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Svalbard's the place

Examining Settler Colonialism's influence on Arctic Prehistory

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In memory of fellow Canadian, archaeologist Dr. Daniel Arsenault (1957-2016)

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ABSTRACT

Svalbard's the place: Examining Settler Colonialism's influence on Arctic Prehistory

The Svalbard archipelago, formerly known as Spitsbergen, is located 1050 km south of the North Pole. The western side of the main island has a warmer climate than other areas on the same parallel. The nearest land masses are Greenland to the West, Scandinavia to the South and Russia to the East. While the islands remained nullius Land for most of its existence, the Svalbard Treaty of 1920 made Svalbard a sovereign state in Norway. Before their discovery by Willem Barentsz in 1596, they did not have an anthropogenic presence confirmed by unanimity. While two major works were written about the potential of prehistoric settlements in the archipelago: Christianson and Simonsson's publication in 1970 and Bjerck's 2000 publication of unsuccessful research results in 1997, no convincing material culture was found. The Pomor museum, which exposed a foundation date before Barentsz, faced cultural management problems imposed by the governor of Svalbard acting on behalf of Norway. The Inuit legends of a mysterious land called Akilineq and Tuniit - people who come to their present territory before them, can give insight into the potential knowledge of these upper Arctic islands. Nenet's legends about mysterious people called Sirtya and the skills of the Sami boat that influenced the construction of Viking ships may be indicative of at least some knowledge of the islands. However, the possibility of the Vikings arriving at the archipelago was only really entertained by the government; so much so that their records were used in the renaming of the islands. There is no evidence that they have visited the islands. Although the Svalbard can be compared to Antarctica in terms of non-prehistoric presence, oral histories are also beginning to create doubt. The world is slowly running out of places that have not been visited by man until modern times. The desire of the new sovereign power to maintain the greatest possible control and influence over Svalbard is visible from the established culture that emerged in the last century, transforming Svalbard as a place to live permanently, not just as a source of resources. These shifting visions of Svalbard's land use helped Norway maintain sovereignty over the archipelago.

O Lugar de Svalbard: Examinando a Influência do Colonialismo na Pré-História do Ártico

O arquipélago de Svalbard, anteriormente conhecido como Spitsbergen, está localizado a 1050 kms ao sul do Pólo Norte. O lado ocidental da ilha principal tem um clima mais quente do que outras áreas no mesmo paralelo. As massas terrestres mais próximas são a Groenlândia a Ocidente, a Escandinávia ao Sul e a Rússia a Oriente. Enquanto as ilhas permaneceram terra de ninguém pela maior parte da sua existência, o Tratado de Svalbard de 1920 tornou-a um estado soberano da Noruega. Antes de sua descoberta em 1596 por Willem Barentsz, Svalbard não tinha uma presença antropogénica confirmada por unanimidade. Apesar de duas obras de referência terem sido escritas sobre o potencial dos assentamentos pré-históricos no arquipélago: as publicações de Christianson e Simonsson em 1970, e, a de Bjerck em 2000 com os desafortunados resultados de pesquisa de 1997, nenhum material cultural convincente foi encontrado. O museu Pomor que atribuiu uma data de fundação antes de Barentsz, enfrentou problemas de gestão cultural colocados pelo governador de Svalbard porquanto este atuava em nome da Noruega. As lendas Inuit sobre uma terra misteriosa chamada Akilineq e Tuniit - pessoas que chegam ao seu território atual antes deles, podem dar uma visão do potencial conhecimento destas ilhas do Ártico superior. As lendas de Nenet sobre as misteriosas pessoas chamadas Sirtya e as capacidades do barco Sami que influenciou a construção de navios Viking podem ser indicadores de, pelo menos, algum conhecimento sobre estas ilhas. Todavia, a possibilidade de os Vikings terem chegado ao arquipélago foi apenas uma hipótese aludida pelo governo, tanto assim o é que os seus registos foram usados para a renomeação das ilhas; pelo que não há evidências de que estes tenham realmente visitado as ilhas. Apesar de Svalbard poder ser comparado à Antártida nos termos da presença não pré-histórica, as histórias orais começam a gerar dúvidas. O mundo está lentamente a esgotar os lugares que não foram visitados pelo homem até aos tempos modernos! A aspiração de um novo poder soberano que detenha um maior controlo e influência sobre Svalbard é visível na cultura estabelecida que surgiu no século passado, a qual transformou Svalbard num lugar para viver permanentemente ao invés de apenas ser uma fonte de recursos. Estas visões cambiantes do uso da terra de Svalbard ajudaram a Noruega a manter a soberania sobre o arquipélago.

GLOSSARY OF TERMS

AStT: (see paleo-eskimo)

Dorset Culture: named after Cape Dorset where the first site was discovered in 1925, the Dorset culture is a Tuniit group which comprises of four distinct cultural phases between 500 BCE–1500 CE in Arctic Canada. The group is known for their distinct artistic style.

Eskimo: Umbrella term referring to the people of the Indigenous people of the Arctic comprising of Kaaladlit (Greenlandic Inuit) , Canadian Inuit , Alaskan Iñupiat as well as the Yupik people and Aleut people of Alaska and East Russia all of which are believed to have a common recent origin due to language and mythological similarities. Each group contains subgroups, many of which with their own distinct language and customs. The name is believed to originate from the word 'ayas ̆kimew',used by the Eastern Canadian Indigenous group the Innu (Montagnais). It describes their neighbors as "snowshoe lacers". Alternately, Cree texts have referred to Inuit as *askipiw,* of which, "means eats something raw" which has aided in the creation of stereotypes concerning northern people. Over time the word has become derogatory reference to all people of the North, but is still commonly used in Alaska in reference to the Yupik and Iñupiat people, who do not identify as closely with the Inuit of Canada and Greenland. In 1977, the Inuit Circumpolar Conference (ICC) meeting in Barrow, Alaska, United States determined that the word Inuit should be applied to all native arctic people despite their chosen term. It is not uncommon to see academic texts still use the term in taphonomic references.

Paleo-eskimo (Pre-Thule or Pre-Inuit): circumpolar people believed to inhabit the Arctic from 2500 BCE until 1500 CE. They are also referred to as the Arctic Small Tool tradition (AStt), a broad cultural entity known for its micro-blade technology and known to settle along coasts and streams. It is believed that they migrated from Siberia around 5,500 years ago, independent of earlier migration waves. The Iyatayet Site (or Denbigh Flint complex) in Alaska, Pre-Dorset in Canada, Independence I and Independence II In Northern Greenland and Saqqaq in Eastern Greenland all fall under the Paleo-eskimo group . This group would later separate into the Norton tradition in Alaska (later developing into the Thule culture or proto-Inuit) and the Dorset

tradition in Arctic Canada. It is believed that this group rapidly “disappeared”, potentially due to competition with other groups (such as the Thule) or maladaptation to climate change.

Inuit: Inuktitut simply meaning “the people”. Used by non-Inuit to describe Indigenous Arctic peoples residing in Northern Canada and Greenland.

Proto-Inuit: see Thule

Inughuit: (also known as Inughuit or Arctic Highlanders) Greenlandic Inuit residents of the high Arctic between 75°—80° N and 58°–74° W.. It is believed that they were first contacted in 1818. Several settlements have been abandoned due to extreme conditions and displacement, such as the village of Etah, now home to American Thule air base. Their population has steadily been increasing.

Indigenous (also known as indigenous/native American/aboriginal/First Nations): The World Health Organization defines indigenous people as- “communities that live within, or are attached to, geographically distinct traditional habitats or ancestral territories, and who identify themselves as being part of a distinct cultural group, descended from groups present in the area before contemporary states, borders and nations were imposed upon an area. Indigenous may be spelled with a capital to acknowledge its own respective nationality.

Thule: The ancestors of Inuit, referred to as Skraelings (skin wears/eaters) in Viking saga texts, the inhabitants of “Vinland” or Canada. They appear to have a rapid, direct migration from Alaska, which may have been aided by the Tuniit.

Yupik (also known as Yu’pik): Meaning “the real people” in the Yupik language to describe indigenous groups located in Alaska and Far East Russia. The group consists of four sub groups who speak their own distinctive languages.They are related to the Inuit and Inupiat people.

Tuniit: (also known as Tuniq or Sivullirmiut) in Inuktitut are known as “the people before” or “first inhabitants”. Once believed to be mythical, archaeologists agree that this is in reference the Late Dorset people (residing in Canada from 800 BCE–1500 CE), whose population may have already been on the decline when they met the Thule people. While archaeologists still need

sufficient evidence to prove that the two groups met- a genetic sequence performed on a paleo-eskimo mummy dubbed Inuk (“person”) reveals no genetic link between Inuit and Tuniit). Inuit oral histories contain many stories about them and claim that the Tuniit intermarried with their ancestors, which may account for their disappearance

Qallunaaq: (□□□□□/ also known as Qallunaat, kadloona, kabloona) Canadian Inuit term for foreigner, settler or non-Inuit person residing in Canada or Greenland, especially European or of European descent. The Greenlandic equivalent is kablunâk, or qallunaat which is originally in reference to Danes.

Samoyed: (see Nenets)

Skræling: Name the Norse gave to the Thule people. The name may have originated from the animal pelts the Inuit wore.

Sysselmannen:(Sysselmannen på Svalbard, Sysselmann) Svalbard’s governor, who represents and enforces policies which acts in the interest of Norwegian sovereignty over the archipelago.

Nenet: (Nenetses, Samoyed) In Nenet, the name means “man” and is derived from a Nenet noun for “human being”. While earlier Russian sources use the term Samoyed, which is now considered derogatory (The word means “self-eater” or “cannibal” in person). The nenet people are comprised of several groups with different dialects and are the largest Indigenous group in Northern Siberia. It is believed that they originated from

Sami: (Also known as Sámi, Saami, Lapp or Laplander) traditionally inhabited the area of northern Norway, Sweden, Finland and the Kola peninsula of Russia. Sápmi refers to both the territory and the people, with Sami meaning of the land of Sápmi.

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1. INTRODUCTION

Svalbard's prehistoric archaeological record is fragmentary at best. Therefore, archaeologists have encountered a number of issues in their efforts to collate a tangible narrative for this arctic archipelago. This MA thesis provides a broad perspective on both visitation and potential settlement during the prehistoric period, through the contextualization of both historical and recent evidence concerning Svalbard and its' neighboring territories. In addition, this thesis addresses human agency in both past and present contexts- an often overlooked component in the theoretical discussion of Svalbard's prehistory.

This thesis is a study divided into three chapters which are then divided into several sub-categories. These subcategories touch on three themes. Firstly, in *2.1 Historical Approach* and *2.2 Settling of Svalbard, S*valbard's history, from its first speculated sighting to its more recent settling and declared Norwegian sovereignty is discussed. Secondly, in *2.3 Socio-political approaches to Svalbard*, the structure of Settler Colonialism and its influence within the circumpolar arctic are examined with particular focus on how indigenous history and prehistory is disseminated. Finally, sections *2.4 Archaeological Approach* and *2.5 Theoretical Approach* give a summation of perspectives concerning Svalbard's prehistory from both archaeological and theoretical frameworks.

1.1 SPECIFICATION AND TOPIC RELEVANCE

The archipelago of Svalbard is located 1050 km south of the [true] North Pole, between the 74° and 81° latitude and 10° to 35° longitude [FIG 1]. The Svalbard archipelago covers a total landmass of 61,020 km² comprising of three large islands: Spitsbergen is the largest and most populated, followed by Nordaustlandet in the north east and Edgeøya to the southeast, as well as many small islands including *Tusenøyane* (Thousand Islands) a group of small islands south of Edgeøya, *Bjørnøya* (Bear Island)-the southernmost island within the archipelago, Kong Karls Land-a group of islands to the east and Kvitoya-an island furthest east and almost completely

covered in ice. Due to its location within the Arctic Circle, the islands experience midnight sun and polar nights as well as a clear view of the aurora borealis. The average temperatures throughout the archipelago are lower than other areas along the same latitude, with the warmest conditions found in western Spitsbergen. From 1961 until 1990, the average annual temperatures ranged from -16 °C in winter to +6 °C in summer (Eeg-Henriksen and Sjømæling 2016), but temperatures are steadily increasing: the average yearly temperature in 2016 in the west was 0°C [1].

Svalbard has a high arctic, maritime climate. Warm saline water originating from the North Atlantic Current passes through to the Norwegian Current and branches off into the West Spitsbergen Current. The West Spitsbergen Current runs alongside the East Greenland Current, which is a major exporter of Arctic sea ice to the North Atlantic Ocean. The currents are narrow and strong, running adjacent to each other within the Fram Strait. The currents follow the path of the Greenland and Svalbard continental shelves, with the East Greenland Current running from North to South (making East Greenland much colder than West) and the West Spitsbergen Current running South to North (keeping West Spitsbergen warmer than East). The currents work together to make the Fram Strait the northernmost ice free section of ocean in the world (Haugan 1999). This meeting of hot and cold also affects the wind conditions of the archipelago. Cold polar air from the north meets milder, wet sea air from the south creating low pressure areas resulting in cold, strong winds during the winter and coastal fog in the summer (Sjöblom 2006).

Other than the coastal lowland, Svalbard is mountainous with both small and large glaciers occupying many of upland and valley areas. In fact, about 60 % of the archipelago is covered in glaciers with a large percentage indicating surge-type behavior (Hagen and others, 1993; Hamilton and Dowdeswell, 1996; Eeg-Henriksen and Sjømæling 2016). This is rare given that only 2% of the world's glaciers show surge behavior, making Svalbard an ideal place to observe this activity. When a surge glacier is dormant, a period which may last for 100 years, the glacier flows slowly and accumulates snow at the top which eventually compacts and contributes to the

[1] Ketil Isaksen of the Norwegian Meteorological Institute

overall ice reservoir. A surge may then be triggered, resulting in short (1-10 years) period of fast moving advancement. During surges, glaciers may move at seven hundred times their usual speed (Elvevold 2007). Surges are not directly triggered by outside events, albeit can be influenced by warming temperatures. The mechanisms which cause a surge are related to the hydrography at the base of the glacier. In order for a glacier to move at an accelerated pace, sub-glacial water must be present, originating from the base reaching its pressure melting point as well as surface meltwater reaching the base via crevasses (Nuttal et al. 1997). These moving glaciers have had a large impact on the landscape, from leaving glacial erratics throughout the island, to leaving striations throughout the bedrock [Fig 2].

[FIG 2] A popular tourist attraction, Nordenskiöldbreen (Glacier), slowly is retreating onto the land, adjacent to Pyramiden. The author of the thesis could hear the distinct crack of calving ice. Photo credit: Photographed by Jessica Thomas, author, 2016

Both ancient and more recently formed moraines can be visible throughout the glaciated landscape as well. Non glaciated areas tend to be found in higher concentrations to the west coast of Spitsbergen and are covered in permafrost, with the top layer melting in summer temperatures. Due to the changing climate-both locally and globally, permafrost is remaining melted for longer

periods than before, resulting in flooding. Patterned ground and pingos (hydrolaccolith) can also be found throughout the landscape. They are formed when groundwater forms ice, creating enough pressure to push up the top layer of permafrost. Pingos are small hills formed by this process of frost heaving while pattern ground are small scale, often symmetrical, geometric features in the terrain. This phenomenon can also been found in Australia and on the planet Mars. Due to the distinct arrangement, it is not uncommon to assume the origins of patterned ground can be traced back to anthropic in origin.

Svalbard is home to a diverse population of terrestrial and marine wildlife. While only 6-7 percent of the terrain has vegetation, the archipelago is hosts the northernmost herbivore: the endemic species of reindeer known as the Svalbard reindeer (*Rangifer tarandus platyrhynchus*) [FIG 3], which are the smallest subspecies of reindeer in the world. While vegetation is low, 178 natural species of vascular plants, 380–390 species of moss, 708 species of lichen and more than 750 species of fungus had been registered as of 2015 (Eeg-Henriksen and Sjømæling 2016) [FIG 4] providing enough seasonal food options for reindeer in preparation for winter. It is believed that the ancestors of the Svalbard reindeer reached the archipelago through a post-glacial North American colonization route due to the genetic links between Svalbard's reindeer and the population of reindeer found in Northern Quebec (Flagstad and Røed 2003). They must have managed to reach Svalbard from Greenland via ice-flows. However, an alternative eastern route has not been completely ruled out. There is also has a sizeable population of Arctic foxes (*Vulpes lagopus*), which can be found throughout the circumpolar region and are believed to have made their way to Svalbard within the past 10,000 years, after the Late Glacial Maximum (LGM). It is not uncommon for Arctic foxes to travel over sea ice (Carmichael 2006). The emblematic animal species of Svalbard is the Polar Bear (*Ursus maritimus*). The Barents Sea population of polar bears occupies the West of Spitsbergen as well as Novaya Zemlya and Franz Josef Land, Russia Polar bears appear everywhere. The author noted that many urban myths exist in Longyearbyen regarding the polar bear population. They are treated with fear, respect and admiration, always an imminent threat lurking in the consciousness of visitors. This sentiment is reinforced by the

mandatory practice of carrying something which can be used as self-defense against polar bears such as a flare gun, or a gun as protection (Sysselmannen 2012).

Jan Mayen Island

Jan Mayen island is located in the Arctic Ocean between Iceland, Greenland and Norway. Svalbard and Jan Mayen are often referenced together but are considered separate entities, but are not administratively related. They are placed together because they are Norway's two only sovereign territories. While Jan Mayen prehistory will not be discussed in this thesis, it is notable that it, like Svalbard, does not have an officially declared prehistory. Jan Mayan is currently only occupied by military personnel. Still, there are indications that it may have been discovered earlier than expected: medieval chronicles such as *The Voyage of Saint Brendan*, recorded around AD 900 provide details about monks travelling in search of solitude, using leather boats from Ireland. It is theorized that they may have also travelled to the Faroe Islands and Iceland before the Vikings.

1.2 RESEARCH PROBLEMS

There is no consensus regarding the extent of human activity on the archipelago before its discovery by Willem Barentsz and his crew in 1596. The indigenous Pomors were already hunting on the nearby archipelago of Novaya Zemlya and it has been suggested that they most likely knew and made use of Svalbard before Barentsz. Naturally, this theory has lead to several excavations on known Russian sites. Conversely, the methodology used for dating their settlements, sites and artifacts has been scrutinized by archaeologists such as Thor B Arlov, Hein B. Bjerck and Svend Erik Albrethsen. Research which aims to uncover evidence from before the suspected Pomorye period is even more heavily scrutinized. Currently all lithics theorized to be linked with a prehistoric settlement have been declared "borderline finds" by the small number of archaeologists still interested in Svalbard's potential pre-medieval activity. Borderline finds are convincing enough to look anthropic in origin, but ultimately are the results of natural

processes. Recent archaeological surveying on Spitsbergen, the largest and most heavily populated island, has not revealed *any* promising signs of prehistoric settlements and test pits have only produced more "borderline finds" which Bjerck proposes should be kept as educative material.

The first chapter will provide a summary of the research conducted in regards to Svalbard's prehistory and address the major arguments in regards to the archipelago's prehistoric status. Although material evidence is lacking in regards to Svalbard's pre-Barentsz discovery in terms of *settlement*, this does not completely rule out the possibility of any prehistoric visitations or *knowledge*. Non-material culture may provide indications that other pan-arctic groups were at least aware of Svalbard before Western Europeans and may have acted as informants.

Distance from any major Continental landmass is the biggest argument attributed to the lack of prehistoric settlement (Mcghee 2008; Albrethsen and Arlov 1998; Bjerck 2000; Elvebakk, Theisen and Brude 1998: 21). The second chapter of this thesis will discuss how the Tuniit-a people from Inuit oral histories which references the paleo-eskimo cultures already inhabiting the land before waves of proto-Inuit migration, would be able to reach Svalbard. Their boats would have been similar to Inuit kayaks (Grønnow 1994, Golden 2006) and potentially umiaks. Historical and experimental evidence has proven that they were able to reach Scotland from Greenland, a distance greater than Greenland to Svalbard. And if not the Tuniit, other sea-faring groups for thousands of years were in the area-it would be quite unusual for them to have "missed it". Perhaps the reason for Svalbard's lacking prehistory is not simply due to the fact that it does not exist.

The third chapter will discuss how artifacts and settlements likely will be difficult to find due to erosion, industrial activity and nearly two centuries worth of disturbances from visitors and amateur archaeologists. In addition to this, public perception would have change about the archipelago in order to garner support-Svalbard is advertised and conceptualized as unspoiled, wild, natural arctic. This is a lucrative image for tourism and reinforces the nearly 100 year old Treaty of Svalbard, granting Norwegian sovereignty over the territory. The implications that come with settlers not being the first and rightful stewards of this new, unknown territory may

draw attention to the less idealistic side of Arctic sovereignty claims. The social structure of settler colonialism has played a major influence in the interpretation of Svalbard's prehistory.

1.3 SOURCE MATERIAL

The current discussion about the possibility of Svalbard having a prehistoric settlement has reached a stalemate. The same can be said for the discussion of Svalbard having, *any* anthropic presence before it's officially declared discovery in the 16th century. With no clear leads, historical archaeology initiatives have eclipsed those of prehistory. In more contemporary times, most archaeological initiatives are tied with rescue missions. If prehistoric archaeology is discussed at all, it is usually the preamble to a more recent historical finding. Svalbard underwent surveying primarily by geologists and amateur archaeologists in the 19th century. Much of the documentation has gone unpunished or has been lost, but if found, may be an interesting contributor to an incredibly scant record. The dominant literature on this topic is represented by a handful of writers and "during the 350 years of history writing, it is surprising how little work has been done to employ 'new' source material. Many writers use the same sources, and their interpretations are to a large extent uniform (Arlov 1988 via Okhuizen 2005).

The most polarizing study of Svalbard's prehistory is Hans Christiansson and Povl Simonsen *Stone Age finds from Spitsbergen (1970)* which describes a collection of lithics found at an excavation at Russekeila near Groenfjorden, suggesting they may date to around the Neolithic of Northern Europe (about 3000 BCE)? It should be noted that this publication was based on a culmination of other articles released by the two archaeologists (Christiansson and Simonsen) in relation to the subject, including an article which addressed sea level changes and isostatic uplift. It should also be noted that, that the excavation was conducted in conjunction with a historical one: the main goal of the excavation was to study an old Pomor settlement.While no clear sign of settlement had been found (tent rings were attributed to Sami and Nenet residents of the settlement), an array of lithics were presented for analysis.

In Hein B. Bjerck's article *Stone Age settlement on Svalbard? A re-evaluation of previous finds and the results of a recent field survey*, the former Cultural Heritage Officer at the Governor of Svalbard in 1996-1999 provides a detailed summary about Svalbard's speculated prehistory. He examines the lithics presented by Simonsson and Christiansson and includes the results from his own archaeological survey in the Bellsund area, undertaken in 1997. While the results are not in favor of a prehistoric settlement or visitation on Spitsbergen, his assessment is thorough and convincing, and his methodology is sound.

A historical source addressing Svalbard's prehistory is that of Gerrit DeVeer, a member of Willem Barentsz crew. DeVeer wrote *The three voyages of William Barents to the Arctic regions, (1594, 1595, and 1596)*: the first known written, firsthand account of Svalbard and it's discovery. DeVeer did not claim to see any settlements when they approached Spitsbergen, and it is this claim that is used to solidify the fact that Svalbard did not have an indigenous population at the time of its founding. He and his crew did not partake in extensively surveying the land by foot.

In addition to these three main sources, Thor B. Arlov, currently teaches the History of Svalbard at the University Center of Svalbard. In his research he covers Svalbard's whaling history and discusses more contemporary history of the archipelago. He also addresses the theoretical implications of Svalbard's founding and in his article "*The discovery of Svalbard — a problem reconsidered"* which criticizes the methodology of Russian publications, specifically in regards to the dating of driftwood. While he mentions the possibility of prehistoric presence on the archipelago, it is mostly a preamble for historical archaeology. Both authors acknowledge the possibilities, and suggest the capability of Vikings visiting the archipelago. In addition, quick surveys have been performed by Canadian archaeologist Robert Mcghee in 1988 in Spitsbergen and Edgeoya in hopes of proving a now abandoned theory that paleo-Eskimo groups may have reached North America and Greenland, from Siberia through island hopping, in "*The Origin of the Eskimos: is an alternate hypothesis possible?*". Had Mcghee uncovered any strong evidence,

current theories about the population of North America would be challenged. Investigations are costly and time sensitive in Svalbard, and if the results do not provide viable return-archaeological initiatives will stop. Today, the discussion has yet again reached a stalemate, and therefore little literature has been produced on the topic since 2010.

1.4 METHODOLOGY

While archaeologists do their best to thoroughly document and record everything they uncover, it is both inefficient and impossible to record every single detail in an excavation (Note, excavation within these climatic and environmental conditions allow c. 5% of the total material culture available to survive the archaeological record). Instead, it is up to the discretion and sensitivity of the researchers to determine what *is* noticeably something of importance from what *is not,* and then, sort out everything else in between. They then make further analyses based on the capability of their teams (taking their previous experiences and training into consideration) while honoring financial and time constraints. Archaeology so often is an interdisciplinary subject, borrowing from both arts and sciences to bestow meaning to material culture. And while the researcher may have a wide breadth of archaeological knowledge, they are still *human*. This ultimately makes them not so different than the people they study, regardless of the divisions of time, space and culture. By deconstructing the role of the objective researcher, it restores agency to the subjects being studied. While typologies may be developed, and conclusions derived from a group's material culture, these are artificial constructions put in place to make sense of the many nuances of human behavior. Miller and Tilley in their 1984 book I*deology, Power and Prehistory* take a critical look at both the archaeological record as well as archaeological record keepers, arguing that the past is a dynamic social construction. That is to say, contemporary conceptualizations of "the past" are developed and built from previous conceptualizations of "the past". Given that time machines have not been invented yet, the present reality for the researcher will be a major influence in the interpretation of the past. In this sense, details that may not have been considered important during the time the historical source was written or the archaeological excavation was documented, might be lost or understudied and made inaccessible for future

generations. An excavation, much like a historical document, never reveals the complete, unobstructed truth but rather, information manipulated by the informants, the environment and the researchers. With this understanding, what does the current *absence* of data on Svalbard truly mean?

Dragoş Gheorghiu and George Nash in their Introduction to *Place as Material Culture: Objects, Geographies and the Construction of Time (*2013) as well as George Nash and Andrew Townshend's Introduction to *Decoding Neolithic Atlantic and Mediterranean Island Ritual (*2016) discuss the concept of *place* is addressed in a prehistoric context. The lack of prehistoric material culture, and visible indigenous populations at the time of Svalbard's discovery, may at first make it's prehistory a challenging subject for study. However, Svalbard the *place* is a fairly new concept in Western European culture. The islands have only been grouped together, given a new, Viking-inspired name and linked to Norway for one century. In their formation as the singular entity of *Svalbard*, they become smaller parts of whole rather than individual areas with their own respective histories. Without a doubt, the physical and metaphysical boundaries which determine what contemporary Svalbard *is* and *isn't*, are socially constructed. With this in mind, researchers cannot assume that prehistoric, seafaring groups perceived these islands to also be part of one entity, and the largest, most currently populated island, cannot speak for the entire archipelago. How can we determine that every island within the archipelago was never populated or at least frequented by prehistoric groups if the few prehistoric archaeological initiatives have mainly taken place on *one* of the many islands?

When examining how the concept of place applies to islands, it should be noted that islands cannot simply be considered insular land masses, but instead, should be viewed in a more holistic sense. That is to say, an island encompasses more than just the currently perceived habitable land, and archaeologists should take into consideration both the land and its relationship with the body of water that encircles them-continents in some way can be considered islands as well. They should also consider how the less hospital features (in the case of Svalbard, the glaciated areas) might have been perceived by native arctic dwellers, as well as the island's

relationship with the mainland (Nash & Townshend 2016). Prehistoric visitors of the island would take more into consideration than the simplified, practical measures imposed on them by archaeologists, just as contemporary settlements today are selected for a multitude of socio-cultural reasons beyond environmental determinism. Predictive settlement models placing emphasis on distance, visibility and assumed habitable surface area as the main determining factors for the settling of an island oversimplify and underestimate the spiritual and cultural capacities of prehistoric peoples. Take into consideration the agency of circumpolar indigenous groups in both past and present. Consider that they have the *power to* (Miller & Tilley 1984) select and reject a place as well as the *power to* initiate a dialogue between themselves and their descendants through the creation or destruction of structures and monuments. They also have the *power to* exchange information and moderate interaction with other contemporaneous cultural groups and the *power to* refuse.

In terms of social-theoretical approaches towards the archaeology of landscape, the author of the thesis has looked at how Svalbard's settlement culture interacts with the non-material culture of nearby circumpolar indigenous groups. This approach uses historical sources, oral histories as well as phenomenology and semiotics (Tilley 1994 and Nash 1997), which allow the author to make secure inferences about a fragmentary-past which currently lacks a more varied archaeological discourse. In particular, the thesis examines the social structure of settler colonialism and its impact on the interpretation of Svalbard's prehistory.

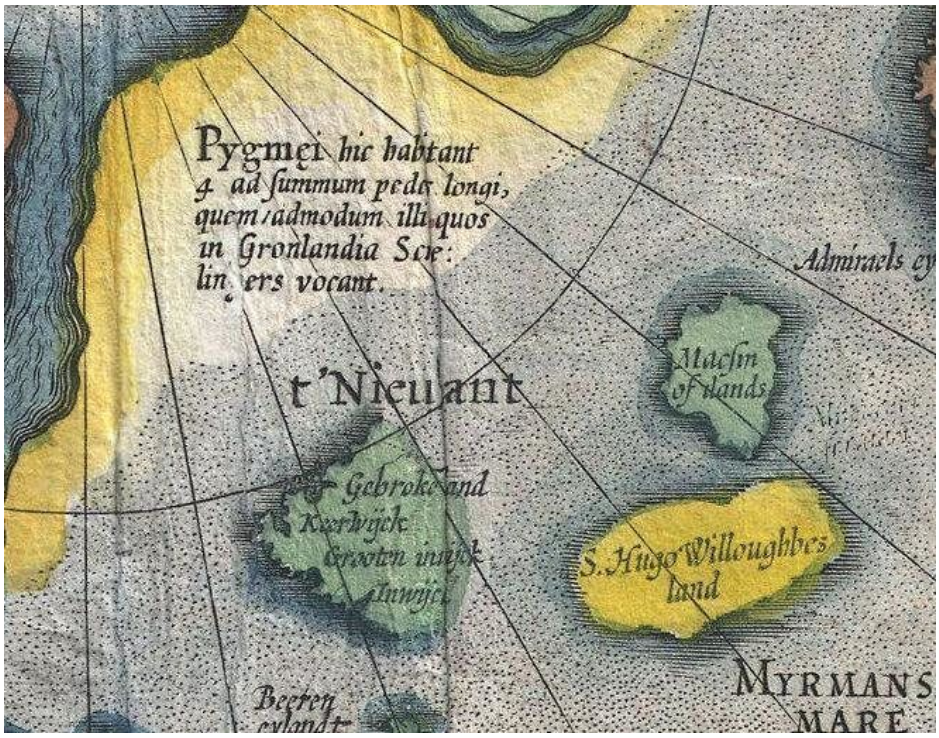
2. THE DEVELOPMENT OF THE THEME

2.1 HISTORICAL APPROACH

There may be historic indicators that Svalbard was at least known about by Europeans earlier than previously acknowledged. In 1565, two years before Svalbard's official founding, a map drawn by Flemish cartographer Gerhard Mercator titled *Septentrionalium Terrarum descriptio*, was published posthumously. The map focused solely on Arctic geography, making it the earliest

example of polar region-based maps in European history. Mercator's map was based off of the descriptions of two lost books, summarized in the also now lost book *Itinerarium* written by Dutch traveler Jacobus Cnoyen (also known as Jakob van Knoyen): *Inventio Fortunatae* and *Gestae Arthuri (*Arthur's discoveries). While the two books are lost, segments of the books were recorded and referenced in a 1577 letter correspondence between Mercator and Englishman Dr. John Dee. Dee had hoped to expand British sovereignty in the Arctic and asked Mercator for more information about the books (Taylor 1956). The original letters have been lost but Dee copied the letters and sizeable sections of the books in his notebook. The books were also referenced a text box found on Mercator's 1599 world map. *Inventio Fortunatae* (fortune-making discovery), is speculated to have been written by a 14th century friar who made several voyages across the north Atlantic. It describes the the North Pole as a magnetic rock, surrounded by four mountainous continents. This concept was not entirely new- it appeared in several works of this era such as in Johannes Ruysch's 1508 map *Universalior cogniti orbis tabula* as well as Martin Beheim's 1492 globe but Mercator's map also provided something of note. The large continents to the southeast of the map, located in the Arctic Ocean, near Novaya Zemlya contains a quote: "Pygmae hic habitant 4 ad summum pedes longi, quaemadmodum illi quos in Groenlandia Screlingers vocant (Here live Pygmies, at most 4 feet tall, who are like those called Scraelings in Greenland)" (Mercator 1564; Oleson 2016; Taylor 1956) [FIG 5]. This cannot be confused for Greenland, because Greenland is clearly depicted as its own entity on the map. Beneath this labelled continent, several islands contain labels, such as the already known Novaya Zemlya, Macsinof Land-which Starkov suggests may be a Russian toponym indicating Pomor knowledge of the region and the possible exchange of information between Dutch and Russia seafarers (Okhuizen 2005), Willoughby's Land, and an unnamed chunk of land directly below the continent labelled "the best and most salubrious" (Mercator 1565) . Willoughby's Land, was commonly referenced at the time, after British explorer Hugh Willoughby claimed to have spotted land during his 1553 crossing of the (now named) Barentsz sea. It would continue to appear in a few other later maps before disappearing completely-partially due to the fact that they were not sighted on other expeditions, including that of Willem Barentsz. The English would later claim that Willoughby's Land were actually part of Svalbard, meaning they had

discovered them before the Dutch, and had rights to it. It is now speculated that Willoughby's Land was actually the coast of Novaya Zemlya. On Mercator's 1569 map, an archipelago labelled ''Santi/Rustene" appears in a similar position to where Spitsbergen would be. While many of these islands have been briefly mentioned in the works by archaeologists such as Starkov and (Belov 1956, 67), they have not proved to be conclusive evidence of Russian knowledge of Svalbard before its discovery by Barentsz. Dr. Edwin Okhuizen, an Amsterdam map historian, is currently researching the topic further.



[FIG 5] Closeup detail of Mercator's map describing pygmies, including the mysterious Macsinof lands and Sir Hugo Willoughbys land. Credit: From Maritiem Museum "Prins Hendrik" at Rotterdam. Downloaded from Atlas Obscura: https://www.atlasobscura.com/articles/north-pole-map-mercator

These speculations have not gained much traction and more research is needed if they are to play a greater role in the discussion of Svalbard's founding, however, there is a strong argument in favor of the Pomors. Descendants of Novgorodian Russians, the Pomors began settling and sailing along the White Sea from the 11th century onwards. They already had already visited Novaya Zemlya before Western Europeans began mapping it in the 16th century. On Svalbard,

the Pomors left a sizeable amount of hunting stations and Russian Orthodox crosses [FIG 6], many of which have been excavated. Archaeologists such as Badigin (1953), Belov (1956), and Obruchev (1964) proposed the Pomor theory (Okhuizen 2005), basing their conclusions on written documents. Unfortunately, no manuscripts of maps from early Pomor seafarers exist, and printed maps were not produced in Russia until the reign of Peter I in the late 1600s (OKHUIZEN 2005). From 1978 onwards, Russian archaeologist V.F Starkov-who would co-founded the Russian Pomor museum (Albrethsen and Arlov 1988)- began publishing the results of his excavations, claiming to have found at least sites 6 on Spitsbergen, with one dated to about 1545 (Albrethsen & Arlov 1988). Starkov used topography data, paleography, dendrochronology and direct dating to support his findings. But, Starkov's work would later be criticized or excluded by western european historians, who have a tradition of accusing "Soviet archaeology"- as work with a nationalist agenda and arguable methodologies. The Pomor influence on the archipelago is so strong that one of the two largest historical museums on Spitsbergen is the USSR founded *Barentsburg Pomor Museum*. It now belongs to the Russian government and is run through coal mining enterprise Arktikugol. The museum became a point of conflict between Norway and Russia in modern times. Although Russian companies own the mine in Barentsburg and Russian is the dominant language of Barentsburg, Norway has sovereignty over all non-economic issues. An example of Norway asserting their sovereignty is through the installation of Norwegian-language road signs (Grydehoj-et al 2012: 110). Another is example occurred in 2008, when the Governor of Svalbard, citing *Svalbard's Environmental Protection Act*, requested for the museum to send their artifacts to Longyearbyen for conservation measures. The museum refused-arguing that Russian cultural heritage should be managed by Russia and that the artifacts, many of which have already been studied and may demonstrate the Pomors' earlier presence in the archipelago, would undergo Norwegian biased re-analysis. After Russian protests, the request was dropped (Grydehoj-et al 2012: 110-111). The Pomors are mentioned in the Svalbard museum, in the capital city Longyearbyen, albeit their activities on the archipelago are said to have started in the early 18th century. The Pomori theory will not be discussed at length in this thesis, although it is unquestionably, the biggest debate in Svalbard's cultural history. The Pomor question also sheds light on the archipelago's highly

politicized founding. The most commonly promoted belief regarding the Pomors' arrival to Svalbard, is that, if they were visiting beforehand, it would not have begun earlier than the 16th century (Albrethsen & Arlov 1988). The Pomors left behind spiritual monuments on the archipelago, as well as some legends- the most well-known one of al is The Dog of Spitsbergen. The fantastical beast is believed to live in the hinterlands and was known to trick trappers and sabotage their hunts (Mcghee 2005:184, 196). This was no ordinary dog, he lived with one of the 11 beautiful sisters of a witch who also lived on the archipelago. The beautiful sisters as well as the witch were the daughters of the biblical King Herod. They lured men to sleepy deaths by appearing as their female loved ones. Ultimately it was them who were blamed for the outbreak of scurvy amongst trappers, and they could be warded off with tobacco and cherries (known for having antiscorbutic properties). The Dog however is not as easy to ward away. He enjoys alcohol and a good meal-so much so that he's known to cause storms and crash ships, just so he could have access to their supplies. In one story, he transforms into a polar bear and kidnaps the wife of a Norwegian prince who had journeyed to Spitsbergen to isolate himself from the rest of the world. His search for her leads to his own demise. In order to please the dog, trappers left the carcass of a deer on a rock said to have the profile of a man, referred to as the "Capless Louse Head", most likely on Edgeøya (Conway 2011).

The most commonly-accepted Svalbard discovery narrative comes from the accounts written in the diary of Gerrit De Veer, which were later published and known as *The Three Voyages of William Barents to the Arctic Region (1594, 1595, and 1596)*. De Veer, a Dutch officer who accompanied Willem Barentsz on his 2nd and 3rd voyages. Willem Barentsz', a cartographer by trade, gained notoriety through his sailing and mapping of the Mediterranean and Spain. Portugal and Spain now controlled the southern ocean route to the Far East, prompting Northern European countries to look for another route. A voyage in 1594, seeking the coveted Northeast Passage, reached as far as the archipelago of Novaya Zemlya, but not before the discovery of the Orange Islands. The archipelago of Novaya Zembla was mapped before the crew turned back due to the hazard of icebergs. In 1597, Barentsz assembled a new crew and was commissioned by Prince

Maurice of Orange to undertake a second journey. When they stopped on Vaygach Island, they initially noticed no signs of people despite being informed of such:

"And vhen wee entered further into the land, wee vsed all the meanes we could, to see if we could find any houses, or men, by whom wee might bee informed of the scituation of the sea there abouts ; whereof afterwards wee had better intelligence by the Samutevs, that tolde vs, that there are certaiue men dwelling on the Wey-gates, and vpon Nona Zembla; but wee could neither finde men, houses, nor any other things" (DeVeer 1876:54).

They did not find any remarkable signs of settlement despite how frequently the both Nova Zemlya and Vaygach Island are visited. By the end of August 1597, the crew encountered a group of about 20 Nenetses, an Indigenous group from Northern Russia. Vaygach Island has been a sacred place for the Nenet for centuries. The meeting with the Nenet group was initially tense but became friendly with the assistance of a translator. The leader of the group provided some navigational instructions for Barentsz and his crew, assuring them of his familiarity of the region. De Veer also describes their reindeer skin clothing, weaponry and transportation in detail. The crew offers a biscuit to the leader of the Nenet group, as an offering of appreciation, which the leader accepts. The information exchanged between the two groups, can be seen in later entries as having an influence on the crew's adaptation to Arctic conditions. By the time the crew reached the Kara Sea, it was frozen, but not before a polar bear attack killed two sailors. This voyage was considered a failure.

Due to the high risks with little profitable return, the government no longer funded expeditions but instead offered monetary rewards for anyone who had successfully found the Northeast Passage. Under the command of Barentsz, two ships captained by Jan Rijp and Jacob van Heemskerk set sail in 1596. This would be the third and final Arctic voyage for Barentsz. About a month into the voyage, after the earlier, albeit contested, discovery of Bear Island (*Bjørnøya)* in May, on June 17th 1596, Spitsbergen was sighted. On the 20 June they saw the entrance of Raudfjorden, a large bay on the Northwest coast of Spitsbergen. They had initially assumed it was Greenland but noted (De Veer 1876: 82) that they were not in the right latitude, and instead, fairly close to the North Pole. On 21 June they anchored in Albert I land, in the Northwestern

part of Spitsbergen between Fuglesongen (once known as Vogelsang or Bird Song) and Klovningen (Cloven Cliff). On 25 June they entered Magdalenefjorden, which was initially named Tusk Bay, in light of the walrus tusks they found there:

"and there wee founde two sea horses teeth that waighed sixe pound: wee also found many small teeth, and so rowed on board againe." (De Veer 1876, 84).

The fjord was later be a popular whaling site and would be given many names, including *Maudlen Sound in* 1616 by Robert Fortherby. The following day, 26 June, they sailed into the northern entrance of Forlandsundet, but were forced to turn back due to an obstacle-either pack ice or a sandbar. Barentsz decided to go east. On 28 June they travelled around the northern point of Prins Karls Forland, named Vogelhoek, due to the large number of birds observed in the area, then they sailed south, passing Isfjorden and Bellsund, which were labelled on Barentsz's chart as Grooten Inwyckand Inwyck.

According to Gerrit De Veer's *The three voyages of William Barents to the Arctic,* the area they explored-the northwest coast-was not populated. This observation has remained one of the biggest proofs that Svalbard did not have an Indigenous presences before its discovery.
Realizing they had not reached their goal, the crew headed to Bear Island again to reconfigure. This is where Barentsz, Van Heemskerk and Rijp had a disagreement, and eventually parted ways, with Barentsz and Van Heemskerk heading to Novaya Zemlya and Rijp heading north again.

When Barentsz and his crew approached the northeastern shore Novaya Zemlya, with the intention of reaching the Vaygach Strait, their ship became trapped in ice. They were forced to over-winter there, eventually using lumber from their ship to make a shack. Only in June of 1597 did the remaining crew head out to sea again. Barentsz perished on June 20th 1597 at sea. The

remaining crew was rescued by a Russian merchant vessel after several more weeks at sea. Norwegian explorer Elling Carlsen discovered the undisturbed cabin in 1877.

2.2 SETTLING OF SVALBARD

Svalbard's history is frequently described as episodic due to both the lack of permanent settlement until the late 19th century, as well as lack of government. Barentsz mapping of the archipelago had a great influence on cartographers, resulting in the rapid incorporation of Svalbard onto maps. The islands were visited by the English explorer Henry Hudson in 1607 several days after visiting Greenland. It is believed that he discovered Jan Mayan, initially naming it "Hudson's Touches". Jonas Poole, after many sealing expeditions with the Muscovy Company to Bear Island, decided to sail past it and head towards Spitsbergen. He spent nearly three months, on the west coast, exploring and naming sections of the island-an example of this is Hornsund (Horn Sound), named after reindeer horn discovered in that area. Poole noted the large amount of whales, and it would be this report which would initiate the first whaling expeditions in the archipelago. After a failed whaling expedition in 1611, the Muscovy Company sent two whaling vessels, piloted again by Poole to Spitsbergen. The success of the expedition, with the assistance of Basque whalers, transformed the islands, particularly Spitsbergen into an international whaling center. By the time the Muscovy Company sent another whaling ship, the crew was met by other French, Spanish and Dutch whalers.

This lead to a period of heavy conflict between nations; Denmark-Norway, then ruled by Christian IV, claimed sovereignty over all the Northern Sea, citing that Greenland was an old Norwegian tax-land. Other nations such as Spain and the Netherlands argued *mare liberum*, or freedom of the sea. The first overwintering was accidentally experienced by an English group in Bellsund in 1630–31, while the first planned overwintering was achieved by the Dutch Noordsche Compagnie in 1633–34. By the late 17th century there were between 200 and 300 ships and in excess of 10,000 whalers around Spitsbergen.

`Other industries were taking place during the height of whaling such as hunting and sealing. Throughout the boom and bust of whaling, Pomors were steadily hunting on the archipelago. The

industry remained sustainable due to the alternating of stations between seasons-only ceasing in the late 1800's. There were also a steady supply of customers-the Pomori had been trading with the people of Northern Norway, particularly the Sami, for centuries. In a 1795 expedition, under their hiring: the first Norwegian citizens to participate in the hunt on Spitsbergen were Sami, from Hammerfest. Norwegians would continue to hunt on the archipelago, eventually slowing the trade between Sami and Pomors. In the height of the hunting era in the 18th century, up to 150 Pomors overwintered by the 18th century.

As the whaling industry began to dwindle in response to the reduced population of whales, companies began to look for other ways the resources of Spitsbergen could be exploited. Aware of the economic potential, Norway and Sweden joined together to create an agreement with Russia in 1872, decreeing Svalbard as a *Terra Nullius*-nobody's land. Coal was steadily used by hunters and whalers, but now, it could be used for mining if the source could be traced. Spitsbergen, from the 18th century onwards became the focus of scientific research, with researchers heading inland. Explorers and scientists such as William Scoresby used smaller vessels to navigate the landscape. The results of these expeditions would later lead to the Industrialization Era of Svalbard, as well as inspire wealthy travelers to consider Svalbard, an exotic locale, as a vacation spot. While hotels were constructed towards the end of the 19th century, the first known permanent settlement on Svalbard was a two story house built in Kapp Thordsen on Isfjorden. It was intended to be the first of many houses, created to accommodate employees of a planned Swedish-owned phosphorite mine. The prefabricated house, built in 1872 known as Svenskhuset (The Swedish House), is considered the oldest surviving building on Svalbard and was designed to withstand the cold (Arlov 1996). In the autumn of 1872, at the advice of the Finnish-Swedish Adolf Erik Nordenskiöld who was conducting excavations nearby, a group of stranded seal hunters set out for Svenskhuset. This would then lead to the Svenskhuset Tragedy where the hunters perished due to a mysterious case of poisoning, assumed to be scurvy. Only after a 2008 excavation was the source of their illness uncovered-the men had died of lead poisoning found in the tin cans which contained their food. The settlement was abandoned when the plans fell through.

After surveying the land for years, American John Munroe Longyear founded Long Year City in 1906-a city meant to accommodate the miners working for his Arctic Coal Company. Administration was American but the miners were mostly Norwegian. In 1910, joint sovereignty for Spitsbergen was proposed by newly independent Norway (which had ended a nearly 100 year jointure with Sweden ending in 1905), Sweden and Russia. This was opposed by Americans and Germans who had vested economic interest in the area. After the financial losses of World War I, Americans sold Long Year City to Norwegian mining company Store Norsk. Post World War I, Germany was no longer as empowered, suspicions about the Bolshevik government and rewards for Norwegian participating in the war prompted increased support of Norway having sovereignty over the archipelago. Regardless, as more and more permanent settlers and industries developed, the question of land ownership arose. Svalbard had no regulations or tribunals to solve conflicts, which may have been a workable enough situation when research, hunting and seasonal whaling were the primary industries, but now it could no longer be an international free-for-all. (Sysselmannen 2012). Svalbard was placed under Norwegian sovereignty by the Allied Supreme Council after the Spitsbergen Treaty was signed on February 9 1920 as part of the Versailles peace negotiation. It came into effect in 1925, as the Svalbard Act. The treaty is currently upheld by 43 nations including the USSR (Russia would continue to honor the agreement), Germany and Denmark-Norway had given up claims for East Greenland in 1919. Norway obtained Jan Mayen in 1929. While Svalbard is a part of Norway, there are certain restrictions applied. Firstly, Svalbard has been deemed a non-discriminatory nation, which means that all citizens from the treaty's signatory country are to be given equal opportunity for economic development (with the approval of Norwegian authority) and not to be discriminated against based on nationality. Secondly, Svalbard may not be used for military purposes and foreign military presence is unwelcome. Thirdly, Norway is obligated to protect Svalbard's environment and finally, Svalbard's taxes can only be used to benefit Svalbard. Svalbard is under control of a governor: Sysselmannen who "effective enforcement of Norwegian sovereignty, especially towards foreign agents on the archipelago" (Government of Norway, 1999: §5.4.1 via Grydehøj *et al.* 2012). Svalbard is a visa-free nation, meaning visitors do not need a travel visa to enter the country and visitors may stay indefinitely so long as they are employed. However,

passengers may need a travel visa to enter any of the few countries which fly there, with the majority of flights to Svalbard leaving from Norway. Due to the relaxed visa laws-families wanting to immigrate to mainland Norway, may start off in Svalbard.[2]

As the mining industry took hold, permanent settlements increased on the island. In 1920, the same year as the Svalbard Treaty was signed, the first school in Longyearbyen was built in conjunction with the church, by the mining company [FIG 7]. Later, the first paved road would be built, and during the WW2, an airport. Today Longyearbyen has a grocery store, bars, hotels and a university center. While Alert, Canada is the northernmost yearlong permanent settlement, Longyearbyen is the northernmost permanent settlement with a population over 1000 people. The archipelago is also home to the northernmost chocolatier, brewery and Oktoberfest. Svalbard's transformation, from industrial center to family-friendly place to live is a prime example of settler colonialism.

[2] One of the largest, more recent settler groups, beyond Norwegian is Thai. Many of whom have decided to settle permanently on Svalbard, although there is a steady migration of seasonal settlers who intend to return Thailand with their newly earned income. The population is claimed to have been "triggered" by a Thai lady who fell in love with a miner, and decided to stay due to the many economic benefits. The population is so impactful that there is a copy of the Svalbard Environmental Protection Act has been translated to Thai (Sysselmannen 2012).

[FIG 7] The northernmost church, built in the 1920's burned down during World War II and rebuilt in the 1950s. The old post station of Longyearbyen is to the left of the photo. Photo Credit: Photographed by Jessica Thomas, author, 2016

2.3 SOCIO-POLITICAL APPROACHES

The European tradition of using the Arctic for its resources originated from the time of Pythias, when he encountered a frozen sea during his voyage in 325 BC on the search for tin. It was later reinforced during the Age of Discovery, when navigators risked their lives to search for the Northeast Passage or Northern Sea Route, an economical shortcut to China and India, through crossing the northern coast of Russia and heading southwards to Eastern China. This would eventually lead to the discovery of Svalbard. In later centuries, navigators undertook dangerous journeys to find the elusive Northwest Passage, crossing over much of Canada's Arctic coast-only "conquered" in 1906 by Roald Amundsen.[3] Historically, the Arctic has not been the most attractive choice for permanent, sedentary settlers from faraway who were unfamiliar with the climate. However, during the Cold War, militaries began looking towards Arctic development and expansion in reaction to the national security risks brought on by warming climates and more accessible seaports. The Arctic was transformed into an attractive place for military exercises and experiments due to the "remoteness" from major city centers and the large expanses of "empty space". Residents of Novaya Zemlya were forcibly relocated to make way for nuclear testing, which was conducted on the archipelago from 1954 onwards (Khalturin 2005).[4]

In order to secure the land, protect sovereignty claims and resources, circumpolar governments began offering incentives for southern residents to move "up North" and for Indigenous people within the regions to move from traditional settlement patterns to newly built permanent settlements. Those who did not move risked financial, social and legal disadvantages. Hurwitz & Bourque's *Settler Colonialism Primer* explain that the obtention of land is at the heart of Colonialism: "Colonialism is derived from the Latin word Colonia... in the Roman Empire, "Colonia" was a " farm," "landed estate," or "settlement" granted to Roman soldiers in hostile or newly conquered territories." (Hurwitz & Bourque 2014). Landed estate and settlement may

[3] The Northwest Passage was already being used as a route for centuries by Inuit, referred to as Tallarugik.
[4] Nenetses residing there had to be relocated prior to the experiments.

promote the occupation of an area, but occupation alone may not immediately foster emotional and spiritual attachments associated with the concept of home or *place*. How then can settlers develop attachment to their new, designated homes? Settler Colonialism, is defined by Tracey Banivanua Mar and Penelope Edmonds as "a distinct method of colonizing, involving the creation and consumption of a whole array of spaces by settler collectives, that claim and transform places through the exercise of their sovereign capacity. (Mar & Edmonds 2010: abstract). Settlers create new places by modifying (physically or metaphysically) places which often already have their own significance and history to the original occupants. The processes undertaken to appropriate previously occupied territories include radicalization, assimilation, isolation and genocide of the original population. In this way, settlers can benefit from the original population's knowledge, selection and development of the area and ressources without fully acknowledging the processes in which they were obtained- a sort of conscious forgetting.

Furthermore, to assure that the past is thoroughly forgotten, boundaries must be established to redetermine the differences between a "settler" and who is a "native". Racialization-the action of attributing physical characteristics to a particular group, in order to determine its;' membership, an act which ultimately invalidates how members of a group might actually self-identify. This allows settlers to ignore the intricacies of kinship, in favor of a more "objective", "scientific" an ultimately narrower method of classifying people. Racialization also allows settlers to avoid acknowledging the diversity of indigenous populations. [FIG 8]. Any previous history of conflict between groups (this applies to the many groups within both settler and indigenous populations), is seemingly overlooked, in favor of creating new bonds based on the ever changing categories of "race".

[FIG 8] Kananginak Pootoogook's (1935-2010 Kinngait) Inuit Futurist-style lithograph "The First Tourist," 1992. provides commentary on Inuit representation in photography. An Inuk woman is proudly posing with iconic symbols of Inuit culture: a seal skin pelt, an inukshuk and a traditional inuit caribou parka. The photo being directed by the photographer, motioning her to pose near the Inuksuk, will ultimately only reveal the subject, and not take into consideration the fact that the narrative is being directed by a Qallunaat instead of herself.
Lithograph 57 x 71 cm. All images © Dorset Fine Arts.

To keep the past firmly in the past and, in cases where the past cannot be ignored, to justify the actions undertaken to maintain occupation of the land, differences between "settler" and "native" must be emphasized. The "settler" identity is a fragile one. If this identity is now made to compete with groups which already have a long established narrative with the land, should have its own origin story. Settler origin stories must then, distort and minimize the essential role indigenous inhabitants played in the survival of early colonies. The sudden lack of visibility of local indigenous groups is simply attributed to indigenous populations "fading away" or "going extinct" (Freeman 2010). Origin stories emerge and develop, continually changing to reflect the zeitgeist. These stories are made *by* settlers *for* settler and are only representative of one

worldview-making settlers the main focal point. Observe the term pre-contact: prehistory in the New World[5] may often be referred to as *pre-contact*, with the *post-contact* era beginning after Christopher Columbus' discovery in 1492, but the term "contact" is settler-centric: indigenous groups were contacting each other for thousands of years, and in some cases interacted with non-American groups, including Vikings. Tens of thousands of years of history is condensed into pre-contact, then a brief European-instigated event as powerful initiator for the post-contact era.

`The commemoration of explorer Matthew Henson after his death in 1955 provides an interesting example how settler colonialism is promoted in Arctic settings. Admiral Robert Peary and his crew journeyed to the Northernmost Parts of Greenland (later named Peary Land) in the late 19th and early 20th century. There, they lived amongst the Inuit and Inughuit, also known as Northern Highlanders, studying their survival tactics. During the expedition, the crew reached the Independence Fjord, and documented that Greenland was indeed an Island as previously known by Greenlanders. Peary's right-hand man, Matthew Henson was nicknamed *Mahri-Pahluk* which in Inuktitut means *Gentle Matthew* by the Inuit. He was noted as being less brash than Peary, spending his time learning Inuktitut and becoming an interpreter. He also learned Inuit dog sledding techniques. Many of the quick interventions needed to sustain the team were thought of by him, recalling all the training he had received, including in igloo making, by the local people. Unfortunately, an expedition lead by Frederick Cook had reached the North Pole before Peary's team did, and there is still some debate as to whether Peary's team actually reached the North Pole at all. When the two returned to the US, they were also met with controversy due to racial policies in the USA. Henderson was black, during the period of racial segregation (racial segregation in the USA began in 1849 and its decline started in 1950). Peary received many awards for his work, albeit was criticized for not hiring a white assistant instead. As Cold War tensions arose, the USA could no longer afford for a country to be legally divided. Hensons and Peary's teamwork began to be used as an example of the capabilities of human achievement when prejudices are put aside. While in the high Arctic, Henson married Akatingwah- the couple had a son named Anaukaq. Peary married Ahlikahsingwah and had two

[5] The term New World may mean that these lands were not known by Europeans until a later period, but it also implies that these lands were not occupied as long as the "Old World". Recent research at Bluefish Caves in the Yukon as well as Cerutti Mastodon site in San Diego, may help to shift perceptions.

sons: Anaukaq and Kali. Anaukaq Henson was proud of his father, and Henson's great-granddaughter Aviaq Henson, worked with Post-Greenland to create a commemorative stamp. For those who were still experiencing the after effects of isolation, the Arctic began to look like a refuge from the incivilities of the home country. It could be seen as a place where settlers could escape prejudices such as class and race. This would inspire a new generation of potential arctic settlers, while also eliminating less desired groups of settlers in larger city centers.[6]

It is important to note that Settler Colonialism does not benefit all settlers equally, and not all settlers have the same motivations for dwelling in the colony. Anyone who is not Indigenous, living in an Indigenous territory is a settler: this includes refugees, slaves, indebted servants, and their descendants. While settlers create and contribute to the development of the dominant culture of the land, there are still hegemonies amongst the settler population. Diversity and multiculturalism is encouraged up until a point, but settlers are also encouraged to assimilate convincingly into the colonial nation. That being said, the identity of "settler" is a precarious one. Had Matthew Henson's descendants been raised in America, they would have been classified as African, regardless of their mother tongue, affiliations or self-identification. The "one drop" rule meant that if a person had "one drop" of African-American blood in their lineage, they would be considered black. Many darker complexioned Native Americans were re-classified as "colored", accused of trying to favor their indigenous ancestry to try to evade segregation regardless if they had any black ancestry or not. In Canada, the reverse occurred, with many black people hiding their Indigenous heritage in hopes of avoiding the Residential School system, or the Reservation system.[7] Reserves are often located on small, remote places, separating indigenous people from major economic centers. Communities that do not have their own means of generating income must rely on government funding to meet housing needs (Patterson & Dyck 2015), and these funds are often limited. Residents of reserves may have to choose between opportunity or family, identity and cultural affiliation when deciding whether to

[6] The desire to move north in order to escape racism in the USA would later be exploited by Josef Stalin, who recruited black americans to join Soviet Russia, emphasizing that class is much more important than race. An example of this propaganda was the movie Tskirk (or circus)…

[7] The author's family has untraceable "Dutch" ancestry. Though possible, their family originates from an area where the Dutch were not known to have historically immigrated to.

remain on the reserve or not. In Virginia, the Pocahontas exception allowed anyone with up to 1/16th Native American blood to be considered "white" due to many of the founding families intermarrying with native people. In many cases, family histories were hidden and forgotten or rewritten out of necessity. The Exclusion Act of 1882 was implemented to slow the amount of Asian immigrants entering America and exclude Asian-Americans from many aspects of American life. These policies made it nearly impossible for Chinese immigrants to find work and save for the restaurant industry, laundry industry or self-employment, and housing. Chinatowns were formed in reaction to this-they provided an oasis of support. Chinatowns were later encouraged by governments as a place for tourism, but also as a form of cultural containment-in fear Asians would intermarry or form alliances with other groups, and later, fearing Communism. Segregation and Exclusion laws created clear, artificial divisions between settler groups and natives in hopes of restoring a balance which never actually existed. All of these racial policies were put in place in order to maintain racial "purity", which would be a justifier in the control of distribution of land. The concept of racial purity and its privileges arose out of the desire to control land usage.

These ideologies created and enacted south of the Arctic would later travel north. Concepts of racial purity have been used to both demonize and idealize the Sami, Nenet and Inuit-as well as other circumpolar indigenous groups, through forms of environmental racism. The nations they reside in, wanting to benefit from increased industrialization without sharing the profits with the current occupiers of the area, have tried to fully obtain their territorial land. The Sami in Norway underwent an ongoing process of *Norwegianisation* which forced Sami students to have lessons exclusively in Norwegian in school. This policy made it hard for Sami speakers to purchase land-and the influx of missionaries confiscating sacred items made it increasingly difficult to continue traditional religious practices (Minde 2003). By creating a singular, unified, Norwegian identity, the state would have control over all of its borders. Assimilation was assumed to create deeper affiliations with the state. Cultural assimilation has *changed* Sami identity and population distribution-with many Sami moving to larger city centers outside of Sápmi, but it has not disappeared or weakened. In fact, in more recent times, Sami identity has strengthened, with the Sami parliament created in 1964. On the Kola Peninsula in Russia, Sami were displaced from

their traditional homes to make way for military installations. The borders were then closed, further dividing Sápmi, making migrations and communications between Sami groups impossible. In imperialist Russia, the Nenet had to pay *yasak*, or tribute, in furs to the Tzar. During Soviet industrialization there were initiatives to commercialize off of their reindeer husbandry skills. These initiatives were not successful-the Nenet were ethically opposed to traditional and spiritual practices to become exploited for profit, but also suffered setbacks from nearby industrial development damaging traditional grazing land (Dalman 2003). While the Nenet population of about 200 was moved to permanently occupy Novaya Zemlya, they were later relocated to make way for nuclear testing; those who settled nearby experienced increased rates of birth defects and cancer. Reindeer grazing on lichens accumulating radioactive particles, lead to an increase in deaths and disrupted herding practices. To the West, both Greenlandic and Canadian Inuit have been forced to close and open settlements at the instruction of the government to make way for development plans. And all groups have experienced environmental damage from oil and mining companies. Throughout all these processes, nomadic and semi nomadic groups claims to their territories were invalidated. The glaringly visible oil rigs and the profits that came with it were seemingly too distracting to the general public.

To acknowledge all the additional assistance needed to survive in a new environment, especially from indigenous people, may detract from the sense of heroism, adventure and strength used to portray early settlers and their fleet. It also exposes the settlements and settlers for what they truly are: fragile. Fragility does not make a convincing argument for the taking up of space and does not make for a compelling origin story[8]. Settlers continually justify to themselves their occupation of the space. If they demonstrate that there are more technically capable or deserving than their "primitive" counterparts, they can further assert their suitability to the territory. While the archaeological record reveals the complex technologies of the Indigenous peoples around the

[8] Greenland's growing political and economic independence from Denmark, gaining home rule in 2009, signifies the beginning of the end to arctic sovereignty claims. Settler colonial hegemonies are alive and well-where settlers (particularly Danish) are provided with incentives to work in Greenland, giving them an advantage over indigenous Greenlandic residents. Descendents of settlers continue to benefit of the initial economic advantage of their forefathers (Petersen 1995).

world, this concept of "primitivism" has not fully been eradicated from archaeological narratives. [9]

But how is Svalbard a settler colony when it has no indigenous population? Ultimately the goal of settler colonialism is the obtainment of the land. Mar and Edmonds describe Antarctica, another location without any identified prehistoric settlements, as a higher form of settler colony, established on imperial ideals (Mar & Edmonds 1999, 31). Both areas have been used as a "clean slate" to carry out the assertion of sovereignty, through the actions of creation, consumption and transformation without the need to *remove* or *control* an existing population. They are free from the many traditional entanglements that come with appropriating space. The lack of prehistory means no previous narratives to be extracted from archaeological sites which may undermine how the land is settled, visited, or managed. There are no sacred grounds or temples to be studied, built around, or quietly dismantled. The climate of both places is harsh enough to justify filtering out any "unfit" settlers. Instead, both places promote young, physically fit, educated (due to the concentration of researchers) and economically capable settlers-"the best of the best". The cultural heritage sites found throughout the archipelago are easier to interpret and manage because they are recognizable as they are linked to a recent and seemingly episodic past. Unlike Svalbard, Antarctica is an ice covered landmass which includes the South Pole. It is a frozen desert, and has the lowest temperatures recorded on Earth. It is considered to be the last site colonized by man, discovered by a Russian expedition team in 1820 and first landed upon by a team of Norwegians in 1895. The landmass quickly drew interests of many nations, and was declared in the Treaty of Antarctica Treaty of 1959 as an internationally shared, peaceful zone. Māori are underrepresented in the history of the southern Ocean and Antarctica. Oral history tells of a Polynesian Navigator named Ui-te-Rangiora (Smith, 1898) who is said to have journeyed far south, encountering ice floes in the Southern ocean, which he named Tai-uka-a-pia: sea with foam like arrowroot. While Polynesian historian Te Rangi Hīroa (also known as Sir Peter Buck) cast doubt on the distance travelled, believing that they would have turned back due to their clothing had they encountered the extreme cold temperatures of the South. Instead, tales of

[9] Mcbrearty and Brookes' groundbreaking article, **The Revolution that Wasn't** (2000) reveals that the "human revolution" model insinuating that Upper Paleolithic Europe was the origin of symbolic belief completely ignores the rich African archaeological record which demonstrates that modern humanity's use of symbolism began in the Middle Stone Age

reaching the polar south may have reached Polynesia via Europeans, and were then incorporated into traditional legends (Mulvaney 2010). That being said, the Kontiki experiment reconfirmed the far distances the Polynesians travelled in the open sea. While Ui-te-Rangiora may have turned back due to the cold temperatures, it is not impossible to surmise that another navigator inspired by this story, might have set out to get better acquainted with Tai-uka-a-pia. More interviews are currently being conducted by the Sandra Lee Morrison from the University of Waikato in New Zealand and Aimee Kaio, Programme Manager of the Tribal Economies, Research & Development team - Tokona te Ao of Te Rūnanga o Ngai Tahu. A fragment of a Polynesian bowl has also been claimed to have been found on the Antipodes islands in 1886, 0.79 m [2ft. 6in] below the surface. It is now in the Dominion Museum in wellington New Zealand.[10]

Returning to the concept of guilt free colonialism-the only population Svalbard settlers are displacing is the flora and fauna, which depending on the worldview, is still significant. Cultures throughout the history of humanity have placed different values on nature-ranging from something to worship to something that should be managed and/or destroyed. Settlers are not transforming sacred ground on Svalbard, and are not displacing indigenous populations. They can also be assured that nature, regarded as sacred in its own way, is protected through the creation of national parks and nature reserves. In settler colonial structures, the concept of un-spoilt and pure wildness was so sought after that national park systems were created to allow settlers to view nature, the conquerable beast, in all its glory, unencumbered by the presence of humans. These parks were and still are notorious for displacing inhabitants and semi-nomadic migrants considering the land to fall within their traditional territory, in favor of "nature conservation" (Spence 1999).

Settlements in Longyearbyen are frequently at war with nature. Buildings work in spite of the climate rather than alongside it. Avalanches and structural collapse are a very risk, and houses are built on stilts to avoid flooding [FIG 9]. The Global Seed Vault, colloquially known as the Doomsday Vault, was built with nuclear war, climate change or any other destruction in mind.

[10] According to Maori magazine: *Te Ao Hou The Maori Magazine*, no. 59 (June 1967), p. 43

Opened in 2008, equipped with maximum security, with chambers being within a mountain, the structure is both practical and symbolic. Nations from around the world including North Korea have contributed to the collection. By sending seeds to the vault, a country demonstrates that the protection of the planet and humanity as a whole is above political conflict. Nations who donate to the vault demonstrate their global concerns, despite potentially being a major player in mankind's impending extinction. It also makes Svalbard look good: warring nations can come together for the greater good in a neutral, isolated Arctic island. Due to the remote location, and the deep foundation of bedrock-the vault is advertised as durable. In reality the vault is more symbolic than functional: in the case of a nuclear disaster, or extreme climate change the vault would be affected as well. Besides, it is not far from the Russian nuclear testing site Novaya Zemlya which was used between 1954 and 1980, and the vault occasionally had mild flooding. A very good example of settlers asserting their dominance over the land is the case of The Northernmost lawn in Pyramiden, where black soil, as well as grass seeds from the Ukraine were imported and maintained. The lawn was successful in adapting to the climate, and still exists today as a new food source for reindeer [FIG 10].

As part of Norway's commitment to protecting the environment, they released *The Svalbard Environmental Protection Act* (or *Svalbardmiljøloven* in Norwegian). The act is meant to "preserve a virtually untouched environment in Svalbard with respect to continuous areas of wilderness, landscape, flora, fauna and cultural heritage" (Sysselmannen på Svalbard, 2012 § 1.1). It took effect on July 1st 2002 and occasionally has amendments. Svalbard's cultural heritage is also under the protection of this act. Two thirds of the archipelago is considered a nature reserve or national park, which means that:

"No activity that has a lasting effect on the natural environment or cultural heritage is permitted".
Under "Section 39 (protected elements of the cultural heritage)
The following are automatically protected:

- structures and sites dating from before 1946;

- movable historical objects dating from before 1946 or earlier that come to light by chance or through investigations, excavation or in any other way.

Evidence of human graves of all kinds, including crosses and other grave markings, as well as bones and bone fragments found on or below the surface of the ground, are considered to be structures and sites and are automatically protected irrespective of their age. The same applies to skeletal remains at slaughtering sites for walruses and whales and associated with spring-guns for polar bears. Around automatically protected structures and sites, a security zone shall extend for 100 m in all directions from the visible or known perimeter, unless the Governor prescribes that it shall be delimited differently" (Sysselmannen på Svalbard, 2012 § 5.39).

It is imperative to protect cultural heritage as well as the environment of Svalbard. Due to the lack of promising leads in the archipelago, specifically regarding prehistory, there is no great enough cause to justify putting these important features at risk. An independent archaeological excavation, solely focused on prehistory would not be convincing enough to damage a natural feature or a historical site. Different technologies, different cultures and different climatic changes also mean different land usages and sites that yield prehistoric artifacts could be in different locations than those with a known historical population. According to Bjerck, shorelines should yield a multitude of artifacts: "the artifacts that are expected to be found are easy to recognize, regardless of the eventual origin of the human groups. Harpoons and projectile points of bone and antler, finely flaked spears and projectile points, and possibly tools of ground slate can be expected. These artifacts are so distinct that any archaeologist, hunter, or tourist would recognize them easily. It is reasonable to conclude that if any artifacts had been found, at least some of them would have ended up in the hands of archaeologists by now. The dearth of such artifacts can therefore be considered to be meaningful" (Bjerck 2000, 105). The problem with this statement is twofold: in reality, shorelines are not overly accessible for tourists to go surveying. In main cities, such as Longyearbyen, the author of the thesis observed that they were very much used by visitors and industry. Any artifacts found on the shore would have been greatly disturbed long before the present. Once tourists and residents exit the city borders, they

legally need to take a gun as protection. Shorelines are not as much of a tourist attraction because they are considered dangerous places for surveying. Polar bears are often known to go prowling and sleeping on shorelines. Secondly, surveying is not encouraged. That is not to say that there aren't curious tourists, but the current belief is that there is no prehistoric presence on the island, so it can be assumed that any artifact most likely falls within historical archaeology. The author of this thesis noticed that throughout Longyearbyen it is explicitly communicated that visitors can not disturb moveable historical objects at the risk of a large fine. In fear of being fined and humiliated (the Sysselmannen website posts pictures of lawbreakers) artifacts may be smuggled out or left in place. Thirdly, museums display the most distinct artifacts. Visitors may be familiar with the dancing bear and mask artifacts of the Dorset, but smaller and/or less ornate finds (often associated with Arctic Small Tool tradition) may be more difficult to detect such as rope or wooden items, especially if they are in varying states of decay or covered in mud. Finally, Bjerck himself explains that in his own surveying practices, there are many borderline finds. Most tourists and archaeologists residing on the island would assume items found on the shore are natural despite their shape if presented to the public. There is little to no motivation to try.
In addition, Svalbard's cultural heritage laws also mean that Svalbard and Norway are in control of managing *all* cultural heritage on the archipelago. It is not in the best interest for Norway to find prehistoric items on Svalbard other than Viking artifacts, as this may aggravate land claims for the archipelago. Having one unified narrator (cultural heritage managed by a representative of the sovereign state) may lead to biases and does not provide an open environment for critical discussion. Unfortunately, as seen with the Pomor museum, archaeologists, museums and the descendants of early settlers may be silenced if their collections and narratives provide a different narrative than the main story.

Within a settler colonialist structure, methodologies used by the settling culture such as scientific and archaeological methods are given priority over Indigenous origin stories, albeit many times, the same conclusions are met. The scientific and archaeological searches of origins place an emphasis on dating, with a value on 'how long" a group and their descendants remained "settled" in an area. This research may then be incorporated into the greater history of humans "settling"

on the land. The purpose of this is twofold. Firstly, this plays into environmental determinist narratives such as predictive settlement models, where the functionality of the land is the most important. The location, visibility and usable amount of land become the main focal points of discussion and gives the land its value. This insinuates that the land is and has always been desired by many people throughout history but that the settlers have finally "won" and are keeping their winnings. Secondly, it also implies that contemporary settlements are permanent fixtures, despite having only a recent history. It puts forward the belief that the settlements are expected to remaining nearly as long as the thousands of years indigenous peoples resided there. In examining how Arctic indigenous people tell their own origin stories, it is not uncommon for current groups to relay that they were not the first group to reside in their territory. Instead portraying the previous group as winners or losers, these origin stories often depict themselves as migrants, exchanging knowledge with the previous inhabitants and attempting to merge with them and their culture.

2.4 ARCHAEOLOGICAL APPROACH

Pre and proto history were specifically thrust into the spotlight in particular when the Svalbard Act was enacted in 1925. In order to link Spitsbergen with its new sovereign nation, nationalistic measures were taken-including the renaming of the archipelago itself. Spitsbergen was the original name given by Barentz. It denoted the mountain he saw on the main island before landing. In Dutch, Spitsbergen means "jagged mountains". The islands were then renamed Svalbard, and the name Spitsbergen was then used to describe the largest island in the archipelago rather than archipelago itself. Colloquially, it is not uncommon for the two names to be used interchangeably. In Old Norse, *Sval* means "cold" or "chilly" and *bard* means "coast" or "edge". When discussing Svalbard's prehistory, a large percentage of texts (Arlov 1996, Bjerck, Eeg-Henriksen and Sjømæling, tour group) make reference to the quote Svalbarð fundinn (or Svalbard found), under the year 1194 in six Icelandic annals. The distance from Iceland to the aforementioned *Svalbarð* is mentioned in the Icelandic medieval text *Landnámabók* describing it as two days' sailing (with favorable winds). This may be more consistent with the approximate 550 km to Jan Mayen and not with the minimum 1,550 km (960 mi) to Spitsbergen (Wordie

1922). The location of this "Svalbard" was first linked to the archipelago in 1813 by Norwegian geologist B.M. Keilha, while others argue that the message was found in 1888 by Norwegian scientist Gustav Storm and supported by Fridtjof Nansen. Other than this cryptic message, there is no other existing evidence to prove the Vikings visited the islands. If just a visitation from a proto-historic group is impactful enough to determine the name of the archipelago-linking it to the descendants of the group, it is not unreasonable to assume that indeed, prehistory is a sensitive issue for Svalbard. However, probable the Viking hypothesis may be, the fact that it selected as a point of discussion more so than other groups is quite telling. Archaeology has been conducted on the archipelago for over 140 years (Jasinski 1993). First research initiatives began around 1861 - a hundred years after the first scientific expeditions were launched and were often in conjunction with geological research. The few major works in prehistoric archaeology on the archipelago are summarized below.

2.41 CHRISTIANSSON AND SIMONSEN

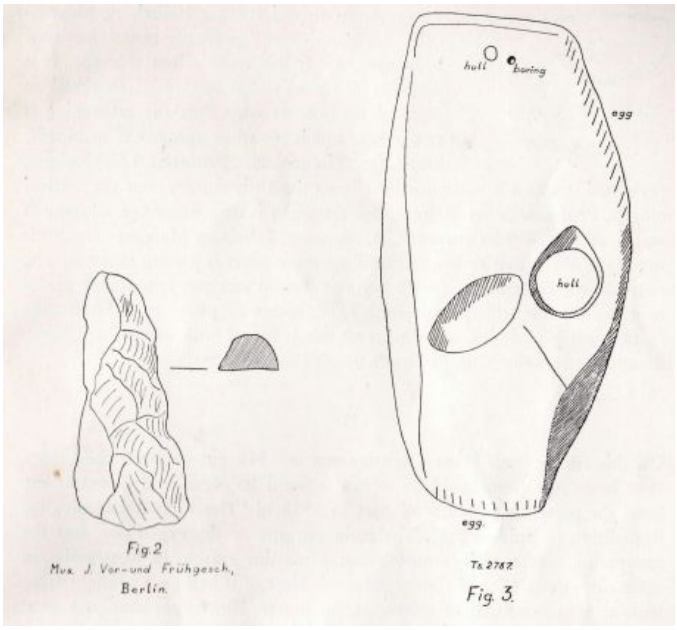
Amateur archaeologists and geologists were already finding flint artifacts on Spitsbergen at the end of the 19th century. Swedish archaeologist Hans Christiansson in 1949, suggested that stone tools might be found in the Isfjorden area, based on 3 finds. Isfjorden is the largest fjord on the island of Spitsbergen and serves the three most populous towns (at the time): Longyearbyen, Barentsburg and the now abandoned Pyramiden.

In 1955, a Scandinavian archaeological expedition lead by Christiansson, together with Povl Simonsen excavated an 18th century Russian whaling site at Russekeila, west of Barentsburg. The excavations took place in July and August in 1955 and 1960. In a 1961 publication, Christiansson proposes that there was not been any major postglacial uplift in the last 100 years in northwestern Spitsbergen after analysing the location of a kitchen midden, and comparing the results with other excavations (Christiansson 1961). Much of the material at the Russekeila, according to Simonson (1957), was well preserved in the permafrost.

Three finds prompted their survey. One of the finds was a “stone” axe found on the east side of Groenfjorden, on Finneset. It was stored in the Museum für Vor- und Frühgeschichte (Museum of Prehistory and Early History) in Berlin. After World War II, much of the collections were sold, damaged and confiscated by the Soviet Union and this artifact among the many was lost. A professor who was in Berlin when it was still in the collection, referred to as Professor von Jenny, provides a sketch [FIG.11]. The hoof-shaped, core adze is believed to have been made from hard schistose rock, which matches the available rock in the area. The second leading artifact (Tromso museum Ts 2787) is described as a oval slate-slab, 18.0x 8.9 cm and 1.2 cm in maximum thickness. It has been distinctly sharpened by grinding from both sides in two places. The artifact contains a natural hole, a seemingly bored hole, and an unfinished hole. It is said to have been found in Gronfjorden, and on a reconnaissance mission in 1955 by Povl Simonssen, he note that there was an abundance of rocks of this shape with natural holes, but none with bored holes or ground edges such as artifact 2. The third leading artifact was found in 1899 by C.S Hansson, a curator at the Göteborg museum, found in Templefjorden. It appears to be a discoidal scraper (Göteborg museum G.M 2776). The convex edge has noticeable two sided retouching. Geologist Arvid Gustaf Högbom classified it as an 18th century gunflint, although archeologist professor Mats P. Malmer later classified it as a Stone Age scraper.

Several artifacts were found to have been worked with a different technique than the typical Russian gunflint near the base of lodgings. Christiansson and Simonssen argue that they were might have originally prehistoric in origin, and but were later used by Russian gunmen. Flint artifacts were found, some 20 of which were identified as "certainly" manmade and differing from the flints imported by Russian trappers. Later, in 1967, the German archaeologist H .W. Hansen added to the material, so that it now consists of 110 artifacts of which at least 45 have been classified as "tools". The interpretation of the flint finds is complicated by the fact that local, eroded flint is abundant and the artifacts seem to lack traces of wear and tear. Nor has a dwelling or even a waste heap yet been discovered. It must be fair to say that the Stone Age hypothesis by and large has been rejected by other Scandinavian archaeologists. The researchers argue that the Eastern Barents Sea and the Kara Sea as the most probable origins for Stone Age

human groups to have originated from [FIG 12]. The archaeologists conclude that both Lapp and Nenet hunters were located at the 18th Russian hunting stations, which might explain the tent circles found [FIG 13].



[FIG 11] of this image is a sketch from memory by Dr. Von Jenny, of a stone axe found slightly south of Barentsberg. Fig 3 within this image is an oval slate slab found in Groenfjorden. Note the labelled borehole shaded in black.

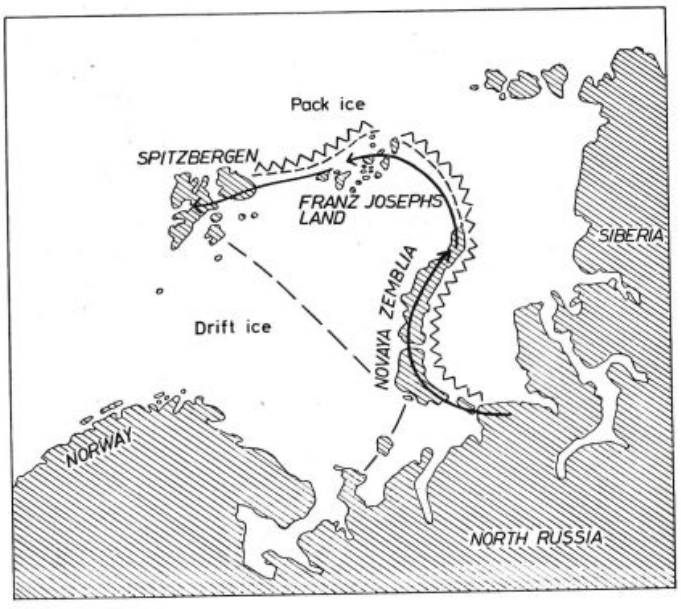
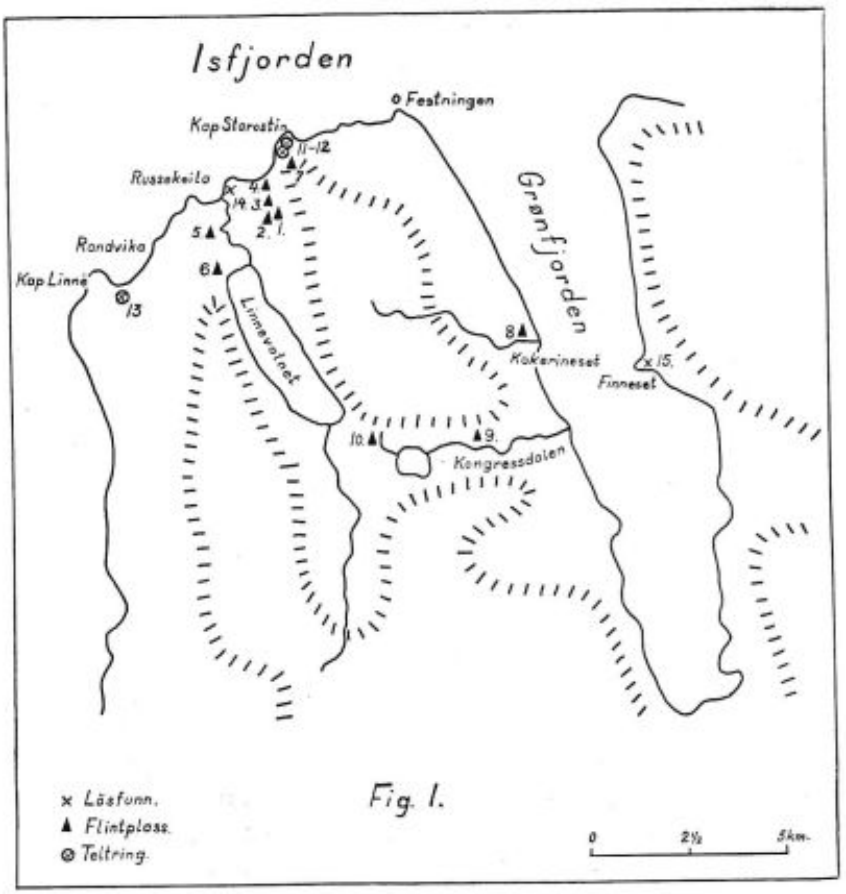


Fig. 11. The Arctic Islands and the migration route to them.

[FIG 12]A map from *Stone Age Finds From Spitsbergen* proposing a potential migration route to Svalbard. This is also the speculated route taken by the reindeer examined in Adolf Hoel's study. Photo credit: Christiansson and Simonsen 1970, pg 22. Scanned by Jessica Thomas, 2017



[FIG 13] Map of locations where lithics and tent rings were found. The "stone axe" depicted in FIG 11 is numbered 15 on the image. Source: Christiansson and Simonsen 1970, pg 6. Scanned by Jessica Thomas, 2017

The two archaeologists argue that Spitsbergen would make an ideal place for prehistoric inhabitants. 1. The abundance of wildlife, which would have been even more abundant in the past before industrialized over-exploitation. 2. During the whole of the northern European Neolithic and Bronze Age, the temperatures would have been 2-3 c degrees higher than present. The surface thaws down to 50 cm in warmer months (Christiansson and Simonson 1970: 18). 3. Raw material is abundant. While materials such as slate and hornstone may become

frost-cracked, once a segment of rock breaks away from the larger rock and lays on top of a moraine, frost shattering no longer occurs. The amount of driftwood appears to be larger on Spitsbergen than Greenland which is perfect for fuel, shelters and tool-making. Christiansson and Simonsen believe that the whole West coast of Spitsbergen would have been favorable for prehistoric hunting groups along with the north coast and the smaller islands in the southeast.

But how would they get there? "The 600 km stretch of open sea between North Cape [Norway] and Spitsbergen is out of the question as a route but that over North-East Russia-Novaya Zemlya-Franz Josefs Land-Nordaustlandet-Spitsbergen seems very feasible." (Christiansson and Simonsen 1970:19). Christiansson and Simonsson explain branded Nenet reindeer stray over to Spitsbergen, using an example of a buck shot in 1911 studied by Adolf Hoel and Helge Ingstad. The buck had a bird's bone tied to its left antler, which would have been attached when it was fully grown. It is believed by both Hoel and Ingstad that the buck must have crossed the Barents Sea during the summer, most likely travelling on drift ice. Christiansson and Simonson argue that the deer might have made the trip during the winter of 1910-11, since older reindeer only shed their antlers each second and third year. In the winter, the ice in the north-eastern part of the Barents Sea can be flat for great distances.

Reindeer are able to smell anything edible, and Christiansson and Simonson note that they have observed reindeer following a 280 km straight line from the northern tip of Novaya Zemlya to Franz Josefs land. It is not difficult to imagine that hunters, who would be able to understand if reindeer detected food on the other side of the ocean, would naturally follow the reindeer's route. Glaciers on Nordaustlandet and the small islands further east were at their minimum extension at the time of the Early Neolithic, and have grown much larger since, meaning that evidence would have been destroyed.

2.42 ETHNOGRAPHER KNUT ODNER

Knut Odner, an ethnographer from the University of Oslo, Norway, critiques Christiansson and Simonson in his 1972 review. Odner's review is referenced in nearly every publication which mentions Christiansson and Simonson's publication. He argues that the drawings are "sketchy, and rather inadequate for an article of this potential importance" (Odner 1972: 38). He encourages photographs of the lithics instead. While he does not doubt the expertise of Christiansson and Simonson, he argues that the deer theory (the cases of marked deer) is not sufficient enough evidence for human migration. "The observed cases both on Svalbard and on Novaja Semlja indicate that a few animals may arrive from time to time; but is it likely that scattered wanderings like these could have induced human beings to leave firm ground for a journey into the unknown? " (Odner 1972:40).

2.43 ARCHAEOLOGIST H.B. BJERCK

Dr. Hein Bjartmann Bjerck's publication "*Stone Age settlement on Svalbard? A re-evaluation of previous finds and the results of a recent field survey."* provides one of the most detailed histories of the archaeology of Svalbard. The former Cultural Heritage Officer at the Governor of Svalbard in 1996-1999, also includes the results from his own archaeological fieldwork in the archipelago, undertaken in 1997, before confirming that there is not sufficient enough evidence to confirm there were settlements before the official founding in the late 1500s. A major reason for initiating the current investigation in 1997 was new information on sea-level change on Svalbard. These data were not available to previous investigators, and provided the grounds for the project entitled 'Stone Age settlement on Svalbard?' The project included a reanalysis of the existing evidence, a detailed reevaluation of the lithics found in the Christiansson and Simonsen excavation. Bjerck states that "the objective of the investigation was not to search for evidence of random or short-term settlements by Stone Age groups, which are often difficult to discover in systematic surveys. Rather, the objective was to produce evidence for a semi-permanent/permanent community with an Arctic marine adaptation, comparable to communities documented in the neighbouring regions of Greenland and along the coast of Russia." (Bjerck 2000). In order to do this, Bjerck considered areas which had the suitable

environmental parameters: such as safe access to the sea, near a beach, access to sheltered and dry locations. While groups may reside temporary hunting locations, he was looking for a more permanent camp which would have more prominent features such as tent rings, hearths and debitage. “The survey had to be systematic, defined, and carefully documented, so that even a negative result could be trusted as historically valid.” (Bjerck 2000).

Bjerck’s consideration of Greenland and Russia, is refreshing. He notes that it is difficult to fathom the 600 km journey from Svalbard to Greenland but notes that it is not impossible. This is further confirmed by the similarity in Peary Reindeer to that of the endogamous Svalbard reindeer. It can be argued that if reindeer were to make this migration, humans certainly would as well. Should the groups come from Russia, Bjerck notes “Even so the distance from Svalbard to Novaya Zemlya is approximately 900 km. If the route includes Zemlya Frantsa Iosifa, the stretches of ocean are broken up into several shorter distances of approximately 300-400 km. However, the distances involved seem to preclude the possibility of an early migration.”

Bjerck finally makes his selection based on profitability of resources for hunting groups. A central location near natural animal migration routes was ideal, as well as an area that was not as heavily affected by post-glacial isostatic uplift. The Isfjord basin and Bellsund have well preserved beaches, which are currently located above sea level. They are dated to around 4500 BP which would correspond with the time Northern Greenland would be colonized by the Saqqaq. Akseløya, an island almost completely blocking the mouth of Van Mijenfjorden, near to Bellsund [FIG 14] was selected. The area is protected from the harsh sea winds, has a stable, predictable selection fauna and has many natural harbors. Ice free channels form on both sides of the island in winter due to the currents within the strait.

[Fig 14]
A more detailed map of Svalbard. Bellsund and the islands of Akseløya blocking the mouth of Van Mijenfjord are visible to the south of Spitsbergen. This is where the majority of Bjerck's surveying took place. Russekeila, the site where Christiansson and Simmonsson claimed to have found lithics is located near Kapp Linne. Credit: Public Domain map by DEMIS, Rotterdam and modified in 2006 by user TheGrappler. Downloaded from: https://upload.wikimedia.org/wikipedia/commons/e/ef/Spitsbergen_mountains_and_marine_features_labelled.png

Fieldwork was performed in the period from 21 July to 1 August 1997 and covered a total distance of 200,000 m^2. After surveying the area by snow scooter in late winter and helicopter in different times of the year, Bjerck selected 6 out of 12 prime locations for thorough, detailed

searches in hopes of finding remnants of a structure or lithic materials. Of these 6 locations, a total of 85,000 m^2 was then surveyed for indications of a structure while a total of 1600 m^2 of vegetation-free area was surveyed in hopes of finding lithics. Two hundred and four 10 cm - 20 cm deep, 30 x 30 by 40 cm wide, test pits were then excavated using a trowel and sediments were not sieved. According to Bjerck, the sediments were dry and easy to excavate, so that any artifacts would not be obscured. The weather conditions were good. Natural beach structures were still visible, indicating there was no heavy disturbances threatening their original deposition. Search time in total equaled to 14 hours.

While the results can be considered significant: no prehistoric indicators were found after heavy surveying in an incredibly probable area, Bjerck suggests that this can be a good lesson in the power of 'borderline finds', which may appear to be anthropogenically-made, but are actually natural. Sharp edged, frost cracked, chert was not an uncommon find: chert can be found in the bedrock of Akseløya and in the general area. Bjerck characterizes frost-cracked material as having a tendency to have a "triangular, four-sided, or many-sided cross-section — in contrast to the flatter, more two-sided flakes that dominate in man-made flakes.

However, flat frost-cracked flakes also occur.

- Flake surfaces on the frost-cracked material lack a bulb of percussion. However, structures that are quite similar can be observed;
- Small, retouch-like traces of wear along sharp edges are common on frost-cracked material. The traces of wear are discontinuous and unsystematically located on both sides of the sharp edges, and they are not too difficult to distinguish from intentional man-made retouch; and
- It is important to see all the flake surfaces in relation to each other. Artifact-like characteristics can be present in naturally flaked lithic material, but these characteristics are seldom present at the same time.

Erroded rock outside of Longyearbyen. Fractured rock is not an uncommon phenomenon in the archipelago. This has been made even worse by mining activities. It is not difficult to imagine the confusion of amateur archaeologists and surveyors. Even if anthropic lithics could be found amongst all the natural fractures, the amount of surface damage-due to erosion as well as the permafrost, would make microscopic analysis quite difficult. Costs and laws to excavate on Svalbard has made it increasingly difficult for archaeologists to pursue excavations.
Source: Photo taken by Jessica Thomas september 2016.

It is just as important to consider a possible artifact in its entirety, and, if humans have been present, at least one certain artifact should be found among the uncertain category. Anyone who cares to present uncertain lithic material as the basis for important cultural historical conclusions should study this collection, and learn from the unpredictability of nature." (Bjerck 2000)
Bjerck's fieldwork is quite detailed and thorough. He states that this should be sufficient evidence that there is no proof of settlement in the area surveyed, and these findings suggest that there are no permanent prehistoric settlements throughout the archipelago. He does not oppose the possibility of finding evidence of shorter term activities, but believes that the implications will not be as significant.

It can be argued that these findings would still be significant, as:

- It may give researchers better insight into climate change. More research needs to be conducted on Holocenic paleoclimates, and if there was evidence that the archipelago was accessible, it may add to a better understanding of the conditions;
- It would challenge traditional borders. Due to Svalbard's proximity to the European continent, much of its conceptualization of *place* is related to Europe. Europeans travelling to the Americas tends to be better documented than Americans travelling to Europe albeit there is knowledge of voyages happening both ways;
- It would give greater credit to non-writing societies. Indigenous people of the Arctic *know* their surroundings better than anyone else, why wouldn't indigenous people of the past, also be aware? It would urge scientists to question why there is or isn't more settlements on the island; and
- Localization: islands which have previously been grouped together may be given more independent consideration, each having their own distinct history.

Unfortunately, with permafrost, while it can perfectly preserve artifacts while frozen, if it is continually thawing and freezing every year, items will decay. Bodies from the whaling period are "popping up" out of the ground from their graves. It is unknown how many may have already decayed before archaeological intervention. Surely artifacts (such as ivory which cracks under extreme temperature and decomposes in water) have popped up and decayed before then. Due to the shifting permafrost, it is now illegal to be buried on the island.

Bjerck describes the initial finds, which prompted Christianson and Simonsen's excavation, as "dubious". Bjerck looks for the lithics presented in their publication and casts a critical eye towards their methodologies. "Nature is unpredictable, and manifests itself in inexplicable forms and phenomena that have nothing to do with human activities." (Bjerck 2000: 100). Bjerck reanalyzed the collection with assistance of Tora Hultgreen at Tromsø Museum in January 1997. The remaining material was not located. (Bjerck 2000). While Bjerck provides a highly

referenced, thorough investigation of the Bellsund area, criticisms can be made about his approach and interpretation. Firstly, the selection of a place with a known migration pattern does not take into account that animal migration routes change frequently. Furthermore, humans have an influence in migration patterns-and humans have been living and hunting near to the Bellsund areas for centuries. In fact, three of the three still-populated cities of Svea, Barentsburg and Longyearbyen, are nearby. Surely this would have an impact on contemporary migration routes. In addition, a settlement would be most convincing because a settlement sufficiently denotes permanence and ownership within the social structure of settler colonialism. A settlement is obtrusive within the landscape. Anything else (such as artifacts or legends) is not considered remarkable because it is easier to exclude from the current narrative. Ancient *visitors* to the archipelago is simply not as threatening to sovereignty as ancient *inhabitants*, despite the fact that in nomadic and semi-nomadic societies, the distinction between the two categories are more nuanced. Even today, a large percentage of Svalbard's current population (students, researchers, tour guides, tourists) [FIG 15] is transitory-their impact on the archipelago may not be directly visible, but they certainly have an influence on the ecosystem as well as the culture.

Bjerck concludes, "This does not mean that evidence for more random or short-term sites on Svalbard may not be present. It is not improbable that a hunter, or hunting party, on an adventure or perhaps lost, could have landed on Svalbard. However, it is difficult — if not impossible — to discover evidence of such activities, even in a systematic survey. It would be interesting to find such a site, but the cultural historical implications would be limited" (Bjerck 2000:110). Bjerck's assessment is reflective of a worldview wherein a visible permanent settlement is the indicator of cultural and historical contribution. Following Miller and Tilley's *Power and prehistory*-the cultural and historical contribution would not be just benefit Svalbard, but would benefit prehistoric studies as a whole. It would encourage a re-imaging of prehistoric people having the *power to* survive, prepare for and adapt to high Arctic conditions-a feat which is often linked with innovations in modern technology (i.e. heaters, snowmobiles, defrosting fluid). In this fashion, it can be argued that Svalbard is undergoing a type of "guilt-free" colonialism, where the only indigenous population affected by the influx of immigrants and migrants is faunal.

Settlers on Svalbard are able to experience what it's like to be in “an untouched and un-spoilt environment” (Sysselmanen 2012).

2.44 ARCHAEOLOGIST MAREK E. JASINSKI

Norwegian archaeologist Mark E. Jasiński, in his presentation at the “Conference on Svalbard Archaeology" held in Tromso on 7-9 March 1989 and subsequent publications in 1990 and 1993, addresses some of the issues which trouble archaeologists on Svalbard. First, he describes conflicts between archaeologists from foreign countries coming to Svalbard to conduct excavations, and Norwegian administration hoping to protect cultural and natural heritage. Most expeditions from foreign countries which have a direct history with the archipelago are specifically concerned with their country’s past (Jasiński 1993: 33) and may miss other details. While Norwegian and researchers from other countries, which did not have direct involvement in Svalbard’s history, have a broader view-this is due to Norway’s obligation to protect cultural interests of the entire archipelago and the lack of national priorities for non-linked countries. The two groups have different research interests, but can benefit from working together.

Secondly, Jasiński objects to initiatives, such as those proposed by Svend Erik Albrethsen in 1989 to “protect” the cultural heritage of Svalbard by limiting new archaeological excavations to rescue missions. Jasiński proposes that this will do more harm than good because researchers will have more materials than they are prepared to manage, without a previously established basis of knowledge. Besides, he argues the concept of overconsumption in regards to archaeology is inherently flawed. The limit of archaeological sites on the archipelago will never be known-human behavior is unpredictable: “It is even impossible to agree a priori with the conclusion that because of geographical location, human activity on Svalbard was limited in every way.” (Jasiński 1993, 37). Archaeologists in Svalbard, rely on established categories-historical sites on the archipelago mainly consist of shelters, production ovens and graves. These all are functional in origin. Furthermore, surveying tends to fall into the functional as well, with the scope of surveying activities remaining along coastal regions. Yet, Russian Orthodox crosses are well known and found throughout the archipelago- these provide a new

category of cultural heritage: they are a representation of both the functional and the spiritual. Due to a previous knowledge of Russian Orthodox crosses, archaeologists have enough information to determine if a wooden post under the ground is possibly part of a wider, symbolic network of beliefs. But what about sites that may not be so easily recognized yet due to the lack of sufficient research? Certain there are sites that are not recognized as sites at all. Taking a functionalist approach will only allow information to escape future researchers, Furthermore, material culture is a small element of the interpretation of Svalbard's history, and the creation of a thorough, well documented archaeological record, with well stored artifacts, will provide material for future generations to interpret beyond the scope of current knowledge. This does not mean that every site studied should be totally excavated. The best way to protect Svalbard's heritage is to allow for all parties involved in research to have clear goals and for factors to be heavily evaluated before approved for excavation.

Finally, fundamental problems exist with archaeological research in Svalbard including the research goals. He asks "What Is Svalbard archaeology and what is its position in cultural research?" (Jasiński 1993: 32). Since Svalbard has no known Indigenous culture, and occupation appears to be episodic, it may seem that there is no base culture to contextualize findings. Jasiński argues that Svalbard has a sui generis, culture: one of its own created from elements of all the many cultures which may have visited the archipelago before the Svalbard treaty of 1920. Svalbard is unlike most places in Europe, and that is what makes it a compelling place for research (Jasiński 1993:32). From the Middle Ages onwards, adaptations to Svalbard's climate by European settlers can be considered *Svalbard* culture. Symbolic elements may be more linked to the home cultures which the settlers came from, yet, may also have taken on their own meanings. "The history of the archipelago (according to the present level of research) is a collection of episodes from different periods, created by representatives of different foreign cultures, rather than a process of cultural development. Thus, what is still missing in our research is the inclusion of Svalbard in comparative studies with a circumpolar perspective, both in relation to particular aspects of the utilisation of natural resources (i.e. whaling, hunting, trapping, etc.), and in general — the position of the archipelago in the cultural tissue of the

Arctic." (1993, 38). He goes on to describe how it is important to consider the transformative changes that happened on Svalbard. For example, one could examine hunting on Svalbard as an example of European adaptation to arctic conditions. Under extreme circumstances, groups lived communally and "Survival under these conditions probably led them to create new elements in their interactions (such as communication systems, symbolism, etc.)" (1993, 40). How did these cultural exchanges influence the home societies of Svalbard workers? In terms of prehistory, much can be said of the same. Jasiński does not deny the plausibility of a prehistoric culture, and instead, argues that interests have changed-with more research being directed towards national interests.

2.45 **ARCHAEOLOGIST FRIGA KRUSE**

When archaeologist Friga Kruse, from the University of Groeningem, used Askladden, the Norwegian cultural heritage database named after the Norwegian myth known as Ash Lad, to determine the spatial distribution of human presence throughout the archipelago over various time periods (Kruse 2016) she noticed something peculiar. While all archaeological sites listed were recognizable, none were dated properly. This made it difficult for her charting: she was able to represent spatial divisions of historic sites but was unable to further separate them by absolute time dates. While this could be a clerical error or due to errors in fieldwork notation, minor obstacles like these make it all the more challenging to get an accurate representation of historic anthropic presence. These shortcomings represent a greater problem for researchers-archaeological materials are not nearly accessible. As of 2017, the Askladden site is under maintenance and has been taken offline. Kruse noticed, from an analysis of archaeological site locations, that there was initially a strong preference for the west coast of the island of Spitsbergen as well as the south of the island of Edgeøya. This could be due to the West Spitsbergen Current, which granted better accessibility to the fjords. These locations also support wildlife, which would make it appealing to hunters. As interest in collecting weather data (brought on by military interests) increased, as well as additional scientific activities, human presence began appearing in the north and south regions of the archipelago.

Kruse argues that it is not a fair representation to compare historical sources of animal populations to contemporary ones, due to historical biases. The early researchers documenting the exploitation of resources were using the same resources themselves yet placing blame on other groups. Historical and archaeological records also only take into consideration terrestrial data, when many hunting activities also took place in the sea. Furthermore, conservation efforts, which occurred at different periods, influences ecosystems, and can still be considered anthropic pressure within the ecosystem (a disproportionate number of carnivores may lead to a disproportionate number of prey). All of this provides an uneven representation. Since the first human arrived in Svalbard, the environment has been influenced in some way by their presence and as long as Svalbard has been known, it has never been "pristine".

2.5 THEORETICAL APPROACCH

One of the main criticisms of Processual approaches to archaeology is that it focuses too much on environmental determinism (Miller and Tilley 1984, Shackel and Little 1992). Environmental determinism is the belief that environmental factors such as climate, terrain and elevation impose the possibilities and limitations of a culture and determine its trajectory. When describing the Arctic, it is not uncommon to see it portrayed as an inaccessible, sparsely populated place, with extreme weather and a barren terrain. But where does this view come from? Certainly not from native Arctic dwellers who are familiar with their environment. The seemingly inhospitable Arctic Circle has been able to support modern human life consistently for thousands of years, in addition to Neanderthal.[11] There are challenges with living in an Arctic landscape, just as there are challenges living anywhere on Earth. An over emphasis on the difficulties of Arctic living detracts from the complexity and variety of Arctic cultures, and instead places the focus on the environment. It also limits the interpretation of Arctic material cultures, reducing most artifacts as pragmatic, serious and necessary for survival rather than acknowledging the regional

[11] Mousterian culture remains dated to 28,500 found in the Polar Urals, considered to be 8,000 years after Neanderthals were thought to have been extinct. Does this indicate that the Arctic circle might have been a refuge for the last Neanderthals, or Neanderthal influenced modern humans?

diversity, innovation and artistry. The focus shifts on Arctic dwellers settling where they are in spite of nature, rather than within it. They are too busy "surviving" to "evolve" and "develop" their technology. This also removes the sense of permanence of the Indigenous people of the Arctic.

When discussing how ancient people could have reached Svalbard, boating technology is a good starting point. Indigenous Arctic people are the masters of innovating to suit their environments. While Bjerck, Christiansson, and Simonssen all mention the possibility of ancient groups, they do not elaborate on the possibilities. Due to the missing archaeological record, geographically closer areas such as Siberia, Norway and Greenland are the best sources for information. Each group residing in this area had and still have an intimate knowledge of their territory. Continuity between prehistoric populations and contemporary ones are difficult to prove, but it is not difficult to imagine that older beliefs may build the framework for more contemporary ones.

2.51 SAMI INFLUENCES

The origin of the Sami people is a widely debated subject. When northern Scandinavia became repopulated after the Late Glacial Maximum about 10,000 years ago, the coastal areas became occupied by three techno-complexes: the Fosna along the coast of southern Norway, the Hensbacka in southwest Sweden and the Komsa in northern Norway (Weinstock 2009). The Norway that the Fosna and Komsa peoples inhabited was much like Greenland is today, including the visibly disappearing ice sheet. As ice sheets continued to melt and sea levels continued to rise, Middle and Late Mesolithic settlers began exploiting the extensive coast and fjord systems. It is also during this time that coastal rock art began to emerge. While there is a debate as to whether these early settlers were the ancestors of the Sami or would later be replaced by the Sami who may have originated elsewhere, the Sami are believed to have become a distinct group during, or in reaction to the incoming migration waves of Indo-Europeans.
Rock art found in coastal areas of Northernmost Scandinavia is often placed near to the shore. Knut Hellskog's article *The Shore Connection. Cognitive Landscape and Communication with*

Rock Carvings in Northernmost Europe (1999) describes the many reasons for why this seems to be a common placement. The selection of coastal areas for rock art is not simply due to convenience-as there are sites both near and far from settlements. Shorelines may have represented a transition from one world to the next. In the context of Sami culture, which does not have a sharp delineation between the living and the dead, features within the landscape take on a spiritual meaning. Povl Simonson noted carvings at the top of the holy Sami Mountain Aldon, which most likely was medieval in origin, which may indicate communication between worlds (Simonsen 1979, 481, Hellskog 1999). Shorelines may also indicate the change of the seasons, given that coastal regions in the Arctic are the first to experience summer. Could it also be that some coastal rock art within Sápmi could be based on legends of a land beyond the sea? Norterminal, an oil company planning to construct storage and reloading facilities for Arctic oil at Gamneset, a peninsula west of Kirknes in Norway uncovered a new rock art dated to about 7,000 years old. The petroglyphs depict herds of reindeer heading inland and would have been visible from several directions from the Barentsz Sea, meant to be seen as a Stone Age billboard. It is suggested by Anja Roth Niemi that the rock art may have depicted a migration route.

A more famous example of coastal rock art is the UNESCO Heritage site Rock Art of Alta, created close to the prehistoric shoreline. It reflects hunter-gatherer rock art from about 5000 BCE – until 0 CE. Water seems to be a continual motif for the images at Alta, whether they are located near creeks, shorelines or ponds. Animals have been depicted in micro-topographic scenes as disappearing into depressions of water and motifs assumed to be the sun (Helskogg 1999, Gjerde 2009). While images can still be seen from the water, they would be even more visible from the shoreline at their time of creation. Boats are depicted in the rock carvings and paintings of Alta while small fishing boats appear from the earliest dated art and onward, with later-dated depictions of larger and larger boats, some carrying up to 30 people and being equipped with elaborate, animal-shaped decorations on bow and stern that are sometimes reminiscent of those found on Viking ships [FIG 16]. This, along with the fact that similar carvings of large boats have been found in coastal regions in southern Norway, seems to indicate long distance voyages along the coast from either direction must have taken place. Sápmi, the

traditional territory of the Sami had already been described in ancient and medieval European myth. The boundaries of Sápmi reached more south than they currently do today, ensuring contact between Sami and Norse (Mundal 2003, 347), and while these interactions may not have been common, the Sami might have been the basis for Norse legends (Mundal 2003). In moments of contact, the two groups would have exchanged information, both practical and spiritual. if the Sami had contact with Vikings, would it not be possible for either group to exchange information about Svalbard? In later times, Nordland boats have been used by Norse and Sami alike, of which, it has been said that the Sami assisted Vikings in shipbuilding. Norsemen traditionally used iron rivets as attachments to boats while Sami sewed boats together reindeer intestines (Christensen 1968). If a group which is nautically active for thousands of years-with boating being both part of practical and spiritual life, it does not seem outrageous to suggest they knew of Svalbard in some capacity.

[Fig 16] A panel taken from the Alta rock art complex. Reindeer are illustrated here along with a large boat containing a figurehead at the front. The building of the Alta dam, Credit: Sini Merikallio /Flickr.

A pastoral people, more famously known for their reindeer herding, the Sami also hunt and fish along coastal areas extensively-with fishing becoming the more actively practiced Sami tradition. Sami and Pomors developed a strong trading system, and most likely would have exchange information. Sápmi emerged in public consciousness again after the Vasas took power in Sweden. Efforts to secure the northern border for economic and militaristic reasons, which had fallen into disregard for southern settlers after the bubonic plague in the 1300's, increased. The publication of Johannes Schefferus's book *History of Lapland* (1674) provides readers with the opportunity to reimage Northern Europe as an adventurous and exotic yet now, more accessible place than the Americas. As Sweden began to make inroads into Sápmi, through the creation of schools, farms and settlements, and later scientific and mining endeavors, visitors to the region began writing travel logs. Now the general public would be able to garner firsthand perspectives of an old but new world. Magdelena Naum describes in her publication "Between Utopia and Dystopia: Colonial Ambivalence and Early Modern Perception of Sápmi" that: "the rhetoric of cultural superiority, desire, and difference mixed with experiences of ambivalence—reactions dominating the engagement with the colonial world, contact zones, and fringes—underlined the perception and image of Sápmi. These experiences and figures of narration were shared by the missionaries, administrators, academics, and adventurers who were sent or travelled to Sápmi in the early modern period" (Naum 2016: 493). Travel adventures contributed to the "othering" of the Sami. This "othering" was then used to justify the settling, "developing" and appropriation of traditional lands. Leonie D'Audet, one of the earliest documented women travelers to Spitsbergen in her book *Voyage d'une femme au Spitzberg* describes her encounters with Sami, describing them as representing two sides of savagery: "Les Lapons de Kautokeino laissent une autre impression que les Lapons d'Hammerfest, et ce sont les mêmes hommes, mais les deux faces du sauvage : à Hammerfest, le sauvage en fête est ivre, hébété, hideux ; à Kautokeino, dans sa vie de famille, il est doux, paresseux, borné. Hors de chez lui il inspire le dégoût ; chez lui il fait naître la pitié." (D'Audet 1854, 260). These narratives, fueled by colonial and settler colonist

narratives, most certainly had an influence on researchers interpreting the capabilities and desires of the Sami and their ancestors. Indications of prehistoric Sami presence on Svalbard would pose some very interesting questions. Would a prehistoric Sami presence be used to reinforce Norway's sovereignty over Svalbard? What would this do to Viking theory?

2.52 NENET INFLUENCES

The Nenet are believed to have migrated from southern Siberia to the northern coast. When they made this journey has been debated, but they were in their current territory for at least 600 years. According to Nenet mythology, they were not the first inhabitants of their current traditional land. The Sikhirtya – or Sirtya, were a legendary race of people who were said to come to Yamal by sea thousands of years ago (Kula 2015). They are often described as being short and strong with bronze adornments in their hair and ornate jewelry (Demyanenko and Maramzina 2017)**.** The current whereabouts of the Sirtya vary. It is believed that they eventually assimilated with Nenetses, while others retreated into caves, or relocated to a kingdom underground. Occasionally, according to folklore, they would be visible at night, through the fog. Historical reference to the Sikhirtya also exists. French explorer Pierre-Martin de la Martinierre describes encountering "a short race who wore white clothes from polar bear fur and lived in homes of fish bones and moss" (Kula 2015) who were very much unlike the Nenet. Archaeologists believe the Sikhirtya people may be linked to the Bronze Age sites found in the region, such as near rivers in the remote Tazovsky Peninsula (Siberian Times 2017). Coincidentally, in Inuit mythology, polar bears had human-like qualities and were rumored to return to their igloos at night, remove their fur disguises and transform back into men. Tuniit art depicts polar bears with markings on their bodies. The author of this thesis interprets these markings as representations of tattoos, potentially indicating the link between man and beast or illustrating a Shamanic transformation. Could this have been inspired by meetings with the Sikhirtya?

They primarily rely on hunting and reindeer herding- L.V. Khomich wrote extensively about Nenet ethnography, did not place emphasis on Nenet boating and it appears to be an understudied subject. Early Russian accounts indicate that Nenetses used the same boats to that

of their Russian neighbours obtaining them through trade. According to Gerrit DeVeer, on Barentsz' second journey, the crew encountered a group of Nenetses, an Indigenous group from Northern Russia on Vaygach Island, known in the Nenet language as *Hehe Ya* or *Hebidya Ya* . Vaygach Island is considered sacred ground for Nenetses, and is a great place of pilgrimage, only lessening in annual visitors after Soviet-era imposed restrictions. Traditionally, pilgrims would gather their reindeers and attach them to a sledge; the reindeer would then walk across the ice of the Yugorsky Shar Strait or swim (Davydov & Mikhailova 2011). The island is adorned with wooden idols, sacrificial piles of driftwood, and the skulls and bones of sacred animals such as reindeer and bears. Could any of the piles of bones or driftwood in Svalbard be remnants of a sacred *place*? Shamanistic activity is known to occur on the island as well. As protective measures, starting from the 15th century onwards, Nenet pilgrims discouraged Russian fisherman from using their area. DeVeer account of their first meeting with the Nenetses on Vaygach was initially suspicious-the group showed their bows and arrows and questioned their activity there before dropping them and requesting to talk with the new group of strangers. Then, the crew's Russian interpreter " questioned with him [the group leader] about tho scituation and stretching of the sea east-ward through tho straightes of Wey-gates ; whereof he gaue vs good instruction, saying, that when they should haue past a poynt of laud about 5 dayes sayling from thence (shewing^ north eastward), that after that, there is a great sea (shewing towardes the south-east vpward") ; saying, that hee knew it very well, for that one had been there that was sent thither by their king with certaine souldiers,* whereof he had been captaine." (Deveer 1876: 58). The navigational information reveals some very important details about the Nenet and their ease of sailing the Kara sea, and possibly Barentsz Sea as well.

2.53 INUIT AND TUNIIT INFLUENCES

In Canadian Inuit mythology, the Tuniit are the "people before" the proto-Inuit or Thule people settled in the region. They are credited in making the landscape more inhabitable for Inuit. In Greenlandic Inuit mythology, the Tuniit were known as people who lived inland. Both depictions portray them as shy, gentle and tall, with a language which could be understood by Inuit, albeit

more simplified, sounding like "baby talk" (Peter Pitseolak, Sikusuilarmiut 1975, 33 via Bennet & Rowley 2004). They also hunted by sitting on a block of snow, pegging their long jackets to the ground and resting soapstone lamps on their knees. When a seal rose to the surface to breathe, they would harpoon the seal, often burning themselves with the hot oil of their lamp. (Bennet & Rowley 2004). While for a brief while they remained in contact with Inuit, with both groups learning from each other, the Tuniit could not adjust to living alongside the Inuit and began to retreat. This thinking differs from the social Darwinist theories which frequently cloud archaeological thinking. The Tuniit chose to leave, perhaps not enthusiastically, but they did not simply go "extinct" because they were unfit.

The earliest known group to have settled in North-Eastern Greenland, the Independence I culture, were heavily studied by Eigil Knuth. Named after the Independence Fjord in Northern Greenland, where a large percentage of the group's sites were initially unearthed, they occupied the area from 2,400 BCE to 1000 BCE. They fall under the "Arctic Small Tool" Tradition (ASTt), an umbrella term for a wide group of cultures, believed to be the first group to have occupied Arctic Canada and Greenland. Incidentally, Svalbard has historically been linked with Greenland-from the Pomors referring to Svalbard as Grumant (Greenland) (Jasinski 1993) to even Willem Barentsz and his crew erroneously thinking Svalbard was initially Greenland (De Veer 1876: 82). The Tuniit through landscape management made the land more inhabitable for the Inuit. How might they have made Svalbard more accommodating for future migrants?

Inuit oral histories describe a land named *Akilineq (or Akilinek in Canadian Inuit)*. The land is said to be far away and rich in resources and happens to be the place many characters journey both purposefully and accidentally. The journey to this land is often described as arduous and lengthy, often through very icy conditions. In Inuktitut, the name means "whole opposite country" or "land over water". In West Greenlandic, Aki-leg means right opposite (Forbes 2007) so it may indicate the land across from the Davis Strait: Labrador and Newfoundland for West Greenlanders. According to a Canadian map, drawn by Pukerluk, and given to Rasmussen, there is a place called Akilineq-a hilly area near the north shore of Beverly Lake in Nunavut-with

Beverly Lake being the body of water being crossed. It is the ancestral home of the Akilinirmiut, or caribou Inuit, who leave behind a rich archaeological record. It was known at the time as a popular location for trading and meeting between groups. According to Fosset and Gustov Holm, East Greenlanders consider Akilineq as a land further east. It has been disputed if this location was indeed Iceland (Fosset 2001). No Inuit remains have been found in Iceland as of yet, though Indigenous DNA has been detected in a small percentage of the population.[12]

Contemporary archaeologists believe that Tuniit boats resemble those of the contemporary Inuit, Aleut and Yupik-consisting of skin stretched across a wooden, ivory or bone frame. The two main styles of boats consist of the Umiak and the Quajaq (kayak), albeit there are many regional varieties as well as personalized adjustments. The Umiak, an open sea boat, is often referred to as a "women's boat" as it was used to transport families alongside their possessions over long distances. Whereas the kayak, a smaller, closer fitting boat is used for hunting. Both styles are lightweight enough to be transported on land, and made from materials which would be fairly accessible and replaceable during journeys, making it quite simple to repair. Their narrow size allowed for more dynamic maneuverability between ice floes. Techniques used to right capsized boats, were perfected by Inuit people and have been presented in numerous demonstrations including a 1576 demonstration in Copenhagen harbor for King Christian IV. A study by Seersholm *et al.* provides some interest insight into the boating capabilities of the Tuniit. The Saqqaq, a Tuniit group situated in West Greenland, who coexisted with the Independence I culture of Northeastern Greenland, have left enough bowhead whale DNA (from whale fat) in middens to suggest that ancient Greenlanders consumed a large amount of whale earlier than thought. Based on previous studies of Greenlandic middens, which did not produce a sizeable amount of whalebones, it had been assumed that later groups developed technology to master whaling. DNA testing of middens also indicates that the Saqqaq consumed more caribou and walrus than previously assumed. Some anthropologists such as Brooke Milne, argue that that the

[12] DNA testing in Iceland indicates the the C1e gene, found in a small percentage of Icelanders may be linked with now extinct Native American group. Since the gene appears to have linked from a lineage from at least the 18th century. Researchers have suggested these genes originated from a native American woman brought back from North America. But what about the possibility of Native people coming to Iceland on their own accord? Ebenesersdóttir SS, Sigurðsson A, Sánchez-Quinto F, Lalueza-Fox C, Stefánsson K, & Helgason A (2010). A new subclade of mtDNA haplogroup C1 found in Icelanders: Evidence of pre-Columbian contact? *American journal of physical anthropology*

Saqqaq may have scavenged whales instead of hunting such large whales from their boats (Chen 2016).

Regardless of boating technology, Inuit and possibly Tuniit had strong mapping skills. Explorers such as Knud Rasmussen and Fridtjof Nansen relied on indigenous knowledge and assistance, to accomplish their achievements. Groups which ignored indigenous help, such as the Franklin Expedition in Canada or Airship Italia, which crashed on Svalbard, proved disastrous. The Ammassalik wooden maps, collected by Gustav Holm during his 1884-1885 expedition to North East Greenland, are 3-D maps, used to assist Inuit navigators. They exemplify a complex mapping technology which takes into consideration landscape topography. The map is lightweight, waterproof and tactile-so that even in the darkest conditions can be read. Dutch scholar Gert Nooter noted that there were several Inuit kayaks found in Dutch museums, though the majority of them were found in towns that had a known whaling history in the seventeenth and eighteenth centuries. Nooter conducted interviews with Inuit informants in 1968 from the Ammassalik region, revealing that kayaks could stay in water four 48 hours if the hide was new and well-greased (Forbes 2007). Several folkloric tales describe travelers wrapping their boats in several layers of skin as protection for longer voyages. Ian Whittaker in his article *The Scottish Kayaks Reconsidered* (1977), calculated that the distance between Greenland and Scotland could be covered if the kayak was rowed four to 6 nautical miles an hour for two days-a feat which could be accomplished by an Olympian. Incidentally, East Greenland was known to have some of the strongest kayakers known.

It is frequently stated that the Ammassalik Inuit of southeast Greenland, had not been contacted by Europeans before Gustav Holm's study, making them a "pure" example of Inuit capabilities. The concept of ethnic, cultural and racial "purity" is an underlying force in the social structure of settler colonialism. As cultures come into contact with other cultures, they become influenced by each other. This has been interpreted in settler colonial literature as cultures losing their "purity"-and used to erase any claimed links a group may have with their ancestors and territory. In reality cultural purity does not exist-cultures do not stagnate and are constantly changing, whether influenced by outside sources or not. While Arctic cultures have been known to remain

culturally conservative, the agency of the people must be considered, and it should be acknowledged that cultural conservatism is a deliberate choice. They had and still have the *power to* retain cultural traditions, while also maintaining contact with other groups. Historically, Inuit and proto-Inuit interacted with the Vikings. The two groups acknowledged each other, occasionally traded, yet remained for the most part, culturally separate. The Inuit who had been navigating Davis Strait for millennia, shared (though not always peacefully) the area with European whalers who began arriving in the 1500s. Inuit and Europeans have had contact throughout the centuries, and both have maintained distinct identities, despite more recent government imposed interference. [FIG 17]

Plate 1. Detail of the original Pierre Desceliers, *Mappemonde*, 1546, John Rylands Library, Manchester, French ms 1, showing a Basque whale-hunting scene, off northern Newfoundland, in the Strait of Belle Isle region. Courtesy John Rylands Library.

[FIG 17] A 1546 map by Pierre Descaliers depicting a group of whalers. C.A Martijn's 2003 article "Basques? Beothuk? Inuit? Innu? or St. Lawrence Iroquoians? The Whalers on the 1546 Desceliers Map, Seen through the Eyes of Different Beholder" discusses how the ambiguity of the subjects' costumes, in the illustration exemplifies the diversity of people whaling and sharing the seas. It was not uncommon for whaling companies to hire Inuit workers, taking them away from their traditional hunting seasons:

"Sometimes there were starvations, because people couldn't survive if they did not have the caribou clothing they needed for the winter months. People working for the whalers sometimes had no time to go out and hunt for caribou clothing during the shedding season—the time when you catch the caribou before the coats are too thick. We used to see people walking around with real thick clothing, and it made them quite uncomfortable." (Eder 1989:164) Credit: MARTIJN, Newfoundland and Labrador Studies, 2003

Cultural conservatism does not necessarily mean isolation. In the European historical record: examples of Inuit making long distance travels to Europe can be found in several written accounts. Most of these accounts describe Inuit as Finn-men, assumed to have originated from northern European countries, albeit Charles du Rochefort in his *Histoire naturelle et morale des iles Antilles de l'Amerique (1658)*, which when translated into English is known as *The History of the Caribby-Islands* clarifies this. In the eighteenth chapter of the English version, an account of a voyage in 1656 to the Greenland coast of the Davis Strait describes the Inhabitants and their boats in detail. The description is quite similar to earlier accounts of previously reported Finmen. Starting from page 110, Rochefort goes on to write,

"though they have neither Sail, nor Mast, nor Rudder, nor Compass, nor Anchor, nor anything of all those conveniences upon which are required to make our Ships fit for Sea; Yet will they undertake long voyages with these small vessels, upon which they seem to be sewn: they have an experiencen'd knowledge of the Stars[13]; and need no other guide in the nighttime..." (Rochefort 1658:111).

Rochefort describes the Inuit as confident in their long distance navigation. Scottish Historian Doctor Mark Jardine links this account with another example by James Wallace, a minister from Kirkwall Scotland.

"Sometime about this Country are seen these Men which are called Finnmen; In the year 1682, one was seen sometime sailing, sometime Rowing up and down in his little Boat at the south end

[13] Inuit astronomy can be read about in John McDonald's 2014 publication *Inuit Astronomy*

of the isle of Eda[y], most of the people of the Isle flocked to see him, and when they adventured to put out a boat with men to see if they could apprehend him, he presently sped away most swiftly: And in the Year 1684, another was seen from Westra[y], and for a while after they got a few or no Fishes: for they have this Remark here, that these Finnmen drive away the fishes from the place to which they come. These Finnmen seem to be some of these people that dwell about the Fretum Davis [the Davis Strait], a full account of whom may be seen in the natural & moral History of the Antilles [by Rochefort], Chap. 18. One of their Boats sent from Orkney to Edinburgh is to be seen in the Physicians hall with the Oar and the Dart he makes use of for killing Fish.' (Wallace 1693)

Wallace makes reference to Rochefort. This account may correspond with the kayak found today in the Marischal Museum in Aberdeen, along with hunting items. The fact that the man in the boat had a full hunting kit with him indicates he set out on his journey with intention. The fact that Finnmen were not such a rare occurrence may dispel the belief that they were kidnapped and may further prove that his attempt to journey to Scotland was deliberate. A third notable account of Finmen in Scotland is that of John Brand, a minister from the church of Scotland:

"There are frequently Finmen seen here upon the coasts, as one about a year ago on Stronsa, and another within these few months on Westra, a gentleman with many others in the isle looking on him nigh to the shore, but when any endeavor to apprehend them, they flee away most swiftly; which is very strange, that one man, sitting in his little boat, should come some hundred of leagues from their own coasts, as they reckon Finland to be from Orkney; it may be thought wonderful how they live all that time, and are able to keep the sea so long. His boat is made of seal skins or some kind of leather, he also hath a coat of leather upon him, and he sitteth in the middle of his boat, with a little oar in his hand, fishing with his lines: and when in a storm he sees the high surge of a wave approaching, he hath a way of sinking his boat, till the wave pass over, least thereby he should be overturned. The fishers here observe that these Finmen or Finland-men by their coming drive away the fishes from the coasts. One of their boats is kept as a rarity in the Physicians Hall in Edinburg" (Brand 1701; Forbes).

In July 2016 an experiment was conducted by English adventure man Olly Hicks and George Bullard to follow the over 1900 km path of the Finnmen. They researched traditional Inuit Supported by Virgin, they intended to see if the distance from Greenland to Scotland could be made using a kayak. The boat is described as "a slightly modified Inuk Duo 6.8m sea kayak which is made of carbon-fibre with Kevlar in the bottom of the hull for ice protection. It is fast and light, designed to cover large distances whilst carrying sufficient expedition supplies, and has special cockpit canopies that can be sealed around the cockpits allowing the paddlers to squeeze into the hull of their boat to rest and sleep." (Hicks 2015) The kayak is nearly 8 m long.

Much of their experiment is documented on social media, as well as journals and interactive maps [FIG 18]. Their starting point was in the Denmark Strait, which transports ice via the East Greenland current on July 1st. The two men, along with their kayak, were brought there via a yacht, waiting for a good weather window in which they could begin their journey safely. In 42 hours, they reached Knighton Bay, Iceland. An entry from July 2nd 2016 at 11:56 pm: "Approaching Iceland coast in thick freezing fog :) we're tired but well, weather ok hard yards to finish but on track for Hornvik ETA 1400 seen whales. O&G X" (Hicks 2016).

As they continued along the coast of Iceland, they had to make quite a few stops due to the continually changing weather and sea conditions. On July 25th they set out again to head towards the Faroe Islands but turned back after 36 hours at the advice of the coast guard due to the incoming gale. Hicks explains "We had three different weather sources. Out there, you're so vulnerable to squalls. You feel small but you get used to it, no one can see you, but your perspective changes. But fear levels rise when there's anticipation of bad weather and the seas get worse. You realise when you're half the size of the swell how little control you have" (Interview with Halloran 2016). During their time in Iceland, they made sure to stock up on supplies and repair any minor damages the ice may have caused.

The route from Iceland to the Faroes Islands was expected to be the most difficult, considering they would be crossing about 450 km of open ocean. The wind was working in their favor during their second attempt at crossing the "devil's dancefloor". On August 4th, 2016, they were able to reach land after 4 days and 4 nights of continuous paddling. The duo travelled to Torshavn and took a much needed rest. They then headed to Suduroy, the southern tip of the Faroes, to prepare for the final leg of the journey. Due to looming weather conditions, as well as low rations, Hicks and Bullard briefly returned to Torshavn (leaving their kayak back in Suduroy).

After another start and stop-the 72 hour weather window they had anticipated would be cut short by a depression coming from Ireland, the final, open sea leg of their voyage began on Friday August 26th, 2016. After paddling for 65 hours, Hicks and Bullard took refuge on the small island of North Rona, to assess the changing weather conditions as well as take a rest. When they arrived on North Rona "They had around 16,000 calories of food packs and 16 litres of water left on the boat when they made land yesterday. They want to save 8,000 calories of food and 8 litres of water for the final leg. This doesn't leave them with much in the meantime." (Hicks 2016). As they searched the small island, they found food a large amount of pasta and water in abandoned huts. They also ate limpets.

After setting off from North Rona on September 3rd, Hicks and Bullard finally arrived in Balnakeil, Scotland on September 4th, 2016. On describing the journey, Bullard explained "We had hallucinations from the Faroe Islands to Scotland, we were so sleep-deprived that we'd start to see lights, boats and trees that weren't there. We heard women's voices in the cliffs. One night dolphins swam next to us and we thought it was a gale or rogue wave." (Halloran 2016) The journey took 6 weeks, with over 12 nights at sea, illuminated by the midnight sun. While this feat is not fully comparable to the Kontiki Experiment (despite Inuit influences, materials were very western), it does indicate that the distance, while taxing, is not impossible. Knowledge of climatic conditions-which seem unpredictable in some places, is imperative for completing the journey but would not be impossible for someone with intimate knowledge of the sea. The distance between Greenland and is much shorter than Greenland to Scotland, with some

locations such as Danmarkshavn would be under 900 km away from Longyearbyen, Svalbard. Or 500 km off Peary land. In regards to the Indigenous groups nearby to Svalbard, neither these groups nor their ancestors are as isolated as it is often assumed. Instead of visualizing each Arctic people as football teams competing to be the best, and thus, first visitor to Svalbard (Miller & Tilley 1988), it can be assumed that at least in some way that any of the islands within the archipelago of Svalbard were known about. The people within these groups had the *power to* journey there, but decided for or against it. Bjerck concludes "if anyone visited Svalbard and returned, any communication of the rich hunting opportunities would be tempered by the description of the strenuous and hazardous journey. The latter would probably put a damper on any desire to move an entire community. This is the most credible reason for the presumed fact that Svalbard was not settled by human groups in the Stone Age. (Bjerck 2001: 111). While this conclusion is reasonable enough, this did not stop navigators, hunters and whalers from going off into the seemingly unknown, why should it be any different for local people? The journeys may not have been supported by the entire community and instead reserved for a selected few. The journey to Svalbard might have been a spiritual one. While Svalbard may not be considered a place for permanent settlement, could the challenging aspect of the journey not contribute to its value? All three groups presented have traditional shamanistic beliefs. Perhaps Svalbard was a land not to be known by the general public. Or could it be that in this case, ancient visitors of the archipelago wanted to hide their tracks as much as possible, just as modern eco-tourists do in Svalbard today?

[FIG 18] The route from Greenland to Scotland, which covers more than 1,200 miles of sea. Source: Hick, Olly, 2015 via Coetzer, Correne, 2016. Downloaded from Pythom: https://www.pythom.com/Greenland-to-Scotland-kayaking-attempt-about-to-start-2016-06-08-43427

3. CONCLUDING REMARKS

The archaeological and historic record during the past 1500 years has been fragmentary for Svalbard. Surveying initiatives, with an emphasis on prehistory, have been limited at best in more recent years. It is for this reason that archaeologists should not be so quick to dismiss the possibility of a prehistoric settlement or even visitation on the archipelago. The case of an island falling within the territories of several indigenous groups yet somehow escaping detection until the Age of Discovery is highly unlikely yet difficult to prove in such an environmentally volatile place. Clearly indigenous communities such as the Sami, Inuit and Nenet at least *knew* of this archipelago before the discovery of the island in 1594 by Willem Barentsz. Perhaps the features which made Svalbard attractive to whalers, trappers and in more modern times- students, tourists

and entrepreneurs also made the location attractive to prehistoric groups. It is important to consider that while needs and interests vary from culture to culture and chronology to chronology, it is not uncommon for an area to retain human interest, despite fluctuating occupation, for millennia.

The findings of a prehistoric presence on the island will not upend the current settlements on Svalbard- and this should not be the goal. Instead, it will change the way Svalbard is marketed for tourists and settlers alike as well as provide a more complete and complex interpretation of circumpolar archaeology. For one, it may challenge what contemporary researchers know about the capabilities of early boats. There is currently a debate about the peopling of the Americas-including discussions on whether early groups used boats or waited for an ice-free corridor to open and grant access into the continent. Evidence of skin boats being able to travel such a long distance-such as from Greenland to Svalbard, in such icy conditions may be able to enrich the discussion. It may also provide some answers regarding settlement planning in reaction to climate change. Structural concepts used in the designing of Svalbard's major towns originate from somewhere else, with settlers adapting these concepts to the unique climatological challenges of the archipelago. Despite their best efforts, contemporary year-long settlements in Svalbard are still not indestructible. Having a frame of reference from earlier visitors, may provide more insight into the possibilities of future structural designs. Finally, it may fuel other archaeological initiatives in the few remaining places on Earth assumed to have no prehistoric presence, such as Antarctica.

But the question remains, how to detect a human presence without a settlement? Paleoclimatologist William Ruddiman's Anthropocene hypothesis differs from other anthropocene theories because it considers prehistory as a factor. While he acknowledges that there is an increase of anthropic markers starting around the time of the Industrial Revolution, such as eutrophication in lacustrine sediments, he argues that a more holistic approach needs to be taken, further including historical and archaeological data. Studies such as the aforementioned Sheershorn et al. discovery of increased bowhead whale DNA in Tuniit middens, open up

dialogues on the markers prehistoric Arctic dwellers may have left on the environment which may not always be visible.[14] The physical ways indigenous people have affected their territories, such as the Amazon rainforest, where indigenous groups practiced forest gardening and the creation of *terra preta* made by slash and burn practices, has only become a topic of recent discussion. While Svalbard's pre-Quaternary history is heavily studied, partially due to the fact that the ancient basement rock (rock which forms part of the continental crust) is exposed in several areas, more information is needed about the early Holocene. Just as artifacts are lost to erosion, areas for sediment sampling are affected by erosion as well.

Svalbard the *place* as it is currently known is a contemporary construction, made with newly imposed boundaries in both the physical and metaphysical sense. The Svalbard of today came to being with European intervention, and continues to exist within this realm. In this sense, Svalbard's boundaries reflect a greater boundary-the separation of the Old World and the New World. While the Old World and its inhabitants were perfectly capable to travel to and discover the New World, and while there is a sufficient amount of evidence indicating these travels did in fact take place, archaeologists have revealed themselves to have a difficult time accepting this. The lack of technology is the biggest argument against ancient groups not reaching Svalbard before the Age of Discovery, yet archaeologists are working from a small archaeological record. Through the use of ethnography and phenomenology archaeologists can gain insight into the many complexities of small craft sea-faring. For one, unlike Barentsz' ship, they are less likely to get trapped in ice. Simply looking at distances on a map is not sufficient enough to draw conclusions and doesn't take into account the rich wealth of knowledge kayakers obtain through *doing*. In addition, more work needs to be done including nearby indigenous groups into the developing narrative of Svalbard's prehistory. Researchers may start by asking elders about their familiarity with a series of islands to the east of the Greenland Sea.

As mentioned earlier in this thesis, Svalbard presents a higher form of settler colonialism where settlers transform the space to assert their sovereignty. Promoting a land as "pure" and

[14] Another interesting study on the impact of indigenous whaling in arctic environments is that of Kristopher Hadley's 2007 thesis Assessing Thule Inuit impacts on High Arctic lakes and ponds : a paleolimnological approach.

“untouched”, emphasizing the lack of visible human settlements and prehistory at the time of “discovery” is an imperialist dream. According to Gerrit DeVeer, there were no groups upon arrival to invalidate or dispute claim to the land, and even if there were indigenous groups-they were not visible, potentially using the land in seasons or areas that were not being used by early settlers. When nearby indigenous groups did travel to the Svalbard (such as the Sami and Nenet), they travelled as temporary settlers in accompaniment with Russian hunters and later Norwegians. Without a prehistoric population, everyone visiting the island is theorized to be given a seemingly equal start. Svalbard is portrayed as an oasis in the Arctic - a place with un-spoilt nature. Yet, ever since the first human stepped foot on the archipelago, regardless of when this happened, the landscape had some sort of anthropic influence. The concept of un-spoilt nature is a myth: whether directly or indirectly, mankind has always had a global influence on the environment, which in more recent times has become increasingly visible. The concept of a land without people being purer than an occupied space is a projection of settler colonial values. Seemingly untouched land is easier to claim, appropriate and transform. Had early settlers on Svalbard truly been interested in the preservation of nature, they would have taken notes from indigenous arctic groups who for centuries have been aware of climatic change: using sustainable building materials and avoiding over-exploiting one area by remaining semi-nomadic. Instead, through the use of semiotics, it is quite visible that the structural separation of settler and nature-from the importing of grass to the spacing of contemporary settlements- represents the settler’s dominance over it. Settler colonialism has played a large role in the interpretation of Svalbard’s prehistory.

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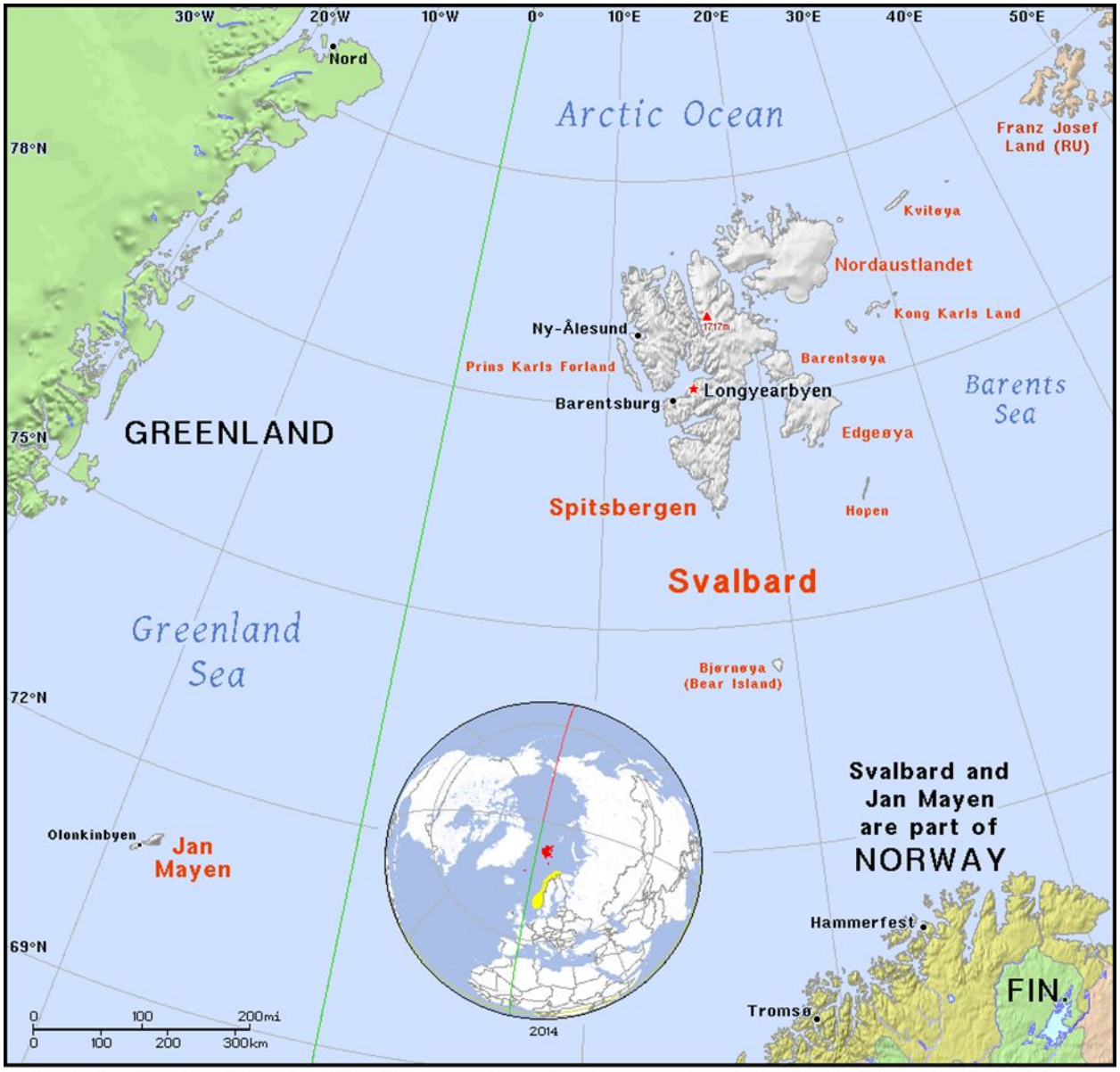

[FIG 1]

Map of Svalbard including Jan Mayen and Bjornoya. Note the Independence fjord of East Greenland, which was home to Independence I (2,400 to 1,000 B.C.E) and Independence II (700 BCE to 80 BCE) at the top of the map. Credit: Public domain, 2010, 2013 Ian Macky. Downloaded from Portable Atlas: http://ian.macky.net/pat/map/sj/sj_blu.gif]

[FIG 3] Small in stature, Svalbard reindeer (Rangifer tarandus platyrhynchus) are endemic to the archipelago. Found most often in Nordenskiöld Land, Edgeøya and Barentsøya. This is not the same species reported to be shot in a study by Adolf Hoel, and thus, it was easy to identify that the reindeer with adornments in its antlers was probably from somewhere else. Photo credit: Display from Svalbard Museum photographed by Jessica Thomas, author, 2016

[FIG 4]A glacial lake in dense tundra of Linnédalen, located at the outer edge of Isfjorden. Nearby there are raised terraces. This is a popular area for reindeer and might be a suitable place for hunting. Photo credit: photographed by Jessica Thomas, author, 2016

[FIG 6]
Russian Orthodox cross found amongst the eroded rock near the ghost town of Pyramiden, at the foot of Billefjorden. Notice the fragmented rock found throughout the terrain. Photo credit: Photographed by Jessica Thomas, author, 2016

[FIG 15] Students at the University Center of Svalbard wearing Devold Original brand Svalbard Sweaters made from a traditional norwegian diamond pattern, a more recent tradition amongst UNIS students. From left to right: Julie Zweidorff from Norway, Jessica Thomas from Canada, Max Holthuis from the Netherlands, Esther Czymoch from Germany and Alia Lesnek from America. Photo credit: Photographed by Julie Zweidorff, 2016

[FIG 9]Typical street scene in Longyearbyen, founded in 1906. Much of it was damaged during World War II and had to be rebuilt. Notice pipes are above ground due to freezing conditions. Photo credit: Jessica Thomas, author, 2016

[FIG 10] Typical street scene in the now abandoned Pyramiden (operating from 1910-1998). Notice the “northernmost lawn”, cobblestone pavement and apartment blocks. Photocredit: Jessica Thomas, author, 2016