiries about the current and past exhibitions and management of the National Museum and Archive in Nuuk. I intend to approach these questions from an Inuit perspective, gaining information about whether their material culture is exhibited and at what rate compared to other assemblages. Additionally, I inquire about the management of the museum: Is the museum governed from Denmark, or is it self administered and independent from Danish authority? To gain information, I have chosen Christian Koch Madsen as my respondent, who is the deputy director and curator at the National Museum and Archive in Nuuk. The other open-ended interview involves the Inuit perceptions about the Norse cultural elements. Have these

traces become a part of their own cultural heritage? In this case, the respondent will be Alibak Hard, who is the most accomplished researcher as he is the site manager of the UNESCO World Heritage Site Kujataa. Moreover, he represents the locals' living in and maintaining the cultural landscapes of South Greenland.

4.3.1 Case study: Kujataa

Kujataa World Heritage Sites serves just as my comprehensive case study in studying the interactions of different cultural elements in today's Greenland. Kujataa is a subarctic farming landscape located in the southern region of Greenland. I assume that it will provide pragmatic research of identity as this site complex contains different traces of three cultural ethnicities. It incorporates the cultural evidence of the Norse-farmers from the 10th to the 15th century and Inuit farming communities from the end of the 18th century to the present days. The attributes of this landscape include different ruin-groups, vegetation patterns associated with farming and grazing, church sites, Inuit farming houses and buildings, archaeological objects, and other intangible traces. Studying these remains and their interactions with each other will serve as a vital evaluation in my research.

5. Norse Greenland's setting in the North Atlantic

5.1 Landnám and the structure of the settlements

Norse Greenland's history is not an isolated phenomenon that scholars concluded in the past. It must be studied in a broader context, compared to other areas in the North Atlantic region, due to connections regarding community development, trade, the lifestyle of the settlers, and the church organization (Deckers 2006: 13, Keller 1989: 113).

According to the *Landnámabok* (The book of Settlement), the first Norse people came from Iceland under the leadership of *Eiríkur Rauði* (Erik the Red). Written sources state that this colonization happened 15 years before the official introduction of Christianity in Iceland. This happened around 999/1000 A.D. therefore the colonisation of Greenland was scheduled to 985/986 (figure 4). Erik the Red departed with 25 ships from which 14 ships arrived at the coast of Greenland. That would mean approximately 500-700 people on board as Poul Nørlund estimated (Nørlund 1934: 18). These Norsemen settled down in the coastal region of the island, concentrated in 3 different settlements: the Eastern, the Western and the Middle – settlement (see figure 2). The land was divided between these families along Greenland's west coast where each family occupied their own territory. Their farms and dwellings were situated mainly in the proximity to the shoreline and the inner parts of the fjords which could have been the most fertile regions on the island. The population reached its highest peak about 1300 A.D when some 2000 – 3000 people lived in the Eastern and the Western settlement (Lynnerup 2000: 293-294).

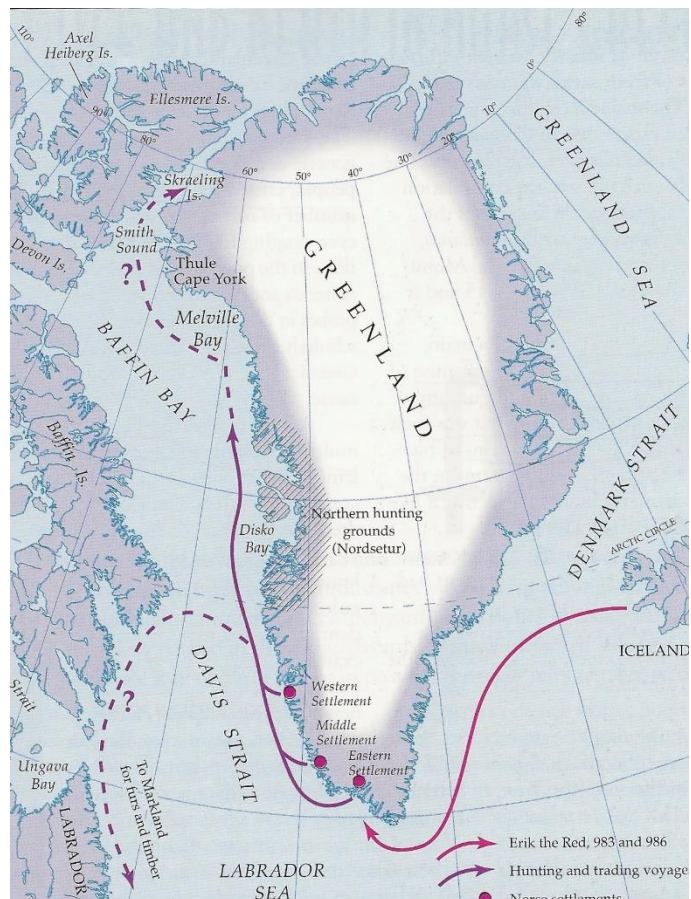


Figure 4- Map displays the voyage of Erik the Red from Iceland (Arneborg & Seaver 2000: 283)

The Norse settlers were first and foremost farmers, land-owners who preferred to continue pastoralism in Greenland, a lifestyle that they had gotten used to in their homeland. On the limited space of green land alongside the fjords and in narrow valleys, they kept cattle, sheep, and goat. The animal bone records show that bigger farms have relatively more cattle than medium-sized and smaller farms. On the other hand, past Greenlanders were always depended on the sea and its food sources: they could exploit the rich marine resources in which Greenland was abundant. In the fjords, they could easily catch seals and fish, and during spring and fall, migratory harp seals could be crucial sources of food. From later periods of the settlements, the animal bone records display a predominantly marine diet (mainly seal), increased from 40 % to 60 %, in some cases to 80 %. Thus consuming domestic animals were gradually taken over by marine food resources (figure 5) (Arneborg et al. 1999: 165-166, Arneborg et al. 2012: 130-131).

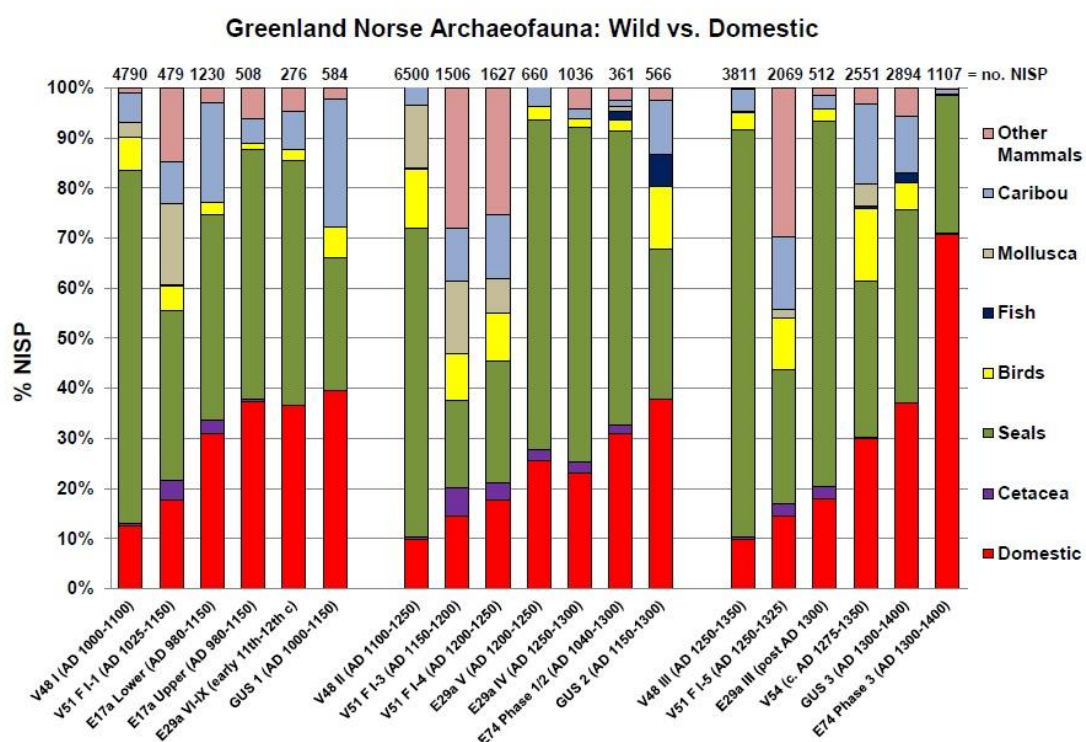


Figure 5- Distribution of species in archaeofaunal assemblages both from Western and the Eastern Settlement. Mark the high proportion of seal and other marine resources (Madsen 2014:22)

Their community was probably organized in the same way as in Iceland, which meant the Norse people in Greenland lived in a stratified society where chief families held the power to govern both the secular and ecclesiastical institutions. On the other side of the hierarchy, tenants were controlled by these powerful leaders (Keller 1989: 23-24). In the first period, Greenland did not belong to the Norwegian Kingdom; this happened later in 1261 when Greenland voluntarily became subject to the Norwegian king Håkon Håkonsen. It is interesting to note that the colony got its first bishopric already in 1225, which was assigned to Nidaros Archdiocese. It is uncertain how they could become subject to a Norwegian Archdiocese without being first subject to the Norwegian king (Arneborg 1991: 142-144, Arneborg 2003: 171-172).

5.2 Mercantile relations and relationship with neighbors

Greenland had a lack of substantial raw material (mainly iron and timber) and seemingly did not have a lot of natural resources. The whole situation was also aggravated by the harsh climate, which made the cultivation circumstantial. We can take into consideration the vast distances which raised serious difficulties for mercantile relations, the import, and export of trades. Furthermore, the periodically appeared drift ice also worsened the situation. Despite these circumstances, they did colonized Greenland. Of many driven push factors, scholars suggest that colonization occurred due to the overpopulation of Iceland in the 10th century. On the other hand, several archaeologists have suggested that the Norse expansion into the North was supposedly triggered by a pull factor: the intention to exploit maritime resources and Arctic commodities. This colonization was probably a planned and intentional movement in the Norse expansion to the North Atlantic region (Deckers 2006: 6-8, Frei et al. 2015: 439-440, Hartman et al. 2017: 129).

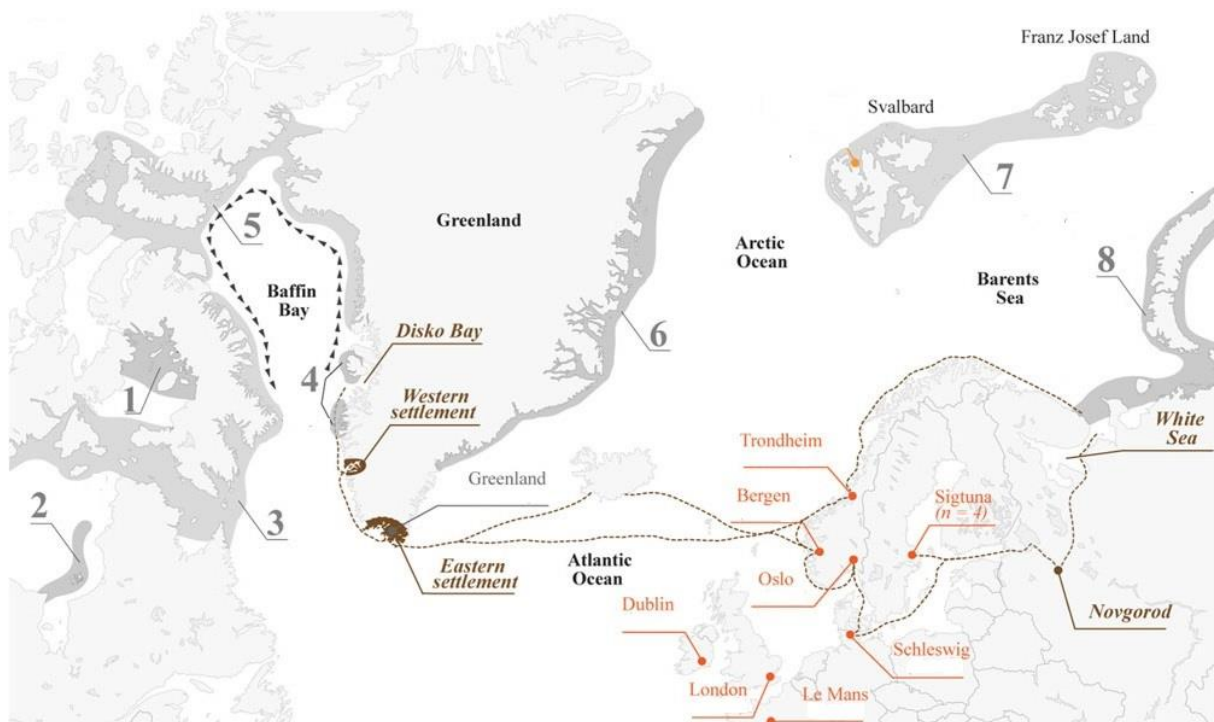


Figure 6 - Potential walrus-trading routes (dashed brown line) including the Disko Bay area (number 4), where Norsemen organized hunting expeditions. Deposits of objects carved from Greenlandic walrus tusk were found in different towns across Europe (orange place-names). Dark-grey areas mark present-day distributions of walrus populations (Star et al. 2008: 3)

Trading relationships and the utilization of marine resources between Greenland and the rest of the world are discussed in the *Kongespeilet* (The King's Mirror), which depicts that Greenland played an important role in the transatlantic imports and exports. As stated in the written sources, Greenlanders exported skins, fur, ropes, and different part of the walrus, amongst others. The tusk ivory had a high value in the middle ages, particularly from the 11th to 13th centuries, which period coincides with the heyday of the Norse settlements in Greenland. It was a highly required commodity throughout Europe, especially among the nobility and the clergy. They would have possessed playing pieces, jewelry, and religious artwork of walrus tusk with which they could display their status and power. Recent researches show that as many as 80 per cents of the archaeological finds of walrus tusks from around the year 1120 to the 1400s originate from tusk that was once taken in Greenland. In order to gain the decent amount, the settlers had to organize hunting expeditions to the Disco- bay area. These hunting grounds for the walruses were located far North from the territories of the Norse settlements. Walrus ivory is recorded as workshop debris in major trading towns such as Dublin, Trondheim, Bergen, Lund or Sigtuna and as material of art objects, gaming pieces, church

ornaments, and belt buckles (figure 6). Archaeologists have found ivory debris in Greenland, which proves that both the raw material and the product could be exported from Greenland (Arneborg 2000b: 306, Keller 2010: 1-3, Bakkevig 2009: 66-67, Star et al. 2018: 1-3).

Among others a lot of gaming pieces carved from walrus ivory were found in the North Atlantic region. These items were created by bone-cutters who were ordered to make unique, richly decorated chess figures and gaming items. Researches assume that a local craftsmen tradition was developed in Trondheim, and as we know from written sources, Nidaros (Trondheim) received indeed tax paid in walrus tooth from Greenland. It could have been quickly developed a center for Norwegian craftsmen who established their style including for example interweaving animal - plant motives. The most famous set of chess pieces is the Lewis chessmen, a group of 93 chess figures from the 12th century, found on the Isle of Lewis, Scotland. This set resembles other gaming pieces from Scandinavia, such as the one found on Hitra island, not far from Trondheim, Norway. These objects are often found where the power of the clergy or the aristocracy concentrated, such as in churches, castles or towns. Additionally, craftsmen carved belt buckles made of walrus ivory; these objects probably imitated and replaced metal buckles. Moreover, a considerable amount of book bindings, boxes, different sword attachments, and caskets were made of this luxurious medium (Frei et al. 2015: 438-441, McLees 2006: 50-51, Roesdahl 2005: 187-189, Seaver 2009: 280-280).

Walrus ivory was obtained in the *Norðsetur* (Northern hunting grounds) territories. These were the areas where they first made contact with the Inuit — or as the offensive term was applied to them in Norwegian sources- *skrælingar* (weaklings). These Inuit must have represented people from both the Dorset and Thule cultures; their members lived by hunting and fishing and thus could thrive in the Arctic natural environment. The Inuit populated the northern regions of Greenland at the same time as the Norse settlers began to colonize the south-western areas. First, it was the late Dorset culture that emerged at Smith Sound in Greenland in the 8th century, and the culture's phase ended ca. 1300. After that period, people from the Thule culture migrated from Alaska and settled down in Greenland, sometime between 1200 and 1400 (Arneborg 2003: 173-174, Arneborg 2008: 594, Bakkevig 2009: 66, 69 Gulløv 2000: 323).

The relationship between these native Inuit and the Norse settlers has been unclear and controversial so far. On the one hand, there are pieces of evidence, mainly in written sources, that the Inuit showed hostile behaviour towards the settlers. This aspect is elaborately discussed in the following chapter (chapter 6.2.3). Although it is challenging to prove trade contacts between the Inuit and Norsemen, we cannot rule out the possibility of occasional mercantile relations between these two ethnicities. The Inuit likely exchanged fur and walrus for everyday utensils such as knives, chess pieces, boxes and combs. So far 170 Norse - related objects have been found all together in the Inuit areas, which may indicate this trading relationship (figure 7). On the other hand, these artifacts can be regarded as objects simply obtained by the Inuit. They could easily collect such items in the abandoned Norse sites after the Norsemen had left their settlements (Gulløv 2000: 324-325, Gulløv 2008: 31).



Figure 7 - Objects of Norse origin from Thule-Inuit areas (Gulløv 2008: 16)

5.3 Religion and the Church system

There is also disagreement among researchers about the religion of the first settlers during the *landnám* period. As stated in the *Landnámabok* (The book of Settlement), Christianity was officially introduced ca. 1000 in Greenland. According to the sagas and other written sources, it was Leif - the son of Erik the Red - who carried out a Christian conversion on the island. He was missioned by the Norwegian king Olaf Trygvasson to lead a Christian mission to the island. Leif was reluctant to accept this mission as "*this errand would be hard to carry out in Greenland*" (*Eiríks saga rauða* ch. 5-6). Leif's father Erik, was also hesitant to leave behind his old Norse faith as stated in the written sources. Otherwise, the mission was quite successful for as much, for example, Erik's wife Thjodil accepted the new religion at once (*Grænlandinga saga* ch. 5) Therefore, the saga literature states that the first settlers were non-Christian during the colonization period, which fact is in contradiction with the archaeological data. So far, no pagan graves have been found on the island; almost all the excavated burials were placed in churchyards. However, we cannot rule out the possibility that few settlers were buried as pagans, and later, these pre-Christian graves were moved to churchyards in later periods. Moreover, it is easily presumable that these pagan graves have not been discovered yet, due to the island's extreme landscape, remote areas and the severe problem of preservation of the coastal areas. The material culture can neither deny nor confirm the religion of the settlers during the *landnám* period. Only a few objects can be associated with the fact that the settlers were familiar with mythological stories or kept their pagan traditions during the colonization period. It is assumed that some of the settlers were already Christian, while others still practiced pagan cults and worshipped several gods (Abrams 2009: 54-58, Arneborg 2008: 593).

My opinion is that the settlers were probably Christians, or at least some of them were introduced to the Christian religion. Otherwise, a handful of settlers were strongly associated with paganism and practiced pagan cults as it was reflected in later vernacular tradition. This period was precisely the transition phase from paganism to Christianity in many European countries. We can only presume how this conversion from one religion to another happened in actual practice. It is certain that the conversion did not happen from one night to another; it took time to leave behind old beliefs, cults, and traditions, sometimes for a more extended period than the Christian Church would have expected.

As I discussed earlier, Greenland's Church and the social system likely followed a similar pattern as in Iceland. It meant that a handful of people - the powerful chieftains and farm owners - owned most of the churches, and had control over the Church organization in Greenland. Several such churches were built already in the first period of the settlements. These buildings, along with the burial sites, were always in the vicinity and attached to the chieftains' farms and dwellings. This was the *eigenkirche* system which was of great importance in the social and economic organization of society. The payments to the churches could provide financial benefits and support the wealth of the leading families. This was the structure of the Church in the earliest phases of the settlements, which could have been changed similarly as it took place in contemporary Iceland. The situation of privately owned churches was probably unacceptable for the Roman Church. In the course of the settlements period, smaller churches were replaced by larger, stone buildings with more advanced structures. This could imply the headway of the Roman Church and the establishment of the Gregorian Reform. This reform transferred privately owned churches to the possession of the Roman Church as it happened, for example, in Norway. Although, the same shift in the Church organization in Greenland is doubtful since written sources describing such matters are scarce. Reforms were never implemented entirely in the Norse settlements in Greenland, and thus the proprietary church system could easily prevail in the whole settlement period (Arneborg 1991: 40-43, 2000: 314-315, Gjerland & Keller 2009: 167).

It is fascinating to study whether Greenlanders gained power or lost it once the institutional Church system was established on the island. The Archbishop of Lund appointed the first Greenlandic bishop - Arnald - sometime in the 12th century,

presumably in the 1120s. There are several debates regarding the date of the appointment and the character of Greenland's first bishop. Scholars argue about Bishop Arnald ever travelled to Greenland or that whether he was an existing person at all. The first resident bishop might have been Helgi, who traveled to Greenland in 1212. After Greenland became the subject of the Archbishop of Nidaros - in the year 1125 - the Church intended to institute Canon Law (Abrams 2009: 58-60, Arneborg : 42-43).

This change in the church organization must have implied changes in the basic construction of Greenlandic society. However, it appears from written sources that the Church never got full access to the community in Greenland. Scholars argue that the Church never actually dominated the chieftains, who managed to maintain their independence in cultural, political, and economic terms. It can be traced in the written sources, that Greenlanders resisted church reforms in some way. However, it is interesting that Greenland never produced its bishops as it was common in contemporary Iceland. Under the whole settlement period, Greenlanders always received bishops who were associated with Norway. The situation was probably two-folded: neither the Roman Church nor the chieftains could hold the hegemony of the ecclesiastical institution. (Arneborg 2008: 593).

6. Why did the Greenlandic society collapse?

6.1 Preface

People have always been curious about remote areas, their population, and the faith of that civilization. When a settlement or a culture seems to disappear abruptly, this unsolved case boosts the agility and intensity of the research. Regarding Greenland and its history, the most well-studied subject is, without doubt, the demise of the medieval Norse settlements.

Already from the recolonization and rediscovery of the settlements in the 18th century, people speculated on the ultimate faith of the Norse settlers in Greenland. At that time, people thought that descendants of the Norse colonist still lived on the island, they just lost contact with the rest of the world. When Hans Egede did not find any living Norse settlers during his expeditions, speculations started to emerge (Arneborg: 2016: 260).

Many researchers have studied this topic already from the 19th century. The urging questions is approached by many different ways and disciplines. Some scholars study this subject from a sociological perspective, while others regard ecology as the best possible approach to this question.

Archaeological approaches often attempt to find these changes in the material culture, which could be corresponded with the changes in a civilization's history. For that reason, the literature on the subject is enormous as so the different approaches and aspects of this matter. Some scholars argue that societies have a life circle just as individuals have: they emerge, grow, reach heyday, and eventually decline and fall or they are resilient enough to reorganize (figure 8). Some demises take place relatively quickly, while others are results of lengthy processes. Likewise, we can discuss different types of collapses; a civilization can collapse culturally, biologically, or eventually can reach a full extinction (Brunk 2002: 195-198, Holling 2001: 394).

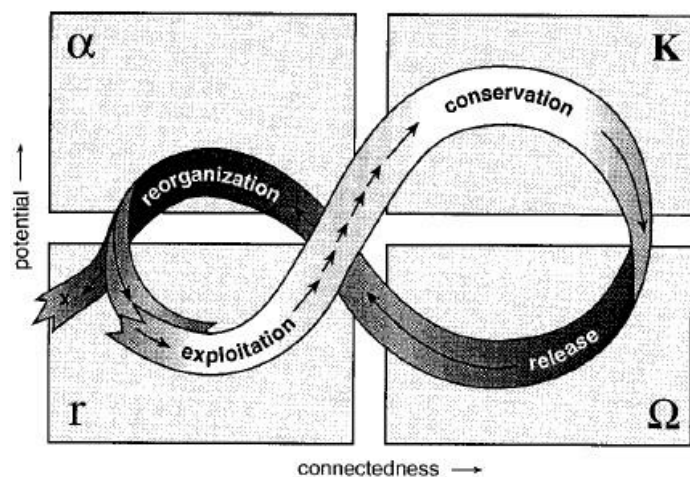


Figure 8 - The adaptive circle. The schematic exit at the left indicates the point where a society cannot reorganize itself and eventually exits from the circle; it collapses (Holling 1986 in Holling 2001: 394)

As it was discussed in the previous chapter (chapter 5), the position of Greenland in the Middle Ages reflects a well-organized society that managed to live in an extreme environment far from the European continent for nearly five hundred years. Although the harsh climate did not facilitate the settlers' way of life, they were able to build a community that was even an essential character in the European trading network. What kind of changes occurred in the settlers' life and in the natural environment that interrupted this development in the 1400s? How did it occur that a prosperous society abruptly disappeared in history?

6.2 Theories about the demise of the settlements

What theories and possible explanations have scholars found regarding the deterioration and fall of the medieval settlements in Greenland? So far, 7-8 different theories exist regarding the end of the settlements: some of them are still under debate while others are already disproved and strongly criticized (Diamond, 2005: 55). All of these theories can be placed into six main categories:

- Changes in climate and the natural environment
- Inuit theories: confrontation and assimilation
- Contact with the rest of the world, trading conditions, commodities
- Theories of illnesses and sicknesses
- Migration theories
- Human responses and decisions

Each of these theories operate on different time scales (individuals, family, generations), interact with long-term phases (rise and fall of societies, economic cycles) natural and environmental processes (erosion, climate, etc.). Each one has its own dynamic and rhythm and consists of different intra-actions. These are nearly impossible to understand using only one discipline or discussed by a single researcher. Hence it needs to be studied applying a multidisciplinary collaboration in order to approach the decline of the Norse settlements in the best possible way (McGovern 2000: 331).

The Western Settlement was abandoned earlier than the Eastern Settlement, presumably sometime in the 14th century. Therefore, when the research field of the collapse is discussed, it implies the total abandonment of all Norse settlements and the disappearance of Norse culture from the island.

6.2.1 Climate and environmental theories

Studying aspects of the climate, its impact, and changes in societies' development have always been a dominant research field since the 1900s. As today's world has been profoundly affected by global climate change in such a dramatic way, there are more and more researchers who draw to the effect of climate deterioration on the medieval Norse settlements' decline in Greenland. The climatic changes could evoke a vast amount of alterations—mainly negative but also some positive - and had considerable effects on the Greenlander's life. Changes in climate can launch a series of transformations, each causes other ones, resulting in a large spirated system. In the process of finding an explanation to the decline, however, researchers tend to omit an important fact: the distinction between processes that made that particular society vulnerable, and the ultimate trigger for the extinction (Dugmore et al. 2007: 12-13, Hartman et al. 2017: 135-136).

From around 800 to 1300 A.D., a Medieval Warm Period – called often the Medieval Climate Optimum - was recorded analyzing paleoclimatic datasets from ice cores. A colder phase followed this warm period from the first part of the 14th century, recognized as the climate phenomenon, called today *The Little Ice Age* (figure 9). This period was characterized by series of cold, wet summers and accumulation of drift ice in the Atlantic climate zone from Scotland to cities in Flanders. *The Little Ice Age*, with a colder period until the 18th century, could result in widespread negative environmental changes which could influence almost every sphere of the human life. While the warm period is

correlated to the North Atlantic *landnám*, the starting era of this climatic deterioration just corresponds to the period of the settlements' decline (Arneborg 2008: 594-595,

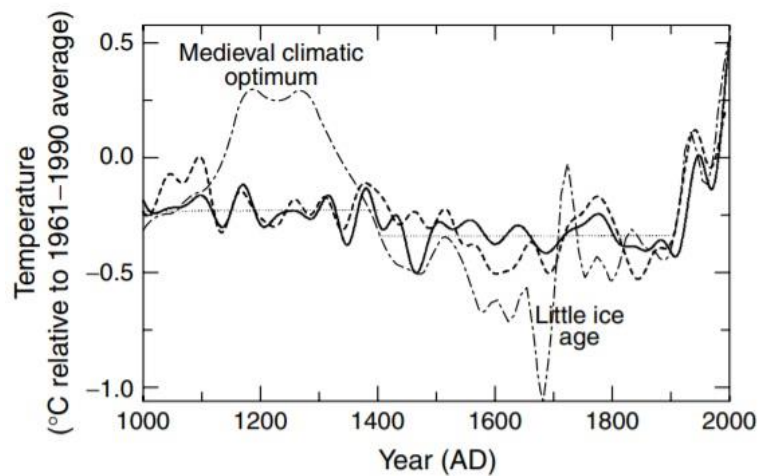


Figure 9 - Graph showing temperature fluctuation between 1000 AD and 2000 AD. The dashed line represents summer temperature of the Northern Hemisphere excluding the tropical regions (Mann 2002:2)

Jackson et al. 2018: 669-670, Mann 2002: 1-2).

There are some shreds of evidence in the historical and archaeological record confirming this climatic decline in Norse Greenland. Written accounts such as Ivar Bårdsson's *Den gamle Grønlands beskrivelse (The Old Greenland's Description)* mentions accumulated sea ice between Greenland and Iceland, which aggravated sea-borne transportation (Jónsson 1930). Icelandic sources also acknowledge abundant sea ice reaching Iceland on several occasions in the 14th and 15th century. Natural sciences from around 1930 have helped to investigate this climate - debate in a more detailed way. In archaeological research, isotope and radiocarbon studies can be helpful providing proofs to this colder period. Results from house refuse material and radiocarbon analyses of several Norse skeletons indicate a shift from a dietary based mainly on terrestrial animals to a more marine diet. However, a complete transfer did not occur due to cultural or other boundaries (see below). In the Western Settlement, the composition of the material found in several ruin-groups also indicate a colder climate and a possible coherent shortage of food. A considerable amount of dog skeleton was recorded in the upper layers of some ruin-groups with cutting marks on their bones, clearly an evidence of consumption of dog meat. Additionally, the insect distributions in these sites showed that warm-dependent flies had become extinct. All of these facts indicate harsher conditions with changing dietary and ecological aspects in the settlements (Arneborg 2003: 177, Arneborg et al. 1999: 165-166, McGovern 2000: 335).

Studying ice core samples is one sufficient method that can provide detailed climate records and hence makes it possible to observe long-term climate shifts even in historical periods. Several projects have been launched to retrieve usable data from drillings on the Greenlandic ice sheet. Through drilling and obtaining samples from the ice sheet, researchers study the O¹⁸ isotope concentration in that particular sampling. The principle behind these studies is that the lower the temperature is, the lesser O¹⁸ isotopes are deposited in residues. Studying the proportion of this isotope is also possible in the human body as this isotope is built in the tooth enamel upon consuming water from precipitation. Among others studying ice-sheet records, investigating sea sediment cores,

pollen analysis, and dendrochronology all can render information which proves this climatic phenomenon (Fitzhugh et al. 2019: 1085-1086, Fyllingsnes 1990: 184-185, Fricke et al. 1995: 869-870)

Regarding climatic and environmental aspects, we can distinguish between external and internal factors in this matter. Due to the changing climate, environmental degradation - such as changes in vegetation cover - occurred. The intensive decline of grass growth could develop decreasing number of pastoral lands suitable for grazing. Moreover, the changing weather could result in crop failure, and a deterioration of woodland. Due to stronger winds and storms, coastal erosion was speeded up. Increasing sea ice during the summer had negative impacts on navigation and hence the trading of commodities. Colder periods also had considerable effect on animal husbandry: cold, wet periods can result in higher birth-death in livestock. These changes all resulted in the loss of useful pastoral grounds, which their society was based on. As Jasinski & Søreide concluded (1999), ownership of this land established the basic social structures including economical and political power. If the land can no longer distribute its vital resources, the structure of the society - utilizing those lands - is no longer sustainable (Dugmore et al. 2012: 3660-3661, Jasinski & Søreide 2000: 128).

6.2.2 Theories regarding economy and trade

Another theory suggests that changing economies and patterns of trade could have triggered the collapse. Although there are two different notions that distinguish between weather, it was the cause, or the effect i.e.: did Norse Greenlanders lost contacts because of the demise, or did they fell into decline because of the lack of trading relations? (Fyllingsnes 1990: 118-119).

Changes in contacts with the North Atlantic regions could have had a considerable effect on the everyday life of the Greenlanders. As the island had a lack of substantial materials, they had to import particular commodities from the European continent. Hence, the settlers were dependent on trade with the continent in both the import and export of commodities. From the late 14th century, decreasing sailing contacts eventuated in the shortage of substantial commodities, such as cereals, timber, or iron in Greenland. Navigation and trade were also aggravated by the increased drift-ice, which became more prominent and thicker during the *Little Ice Age*. The trading support from Norway was indeed substantial in case of these commodities. However, there is little reason to think that the basic subsistence of Norse Greenland was dependent on trading goods. From the onset of the settlement period, Greenland had to be self-sufficient and were able to produce every commodity that was substantial for their basic living. It is quite unlikely that the Norse settlements in Greenland started to decline because of the lack of iron or imported garments from the continent (Arneborg 2011: 81-82, Gulløv 2004: 267-268, McGovern 2000: 329).

In addition, the situation could be hardened by the waves of the Black Death between 1347 and 1351 which intensely shortened the population in Europe. In Norway, this epidemic resulted in the loss of 30-50 % of the inhabitants. The epidemic inevitably affected economy; the value of several commodities must have dropped, amongst them high prestige materials could lose their value to the most significant degree. Hence, walrus ivory (next paragraph) - exploited and traded by Norse Greenlanders - could have been subject to a significant drop in value (Dugmore et al. 2007: 18).

Recently a new proposal has gained ground in the research which suggests that a shift in the economic focal point in Europe from the 13th century could have contributed to the

demise of the settlements. As I discussed earlier (chapter 5), Greenland was a substantial actor in the North-Atlantic trading system, as they could exploit and trade with a high-value prestige good at that time: the walrus tusk. However, from the 13th century merchants developed trading contacts involving several other luxurious commodities: such as fur trade from the Baltic region and elephant ivory from Africa which were traded on the newly-opened Mediterranean routes. From this century onward, the demand for Greenlandic ivory started to decline, and the medium was gradually replaced by White Sea walrus ivory and elephant ivory, perhaps most importantly regarding ecclesiastical art objects. This increasing market isolation could also play a substantial role in the deterioration of the settlements as they were dependent on the export and the income of this luxurious commodity (Dugmore et al. 2007: 18, Hartman et al. 2017: 130-131, Star et al. 2018: 5-7).

6.2.3 Contact with the Inuit

The nature of the Norsemen's relation and contact with the Inuit provides different theories explaining the downfall. In this matter, researchers distinguish between two distinctive concepts: the confrontation and the assimilation theory. In order to discuss these, one has to reveal the nature of contacts between Norsemen and Inuit. However, the situation and the debate is even more complicated as the relationship between these Inuit and the Norse settlers has been so far unclear and controversial (Fyllingsnes 1990: 31).

It was the leader of the recolonization of the island, Hans Egede, who first suggested the confrontation theory, namely that the Inuit killed and wiped out the Greenlanders from the existence. He referred to *Det gamle Grønlands beskrivelse af Ívar Bárðarson* (The Old Greenland's Description by Ivar Baardson) which describes the Inuit's hostile behaviour towards the Norse settlers. This written source reports that the Western settlement became deserted in ca. 1350 due to different Inuit attacks. Another occasion from 1379 is mentioned in Icelandic Annals; that "[the Inuit] *killed 18 and captured 2 boys who were made slaves.*" In these written materials, the term *skrælinger* was used on the Inuit. *Skrælinger* is an appellation applied to the Inuit out of their community. The appellation is quite offensive, which can literally be translated as 'weak' or 'thin'. The term also indicates that Norsemen regarded their Inuit neighbors as outsiders of the Christian, European, socialized world. Thus these people - from a Norse point of view - were not subject to the Norse laws, and so homicide would not have been a punishable crime. Nonetheless, we have to take into consideration that these sources were written by Europeans and thus might be biased depictions. (Fyllingsnes 1990: 34-35).

Confrontation theories are also supported by Inuit-oral narrations collected by Hans Egede upon recolonization in the 1800s. Some of the Inuit tales depict Norsemen as clumsy, violent settlers who often lost to the intelligent, adaptive, and cooperative Inuit. Although these oral-histories are neither credible accounts since they were narrated and collected centuries after the period of the Norse settlements (Arneborg 2000a: 117-118, Arneborg & Seaver 2000: 282-284, Gulløv 1997: 408-409, McGovern 2000: 328-329).

These conflicts between Norsemen and Inuit could have arisen from the ownership and rights on hunting grounds and marine resources. However, some researchers assume not only hostile but trading contacts between Inuit and the Norse settlers. Norse artifacts recorded at Inuit grounds might confirm this theory (see chapter 5.2). These two different cultures could easily interact with each other, both in hostile and trading terms in different periods of the Norse settlements. Confrontation theory cannot be taken for sure due to biased written sources and incomplete archaeological records about Inuit

and Norse fights. On the other hand, Inuit artifacts and technology are almost completely missing in Norse sites, such as effective hunting methods or clothing style well-adapted to the Greenlandic climate (Gulløv 1997: 400-401, 2000: 336, 2008: 20-22).

Assimilation theory suggests that the Norse settlers simply assimilated into the Inuit population and therefore adapted their way of life in the Arctic environment. However, according to a few researchers, this concept was unacceptable, which involves a "*higher Christian-culture succumbed to a wilder tribe*" (Sundt 1860: 161). For some researchers such as Fjodtjof Nansen this theory seems logical and credible which is often supported by written accounts. These narratives occasionally mention that past Greenlanders had abandoned their Christian belief and adapted an Inuit way of life (Fyllingsnes 1990: 66-67).

In contemporary research, assimilation theory is still controversial and heavily debated. On the one hand, anthropological samples taken from the skeleton material from Norse graves do not indicate any assimilation process between Norsemen and Inuit (Hansen 1924: 518). Similar results were unearthed during the excavation of ruin-groups in the Western Settlement showing that no mixed race had occurred at this time. Additionally, Inuit skeletal remains from West-Greenland did not show Nordic anthropological features. When scholars intend to disprove assimilation theory, they often refer the cultural and ideological differences between the two ethnic groups, namely that it would be impossible that a Christian-European farming society would have adopted a "heretic" way of life. In this case, they would have to abandon their lifestyle and socio-ecological system based on the ownership of the land. Additionally, The Roman Church and their divine intellect would have also prevented this total assimilation. On the other hand, blood group studies and Inuit folklore stories might indicate a possible assimilation of some Norse settlers into the Inuit population (see chapter 9.2.1). Particular individuals or groups - those who did not migrate to other territories - might have assimilated to the local society (Fyllingsnes 1990: 68-70, Jasinski, Nilsen & Søreide 1999: 130).

6.2.4 Migration

Researchers have always favoured migration theories as it would be reasonable to think that settlers migrated to other lands when life in Arctic Greenland became unsustainable. In this matter, there are several concepts regarding this migration: whether they settled in North-America, journeyed back to Iceland, Norway, or England.

In written accounts, there are no mentions regarding the migration of Norsemen back to Europe in the late Middle Ages. Although some researchers suggest a possible re-settling and propose Iceland, Norway, or England as final destinations: the latter due to fishing and trading contacts while the first two because of the settlers' connection with those lands. Whereas these presumptions stand without any significant discussion, a possible Norse migration to North-America have drawn considerable attention among scholars. The concept of a North-American migration is rooted in the tradition of the *Vinland journeys*. *Grænlandinga saga* (The saga of Greenlanders) and *Eiríks saga Rauda* (The saga of Erik the Red) reports journeys of the Norse Greenlanders to North-America around the year 1000 A.D. Pervaded with national-romantic notions, some scholars tried to connect these travels with a possible migration from Greenland in the late Middle Ages. However, the written material and the archaeological record cannot prove this theory. On the other hand, Helge and Anne Stine Ingstad managed to find Norse traces at excavations of L'Anse aux Meadows site in Newfoundland. The site was dated to circa 990 A.D. using C¹⁴ results, which correspond well with the possible date of the *Vinland*

journeys. Nevertheless, this fact does not indicate that their descendants in the 15th century also journeyed to these territories and settled there (Fyllingsnes 1990: 138-151, Ingstad & Ingstad 1985: 258).

6.2.5 Sickneses

Some scholars assume that different kinds of diseases could weaken the settlers' health, and hence with their impoverished well-being, they were not able to withstand other external changes. Moreover, it is argued that waves of the Great Plague (1347-1351) reached the coast of Greenland, which caused devastating population - decrease elsewhere in Europe, including Iceland and Scotland in the North Atlantic. The discussion around illnesses and their contribution to the downfall was aggravated by Poul Nørlund's excavation and discussion of the Herjolfsnes site in 1921 (Nørlund 1924: 252).

Human bones from the Herjolfsnes site gave the basis for the degeneration theory. The skeletal material was examined by F. C. C. Hansen, an anthropologist in Copenhagen, who, together with Nørlund, determined that "...*the last Norsemen at Herjolfsnes were a degenerated race...*" (Hansen 1924: 296). Among others, Nørlund mentioned signs of sterility, tuberculosis and worn-out teeth recorded on the skeletal material. According to Nørlund these factors were more than enough to cause a decrease in population and finally the complete biological extinction. Later examination of the human bones from Herjolfsnes disproved Hansen's and Nørlund's assumptions as no deformations and degenerations were found on the skeletons. It is generally assumed that the bones shrunk and deformed in the ground of the cemetery and upon later transportation to Denmark, they dried out and became extremely fragile. As a result of this, degeneration theory was entirely disproved and abandoned in Greenlandic research (Fyllingsnes 1990: 160-163, Lynnerup 2009: 22-23).

The argument about the destructive effect of the plague in Greenland has a long tradition in the research. Already in the 1700s, people professed that pest had come to Norse Greenland and caused irreversible damages in earlier centuries. However, neither written sources nor the archaeological records have found evidence on this epidemic in Greenland. As contagious diseases cannot be documented well enough in the skeletal material, mass graves could indicate such diseases. At Brattahlíð (Qassiarsuq) site, archaeologists found a grave with 13 individuals, however these remains did not show any traceable signs of the plague. Several other mass graves were recorded, such as Ø-149 Narsarsuaq (Uunatoq) and Ø-64 (Inoqquassaat) ruin-groups in the Eastern settlement or Sandnes at the Western settlement. Archaeologists could not record signs of pest in any of the cases (Fyllingsnes 1990: 165-166).

6.2.6 Pirate theories

Theories concerning different pirate attacks in the 15th century have emerged during past courses of Greenlandic research. It would be a logical theory that the deterioration was the result of deportations and murders. This theory was based on the fact that murders, raids, and abductions had been reported elsewhere in North-Europe in the late Middle Ages. Some written sources might indicate similar attacks in the Norse settlements in Greenland, although such materials must be handled with criticism. Pirates of English, German, Portuguese, or Basque origin are the most prevailing perpetrators. Nevertheless, this theory has gained little interest among scholars who tend to draw their attention to widely-discussed theories such as aspects of climate deterioration or the

human responses in the demise (see following paragraph) (Fyllingsnes 1990: 121, 135, Keller 1989: 31-32).

6.2.7 Human impact

Nevertheless, it would be a mistake to refer everything to internal factors regarding climate change and to omit the study of internal aspects: human responses and decisions. It is generally assumed that the settlers failed to adapt to the changes and thus a human impact i.e., internal factors had a major contribution in the demise. A significant one in the downfall was the settlers' decisions and how they responded to these changing aspects. Regarding human impacts, researchers distinguish between two outcomes: the successful and the failed adaptation.

Traditionally, it was generally assumed that the Norse settlers failed to adapt to the changing environment and did not attempt to alter their social and ecological systems during the deterioration. Some scholars argue that possible overgrazing on the grounds had a considerable role in the demise. Analyzing pollen cores and soil samples in both settlements uncovered damage in the pastoral system and the vegetation, namely a rapid decline in dwarf willow and birch trees followed by soil erosion from about 1000. So it means that these vegetational changes had already started before the first signs of the demise appeared. Other inner factors such as the Norsemen's rejection of adapting Inuit Arctic-technologies, the overexploitation of pastoral grounds, and unsustainable harvest of wild commodities could contribute to the downfall (Berglund 1986: 110-111, Dugmore et al. 2007: 13-14, Ingstad 1959).

Nevertheless, it would be an exaggeration to state that Greenlanders were not prepared for the Atlantic lifestyle, farming, and agriculture. For nearly 500 years, they could manage sustainable exploitation of pastoral- grounds, and Arctic commodities. Ongoing researches show that Greenlanders managed to create and supervise a substantial system that even responded effectively to the changing environmental aspects (Dugmore et al. 2012: 3660-3661). This proper adaptation is also acknowledged in the nature of the settler's diet. The animal bone records show that Greenlanders had a dominantly marine diet from the onset of the *Landnám* period with an increasing marine component from the 14th century. Additionally, isotopic evidence from human remains reveals that some settlers could base their diet on marine resources at a 70-80 % rate (Arneborg 2011: 261-264, Fitzhugh et al. 2019: 1085, 1088).

This overall image demonstrates well how Norse Greenlanders were able to adapt to a range of climate changes through the onset of the *Little Ice Age* but failed to cope with similar scale perturbations when additional, unrelated factors co-occurred. Successful adaptive decisions made at the beginning of the settlements period, created vulnerabilities in later phases. The settler's concentration on particular economic activities (utilizing walrus ivory) and dietary choices (mainly marine-based diet) were effective and could cope with a degree of changes in the short term. Nevertheless, on a bigger scale, due to these decisions, they ultimately lacked resilience when global economic and environmental changes occurred (Berglund 1986: 112-113, Dugmore et al. 2011: 3661-3662, Nuttall 2010: 32-33).

6.3 Postface

In further discussion, I intend to unfold the contribution of human impact discussed in this last paragraph but with a main focus on identity and human decisions in the downfall, i.e., "peek behind the curtain" and reveal why they made those particular

choices. In order to study this, I will concentrate on the discussion of the physical manifestation of identity in the following two chapters: valued personal objects (chapter 7) and ecclesiastical buildings (chapter 8).

7. Valued personal object - portable identity markers

7.1. Preface

The material culture is the substantial body for creating and understanding the settlers' Christian identity and their decisions with it. Artifacts were created for a specific purpose, to show this character through the meaning of that particular object. Besides the content and function, objects held two other components: the artistic style and the medium. Most commonly, artifacts were studied mainly by discussing their function and style, but in the case of Greenlandic assemblage, discussing the choice of the material is also crucial. Due to the extensive contacts of Norse Greenlanders, and the island's geographical location, it is expected to find alliterations in the choice of raw materials and adaptation of local resources and traditions (Kopár 2008: 106).

Correspondently, I have chosen to categorize the assemblage mainly by the medium of artifacts, discussing the occurrence and the meaning of that raw material in a religious context. The Norsemen's choices of artistic media expose aspects of the cultural identity and cultural contacts of the Norse Greenland colony. It also reveals reasons for the Greenlanders' willingness to adapt to the local occurrences and, in other cases, their unwillingness to act the same way. I intend to study what extent the Norse settlers followed continental fashions of material culture and what extent they developed their style, characters, and use of raw material regarding religious objects.

7.2 The assemblage

The studied assemblage consists of ecclesiastical artifacts, which in my opinion, can express the settlers' identity in the best possible way: they combine the religious and the artistic aspects; both of them serve to express cultural identity. Under the terminology '*religious object*' I refer to all kind of objects of all medium that was created by an ecclesiastical purpose or carry religious meaning (inscription, the form itself) for express some belief. Greenlandic art tradition has its roots in the pre-Christian Viking world, but the style and workmanship of artistic objects were strongly influenced by Christianity and its design. Art and artistic stiles served as a way of self-expression in both cultural and religious meaning. From these religious objects I have selected to study valued personal objects which reflect important identity elements. Such possessions could provide individuals, and groups with the sense of belonging to a certain community or in other cases the notion of otherness and uniqueness (White & Beaudry 2009: 211-212).

Although the nature and distribution of religious artifacts in Greenland carry several challenges in interpretation due to the structure of the material. Accordingly, the lack of precious metals might display the image of a community missing members with high-society status: namely powerful chieftains and priests. In other words, that they did not obtain such income to own precious metals in large quantities. However, the scarcity of gold and silver objects can be explained with other factors and processes (see chapter 7.2.1) (McCullough 2016: 141).

In many instances, archaeology tends to concentrate on the analysis of these items, and correspondently studying the remains of upper class of society. However, this approach might result in an unbalanced image of that society omitting the cultural material of the 'common people.' Nonetheless, the content of the Greenlandic material presents a unique opportunity to discard the exaggerated emphasis placed on high-value objects. In the case of the Greenlandic assemblage, a significant amount of religious, archaeological

objects made of non-precious materials have been preserved - especially of organic material - in comparison with other countries in the North Atlantic. Due to good preservation conditions in Greenland, it is possible to analyze the day-to-day religious objects and their meaning.

7.2.1 Metal

As it was discussed earlier in chapter 5, certain natural resources were not available on the island; the range of useable materials differed from contemporary Scandinavia and even from the geographically closer Iceland. It is generally known that Greenland was short of metal, particularly bronze and iron, which were indispensable raw materials for making everyday objects, utensils, and weapons and were also crucial to create particular religious objects. Archaeology has been so far recorded a modest amount of bronze, iron, and lead objects in Greenland compared to other sites in the North-Atlantic.³ However, it does not mean these objects were entirely absent, but preferably it might indicate the fact that Inuit collected and reused these metal objects after the Norsemen abandoned their dwellings. This theory can be bolstered by those metal items (total of 101 pieces) found at different Inuit sites (Gulløv 1997: 250, Gulløv 2000: 323, Kopár 2008: 102-103).

Shreds of evidence have been recorded regarding local production and smelting of metal on the island. These indicate smelting from crude iron, not actual smelting from the iron bog, and correspondently no hearth pit has been found on Greenland, which could indicate a large-scale metal industry. Additionally, the lack of charcoal would have made advanced smelting -techniques impossible. Amongst others, they are usually smithies, soapstone molds, and pieces of slag that can be found at Norse sites. Therefore Norsemen had to import iron in the form of crude or wrought iron, for manufacturing the desired metal utensils, or in the case of elaborately - formed items they could have imported the objects themselves (McCullough 2016: 186-188).



Figure 10 - Lead pilgrim's badge with a Crucifixion scene (Kopár 2008: 109)

Regarding precious metals, artifacts made of silver and gold are almost entirely missing from Greenland: only six such items have been recorded so far, from which there are only two gold rings. These however cannot be regarded as personal objects as they represent ecclesiastical positions and thus were usually the property of the Church. Compared to objects of other mediums the number of devotional artifacts made of metal is relatively low. In the middle ages, it was widespread to wear or own any form of the cross expressing personal Christian devotions. Worn or hung crosses from a cord were common items in the whole Christian world, while in Greenland, only three such items were recorded. One of them is a simple pewter pendant cross from Hvalsey site, probably of English provenance. The object is formed in the Latin cross-type and has a small hole bored through the upper part of the pendant (Seaver 1996: 173). A lead plaque from Frederiksdal near Herjólfssnes also represents personal devotions of a Norse settler. This artifact shows a higher level of molding, although it is poorly preserved, so it is not possible to deduct further conclusions regarding technology. The plaque depicts a biblical scene with a Crucifixion, in the presence of the mourning Virgin Mary and John. The

³ For example at Gásir in Iceland (Vésteinsson 2009).

object is assumed to be a pilgrim's badge, also associated with foreign provenance (figure 10) (Berglund 1988: 35).

7.2.2 Bone

Besides obtaining metal via trading, it seemed an obvious solution to replace it with locally accessible resources. Osteological mediums were utilized to create every-day objects such as combs, household utensils, garments, figurines, and gaming pieces. These items were carved from bones of both wild (walrus, narwal, whale, seal) and domestic animals (sheep, cattle). The most precious bone of all was ivory taken from walrus and narwhal skulls. These valuable mediums were obtained during hunting expeditions to the Disko Bay area and were used by Norsemen to cover their tax duties to the Norwegian Kingdom. Walrus ivory was the main export ware, which was a highly demanded material in the early Middle Ages (see chapter 5.2). It was usually exported in an uncarved state, in most cases, in pairs still attached to the skull of the animal. However, the large quantity of debris and working marks on the bones recorded in Greenland also indicate a local preparation and primary bone processing industry on the island. While walrus rubble was found in great abundance at almost all excavated sites, the number of actual objects made of walrus is relatively low in the Norse settlements. This implies that Norsemen appreciated the export value of the medium over the material's importance used in delicate artistic objects. (Kopár 2008: 104-105)

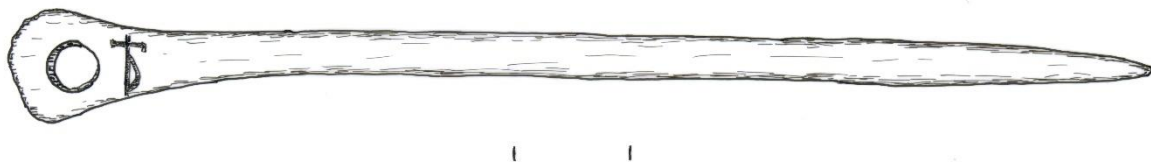


Figure 11 - Pin of caribou with the combination of a cross symbol and the rune 'b' (<https://samlinger.natmus.dk/DMR/asset/224067>)

Bone item in the case of personal Christian devotion was only found in a few occasions. An incised cross on a cow astragalus was found at Ø-71 in the Eastern Settlement. A hole was bored through the upper part of the bone, suggesting that it was hanged or worn. This little piece of bone could function as a kind of amulet just as the little animal talismans carved from walrus ivory (McCullough 2016: 158). In several cases, different cross symbols on domestic objects appear alongside with owner's marks. Such an item is a pin of caribou antler from Sandnes, which was carved with a combination of cross and the rune 'b.' (figure 11). The same combination was recorded on a small spade/lade of whalebone from the same site (Berglund 1998: 52-54).

7.2.3 Wood

Despite the limited accessibility of wood, a considerable amount of wood objects has been recorded in Greenland. From the coastal region, driftwood could be obtained and worked for smaller objects both in an ecclesiastical (crosses, crucifixes, church furnishes, and portals) and in secular context (gaming pieces, household utensils). As well as the use of everyday objects, wood was perfectly capable of being the medium of artistic purposes. Compared to contemporary Scandinavian examples, which sometimes represent complex floral and animal ornamental patterns, wood objects in Greenland have a relatively simple design, and the decorative elements are also limited. These objects were likely made in Greenland, aside from few exceptions in the assemblage. Although most of the items are simple in design and pattern, there are some beautifully carved and formed

pieces imitating examples made of valuable materials. This indicates that carvers saw and studied imported pieces and that they were aware of wider continental styles and designs (Kopár 2008: 106-107, Pinta 2018: 8-10).

The number of personally valued wood objects is relatively high at the Norse settlements. Most of these items are crucifixes or crucifixion scenes found in the Western and the Eastern settlement. The crucifix from the churchyard in Sandnes (ruin group V-51), shows a similar scene as the lead plaque mentioned earlier (see above) (figure 13). The object depicts Christ on the crucifix with Mary and St. John next to the central figure. The three of them are encircled by a richly decorated ornamented frame. It is assumed that the crucifix is imported, and belonged to a local priest whose grave contained this personal object.



Figure 13 - Crucifix of wood depicting Christ, Virgin Mary and John (Kopár 2008: 111)



Figure 12 - Wooden plank with Crucifixion scene (Kopár 2008: 112)

The other religious artifact is simpler in formation and decoration and thus it is possibly a local production following Continental examples (figure 12). This cross was recorded in ruin group V-53d, Austmandal, and shows Christ on the crucifix with closed eyes and a *Gloria* around his head. Both objects were dated to ca. 1300, display European artistic traditions, and have parallels with contemporary Continental and English models (Kopár 2008: 112-113).

Several other aspects reveal that past Greenlanders followed the admitted Christian burial traditions and practices. Many deceased in the Herjólfssnes churchyard were given wooden crosses, varying greatly in size, design, and craft; some of them are simple split sticks while other pieces are finely carved with runic inscriptions. Several examples imitate metal, metal-covered, or gilded crosses with their carved ornaments.⁴ Fifty-eight such wooden crosses were found altogether, which makes this assemblage the most extensive collection of preserved wooden crosses in the North Atlantic (figure 14). The crosses were originally dated to ca. 1300 by Poul Nørlund (Nørlund 1934), but the runic inscriptions on several of the crosses assume an earlier date and thus a more extended period of use (Stoklund 1995: 537-539). The functions of these crosses is a highly debated subject among scholars. Some crosses could have had an extended religious magic purpose as for example the Latin mystic formula indicates on the cross no. 150. Other specimens suggest that these objects were not limited to burial traditions but were dedicated to religious devotion in the lifetime of the deceased; thus, they were the physical materialization of personal religious beliefs. This theory is upheld by many runic inscriptions such as "*God the Almighty guard Guðleif well*" or "*Þorleifr made this cross in praise and worship of God the Almighty*" found on these crosses. The design and

⁴ In at least two cases, crosses imitate insular (Celtic) design with semi-circular armpits (figure 15).

formation of the crosses surely confirm this theory as they differ from contemporary funerary crosses from England and France. Two of the Herjólfssnes (Ikigaat) crosses imitate Celtic design with the shape of semi-circular armpits (figure 15). Other specimens imitate metal, metal-covered or gilded examples indicating an imitation of imported metal crosses, made in a locally accessible medium. The narrower part at the bottom of the Greenlandic crosses suggests that they might have been hand-held crosses (processional crosses) used during rituals or could be attached to turf walls of the houses and thus served as objects of private devotion. Upon burial, crosses could be planted in the ground, functioning as grave-marks (Lynnerup 1998: 59-60, Seaver 1996: 99).

Two similar crosses were recorded at V-51, Sandnes⁵ in the Western Settlement. The context of these finely carved items indicates an analogous use of domestic worship in the dwelling (Berglund 1998: 49). Additionally, a smaller burial cross simple in design was recovered from the so-called family grave at Sandnes. This object rested in between two adult females, each buried with a child. Furthermore, several wood fragments interpreted as parts of such crosses were unearthed at both the Eastern and the Western settlement (Roussel 1936: 17-18, Lynnerup 1998:24).

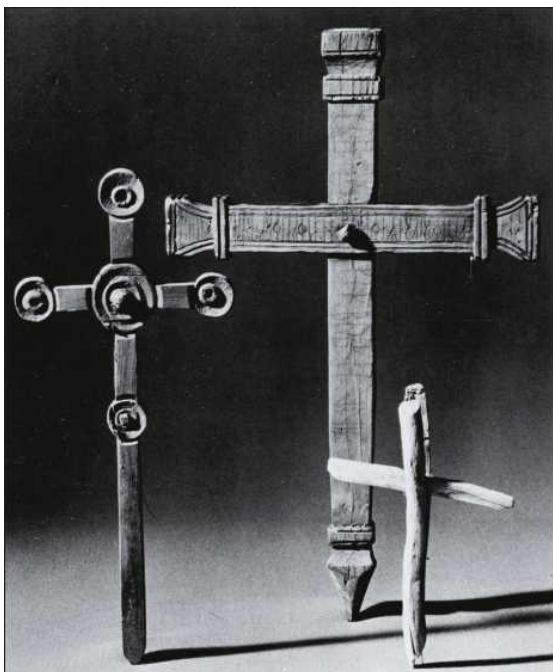


Figure 15 - Three examples of fifty-eight wooden crosses from Herjólfssnes churchyard (Kopár 2008: 113)

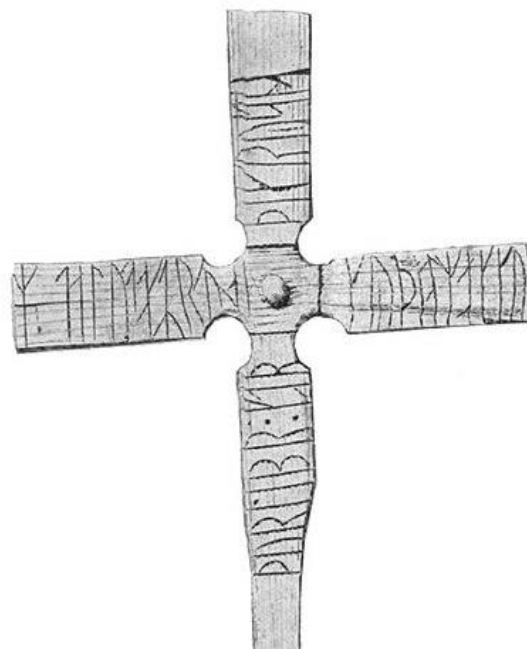


Figure 14 - Cross with semi-circular armpits and runic inscriptions (<https://samlinger.natmus.dk/DMR/asset/189269>)

Cross symbols do not appear only as independent crosses or crucifixes but were also incised or carved on the surface of different wooden utensils and objects just as they also occur on other materials (see chapter 7.2.2 and 7.2.4). Different types of crosses were recorded on ladles, bowls, spoons, scoops, cutting-boards, spade blades, wood panels, and other unidentified objects. Usually, they are incised crosses, but in one case (a big ladle) the symbol of a ringed cross was cut through the material. Joel Berglund separated ten cross variations by form appeared on all kind of medium in Greenland (figure 16) (Berglund 1998: 49). The Latin form of the cross is the predominant variation in the settlements, most commonly with arms terminating in a triangle or 'Y' shape. Aage Roussel referred to these as "typically Greenlandic," although the form is also known

⁵ The site is usually cited as GUS or Gård Under Sandet (Farm-Beneath-the-Sand).

from the Faroe Islands and Norway (Berglund 1998: 50; Roussell 1936: 205). In almost every case, the triangular ends are empty, except on one occasion when the cross's arms extend to the base of the triangle (figure 16 type 1). A piece of leather containing similar three-based crosses (i.e., trilobite) alongside with other cross symbols was excavated at Herjólfssnes by Poul Nørlund.⁶ It is suggested that this form represents the runic 'M' for

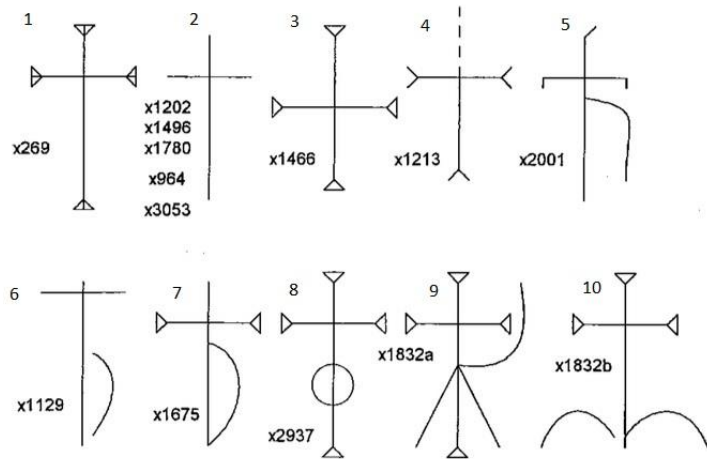


Figure 16 - Cross variations recorded in Greenland (Berglund 1998: 49)

Maria. In several other cases, the cross was combined with different runic letters. These marks are usually interpreted as owner's marks representing personal valued objects combined with the symbol of the cross as a magic charge and the manifestation of the owner's religious views (Berglund 1998: 51-52).

Besides single runic letters, complete rune inscriptions associated with Christian beliefs or practices were also recorded on wooden objects. Christian prayer counters are one group of artifacts that usually contain religious runic inscriptions and notches or other repetitive features in increments of 5, 10 or 15. This feature probably helped the owner tracking the recitation of the rosary or prayers. At Sandnes, a counter was excavated with five carefully carved nooks and the runic inscription "Hail Mary, Full of Grace" on the back (figure 18). A tally stick consisting of 10-10 notches in two groups and a Latin 'M' at the end was found in Qoorlortop Itinera. The object has a hole on one end, perhaps for the purpose of being worn around the neck or the wrist. Similar notches were recorded on a wooden artifact in the shape of a fish from V-52a Umiviiarsuk. The item was notched ten times along its "spine" and has a runic engraving associated with Mary and a Latin rendering of a Psalm (figure 17) (Imer 2012: 69-70).



Figure 18 - Prayer-counter from Sandnes (<https://samlinger.natmus.dk/DMR/asset/189267>)

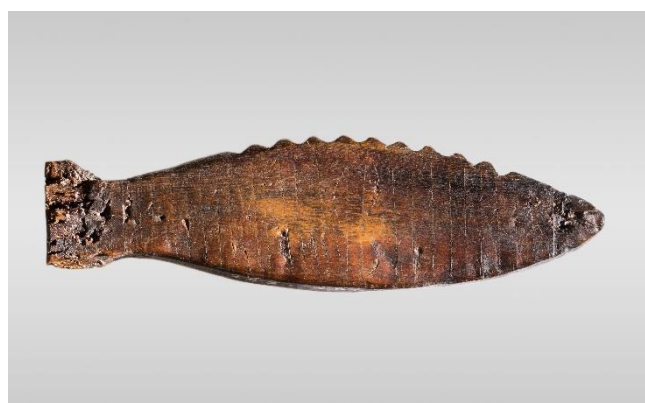


Figure 17 - Fish-shaped object of wood from V-52a Umiviiarsuk (<https://samlinger.natmus.dk/DMR/asset/190013>)

⁶ Being the only textile object in connection with religious interpretation, I chose not to establish a separate chapter for the material. Instead of it is referred here because of the similar cross motif that both wooden objects and this scrap bear.

Another fish-shaped wooden object was recorded at Sandnes but in this case without notches or runes. This fish was a universal symbol of Christ, mainly in the Early Christian times. In another interpretation, fish-shaped objects can be associated with the Virgin Mary as she is also the patroness of Seafarers and the occupation of the sea. (Berglund 1998: 52).

At Herjólfnes, in one case, a small wooden stick, the so-called Gudveig's rune staff was carved in the memory of a deceased pagan person and was given to somebody else as a commemoration. Hence it can be interpreted as a secondary Christian burial (Kopár 2008: 108).

A small wood fragment was excavated at Garðar (Igaliku) site interpreted as an amulet. The object contains a portion of Ave Maria's prayer reading "*...et benedictus fructus ventris tui*" ("...and blessed is the fruit of thy womb"). Such prayers are also recorded on wooden crosses (see above) and also on steatite objects in connection with textile production (see next subsection) (McCullough 2016: 170-171).

7.2.4 Stone

Likewise, stone was a widely used material in Norse Greenland; however, not all types were available on the island. Due to the lack of clay, Norsemen had to import pottery probably from Norway and other parts of the continent (Roussel 1941: 243). On the other hand, soapstone (steatite) was an easily accessible medium and thus utilized extensively in the Norse settlements. Due to its soft but sturdy character, it could be shaped relative effortlessly, but at the same time, objects of this medium were rather durable. Moreover, soapstone is heat-resistant and has a high heat-storage capacity, so it is a suitable material making cooking vessels. Norsemen made all kinds of objects of soapstone both for secular and religious purposes. Steatite was used for making household vessels, cooking earthenwares, tools, loom weights, oil lamps, small figurines as well as artistic artifacts expressing Christian beliefs and traditions (Hansen & Storemyr 2017: 9, Kopár 2008: 108-109).

A significant number of stone objects were recorded in connection with personal Christian devotion both in the Eastern and the Western settlement. Of these, a single jet cross was found by locals near the shoreline at Ø-111, Herjólfnes. The cross is 13 mm wide and 4mm thick, forming an

equally-armed greek cross. At the end of each cross-arms, two concentric circles are engraved while in the middle of the object, two sets of such circles are situated (figure 19). The circles of the ornament are inlaid with a lighter colour, possibly orphiment⁷ to highlight the decoration. Through one arm of the object, a hole is bored through so it could function as a worn pendant. Nørlund



Figure 19 - Almost identical jet cross- pendants from York (left) and Herjólfnes (right) (Arneborg 2000b: 316)

⁷ Orphiment is a yellow mineral, typically used in illuminating Christian manuscripts.

suggested that the cross was made of bone (Nørlund 1924:192), but Pierce determined it to being crafted from jet (Pierce 2011: 248). Jet was considered to hold magical properties in the middle ages, and hence it suited well for making protective amulets. The item has been dated to the 11th or 12th centuries based on its stylistic style and form, and it is considered to come with English trade. The cross shows resemblance with specimens across the North Atlantic, from Norway, Ireland, and Scotland with a consecration around Yorkshire, England: nearly identical examples were recorded in great abundance in York and Whitby (Pierce 2011: 134, 248; McCullough 2016: 157).

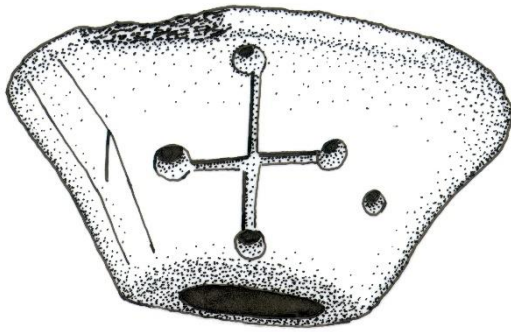


Figure 21 - Spindle whorl with cross and rune marks
 (<https://samlinger.natmus.dk/DMR/asset/224175>)



Figure 20 - Loom weight fragment with the inscription *paradi/parati* (Imer 2008: 83)

Several steatite fragments were found at Garðar (Igaliku), interpreted as molds for creating absolution crosses made of lead. The fragments do resemble the formation of cross's arms, but their purpose cannot be determined for sure as so far no lead crosses have been recorded in Greenland (Nørlund et al. 1930: 146-147).

Weaving and the domestic produce of textiles were substantial in Greenland, which is proven by the many textile tools found in the Norse settlements. Loom weights and spindle whorls comprise the largest group of such objects; they were equally found both in the Eastern and the Western settlement. Besides, different owner marks and non-religious runic inscriptions (for example, name of the maker), such items could also hold some Christian significance. On several spindle whorls and loom weights, different cross symbols appear - sometimes together with owner's marks - emphasizing the Christian religion of that person who made or owned that particular object (figure 21) (Imer 2008: 78). Additionally, on many of these objects, short-inscriptions in connection with Christianity or rune-like characters combined with small crosses can be found. Most frequently, the short *ki-*, *gi-* *tiki-* inscriptions can be recorded, which are associated with abbreviations of saints or Christian prayers. Another small object, a loom-weight contains, in turn, the inscription *paradi/parati*, which is interpreted with the word 'paradise' (figure 20) and thus can be placed in Christian context (Pierce 2011: 253).

Besides the previously described inscriptions, runic letters reading Maria or the name's fraction can be found on these textile objects in the Greenlandic assemblage. These items - called *Marian-objects* - were likely created pursuing the Christian tradition of invoking Mary in connection with textile production. Virgin Mary is often associated with weaving and spinning. The symbolic originates from as early as the 5th century comparing the womb of the Virgin Mary to a workshop that produces „the awesome loom of the divine economy.“ Thus, the image of Mary spinning or weaving with a spindle and/or distaff in her hands found its way to artistic depictions. Besides several examples, a

spindle whorl with incised *ki-*, *gi-* inscriptions were found, together with a Maria-engraving and a cross. All of the three components confirm the religious interpretation of this particular object. Additionally, other objects such as steatite molds for spindle whorls and warp weights associated with Marian veneration in the form of passages of *Ave Maria* were also recorded (McCullough 2016: 167-168, 170). Similar Maria (Maia) inscriptions also appear on objects of other materials such as on wooden crosses (see chapter 7.2.3).

Unidentified steatite slabs varying in size, form, and decorations were recorded at several ruin-groups. These objects are interpreted as fragments of plates to eat from (Nørlund et al. 1930), as pieces of rectangular vessels (Pierce 2011: 252) or as weight stones (Høegsberg 2017: 217). Their decorations range from simple incised ornaments, crosses, runic letters to more complex motifs; on one piece from V-51, Sandnes, a symbol of St. Hans's Cross can be seen. In religious context, this used to symbolize either the name of God or the human nature of Christ. Another specimen from the same site depicts a cross that resembles the form of consecration crosses of soapstone from Faroe Islands. The example found at E-167 has an elaborate ornament: on one side, there is a depiction of Christ on the cross, while the other side was decorated with leaf motifs and a band of diamonds (figure 22) (Høegsberg 2017: 216-217, 220).



Figure 22 - Slab of soapstone with decorations on both side (Høegsberg 2017: 220)

7.3 Analysis of the material

The above described objects with religious interpretation can clearly validate their effectiveness as sources for negotiating the different waves of acculturation and thus identity. Artifacts recovered in Greenland are small, simply decorated, a considerable number of them were made for personal usage. Apart from their functional purpose, these artifacts carried a symbolical religious meaning and thus have an additional significance for their owners: namely expressing identity and belonging to the Norse Greenlandic community and the Christian world. Upon creating such objects and the interpretation with it was not necessary to use precious mediums or to apply elaborate ornaments and formation to express the significance of that particular object. These personal values and symbolic meanings are embodied in the artifacts themselves through using different practices.

One of the utilized practices in Greenland was engraving inscriptions and different kind of crosses which deploy both every-day objects and artifacts possessing already religious meaning with the attributes of identity. In the studied Greenlandic assemblage, a tremendous amount of runic or occasionally Latin inscriptions have been recorded. In almost every case, these can be reading as Christian prayers, names of saints and psalms on wooden possession- crosses, counting sticks while in some cases owner-marks were depicted on every-day objects. Out of the inscribed items, a considerable number bears traces of inscriptions depicting or evoking the Virgin Mary. These *Marian-objects* were often simple, every-day artifacts possessing no significant form connected to Christianity: through the symbolic meaning of their function –weaving and spinning – with additional inscriptions, they gain additional value to that person. The number of

such items suggests a strong Marian tradition among Norse Greenlanders. The settlers' Christian belief was so firm that they commemorated a deceased pagan person in Christian burial and, in a way, bestowed that person with Christianity.

Sometimes the form itself and/or the decoration carry religious meaning and thus become a portable identity marker. Personal adornments with religious interpretation are one group that expresses well how people constructed and constituted themselves towards the outer world. In the Greenlandic assemblage, many crosses and crucifixes with the potential of religious interpretation can be found in such context. They are either worn or used in close proximity to an individual's body and thus were a part of a communication system to the outer world invoking that person's identity. What is more, they were so important to that person that upon burial, these objects were placed in the grave or near the deceased. This incredible amount of wooden crosses displays the need and implementation of evoking Christian identity. The pewter cross from Hvalsey, the pilgrim's badge, and the crucifixes depicting biblical scenes are further pieces of evidence for this. Overall Christianity had a so important significance in their lives and their identity, that they inscribed and added different Christian symbols and/or inscriptions to many every-day objects like loom weights or spindle whorls. To an outsider who travelled to Greenland it was certain that the island was inhabited by "good Christians". Upon approaching one could clearly observe such practices: worn and used widely by past Greenlanders or implemented in their houses such as procession crosses.

The use and choice of artistic media was also a crucial factor in constructing identity in Norse Greenland. Most of the objects in Greenland were created locally, using raw materials and resources achievable on the island. Norsemen successfully adapted local artistic mediums, and used them to replace and imitate objects of regionally unobtainable materials. On the other hand, however, the dichotomy- both overarching and regional- is proven in the matter of the material culture: besides local production, broader North Atlantic traditions were expansively utilized. Upon trade, new cultural impulses arrived at Norse Greenland, shaping their identity: it constantly changed as they implemented new characteristics. Additionally, Greenland's distance and location - being an island - from the European continent could alter the meaning of objects and practices in the settlements: what was overall, for example, in Scandinavia, could obtain altered status and new symbols in Norse Greenland.

Creating and shaping material culture happened for two reasons in Norse Greenland: to prove their identity and themselves *for* the outer Christian world and *against* their neighbors the Inuit. It is interesting to note that Norse Greenlanders never adapted Inuit clothing style - no such pieces were recorded in archaeological contexts - and techniques which otherwise would have been seen as an obvious decision. Norse Greenlanders nevertheless did not want to be associated with a "pagan" population and tried to prove that to the outer world using as identical objects as the circumstances and their resources allowed.

These people used material culture to imagine or re-imagine, make and order their world, and so to both define their place in that world and their network of relationships: social, natural, and supernatural. The relationship between person and object is a duplex notion: Norse Greenlanders altered their artifacts - consciously or unconsciously - in order to show their cultural identity and avoid being *Others* while those items influenced their lives and perceptions at the same time.

8. Churches

8.1 Introduction

Studying medieval churches is another valuable approach concerning the Norsemen's sense of identity. The analysis of ecclesiastical buildings is capable of combining two essential components that influence shaping identity: the architecture - cultural traditions and the religious aspect, including practices and beliefs. Different traditions in the Christianization process influenced church buildings through which cultural and religious identities reveal themselves. These remains are one of the most visible and accessible physical pieces of evidence in many instances above ground. Thus they have been in focus since the very beginning of the Greenlandic research (see chapter 2.4).

8.2 Location and preservation

There are some 20 church buildings recorded in the Norse settlements in Greenland, of which 17 were registered in the Eastern and two maybe three in the Western settlement (figure 23-24). Regarding these church sites, a significant variation is observed in preservation status. The best-preserved building is the church site at ruin-group Ø-83, Hvalsey, the only church which walls are high enough to determine the position and form of its windows and roof construction. Besides the well-preserved Hvalsey site, poorly preserved ones and almost completely decayed churches were also recorded. The destruction and disappearance happened due to several factors, such as the re-use of building material by local inhabitants, erosion, or intensive grazing of sheep at these sites. Additionally, as a natural practice in the Middle Ages, the rebuilding of old structures into new styles and traditions could also erase part of the earlier constructions (Arneborg 2000b: 314-315, Gjerland & Keller 2009: 167, McCullough 2016: 101-102).

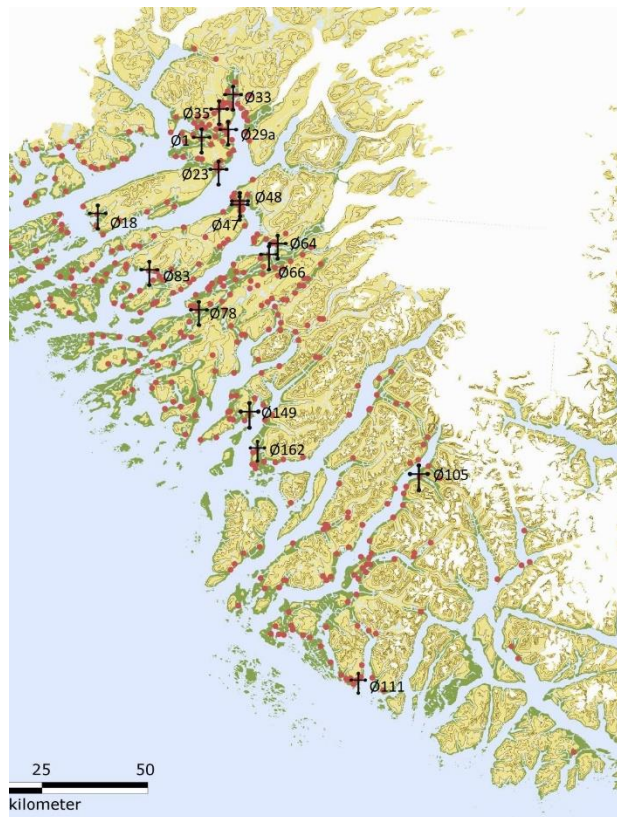


Figure 23 – Disposition of churches in the Eastern Settlement (Arneborg 2011)

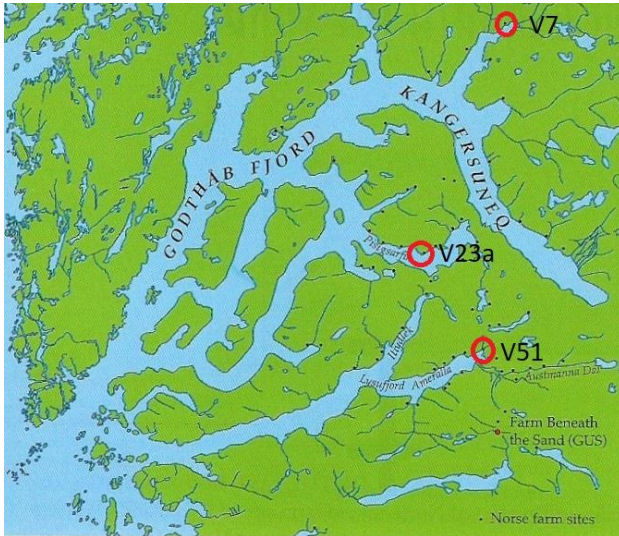


Figure 24 - Church sites in the Western Settlement area (Berglund 2000: 296). Numbers of ruin-groups and red circles were added by the author

All of the churches are located in close proximity to waterfronts, along the coastline and connected to farm cores and home fields resembling the Icelandic model. All but one ecclesiastical building is situated in the inner fjords, in most cases, in areas where these fjords terminate. The only exception is the Ø-111, Herjólfssnes (Ikigaat) church, which is located at the very southern end of the Eastern Settlement in the outer fjord area, right next to the seaside (figure 23). The site is situated in a highly visible peninsula, surrounded by various landscape features. Hence the farm and its buildings, including the church, could also function as a significant landmark

and navigation point to sea-farers upon approaching the Greenlandic coastline. In the case of some churches, it is generally assumed that they were intentionally placed in the near of prominent geographical features such as waterfalls or rivers. On the other hand, not only the placement of churches was prominent, but the view from church door or window could have been an essential factor upon the erection of these structures (McCullough 2016: 106-107, Nørlund 1934:105).

8.4 Groups

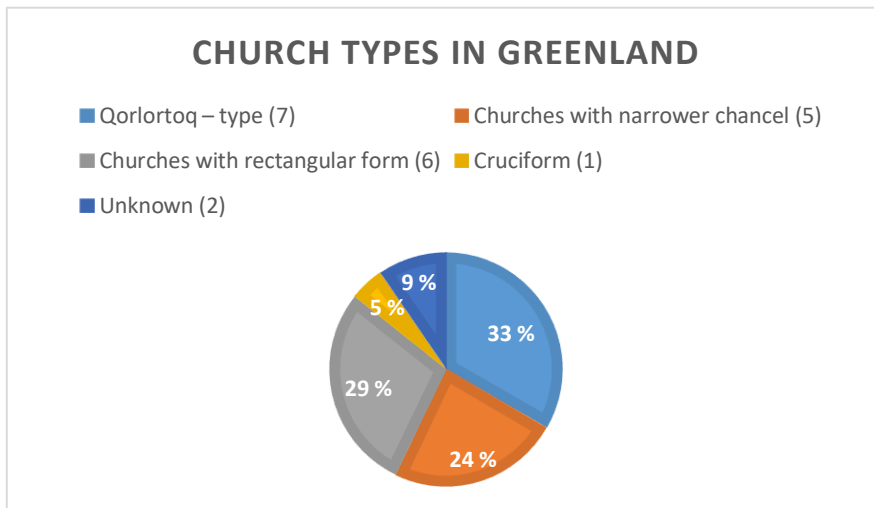


Figure 25 - Distribution of church types in Greenland (Created by the author after Keller 1989)

The church remains in Greenland can be roughly divided into three main groups regarding their basic form and function: the bænhus type, churches with narrower chancel, and buildings with rectangular layout. Like anywhere else in Europe, re-buildings were carried out according to the newly-adopted architectural styles and features. Thus it is possible that at one site, two or three different layouts and elements of different styles can be recorded. Each variety will be discussed in the corresponding subsections.

8.4.1 Qorlortoq – type

This first group contains smallish buildings built from turf and wood, surrounded by circular enclosures: dikes or walls. These churches are the so-called Qorlortoq (or Q-type) structures, named after the area (Qorlortoq-valley) where they were first recorded and are most concentrated (Nørlund & Stenberger 1934: 14). There are seven such churches, recorded so far only in the Eastern settlement (figure 25-26). None of these small churches exceed internal 10 m², and the diameter of the churchyards are not bigger than 30 m. The surrounding enclosures tend to have entrances at the south-west or west side. The most well-documented Q-type church is the Ø-29a Brattahlíð I (Qassiarsuq), usually called Tjodhild's church, excavated in 1961-65. This building has been dated to the 1000s to 1100s, and appeared to have outer protective turf walls and curved inner wooden walls. In the surrounding churchyard, 144 graves were excavated. The position of these graves indicate a cemetery of circular form. Several other excavations were carried out at Ø-35, Ø-64, and Ø-33 ruin-groups, where C¹⁴ dates were taken from the churchyards. (Arneborg 2000b: 313, Arneborg 2006: 27-30).

The form and structure of the above described Qorlortoq (Q-type) are widely prevalent in the North Atlantic region (see below), where the Faroese term *bønhús* is established and used in recent archaeological research. In Scandinavia, the variations *bænhus*, *bønnehus* are referred to these buildings. In English speaking countries, these words' literal translation is in use; *bæn/bønn* (=prayer) *hus* (=house). The term chapel is also widely used for these structures, but I intend to avoid this appellation as *chapel* can be used of any smallish independent church in the Christian world, not only the presently debated prayer-houses. These buildings represent a particular sphere of Christian identity - the realm of personal devotion in sacred space (Arneborg 2000b: 315).

Prayer house is the term for church buildings, which, according to the Roman Church, does not possess full status as an ecclesiastical building; in other words, the building was not consecrated by a bishop. Thus it was not allowed to hold Mass, celebrate feasts or distribute sacraments in a prayer house. Unlike large parish churches that could house a whole congregation and its members, these relatively small buildings could accommodate a considerable number of people; a chieftain and his family for whom the building was set aside for individual prayer and contemplation. These chieftains were the owners of these prayer houses, who could, of course, apply to the bishop to be allowed to celebrate Mass in their private church. There are some indications that particular kinds of events and masses could be celebrated in these buildings, which were distinct from the ones held in consecrated churches. In Icelandic charters (*Diplomatarium Islandicum*) the terms *bænhússöngur* (chapel-song) and *bænhúsdagar* (chapel-days) indicate such practices. As prayer-houses received no tithes or dues, they could be simply built out of personal devotions. Their distribution and proximity to farms also indicate the prominent role of personal faith, and at the same time, they were the expressions of social status (Brendalmo 2006: 181-182, Brendalmo, personal communication; Vésteinnsson 2000: 288, 2009: 143-144).

These private religious houses were constructed of stacked turf around three sides of the church, occasionally with stones in the supporter walls. The inner- construction itself was probably built of timber, and the whole structure was surrounded by a circular, semi-circular, or oval dike or palisade, which so determined the shape of the churchyard. However, in some cases, graves were not documented in these enclosures. These circular features vary between 13 and 22 m in diameter and have entrances at either side. The churches are situated centrally in these enclosures. The churches themselves were

rectangular in plan with a small floor area, which vary from 5 to 15 m². Regarding the interior structures, some excavations revealed that these churches were equipped with side benches along the north and south walls, similar to the ones recorded in Norse longhouses from the Viking period. There were limited solutions for lighting implements: possibly an open door, a small window, or a portable oil lamp could provide the principal source of light. They have not documented hearths in these buildings, so steatite lamps could also be the source of warming. At some sites in the North Atlantic, reconstructions were erected in order to gain a notion of what people in the past would have experienced in and outside of these churches. (McCullough 2016: 113-114, Stummann Hansen & Sheehan 2006: 37).

These restorations could contribute to the phenomenological sense of the structures and thus provide a theoretical conception about the nature of rituals conducted here. Being small buildings with little floor area and a limited number of windows, the experience of these buildings could differ from contemporary larger, stone churches. They surely could generate an intimate, sometimes even a claustrophobic experience. Upon entering these tiny and darkish prayer-houses, one could observe the notion of some transition to a sacred place. Recited prayers and hymns could be reflected from the massive turf walls. People might have sat side-by-side, close to each other, generating the feeling of one mass of the human body and thus contribute to the inherency of that community. On the other hand, standing or sitting alone in these churches would have produced the impression of being all alone in the world. Upon exit, people would have felt coming back to the human realm from the sacral, religious sphere. A similar experience could have been experienced by people entering and leaving caves: the passage between the outer, every-day world, and the inner "*ritual landscapes*" (Bjerck 2012: 59-60).

8.4.2 Churches with narrower chancel

The next group documented in Greenland contains churches with a quadratic nave and an adherent narrower chancel. In the case of these buildings, it was observed an "open" west gable without a trace of stone structure or turf construction. As Roussel suggested (1941: 109), these missing structures might indicate that they were constructed from timber. Krogh even assumed that many of these churches might originally have been wooden structures, with outer protective stone or turf walls. In the early phases of the settlements, complex stone structures were not typical in Norse architecture. Therefore such protection around wood or turf constructions was indeed necessary due to the strong winds and harsh climate of the North Atlantic. Written sources in Iceland and excavations carried out at Sandi in the Faroe Islands indicate such tradition (Krogh 1975: 52-53, 95).

Altogether, there are six churches which belong to this group (figure 25-26). They were built in Romanesque style and were dated before and around 1200 and earlier than the rectangular stone churches (see next subsection). Their sizes vary from 38 m² to 80.5 m², but in some cases, it was impossible to estimate their internal floor area. The form could represent the intention of divide the laity residing in the wider nave and the clergy preaching in the narrower chancel (Keller 1989: 200-201; McCullough 2016: 98, 103-104; Pierce 2011: 227).

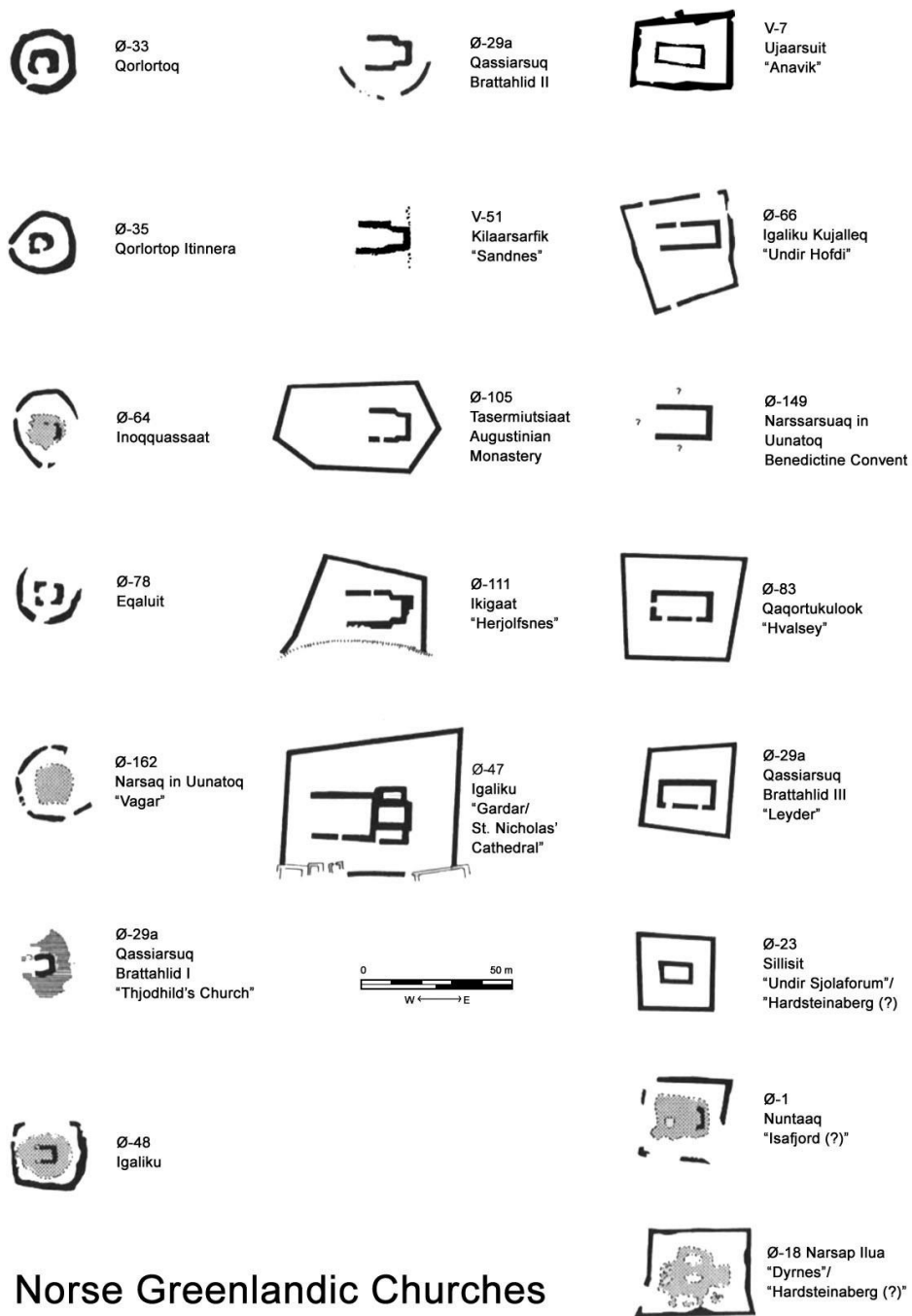
8.4.3 Churches with rectangular form

The third group involves six stone churches of simple, rectangular form with a significant variation in internal floor square from 32.25 m² up to 65 m² (figure 25-26). Nørlund

believed (1934) these churches were built in the first phase of the settlements in Greenland and compared them to early specimens from the British Isles. However, Roussel disproved Nørlund's theory referring to Norwegian parallels built around 1300. It was Krogh (1983) who upheld the principle of Roussel's chronology, and finally supported that with the excavations made at Sandur (Sandi) in the Faroe Islands. These structures are often referred to as the "medieval" structures in the scholarly literature and subsequently belong to a later phase of the settlements after 1250. Though, in the case of two such churches, open west walls - similar to the previous group - were documented, which might indicate that they are somewhat earlier constructions (figure 26) (Keller 1989: 204-205).

These buildings were the results of an intense building phase and prominent expansion for the Roman Church in the 12th - 13th centuries. In most of Northern Europe, large, stone churches in prominent locations were erected representing the headway of the institutional church system. Despite its sparsely inhabited territories and distance from cultural and ecclesiastical centers, the North Atlantic communities became a part of this building program. Especially in Greenland, this resulted in a particular number of large stone and/or wood churches, serving a small community. Compared to Iceland and the Faroe Islands, the Greenlandic Norse population was much smaller and dispersed over a large-sized region, yet they built churches that were comparable in size to structures being built at the same time in Scandinavia. Inside the Greenlandic churches, costly bells and stained glass were implemented into the windows (Pierce 2016: 139).

In the case of two buildings (Ø-18 and Ø-47), a 4th group is suggested: these are the cruciform churches. Although, in the case of Ø-18 at Narsaq, the layout could not be certainly determined as no excavations were carried out at the site. Krogh (1976: 301) only suggested the cruciform plan out of shape of the construction's collapse. The other example is the cathedral at Ø-47, Garðar II (Igaliku), which is an extension of a romanesque structure, with added side-chapels and thus creating a cruciform shape (figure 26: Ø-47). The chancel and these side-chapels were plotted in Greek feet while the nave was constructed in Roman feet, the latter indicating an earlier building date, around 1200. The extension could be added after ca. 1225 (Arneborg 2006: 48-49).



Norse Greenlandic Churches

Figure 26 - Layouts of Norse Greenlandic churches (Keller 1989: 193, McCullough 2016: 99)

8.5 Chronology

These groups indicate a chronological development and evolutionary sequence based on comparisons to church architecture from the North Atlantic region⁸ and recently C¹⁴ and AMS dates from the churchyards. These and other datings indicate that bænhus structures were already built from the beginning of the *landnám* phase. The Romanesque style reached the Norse settlements in Greenland around 1200, featuring the large stone churches with Romanesque arches and Roman feet structures. During the last settlement phase, Gothic architectural elements appeared on the island, such as churches with cruciform plan, or Carolingian- Greek foot in the structures. However different types of churches could have been in use for a longer period; bænhus structures could overlap larger stone churches built in the 12th-13th century, or churches with narrower chancel could have been built in the latest period of the settlements. So the following chronological groups indicate the approximate erection of the structures, not the period of their use: these datings are *terminus post quem* rather than *terminus ante quem*.

The erected churches indicate dynamic settlements in Greenland and have been divided into three main periods:

1. The Qoorlortoq period (*landnám* phase), ca. 985- 1050/1100.
2. The Romanesque period, ca. 1100 – 1225/1250
3. The "Medieval period" (gothic phase), ca. 1250- 1300/1350 (Arneborg 2002: 25, Keller 1989: 207-208).

8.6 Building traditions and parallels

Bænhus

As it was discussed in the previous subsection, these small churches surrounded with sub-circular enclosures in Greenland were built in the earliest period of the settlements in Greenland, presumably from the starting point of the *landnám*. This fact would mean that the tradition should have been evolved somewhere else. According to the historical sources, the Christianisation process came from Norway to the North-Atlantic region and thus the building traditions with it. Turf-timber church design and construction are evident in the whole North Atlantic: such specimens were excavated in Iceland with outer protective walls of turf or stone. The distribution of these structures also features Icelandic patterns: great affinity to water and harbor positions and close to dwellings. However, in Iceland, churches were recorded in the range of 10 to 30 m from the farm, while Greenlandic examples are more dispersed. Keller underlines that turf churches were also constructed in northern Norway (Keller 1989: 203).⁹

Regarding the background of circular churchyards, different opinions have emerged among archaeologists. Keller (1989) reckoned the notion that the background of these circular enclosures seems to lie in the early Christian environment in Ireland; the influence of Celtic Christianity resulted in the circular form. In Ireland, the circular form is the dominant feature in the earliest phases of the Celtic area.¹⁰ (Keller 1989:199). Though Keller later retreated from his view, the possibility of a Hiberno-Norse

⁸ A transition from church with narrower chancel to a rectangular church was documented at Sandi (Faroe Islands) beginning in the early 11th century (Krogh 1983: 52-53).

⁹ Some 50 turf churches are known in Northern Norway, although these structures have not yet been under examinations, and a little is published on this matter (Keller 1989: 187, 203).

¹⁰ Such sites are Beefan church in Donegal or Illaunloughan, Co. Kerry (Keller 1989: 192).

architectural school of circular churchyards has gained some new interests in recent years due to the latest studies in the Faroe islands and elsewhere (Stummann Hansen 2011: 76, Stummann Hansen & Sheehan 2006: 44-50).

Although, in the Middle Ages, the rectangular layout seems to dominate in the Nordic countries – further proving a possible Celtic influence - Brendalmo and Stylegar stress out the several examples of the circular churchyard in Norway, albeit from later periods. However, they do not exclude the possibility that the origin of sub-circular church yards derives from the Middle Ages, from earlier constructions (Brendalmo & Stylegar 2003: 170-171).

Circular or sub-circular dikes have been documented elsewhere in The North Atlantic region, from Scotland, Faroe Islands, Iceland to Finland, Sweden, and Denmark. Additionally, the form is not restricted to this particular area: several examples can be found as far as in North- Germany, Netherlands, and Belgium. Earlier it was assumed that circular churchyards reflect only early Christian influence, but after the analysis of Icelandic and Faroese examples, such churches could also be ascribed to later periods. It seems like the feature was not limited to one geographical area or even a chronological period: circular layout is indeed the prevalent form in Iceland up to this day (Brendalmo & Stylegar 2003: 170-171, Stummann Hansen & Sheehan 2006: 28-29).

Churches with narrower chancel

According to Krogh (1976), the building technique of outer stone walls was first adapted and developed in the North Atlantic isles. He based his assumption on the fact that these buildings needed extra aid in the windy North Atlantic. However, the method could have been known in Norway long before the Norse expansion to the North Atlantic. Similar stone-cladded wooden constructions were already used from the early Iron Age, particularly from the Late Roman and the Migration Period. In Northern Norway, this form was the most widespread type in the Iron Age. Looking upon the formation of the so-called *ringformede tun* (court-sites), it displays the same features as the discussed churches: the long walls are made of stone or turf while one of the gables seems to be "open" suggesting a wooden construction. Thus the tradition could have originated from the Pre-Christian Iron Age world (Keller 1989: 202-204). Although, regarding the form itself, it is difficult to trace back where this layout was first used as it is generally prevalent in the whole Christian world. In western and southern Norway most of the parish churches built of stone have a similar layout with narrower chancel from the early 1100s onward: a considerable number were erected from this period. In addition parallels are documented from the Faroe Islands and Iceland to Orkney-; and Shetland Islands (Ekroll et al. 2000:12, Kristjánsdóttir 2011: 425-427, Owen 1993: 320-324, RCAHMS 1946).

Rectangular churches

In this later settlement period, Greenlandic churches were influenced by Scandinavian (continental) church design; these structures are often compared to contemporary Norwegian specimens. In Norway, this type of church is called the *langkirke* (long-church) which was the dominant form from the 1200s especially in territories of the Stavanger Archbishopric. Like in Greenland and Norway, the oblong form was the preferred type for later medieval churches also in Orkney, Shetland and the Faroe Islands. At many of these sites, previous structures with narrower chancel were registered: it was probably a common practice to demolish the old layout and replace it with an oblong form (Cant 1993: 15, Krogh 1982: 304-306, Roussel 1941: 119, RCAHMS

1946). Interestingly, in Iceland, no stone churches from the Middle Ages have been documented. Written sources and archaeological excavations have shown that most of the churches were built of timber, even the major cathedral sites such as Skálholt and Hólar were wooden structures (Stefánsson 1997:25-31,37-38).

8.7 Analysis of the ecclesiastical buildings

In the Middle Ages in the North Atlantic, one of the best ways to express identity and connection to the European Christian community is to erect prominent church buildings. These structures are the product of identity and within the interaction of different cultural roots. The choice of traditions, building material, volume of the buildings, and their placements all contribute to the different aspects of the settlers' identity.

The notion of *bænhus* churches display a personal, private devotion of faith and identity in contrast with the experience observed in massive, stone churches: the notion of external worship. Celebrating Mass in a probably foreign language could also strengthen the feeling of *Otherness* while murmuring prayers in a *bænhus* would bolster the notion of *inherency*. However, it would be a mistake to generalize the feeling of what present-day people experience in connection with these settings and to project that to the notions of past Greenlanders. Experience can vary from person to person, it is a subjective agenda, and settlers in the Middle Age had definitely distinctive attitude towards such buildings. For them, these were the general sights in the landscape; they were used to the scenery of these turf covered constructions.

Which traditions did influence the structure of Greenlandic churches? As it was discussed in the previous subsection, ecclesiastical buildings in the Norse settlements in Greenland seem to carry both Norwegian and Icelandic building traditions. While turf-covered, *bænhus* structures resemble North Atlantic traditions adapting to local circumstances, layout and evolution of more spacious, stone churches can be compared to any buildings erected in the European continent. Additionally, a third tradition and cultural influence can be drawn into the picture: a Celtic-Christian impact, which was neglected in prior research.

Recently, more and more evidence suggests a Celtic branch of Christian activity or characteristics in Norse Greenland. Church buildings themselves testify these divergent religious practices and identities in the form of circular churchyards surrounding particular sites. The influence of an early Celtic branch of Christianity is further supported by artifacts found at several sites, carrying Irish traditions such as cross-incised slabs and wooden crosses with semi-circular armpits which resemble early Medieval Irish specimens. Additionally, recently conducted DNA studies on Norse settlers in the Faroe Islands and Iceland indicate that while the majority of the male population had mainly Norse components in their DNA, the female population had a British/Irish ancestry. (Arneborg 2005: 16, Helgason et al. 2001: 737). It is hence possible that upon colonization of Greenland from Iceland, people brought along Celtic traditions and customs, which appear in the above mentioned archaeological material. This blended religious identity thus produced shifting and complex ecclesiastical traditions in the Norse settlements in Greenland (Urbanczyck 2000: 48-49).

Religious structures are abundant in Greenland, especially if we compare the number of such buildings to the population of the island. From this, it is clear that the number and the capacity of churches exceed the need that the Norse settlements, and the population within it required. Vast stone churches with elaborate layouts and substantial capacities were erected in Norse Greenland while in the same region in contemporary Iceland and Faroe Islands, only a few such buildings, were built (Pierce 2016: 140). Then why did this major intention of building big stone churches develop in Greenland? Such practice could serve the same reason as the shaping and selection of their used material culture: they would like to demonstrate their connection and belonging to the Christian world. Monumental building programs are characteristics in island societies:

an urgent need to outweigh their isolation and a possible deannouncement of being *Other* with spectacular community structures (figure 27).

From the 12th – 13th onward, an even more immense building program was introduced in Greenland. This period just corresponds to the initial phase of the Little Ice Age; climatic changes on several matters occurred in Greenland and elsewhere in the North Atlantic. It is rather intriguing to observe that Norsemen invested in and built even more and more immense structures in the time of deterioration and deprivation. It was perhaps in the interest of the residing bishops or the will of the people to emphasize their obligation to the Christian world.

For anyone living in the North Atlantic, these monumental buildings represent the inclusion of the collective European identity and culture that would mean engaging in trade and social interactions. These aspects were indeed indisposed in the life of the Norse society of Greenland, which relied greatly on imported goods and mediums.

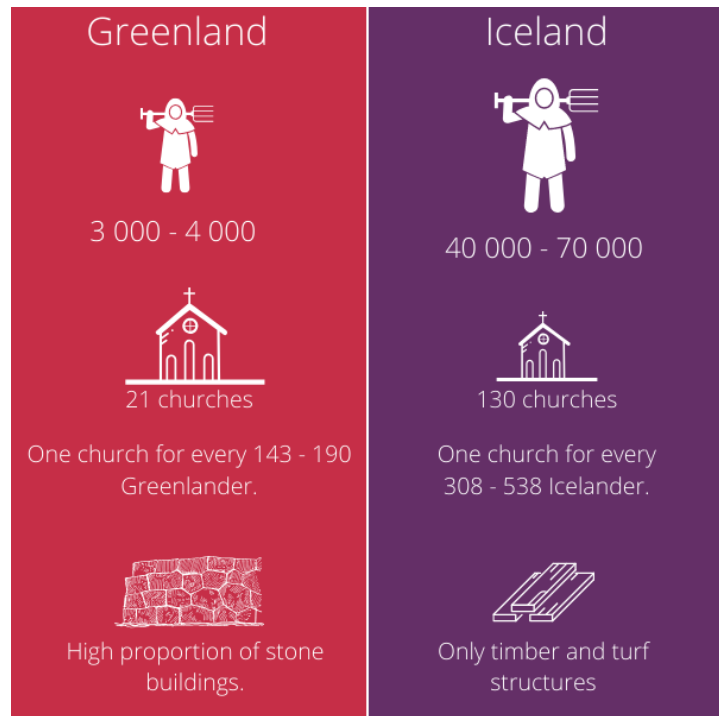


Figure 27 - Schematic figure displaying the number of churches compared to the amount of inhabitants in Greenland and Iceland around the 13th century (Created on www.canva.com after Madsen 2014: 16 and Zoëga 2014: 24)

9. Cultural heritage in Greenland

9.1 Introduction

Cultural heritage sites in the Arctic region, including Greenland, demonstrate the capability of human adaptation in a cold climate and harsh environmental conditions. Greenland is a vast island that incorporates different climate conditions, vegetations, and natural resources. These features have influenced the basic fabrication of lifestyle based either on hunting of wild animals or agriculture and livestock. The Greenland ice sheet covers roughly 94 % of the surface, where cultural traces left behind by past societies are almost absent. On the other hand, the coastal regions and inner fjord areas are abundant in archaeological sites demonstrating both periodical and permanent human dwellings (Gulløv 2004: 11-13).

Due to the character of the landscape - unchanged, with only small-scale infrastructure, constructions, and road-system – the general preservation of archaeological sites in Greenland is outstanding. Occasionally nearly intact traces have been preserved in the landscape far from modern settlements, which are scarce and dispersed in a great area. These cultural remains left in Greenland can provide unique opportunities to map past societies as a result of minor disturbances by later civilizations. On the other hand, this untamed nature and harsh climate can affect and reshape cultural heritage: the impact of erosion, wind, climate change all destroy built and other tangible cultural traces (Andreasen et al. 1999: 65-66).

However, cultural heritage contains not only these elements but also intangible aspects. Language and its dialects, traditions, customs, practices, history, dance, and folklore are all part of a culture's legacy. They are often exposed to human oblivion if they are not collected, studied, administrated, educated, and practiced in the right way. People in Greenland often live far from each other, sometimes hundreds of kilometers away, which aggravate keeping social relations and customs alive. Researchers are continually working on developing a set of objective plans for mapping, protecting, and educating aspects of cultural heritage in today's Greenland (Petersen 2000: 340-342).

9.2 Three branches of the cultural heritage

The cultural landscape in Greenland is a complex phenomenon containing three different nations' legacies: these are the Inuit (including pre-; and neo-Eskimo), medieval Norse, and Danish elements. These cultures differ not only in terms of used material, language and practices but also in the central location of their built legacy: while the hunter pre-Eskimo people primarily lived in the northern part of the island near their hunting grounds, Norsemen settled on south-west Greenland, where they were able to maintain their farming lifestyle. On the other hand, these remains are occasionally situated side by side, sometimes in one location, and have interacted with each other over the centuries (Petersen 2000: 348-349).

9.2.1 Inuit (including Pre-Eskimo elements)

The first branch contains the cultural heritage of modern Greenlanders, that is to say, the legacy of Inuit. The word '*Inuit*' means people in the plural, '*Inuk*' is the singular phrase meaning human being. Greenland has 80-90 % native Inuit population and circa 10-20 % of people with Danish and other origins (Scandinavian, American). Nevertheless, Inuit ethnicity does not possess a unified genealogy, they sometimes dispose distinctive origins and ancestors: an East Greenlander can claim himself a lineage differing from a

Northern Greenlander's. People have mingled over centuries combining different cultures and ethnic groups (Hard, personal communication; Petersen 2000: 340).

The continuity between the Thule-culture - emerged in the 12th century (see chapter 1.2) - and modern Greenlanders is evident, which provides researchers a direct historical approach to the past. Today, native Inuit call the Dorset-people Tornit (pronounced as dornit) or Turnit (dunit) people. Some modern Greenlanders claim also these Dorset-people as their ancestors. All of these ethnicities have to face the fact that living sustainably in Greenland is based on hunting marine and terrestrial animals. Members of these cultures were first and foremost Arctic hunter-gatherers who moved around a lot, and settled in temporary settlements such as tent places. Hunting seals, caribou, and muskox were important activities right up to present. Besides archaeological evidence, local folklore, practices, and place-names can provide archaeologists clues where past settlements may be found. Additionally, farming and livestock breeding were introduced in Greenland ca. 200 years ago: just like Norsemen in the Middle Ages keeping domestic animals - mainly sheep and cow - is now a crucial form of subsistence on the island (see chapter 9.4 below) (Gulløv 2004: 173).

Besides farming, there are some shreds of evidence proving that Norse influence has been occasionally incorporated into modern Inuit customs and practices. Such an example is a wood joining method - the hook-scarf technique which initially was not used by Inuit people. It is possible that they learned it from the Norse settlers, who had used this method in prehistoric times in Scandinavia. Additionally, a particular type of dance, the ring dance, could originate from the Norse, who had a similar practice in the Middle Ages (figure 28). Linguistic influences can also be found in examples in Norse loan words, such as the use of the Greenlandic *kuuna* word for wife (Norse *kone/kona*). Some researchers state that the Greenlanders ethnic name for themselves - *kalaaleq* - comes from the

Norse *skrælinger*. First missionaries noticed that Greenlanders called themselves Inuit, but when they talked to foreigners, they used the word *kalaaleq*. However, I doubt that an ethnicity would take over and use external appellations, that, in addition, bears a pejorative meaning (*skræling* means weakling) (Andreasen et al. 1999: 66-68, Petersen 2000: 340).

Aside from these Norse elements which entered into the Inuit legacy, there is evidence showing that Inuit regard Norse heritage as a "foreign culture." An unfamiliar form in the landscape, a peculiar rock, for instance, is quickly interpreted as the work of the Norsemen. These days, in the area of South Greenland, where the Norse settlements once existed, people usually say referring to strange features in the landscape: "Oh, the Norsemen must have built it" (Petersen 2000: 347-348).

Besides customs and linguistic evidence, mutual mingling is also proven by blood group studies. Although there are variations in the regularity of blood types in a particular population, it is generally assumed that people with similar blood group frequencies tend to have a common origin. Researchers took blood samples from about 4000



Figure 28 - The so-called ring dance performed by Inuit in the 18th century. Painting by Jens Kreutzmann (Petersen 2000: 347)

Greenlanders in the 20th century, which were compared to each other and the gene frequencies of Danes, Norwegians, and Icelanders. Results show that the values of the population living in the southern part of Greenland (Julianehåb) have close issues with Icelanders. In the population of both Iceland and Greenland, the frequency of the A gene is lower, and the O gene is higher than in Danes and Norwegians. Upon re-colonization of the island, Hans Egede accounted that Greenlanders living along the west coast of Greenland are relatively fair-skinned (Persson 1969: 625-626).

9.2.2 Norse traces

On Southwest Greenland Norsemen left behind traces which bear witness to their European culture lived and thrived in this region for some 500 years (see chapter 1.2 and 5). In archaeological research, these Norse resident units are referred to as *ruine-grupper* (ruin-groups), which terminology is still in use up to recent days. The phrase *ruine-grupper* represents all signs of human residence that the Norse settlers left behind. Besides the previously discussed church sites (see chapter 8) and cultural material (see chapter 7) it can equally mean a single *sæter* (shieling), a hunting place, a barn, a festive hall, a residential building, or a complex farming site with the combination of these buildings. Archaeologists have been recorded more than 400 ruin-groups so far, which number continuously extends by the years of archaeological research (Andreasen et al. 1999: 67-68).

Besides the tangible material, written sources discussing the Norse settlements in Greenland are another integral parts of the heritage. As such internal accounts were not produced by Norse Greenlanders (or vanished through the centuries), we have to rely on external documents about these Norsemen and their settlements. These are medieval accounts produced in contemporary Europe (mainly Iceland, Norway, and Denmark) and documents produced after the Greenlandic settlements had vanished and lost contact with Europe. All written material was written in either Norwegian, Icelandic or Danish. Additionally, Inuit oral traditions tell about the life and relations of the Norsemen in Greenland. They contain vivid stories about the Norsemen, something which is part of the Inuit legacy as well¹¹ (Petersen 2000: 342-343).

Place-names and other linguistic traditions - which are survived and used in Greenland up to recent times - may possibly indicate Norse dwellings and customs in a particular region (see previous paragraph). Such an example is the place-name Quallunaanguit at the Sisimiut fjord in Southwest Greenland, which literally means "the dear Danes." The term was initially used for Norse settlers whom Inuit referred to as *quallunaat* (the pale ones). After the Danes re-colonized the island, the Inuit continued to use the term for them, which was previously referred to the Norsemen. Stories are known about this place-name featuring a Norse family who lived and had a good relationship with local Greenlanders in the area (Petersen 2000: 347-348).

9.2.3 Danish, recolonization period

After the Danish colonized and re-discovered Greenland in 1721, they brought architectural influences and traditions to the island, which still influence modern-day buildings to a greater extent. At first, these were only trading stations, but later, they established complex settlements by modern-day sense. In these areas, they built

¹¹ From 1858, onward Inuit legends written down and illustrated have been collected. A prominent collection was gathered by H. J. Rink, a scholar and govern superintendent in South Greenland (Petersen 2000: 342).

monuments, houses and farms which are concentrated on Southwest Greenland, where medieval Norse settlers once grazed their animals. In Greenland it was also the Danish who reintroduced farming into the area. Although in the initial period of the colonization they launched a de-Greenlandification programme later they adapted to local conditions and materials, thus combining Greenlandic and Danish-Norwegian styles. This mixture has created a distinctive 'Danish-Greenlandic' style. Such an architectural feature is, for example, Inuit- style houses with a pitched roof (Vésteinsson 2016: 109-112).

9.3 The management of cultural heritage

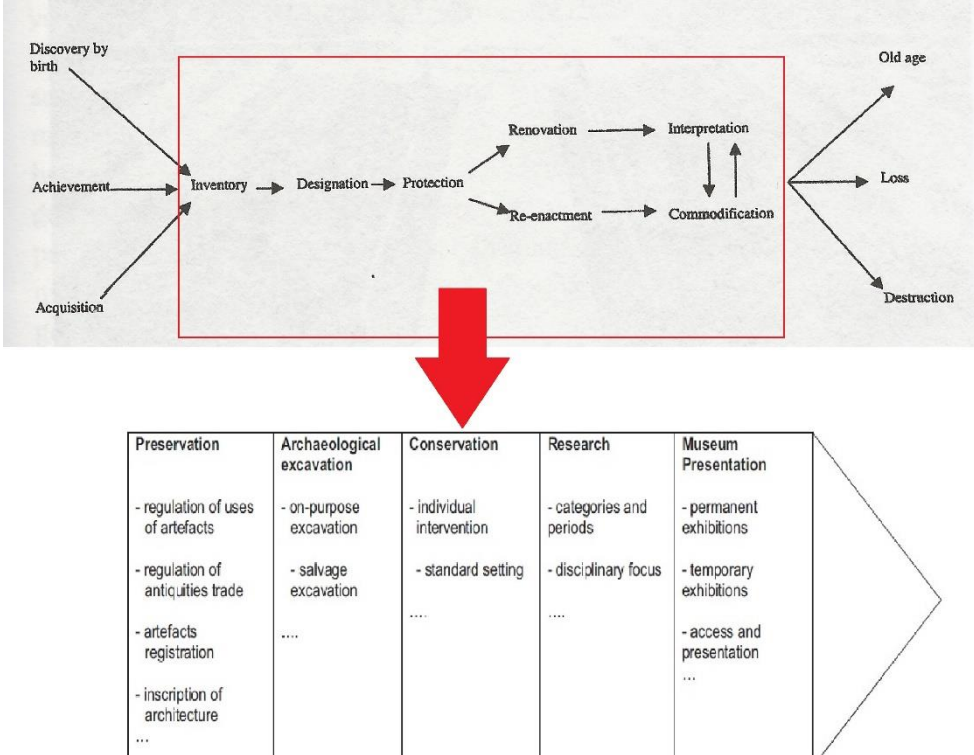


Figure 29 - The heritage process and its activities (Created by the author after Howard 2003: and Zan & Baraldi 2013: 212)

Not every cultural element is automatically acclaimed as cultural heritage. The above-discussed features can be regarded and perceived differently by various ethnicities in Greenland with a distinctive background. The heritage is not a static phenomenon; all of its elements and circumstances can change relatively fast. There is a particular process within which items are entering the heritage chain and activities taking place (figure 29). New things frequently emerge, which eventually become 'acclaimed' or can leave this circle and turn into 'not heritage' (Howard 2003: 186-187).

Acclaiming heritage can be established on different levels: on national and international levels. It is a particular institute that has the authority to approve cultural landscapes, things, monuments as cultural heritage. In the period from the colonization in 1721, til ca.1979 Danish officials, missionaries and explorers were the collectors of Greenlandic archaeological, ethnographical, and osteological artifacts and remains. In line with that, the antiquarian responsibility of the Greenlandic cultural heritage also laid with the Ministry of Culture in Denmark. Thus, it was the institution responsible for exploring, preserving, and communicating cultural heritage in Greenland. After 1979 – the date of the Home Rule Act - processes and actions reasserting Greenlandic identity (see chapter 2.5) began to gain ground in Greenland (Madsen, personal communication).

From 1982 onward, the Greenland National Museum and Archives (NKA) have taken over legal management of Greenland's cultural heritage. The museum is an independent cultural institution under the Ministry of Education, Culture, Church and Foreign Affairs, Government of Greenland. This independent cultural heritage management also resulted in the Utimut repatriation process, which made it possible for hundreds of artifacts to be shipped back to Greenland. This operation is still ongoing, and its agreement - signed by both parties - is still valid to this day (Madsen, personal communication).

Today, NKA functions both as a national museum and cultural heritage board, that is completely self-administered and autonomous from Denmark. The operation of the NKA inspired local initiatives all over Greenland, which produced fourteen other local museums in eighteen Greenlandic towns. Besides these museums' active collection of artifacts and information, they also help to monitor the Greenland Museum Act and The Act of Preservation of Buildings and Ancient Monuments. The former states that all land is publicly owned, and consequently, all cultural artifacts (according to definitions in the Museum Act of 2015) retrieved after 1982 belong to the public. Thus they are the sole property of the Government of Greenland, and they should be placed, curated and managed by the NKA or local museums. All foreign, including Danish, researchers aiming to do archaeological investigations in Greenland must apply for a permit from NKA to do so. Furthermore, exporting objects of Greenlandic origin, which are older than 1940, must be applied for and approved as well by written consent of the NKA (Madsen, personal communication).

The Act of Preservation of Buildings and Ancient Monument defines monuments as humanmade, visible structures or installations built before 1900, which are automatically protected in Greenland. The Act furthermore deals with churchyards, special cultural-historical areas that should also be protected. In such cases, the issue must be brought up to assign authorities whose demands and active participation must meet the assignment's content. The Greenland National Museum and Archives administer this Act on behalf of the Minister for Culture, Church, and Education in Greenland. However, on single occasions, NAK can delegate preservation tasks to local museums. There is a tight collaboration between the NAK and agricultural authorities as the Act is often used with applications concerning non-urban, agricultural land zones. This association prevents conflict between the Act and agricultural interests. Such prosperous collaboration happened during the great expansion of sheep farming in the 1930s. That time NAK and representatives from local museums participated in an active survey concerning fields and sites of new farm buildings (Albrechtsen et al. 2016: 6-8, Andreasen et al. 1999: 70-71).

Additionally, the NAK is responsible for the registering of buildings which are considered to be worthy of preservation. This process is also regulated and defined by the Act of Preservation. This database is updated and forms the basis of area applications or building protections. Together with the Act of Preservation, these two components are crucial in controlling infrastructure and other human activity in a cultural landscape. This is practiced in a way that monuments are available for everyone, but at the same time, these structures are affected by human impact as little as possible (Andreasen et al. 1999: 71).

9.4 Case study: Kujataa

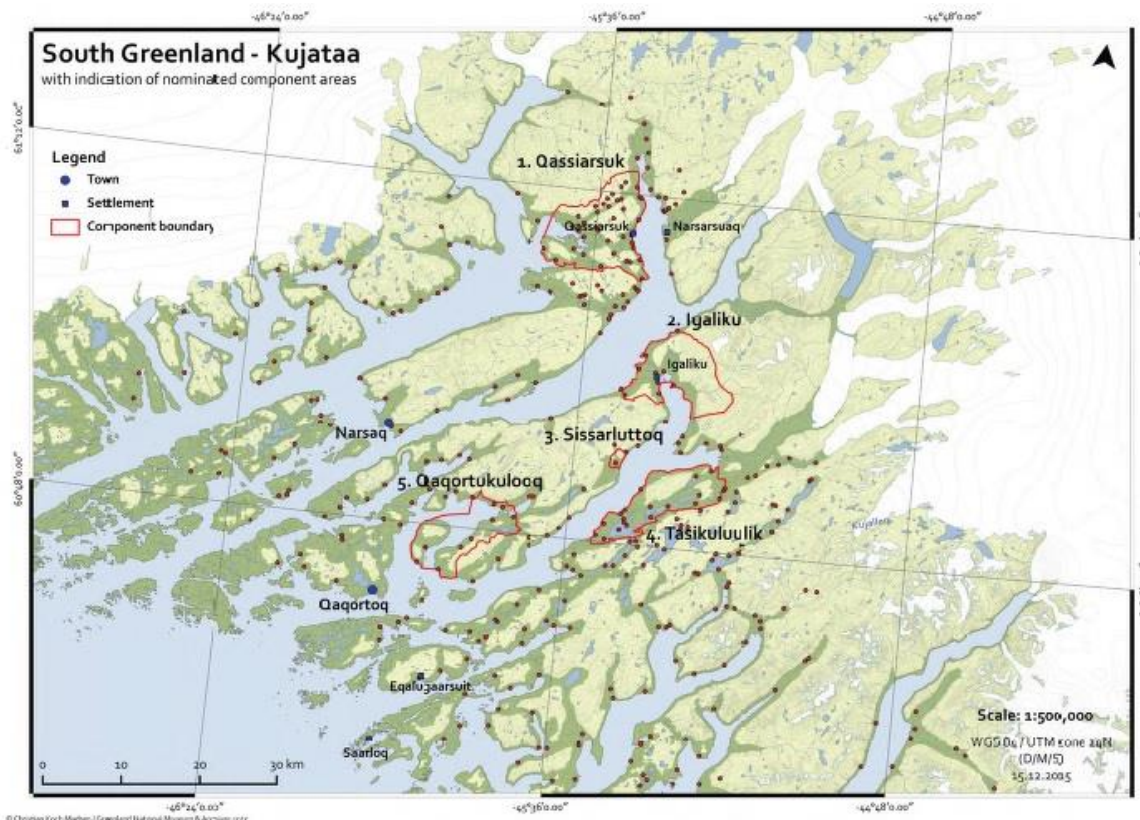


Figure 30 - The five component-areas of Kujataa World Heritage Site (Vésteinsson 2016: 12)

Kujataa is an exceptional composite of sites which is perfectly suitable for studying the interaction of different cultures and their elements. It is a sub-arctic cultural farming landscape composing Inuit, Norse, Danish and occasionally pre-Eskimo traces. These features are often situated side by side in this area which was first nominated to be enrolled in the UNESCO's World Heritage List in 2003, and finally got inscribed in 2017 (UNESCO, 2017).

Kujataa is located in South Greenland, in the area today comprising the municipality of Kujalleq. The world heritage site is made up of five components, which roughly cover the central area of the Norse Eastern Settlement (figure 30). The property is approximately 348.92 km², including both land and submerged areas alongside the Tunulliarfik Fjord, Igalikup Kangerlua Fjord, and the southern part of the Qaqortup Imaa. These five-components together display mainly two farming cultures – the Norse from the 10th century to the mid 15th century and an Inuit from sometime 1780s onward. The five component areas – Quassiarsuk, Igaliku, Sissarluttoq, Tasikuluulik (Vatnahverfi), and Qaqortukuloq (Hvalsey) – are historic areas and possess Outstanding Universal Value (OUV) including crucial features and sites. Besides, Norse and Inuit traces, earlier remains of the Thule-Inuit culture, and Palaeo-Eskimo finds occasionally add to the value of this World Heritage site. However, these have not been subject to systematic archaeological research in any of the components, so the nature and extension of these traces are yet unknown (Albrechtsen et al. 2016: 6-8).

The first area, the Brattahlíð (Qassiarsuq) component is the most favorable for farming due to the area's low elevation and relatively mild climate. The territory consists of extensive grass and meadowlands; thus, it was the second place in Kujataa (after Igaliku) where sheep farming was reintroduced in the 20th century. Regarding modern

heritage, three enlisted buildings connected to sheep farming are protected by law in this extensive pastoral landscape. Additionally, four Inuit winter houses, one of them dating to the 19th century, were documented here. Besides these, 38 registered Norse sites with more than 30 features were registered and submitted to protection. These are mostly farm sites (large, medium or small-sized) while some that can be interpreted as shielings. In

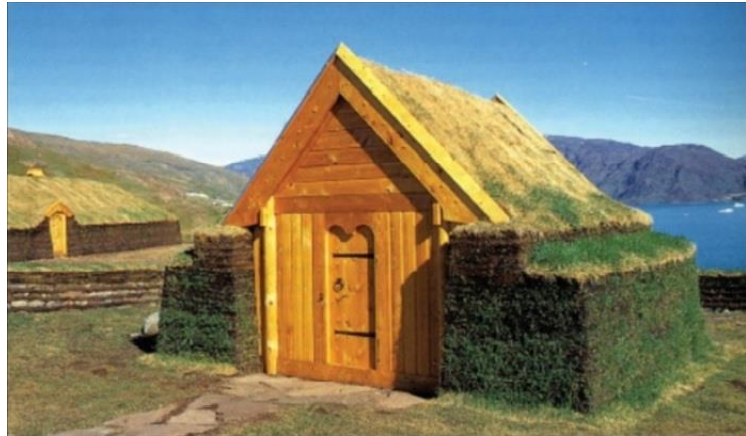


Figure 31 - Reconstructions of Tjodhilde's church and a longhouse appearing in the background (Price & Arneborg 2018: 172)

the case of four large farms and one medium site, adherent churches were registered. The Quassiarsuk area has the highest ratio of churches compared to the number of farms. The Eastern part of the property is particularly abundant of registered sites: here besides Norse traces, Thule-Inuit ruins, and modern heritage buildings, replicas were set up to help people experience notion of past structures. These reconstructions are the so-called Tjodhilde's church and a longhouse which are situated at the site of Brattahlíð I (E29a). These were constructed based on the results of excavations and parallels in the North Atlantic (figure 31). Quassiarsuk is the only area from the four components where the presence of Palaeo-Eskimo culture was confirmed (Vésteinsson 2016: 65-69).

Component 2, Garðar (Igaliku) is a compact and hardly reachable area, with considerable lowland surrounded by high, dramatic mountains. The lowlands, which are the most spacious pastoral ground in whole Greenland, are entirely man-shaped. Additionally, modern farming was reintroduced here as early as in 1783, hence modern Greenland's oldest farming community lays here. In the middle of the 20th century, Igaliku was home to more than 200 people, while now only 33 inhabitants live in this area. Most houses are single-family dwellings, from which some of them reused the local red stones taken from Norse ruins. These 53 historic buildings exhibit clear Danish architectural influences adapted to local conditions and circumstances. Besides these 20th century structures, Inuit winter and summer houses and camps, as well as a Christian Inuit cemetery was documented here, all from the 18th-19th century. In addition, 17 registered Norse sites can be found in the area, which vary significantly in size and function. There are both small-sized shielings, outstations, and small/medium farms with ten or fewer structures. The only large-sized farm is the episcopal manor at Garðar (Igaliku) with a complex set of more than 50 buildings. This was the largest single dwelling in the Norse Greenlandic settlements, which not only held the religious but also the economic power of the area. This is demonstrated well by the enormous storage buildings and the modest size of the nearby farms. Apart from the cathedral at Garðar (Igaliku), only one small church was registered connected to a medium-sized farm in this area (Vésteinsson 2016: 71-73, 79).

Component 3, Sissarluttoq is situated in a small valley characterized by high, steep slopes. The area with unbroken mountains makes landing somewhat circumstantial, which feature is also reflected in the place-name self: Sissarluttoq means "the poor landing site." Some 10 km before the head of the fjord, the area has an indentation, an isolated valley between the steep mountain ranges. This area is watered by several streams, a river, and aided by proper irrigation which equips this place with an

exceptional hay-making potential. Even though it is difficult to reach the area from the waterside, it is relatively easy to arrive using overland routes from Igaliku (component 2) and Hvalsey (component 5). One single Norse site – a large farm – with 44 features was recorded here, which could function as an essential economic outstation for Garðar (Igaliku) and thus for Greenlandic bishops. The site has exceptional preservation conditions, containing irrigation channels, small animal pens, still standing dry stone architectures, and completely collapsed turf constructions. Besides the Norse traces, however, no other historic features or modern settlement elements have been recorded. The landscape is thus untouched since the Medieval Ages (Vésteinsson 2016: 80-81).

Component 4 – Tasikuluulik covers the area along the southern coast of the Igalikup Kangerlue fjord. Its Norse place –name, Vathnaverfi means “the lake district,” refers to the vast outwashed plains created by large glaciers. This component begins at the head of Igaliku Kujalleq fjord and stretches further inland, towards the Inland Ice. In the northeast corner of the territory, winds have created barren, sand dunes, and tonnes of sediment deposited along the way. Between this sandy landscape, fertile meadows can be found where Norsemen left several ruin-groups. West for this sandy area, a valley stretches parallel to the fjord, where the largest medieval sites are situated on the fjord’s coast. Additionally, small and medium-sized farms are located in this valley. Modern sheep farming has been practiced here since 1934, although unlike components 1 and 2, pastoral lands are minorities compared to scrub woodland. From the 20th, only one building is listed to be protected by Greenlandic law. Nevertheless, from the Norse period, ca. 19 sites were registered here, comprising a high settlement density, which can only be compared to component 1. The largest site and thus the regional center is Igaliku Kujalleq (Ø-66), with more than 30 features. Regarding Inuit archaeology before the 20th century, there are no registered sites in this area. However, this fact can be the result of the extensive focus on Norse archaeology, and a survey of Inuit elements would likely reveal such remains (Vésteinsson 2016: 84-88).

The last component – Qaqortukulooq (Hvalsey) – is the outmost of the protected areas, located in a transition zone of outer and inner fjord areas. It stretches from the head of Qaqortup Imaa fjord to southwards, including the island Arpatsivik. The mountains are more than 1000 m high at the head of the fjord, but the landscape becomes flatter towards the opening of the fjord. There is considerable lowland in the area, but the conditions for hay-making are less optimal than in components 1 and 2. This is mirrored in the small size of the farms built here by the Norsemen. There are 11 Norse sites altogether, ranging from single structures to the regional center of Hvalsey. This site contains 16 structures, which – compared to sites in components 1 and 4 – is a modest number. Therefore it is assumed that a neighboring farm (Ø-83a) would have aided and provided the necessary resources for the Hvalsey manor. In many instances, component 5 is similar to component 2: a center could have dominated and held the economic power in the area while the adjacent farms are all smaller. However, unlike centers in the other components, Hvalsey is not situated on the most fertile area, but it has a clear marine orientation, located in close proximity to the fjord. Seafarers could see the walls of the church as soon as they entered the fjord and could be visible from far distances. This theory is supplied by the Greenlandic name for the place: Qaqortoq means “white,” which may imply the white masonry of the church’s walls. Regarding modern Inuit buildings, one site is of particular interest as it marks the beginning of modern sheep farming in Greenland in the late 18th century. The first couple of an Inuit woman Tuperna and her Norwegian husband Anders Olsen chose this place to start farming here with cattle and goats. Although their house was burnt down and they relocated, the foundations of this

building are now under protection. This house is a part of an Inuit settlement, which might be even older than the 18th century (Vésteinsson 2016: 90-92).

9.5 Analysis

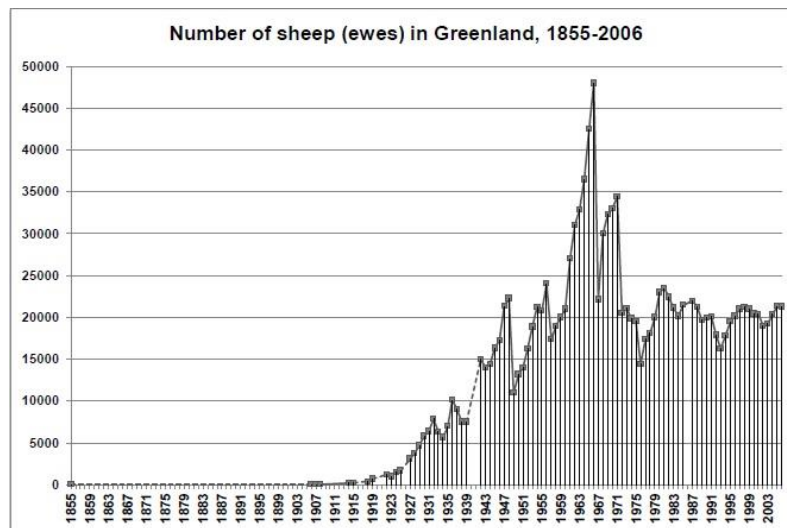


Figure 32 - Graph showing the intensive growth in the number of sheep in Greenland (Madsen 2014: 221)

As it is represented in the different component areas, both present-day Inuit and medieval Norse culture exploit livestock, agriculture, and partly hunting of marine animals. However, the Inuit way of life did not always comprise agriculture and domestic animals: they were introduced gradually to livestock farming from the beginning of the 20th century (figure 32). Today they breed their sheep where once Norse settlers established themselves as Arctic farmers: they were the first to introduce farming to the Arctic and built human settlements based on this. This Norse cultural tradition came to life approximately 200 years ago and has been influenced the Inuit farmers for two to three generations. They began to use the same pastoral-grazing areas, which once were extensively utilized by Norse farmers in the Middle Ages. This lifestyle is also aided by the fact that hunting wild animals is subject to stricter national and international conventions and laws. Caribou and muskox – which were once entirely wild animals – can be incorporated into domestic breeding. The result is a cultural landscape consisting of fields, shaped by grazing in medieval and modern times, ruins and present-day buildings both of Inuit and Norse origin. Together with the reuse of Norse medieval building materials, these modern farmers reflect their connections to their medieval Norse predecessors and the continuity between modern and past farming. On the other hand, Danish architectural styles and influences affect the modern Anthropocene landscape in Greenland.

10. Discussion and conclusions

10.1 Introduction

The question of cultural identity is a problematic phenomenon per se, but it is even more complicated when past tendencies are drawn into the picture. The biggest challenge is that identity and heritage are perceived differently by each individual; thus, they are somewhat subjective notions. Though there are some universal perceptions concerning a common Viking or medieval Norse identity and self-image with a specific emphasis and interest on the former one. Nevertheless, studying the medieval Norse identity and within this those settled in Greenland, can provide just the same possibilities.

In present-day, identity and cultural heritage are conjoined notions as heritage can demonstrate very well the different elements of identity. Features of cultural heritage are something that is acknowledged by its practicing members upon entering the cultural heritage process. Identity, however, is something more than cultural heritage: it is only a tiny part of it, identity goes beyond the boundaries of the discipline of heritage.

10.2 Cultural identity and its contribution to the collapse

The Norse settlers in Greenland chose to live in a diaspora, which fostered their cultural identity and prevented their full adaption to the local way of life. Greenland – being an island – was a marginalized area for those living outside of it but regarded as a part of the Christian world for those living on it. Norse Greenlanders took the risks and the dangers of seaborne transport to gain resources and garments from the European continent instead of the adaption of Inuit technology and clothing styles.

Creating objects and building churches in the spirit of Christian identity serve the purpose of avoiding being labelled as *Others*, outcasts of the civilized world. By mediating different traditions in the material, they wanted to prove their *inclusion* to the Christian community. Therefore, these connections were inevitable to maintain basic social and trading norms, to receive ships and artifacts via seaborne trading routes. Upon approaching the Greenlandic coast, outsiders could make sure that Norse settlers living there were professing Christians: their vast stone churches denoted this, already from far distances. Their intention of being seen as true Christians was not always successfully maintained: several written accounts report that pagan rituals, performed by heathen individuals happened on the island. Whether these sources are based on preliminary reports and thus documents actual practices on the island, we do not know.

However, this was probably one of the main reasons why Greenland always got bishops of foreign origin and never had religious leaders of their own: the Christian clergy feared that Greenlanders would have abandoned their religion on such a marginalized area like Greenland. Residing clergymen could have a further objection to adapting local Inuit methods, and technologies. It was probably unacceptable for them to accustom this "pagan" way of life even when it would have been crucial in the changing circumstances of climate, lifestyle, and resources. The bishops farm at Garðar (Igaliku) with the adjacent cathedral could indeed demonstrate this economic and political power obtained by these clergymen.

They were Christians with multi-cultural roots and traditions, which appear in the portable material culture and the ecclesiastical buildings. The composition of these cultural elements shifted just as their identity: over time, a respective Greenlandic identity could have emerged. This new identity could have evolved with or without the

settlers' consciousness. However, Norsemen also kept traditions which represented their cultural roots such as wooden crosses or loom weights with Christian symbols. Although the subject of my thesis is only a small-scale investigation, the identity of the settlers can be placed in a broader context in the North Atlantic region. It is evidently more appropriate to address the settlers' identity as 'North-Atlantic' or 'European Christian' than address it as "Norwegian" "Icelandic" or even "Scandinavian."

Referring back to the passphrase by Bozena Werbart at the beginning of the theoretical chapter: *"Identity is not a static phenomenon but rather a shifting concept which is affective to external circumstances"* Norse Greenlandic identity was indeed not a static phenomenon, but rather a fluid notion, which was constantly shaped and altered by external circumstances appearing in the North Atlantic region. A great many changes occurred during the lifetime of the Norse settlers, among others natural, cultural, sociological, which resulted in the fluidity of identity and thus the shifting nature of cultural material.

Since I have discussed the identity of the Norse settlers elaborately, it is now possible to answer my central research question:

- *To what extent and how did the settlers' cultural identity contribute to the deterioration of the Norse settlements in Greenland?*

During the 14th and 15th centuries, people in the Nordic countries were affected by hunger, wars, and climate change. However, the crisis became a disaster of complete cultural and biological extinction only in the case of Norse Greenland. In the same area, in the North-Atlantic region, Iceland experienced similar problems with plague and volcanic eruptions, but they could nevertheless renew and rebuild their society and settlements. It is incredibly fascinating why one collapsed, while the other could revive itself, especially in the same territory. Hence, in my opinion, the settlers' decisions, deriving from their cultural identity, contributed to the collapse to a greater extent. They rather invested in costly, elaborate churches and representative objects at the same time as the changes struck in. Maintaining their conservative, stratified, Christian, farming, and husbandry-centric lifestyle was more crucial for them than reacting to the changes by shifting some aspects of their life. Their fear of being labelled as pagans was greater than their fear of extinction or giving up their lands. Norse Greenlanders choose to avoid adaption to the changing circumstances, and instead they strengthened and emphasized their traditions and identity. They would have rather died than abandon their central values and customs, connecting them to the outer world. Their "imported" bishops could have played a main barrier to show flexibility and to adapt Inuit technology and skills.

The manipulation and use of material culture and ecclesiastical buildings to promote a European identity through objects and practices is thus a contributing factor to their disappearance. Although their identity went through different changes and was in the right way obtaining a specific "Greenlandic" attribute, the basic construction and perception about the world did not change: it laid in their homeland. This homeland formed their fundamental concept of belief, culture, society, power, and land-use, which Norse settlers remained faithful until the very end. It is probable that the settlers could have survived full extinction, if they had adapted arctic Inuit technology and lifestyle but the preservation of ethnic and identity purity was more crucial to them.

Therefore, I conclude that identity had a substantial contribution to the collapse of the Norse settlements, however, I do not declare that it was the main reason for the deterioration. It was not just one reason or factor that led to the collapse but the

combination of several different processes, changes, and interactions occurring during the deterioration; all of them had a part to play in the demise. When the settlers faced series of these challenges and at the same time based their decisions on emphasizing cultural identity, this combination resulted in inevitable consequences. They were not resilient enough to reorganize their society and hence change their subsistence and perceptions. Their determination to put enormous efforts into showcasing their identity towards the rest of Christian Europe, combined with climatic, natural, human, and societal factors, resulted in the collapse of the Norse settlements in Greenland. In other words, their society exited the adaptive circle (figure 4) and reached a full biological and cultural extinction.

10.3 Cultural heritage

As it was discussed thoroughly, the cultural heritage of today's Greenland is a complex phenomenon containing several elements of Norse, palaeo-Eskimo, neo-Eskimo (Thule-Inuit) and Danish cultural elements. These cultures influenced and still affect each other in many ways, not just regarding particular methods and techniques but complete lifestyles and living conditions. Both in the past and in the present, mutual influences can be found going in every direction.

However, these elements are not perceived and developed in the same way due to the divergence of time range and ethnicities. The Inuit and Danish legacy is a "living" heritage, which have present-day possessors who cultivate these customs and practices. On the other hand, Norse Greenlanders did not leave any descendants who could openly claim the Norse legacy left behind on the island. Who could then declare this section of cultural heritage and whose responsibility to tend its elements?

Possible applicants could be either Iceland - the land from where Erik the Red colonized Greenland - or Norway wherefrom Norsemen first had colonized Iceland. In this matter, these intangible and tangible elements could be regarded as a sort of "Norwegian-Icelandic" legacy, and thus their demands would be legal to retain this heritage. However, the concepts of national-states, as we know today, did not exist in the 9th-10th century. There is a reason why these settlers are not referred to as Icelanders or Norwegians but rather Norsemen: they carried a complex composition of cultural and biological roots. Hence, these elements could be regarded as a *common legacy* of a *North Atlantic Norse heritage* with which today several ethnicities could identify themselves. Nevertheless, Danes did not easily accept these Norse traces of Norwegian-Icelandic origin as they would have served as proofs for Norway in the *Greenland case* and thus disproved Denmark's claim to the island.

The native *Kalallit* (Inuit) population makes up the majority of inhabitants in present-day Greenland unlike for example in Norway where the indigenous Sámi population is a minority. Today, the situation in Greenland is quite unique in that Greenland is politically submitted to Denmark, but retains almost complete autonomy and possesses full authority regarding cultural heritage and its management. The multi-cultural society with diverse lineages that have evolved in modern Greenland requires liberal and inclusive cultural heritage management. The position of heritage administration, including several stakeholders and authorities in Greenland, is an excellent model of how ethnicities and countries could obtain diplomatic and peaceful cooperation, which takes into account everybody's interest.

Past settlers' cultural roots were equally multi-cultural as present-day Greenlanders' who can claim themselves descendants of different lineages. The Greenland Inuit inherited

these Norse traces, and Denmark acquired the research traditions with it. A vital question concerning this, is how modern Greenlanders perceive and cultivate this unique cultural landscape. Hence, I have arrived to answer and discuss my second, supplementary research question:

- *What role does the cultural heritage of Norse settlements in Greenland play in today's national narratives of this cultural-historical phenomenon?*

The answer is rather complicated and layered since a sort of duality characterizes the Inuit perception about Norse cultural traces. On the one hand, they regard these elements as sources of a foreign culture. Specific natural formations are often interpreted as the work of past Norse settlers emphasizing their uniqueness and strange dispositions. This notion was confirmed upon conducting the open-ended interview with Alibak Hard, who emphasized:

" So there is no connection [among modern Inuit population] or passed on traditions coming from the Norse."

Furthermore, materials from Norse structures were often used as secondary building elements in modern Inuit houses. However, this practice – using material of past cultures – is widespread all over the world, even if such elements belong to our direct ancestors. This limited interest for Norse elements by the Inuit can be regarded as a result of the approach applied in Dano-Greenlandic research in the past. This tradition described Norse and Inuit (and pre-Eskimo) activities and heritage separately, which could strengthen the Inuit's foreign attitude towards Norse elements.



Figure 33 - "Traditional" Inuit hunting method from kayak on the left and hay-stacking (Madsen 2014: 226, Nordic Council of Ministers 1999: 95)

On the other hand, the identity of the Inuit has started to change in the course of the last 200 hundred years and correspondently their perception about the Norse heritage. Modern Inuit accept the fact that their ancestors learned certain things from their Norse neighbors: these can occasionally be traced in linguistic evidence in place-names and Greenlandic words or in the matter of customs and traditions (such as the ring dance mentioned earlier). Sometimes particular modern Greenlanders even claim themselves Norse ancestry and origin. However, these possible Norse elements incorporated into Inuit legacy are not proven facts and therefore the subject needs to be further studied and analysed.

The only certain issue is that identity of the Inuit is a changing concept; it evolves with time and changes under external circumstances. They can easily adapt new aspects of identity - even from "alien cultures" - that they did not recognize in the past. They did so with farming and animal husbandry which had been reintroduced some 200 years ago on the island. Their lifestyle more and more reflects the Norse way of life, while fewer and

fewer locals practice "traditional" Inuit methods (figure 33). These, however, can be preserved and mediate to the public by organizing workshops and informative presentations to the local community.

In my opinion, an individual or a whole community cannot obtain only one sort of identity but rather can possess a set and combination of cultural identities. The keyword is equivalence: we have to tend them and manage them uniformly and consequently mediate them properly to the general public. In the "Greenlandic model," local authorities, stakeholders, and inhabitants are all drawn into the decision-making process and the management of cultural heritage. This multi-faceted, interwoven nature of different cultures in Greenland but at the same time a nationalistic approach was enhanced by my other interviewee, Christian Koch Madsen:

"Of course, the entire notion of the museum [NKA], its societal role, and ways of communicating the past is a Colonial [Danish] legacy so unreflectively interwoven with and imbedded in Greenlandic perspectives on how to narrate the past that it is, at times, hard to tell one perspective from the other. However, choices in languages and narratives in the exhibition reflect a wish to build cultural self-awareness and national pride, thus clearly supporting the nation-building processes as part of Greenland's move towards eventual independence."

This method in Greenland supplies feasible solutions, answers, and strategies and perhaps can serve as a "model-land" to countries owning a similar, versatile cultural heritage.

Kujataa World Heritage Site fits properly into these approaches and methods being an excellent case study for showing pre-Eskimo, modern Inuit, Colonial Danish, and past Norse cultural features coming together. It also reflects how identity can change and bring in new elements relatively rapidly under a couple of hundreds of years. In the territory of the five component-areas, these different branches of legacy have existed next to each other, and occasionally on top of each other. Furthermore, it displays well the entering process of different elements into a new cultural agenda, namely farming techniques and its material into Inuit heritage. Inuit people today use the same pastoral grounds, as their predecessors once utilized in the Middle Ages. Slowly but surely, Norse traces have been perceived differently by the local population: it can enter into the heritage process of the local Greenlandic legacy. Once again, Kujataa World Heritage Site perfectly displays the success of the "Greenlandic model," where *"...the three legs are intact in the Outstanding Universal Value (OUV); the defined uniqueness, the tangible proof, and the protection."* (Hard, personal communication). People living on the island with different lineages and backgrounds have close cooperation; they work together in order to protect, maintain, and mediate this unique Arctic cultural landscape.

Kujataa and the nature of cultural heritage management in Greenland can furthermore be a vital evaluation in the authorized heritage discourse (henceforth AHD). This discourse criticizes the exaggerated function and significance of the authoritative expertise and thus a sort of exclusion of local caretakers and stakeholders. As a consequence of the AHD, a universal, common value (see the previous paragraph) is often enhanced, and other forms of identity are often discarded and undervalued. Additionally, the dialogue focuses on aesthetically pleasing material objects, sites, and hence eliminates non-traditional conceptions of heritage (Smith 2006: 29-31). One can assume that Kujataa being a World Heritage Site also bears such prejudices and discarded perceptions. On the other hand, there is a strong desire to include participants from the local community into heritage management in Greenland as Alibak Hard

stressed out: “The management of site though, is based on sustainable principles – this means including the local population in all processes. Including through democratic processes in legislative work. The steering committee and the management group both have local representatives from both the agriculture and the population (in this case, this is two sides of the same matter).”

What will the future bring for modern Greenlanders and their cultural heritage? In Greenland, past and present are interlocked. As much as their Norse predecessors, modern Greenlanders have to face an increasing problem which endanger their cultural heritage: climate change and its driven factors.

Since the mid - 20th-century changes in the Earth’s climate system have emerged affecting the whole world, with the North Atlantic – including Greenland – being affected expansively. Greenland is significantly exposed to climate fluctuations, the rising average temperature and melting of the Greenlandic ice sheet; all three causing both local and global problems. Driven factors such as sea-level rise, changes in precipitation, and increasing storm intensity and frequency are threatening and have already caused severe damages in both cultural and natural heritage. Within cultural heritage, climate change has effects on both built remains, archaeological material, and complete cultural environments. A vast amount of sites slowly disappears and/or gets severely damaged, which could cause irreversible losses of crucial archaeological information. Ongoing research shows that sites are highly reactive and vulnerable to increasing microbial degradation and coastal erosion. Organic materials – which the Greenlandic archaeological assemblage is abundant of - are particularly vulnerable to such deteriorations. The rate of microbial degradation is influenced by soil temperatures, precipitation content, rising air temperatures, and fluctuations in moisture which all may induce the loss of organic material.

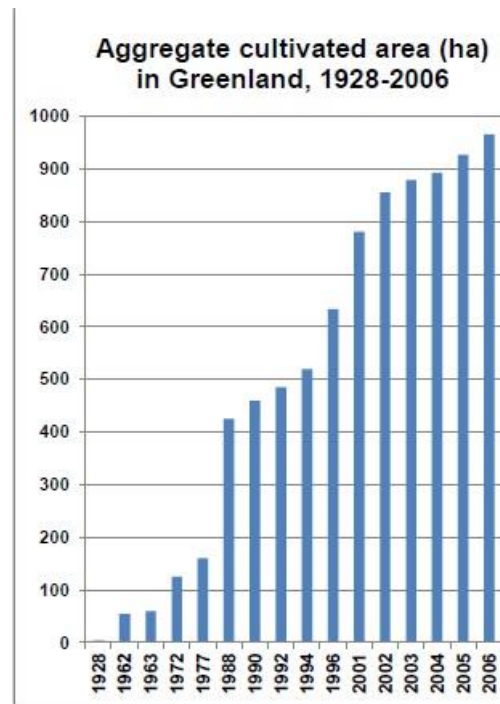


Figure 34 - Growth of cultivated area in Greenland since 1928 (Madsen 2014: 224)

Nevertheless, not only their legacy is in danger, but climate change could also irreversibly alter their lifestyle. The changing climatic conditions and melting ice in Greenland provide more and more pastoral and grazing areas for Greenlandic farmers (figure 34). While this can be regarded as a positive side-effect of the climate change, smaller villages that still rely on hunting and fishing of wild animals could lose their subsistence. Arctic wildlife is ultra-sensitive to climatic changes: the regressive number of prey animals means that these inhabitants would have to abandon their traditional lifestyles. In this way, climate change would contribute to the destruction of their livelihood and, at the same time, the loss of irreplaceable tangible and intangible heritage.

It is rightful to ask whether modern Inuit population could end up like their Norse predecessors in the light of current climate changes. Is it possible to compare the two climatic fluctuations and draw conclusions and predictions regarding the future? I reckon

that it would be challenging, if not impossible. Even if they cannot be measured, we could still learn from past events, the settlers' decisions, and eventual mistakes. Furthermore, in my opinion, with the 21st-century hindsight and technology, such destiny is avoidable. In the worst-case scenario, they would have to adapt to the changing circumstances and maybe alter their perceptions about the world and subsistence. Something that the Norse settlers in Greenland in the Middle Ages seemed to neglect.

10.4 Concluding remarks

The research field of the Norse settlements in Greenland and its demise requires a multi-disciplinary and international approach in order to study the different aspects of this subject and answer research questions in the most comprehensive way. The material culture of the Norsemen is versatile and carry a vast amount of opportunities for studying identity and understand the purpose and believes behind different practices. In order to fully comprehend these aspects, in the future research, it is crucial to draw in comparative material from other countries both in the North Atlantic region, Scandinavia, and beyond these territories. The magnitude of my master thesis, however, did not allow me to discuss these matters in such an extensive way, but focusing on analyzing identity and its physical materialization even if on a much smaller scale. Identity studies regarding past societies provide much more than just recognizing perceptions of bygone cultures: it also contributes to recognizing who we are and why we think the way we do today. Studying cultural heritage is just one tool to help answer these ultimate questions.

"The past is not abstract; it has material reality as heritage, which in turn has material consequences for community identity and belonging. The past cannot simply be reduced to archaeological data or historical texts – it is someone's heritage."

(Smith 2006: 29)

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Appendix

Appendix 1

Table of churches in Norse Greenland (Created after Keller 1989: 184, 193; Vésteinnsson 2010: 140)

Ruin Group	Location	Norse name	Internal m² (appr.)	Type
Ø33	Qorlortoq		5	Qorlortoq (Q-type)
Ø35	Qorlortup Itinnera		6,5	Qorlortoq (Q-type)
Ø64	Inoquassaat		6,5	Qorlortoq (Q-type)
Ø48	Igaliku	Garðar I	7	Qorlortoq (Q-type)
Ø29a	Qassiarsuq	Brattahlíð I	7	Qorlortoq (Q-type)
Ø78	Eqaluit		15	Qorlortoq (Q-type)
Ø162	Narsaq, Uunatoq	Vogar	unknown	Qorlortoq (Q-type)
Ø29a	Qassiarsuq	Brattahlíð II	38	Romanesque
V51	Kilaarsarfik	Sandnes	40	Romanesque
Ø105	Tasermiutsiaat	Stórt klaustur	46	Romanesque
Ø111	Ikigaat	Herjólfssnes	80,5	Romanesque
Ø1	Nunataaq	Garðanes	unknown	Romanesque
V7	Ujarassuit	Ánavík	48	"Medieval"
Ø29a	Qassiarsuq	Brattahlíð III	50	"Medieval"
Ø66	Igaliku Kujalleq	undir Höfða	63	"Medieval"
Ø83	Qaqortukuloq	Hvalseyjarfjarðarkirkja	65	"Medieval"
Ø149	Narsarsuaq, Unartoq	Systraklaustur	65	"Medieval"
Ø23	Sillisit	undir Sólarfjöllum	32,25	"Medieval"
Ø47	Igaliku	Garðar II/Nikuláskirkja	170	cruciform/cathedral
V23a	Qaqssingut	Hóp í Agnafi røi	unknown	unknown
Ø18	Narsap Ilua	Dýrneskirkja	unknown	unknown

