# Knowledge, Entertainment, Fables
## Imagining the Arctic in the Netherlands, 1555-1685

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*"For Pliny tells us of whales that embraced acres of living bulk, and Aldrovandus of others which measured eight hundred feet in length – Rope Walks and Thames Tunnels of Whales! And even in the days of Banks and Solander, Cook's naturalists, we find a Danish member of the Academy of Sciences setting down certain Iceland Whales (reydan-siskur, or Wrinkled Bellies) at one hundred and twenty yards; that is three hundred and sixty feet. And Lacépède, the French naturalist, in his elaborate history of whales, in the very beginning of his work (page 3), sets down the Right Whale at one hundred metres, three hundred and twenty-eight feet. And this work was published so late as A.D. 1825.*

*But will any whaleman believe these stories? No. The whale of to-day is as big as his ancestors in Pliny's time. And if ever I go where Pliny is, I, a whaleman (more than he was), will make bold to tell him so."*

- Ishmael in *Moby-Dick* (Herman Melville, 1851) 431-432.

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# Introduction

Amsterdam, 1685. The Dutch Republic was severely weakened by the catastrophic attack of the Sun King and the English in 1672, but the harbor metropolis maintained its status as Europe's wealthiest city. Since the beginning of the seventeenth century it had almost doubled in size, growing into a booming center of art and science. The Dam square was dominated by the new town hall, and the stock exchange where merchants traded goods coming in from all over the world. On that same square, bookseller Aert Dircksz Ossaan, published *De Noordsche Weereld* (*The Northern World*). The work consisted of two travel accounts that were translated and commented on by Simon de Vries, a prolific writer and translator that produced travel accounts and encyclopedic works on the wonders of nature.[1] He was aware that *The Northern World* was one among many itineraries that appeared in bookshops, but he was sure that readers would find enjoyment in his work: "When you want to read this work during wintery evenings, sitting at a crackling fire, you will, with certain satisfaction, travel the *cold-and-icy North*; its seas and lands. Likewise, it can serve to drive off some of the indolent drowsiness of the hot summer days."[2]

At first sight the two travel accounts that *The Northern World* consists of are strikingly different, even contradictory. The first book was originally published in 1671, written by the French surgeon Pierre Martin de la Martinière. It presented the North as the realm of reindeer, wolves, and bears, with snow-capped peaks, stormy seas, and mysterious wizards that worshipped the devil. Martinière had traveled to Norway, Spitsbergen, Iceland, Lapland, Siberia, Boranday and Nova Zembla aboard a Danish merchant vessel and recorded everything he encountered during his journey.[3]

The second book was also written by a traveling surgeon. The author was the German Frederick Martens, who had served aboard a whaling vessel in 1671. He wrote the most extensive account of Spitsbergen's natural history of his time, complete with detailed drawings. Only a small portion of the book was dedicated to his own journey. The rest he saved for an encyclopedic account of the animals, plants, herbs, minerals, mountains, ice, and weather. He provided anatomical descriptions of the animals he observed as well as practical information on the uses of herbs, and on how to navigate the icy seas.[4] He worked together with doctors in Germany that helped him with his meticulous study by investigating the samples Frederick brought home. The description of Spitsbergen lacks the fantastical elements found in Martinière's book. Martens gave off the impression that he simply described nature as a passive observer, without any obvious interpretations.

Many of the supernatural elements in Martinière's account had been around since medieval times, some even before. They were fully articulated by Olaus Magnus in his *Historia de Gentibus Septentrionalibus* (1555); a history of Sweden and its peoples.[5] The far North – which Olaus himself knew only from histories and hearsay – was the realm of idolaters and wizards. These were not the only supernatural elements in his book. Magnus also told stories from fishermen who claimed to have witnessed giant snakes and whale-like monsters in the northern seas; beasts that could devour ships or drown entire crews by spouting water from their heads.[6] Magnus' work

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[1] Simon de Vries, *De Noordsche Weereld; Vertoond in twee nieuwe, aenmerckelijcke, derwaerts gedaene Reysen: D'eene, van de Heer Martiniere, door Noorweegen, Lapland, Boranday, Siberien, Samojessie, Ys-land, Groenland en Nova-Zembla … D'andere, van de Hamburger Frederick Martens, verright nae Spitsbergen, of Groenland, in 't Jaer 1671 …* (Amsterdam 1685).

[2] Simon de Vries in the introduction to *De Noordsche Weereld*. The translations from (Old) Dutch into English are my own, unless specified otherwise.

[3] Pierre Martin de la Martinière, *Nieuwe, Aenmerkelijcke Reys … Door de Noordsche Landschappen*, in Simon de Vries, *De Noordsche Weereld* (1685).

[4] Frederick Martens, *Nauwkeurige Beschryvinge van Groenland of Spitsbergen*, in Simon de Vries, *De Noordsche Weereld* (1685).

[5] Original Latin publication: Olaus Magnus, *Historia De Gentibus Septentrionalibus* (Rome 1555). Translation used: P.G. Foote (ed.), *Description of the Northern Peoples* (London 1998).

[6] Olaus Magnus, *Description of the Northern Peoples*, 1087.

combined literary evidence from classical authorities and medieval chronicles with his own observations and local folklore.

Sea monsters and strange creatures also appear in Martinière's book. Although Martinière himself was very skeptical of the existence of monsters, the translator, Simon de Vries, tried to make the text more complete with short elucidations. In one of these De Vries argued against the French author who denied that unicorns existed. Near the end of his travels Martinière presented the Danish king with narwhal-teeth. He had to explain to the king that the gifts were not the unicorn horns he expected them to be, but that they belonged to a species of whale. For Martinière, unicorns were fables. De Vries referred to passages on unicorns from the works of Pliny (61-113), Sebastian Münster (1488-1552), Marco Polo (1254-1324), Di Barthema (1470-1517) and many others to prove him wrong. Although he agreed with Martinière that none of these authors agreed on what a unicorn looked like, De Vries noted that the same would be true if these authors would have described different species of cows. This did not mean that cows did not exist.[7]

Martinière often questioned the ancient authorities that De Vries relied on. At the same time, Martinière and De Vries both agreed that the Arctic was a realm of witchcraft and demons. Although Martinière questioned the ancient authorities, he debated with them nonetheless. In the account of Frederick Martens, the ancient and medieval authors are completely absent. Contrary to Martinière, Martens stayed away from the academic debates, and presented his evidence as *matters of fact* whose reality was beyond questioning.

New facts challenged old sources, but it could be hard to tell if the accounts of travelers were to be trusted over centuries of scholarship. In the sixteenth – and seventeenth centuries there existed radically divergent ideas about the natural world. Natural histories and studies of foreign peoples in the sixteenth century often emphasized the extraordinary and marvelous; the supernatural and the fringes of nature. Some authors chose to expand on this literature, adapting new facts to established frameworks, while others began to question the existing frameworks altogether. The books of Martinière and Martens had radically different methods for describing the Arctic. Martinière embedded his account into century-old debates while Martens chose to rely solely on his own observations.

Recognizing these two methods of description can be used as a tool to gain insight into the wide variety of views of nature and foreign people in the sixteenth – and seventeenth centuries. It is important to realize that most authors relied on a combination of literary evidence and firsthand experience. There were only gradual differences. Furthermore, there was no single literary tradition: the classical – and medieval books that scholars used to make sense of the world were no coherent body of texts. Different scholars relied on different texts and adapted the texts they used to fit new observations. Descriptions based mostly on empirical evidence would become more dominant near the end of the seventeenth century, but only gradually. Even then, scholarship embedded in literary traditions would not completely disappear.

The aim of this thesis is to explain the different interpretations of the Arctic in the Netherlands from the late sixteenth – to the late seventeenth century. How should these different interpretations be understood? How were the interpretations of travelers affected by classical literature, Scripture, medieval manuscripts, and hearsay? And in turn, how did traveler's interpretations affect scholarship based on literary evidence? Do the interpretations of nature reveal certain developments, or did multiple methods of description simply co-exist?

[7] Elucidation to Martinière's text by Simon de Vries, 124-125.

## Voyages of Discovery and the *Disenchantment* of the World

For historian Marijke Spies the late sixteenth century "(…) was a frightened world, handed down from generation to generation, stringed together by scholars who sorted out the books of classical geographers, the Bible, and medieval chronicles in search of ancient information, which often originated in hearsay."[8] According to the old standard story of the Scientific Revolution this 'enchanted' world of myths and fables disappeared with the new mechanistic philosophy and the advent of modern science. In more recent historiography, this narrative has been severely criticized.

On the one hand there are historians that agree that the enchanted world disappeared due to the advent of modern science, but they do not agree that modern science was defined by physics and the new mechanistic philosophy. The rise of modern science is instead explained as a series of parallel developments in philology, natural history and cartography. Global commerce is sometimes seen as the main advancement in this period because it brought new facts in circulation that classical literature could not account for. It meant that new information had to be explained by non-literary methods. On the other hand, there are historians that disagree with the narrative of the rise of modern science and *disenchantment* altogether: they claim that there was no revolutionary break with the literary traditions. If anything, there can only be discerned gradual, messy developments. Of course, there are also historians that fit somewhere in between these two groups. What both groups agree on is that if the rise of modern science happened at all in the seventeenth century, it had to do with many things besides the new mechanistic philosophy.[9]

The historical narratives that emphasize the importance of global commerce and developments in natural history are here represented by William Ashworth and Harold Cook. Peter Mason has shown that these histories have focused too much on scientific progress and have ignored the natural historians that adapted new facts to old frameworks. The histories of Anthony Grafton and Eric Jorink create a good synthesis of these opposing historical narratives by presenting a broader view of the changing intellectual climate in the seventeenth century. Although their narratives are less straightforward, they are most complete: they present both gradual changes and continuities. Other historians are referred to in the text, but the historians named here provide the central discussions in which the main arguments of this thesis are embedded.

William Ashworth was one of the first historians to draw attention to developments in natural history as part of the Scientific Revolution. He used the concept of *emblematic worldview* to explain how renaissance authors drew on older sources – mostly classical – to create a web of symbolic meanings attached to the natural world. This web was more than a system of beliefs; meaning was assigned to anything extraordinary in nature, such as monsters and creatures that did not fit the category of either animal or plant, but meaning was also ascribed to 'normal' animals through stories, allegories and metaphors. This plant and animal symbolism returned not only in natural histories, but also on coins and in emblem books.[10] Natural historians did not differentiate between the meaning that was man-made or cultural, and the meaning that was 'natural'. This assignation of meaning was part of viewing the world as an integrated whole. According to Ashworth, zoologists like Pierre Belon (1517-1564) and Guillaume Rondelet (1507-1566), who wrote only about the anatomy and physiology of animals, were less influential in the late renaissance than natural historians that tapped into the web of meanings built on centuries of tradition:

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[8] M. Spies, *Bij Noorden Om: Olivier Brunel en de Doorvaart naar China en Cathay in de Zestiende Eeuw* (Amsterdam 1994) 34. Translation my own. Original: ''Het was een angstige wereld, van overlevering op overlevering samengesteld door wetenschappers die de boeken van de klassieke geografen en de bijbel en de middeleeuwse kronieken uitplozen op oeroude gegevens, vaak slechts afkomstig van horen zeggen.''

[9] An important author that argued against the importance of the mechanistic philosophy in the disenchantment of the world is Stuart Clark: S. Clark, *Thinking with Demons: The Idea of Witchcraft in Early Modern Europe* (New York 1999). His argument is mostly centered on the adaptation of demonological theories to the new philosophy. The reason Clark is not included here, is that the underlying theoretical debates were not central to Arctic land descriptions.

[10] W.B. Ashworth Jr., 'Natural History and the Emblematic World View', in D.C. Lindberg, R.S. Westman (eds.), *Reappraisals of the Scientific Revolution* (Cambridge 1990) 303-332; 307-311.

> “Anatomy, physiology, and classification may be the heart of modern zoology, but in the sixteenth century they were only several strands of a much more complex web, and contemporaries obviously felt that such a stripped-down world was incomplete; the zoological world depicted by Belon and Rondelet was not the zoological world inhabited by the Renaissance man; it had lost too much of its richness and meaning.”[11]

According to Ashworth, the importance of the symbolic, or *emblematic worldview* began to disappear around 1650. In his work he points to publications in which nature was 'desymbolized'. Primarily, the discovery of animals in the New World were the cause for new methods of description. He puts the works of Joannes Jonston (1603-1675) and the *Natural History of Brazil* (1648) by Georg Markgraf forward as watershed publications. Jonston was confronted with the incongruity of style between the description of New World animals and animals known to the ancients. The New World animals had no emblematic meaning because there was no classical literature or allegories to reference. Instead, descriptions were narrowed down to notes about outward appearance and physiology.[12] Ashworth does not provide a solid explanation why these works were strong enough to break with the literary traditions, while the works of Rondelet and Belon were not well received. He only mentions that a factor that contributed to the disappearance of the emblematic world were general books that attacked superstitions such as Thomas Browne's *Vulgar Errors* (1646) which aimed to "purge natural history of commonly, but erroneously, perceived truths."[13]

Harold Cook concludes in his study on natural history and medicine of the Dutch Golden Age that “It was no accident (…) that the so-called Scientific Revolution occurred at the same time as the development of the first global economy.”[14] The growing merchant class was after knowledge and technology that could make a profit, cure illness, and improve marine navigation. Merchant-explorers were concerned with practical *matters of fact*: facts that transcended cultural differences and could be taken out of their foreign contexts to benefit Europeans. Objects, artefacts, and medicinal practices could be brought over from the New World, the Indies and Asia to the Continent without practitioners having to ascribe to any of the moral or religious values of the Other.

Objects, animals and plants were transformed into knowledge at home. The meticulous study and categorizations of new specimens made emblematic interpretations of nature useless. As will be seen, Cook’s argument is consistent with the style of description of merchants, explorers, and whalers in the Arctic, and to some extent to the methods used by the geographers they worked with. It is also true of the botanists and naturalists of the late renaissance discussed by Ashworth. However, it ignores the perseverance of some ancient and medieval ideas that remained vital to other scholarship. *The Northern World* shows that the literary traditions and ‘enchanted’ ideas did not suddenly disappear; not even among the merchant class. Cook’s thesis also ignores that not all ‘fables’ of monsters, strange races, and fabled kingdoms were part of the literary tradition built on Scripture, medieval – and classical scholarship. Many ‘fables’ appeared in travel accounts by explorers that remained popular throughout the sixteenth – and seventeenth centuries. Think of the travel accounts ascribed to John Mandeville, or the books of Marco Polo, but also of travelers that went to Constantinople, Iceland and Russia.[15]

Peter Mason has argued that Ashworth's analysis has focused too much on key authors and passages and masks the persistent interest in the preternatural. Mason claims that the late seventeenth century was not the period in which the world became disenchanted. Rather, many

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[11] Ashworth, ‘Natural History and the Emblematic World View’, 312.
[12] Ibidem, 317-319.
[13] Ibidem, 319-320.
[14] H. J. Cook, *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age* (New Haven 2007) 411.
[15] Adriaen van Nispen, *Verscheyde Voyagien* (Dordrecht 1652).

'enchanted' ideas persisted into the eighteenth century. Mason is right in pointing out that the disenchantment of natural history was no linear process. However, his counter-examples of new world animals provided with allegorical meaning, and of New World animal-representations based on hearsay instead of direct observations, are by themselves not convincing enough to claim that the general trend Ashworth describes did not occur.[16] What it does show, is that the old framework was more adaptable than Ashworth and Cook suggest.

Eric Jorink's study of the *Book of Nature* is more nuanced. Jorink argues that humanist scholars and theologians interpreted nature as the second book of God, which together with the Bible provided a deep understanding of Creation. He concludes that from around the second half of the seventeenth century the normal in nature was more often emphasized instead of the supernatural or preternatural, which had been the focal point of natural history in the late renaissance.[17] In the seventeenth century the idea was on the rise that God had made the world in accordance with regularities and laws. Natural philosophers like Newton and Bacon were not the only ones to promote these ideas. Jan Swammerdam and Antoni van Leeuwenhoek, who studied nature with a microscope presented how the 'design' of the universe was to be found in every level of existence.[18] Simultaneously philological studies of Scripture and ancient sources, laid bare problematic inconsistencies in the old worldview. For example, Joseph Scaliger (1540-1609) found by researching Egyptian genealogies that the earth must have been much older than the Bible proclaimed.[19] Scaliger's work was controversial but the problems it exposed inspired other scholars to question biblical and ancient truths.

In his book *New Worlds, Ancient Texts* Anthony Grafton compares the canon of the late medieval universities to a glacier: its content moved slowly, almost invisibly, but the changes and adaptations amounted to intellectual revolutions during the centuries that followed. Instead of viewing the literary tradition as static, Grafton presents it as a diverse set of tools that could be adapted to fit different circumstances. The tools were used both by the book-learned university scholars, and the humanists that criticized the Latin translations of the Bible and of classical authorities. Some merchant-explorers and geographers could ignore what was written by Pliny and Aristotle, but still rely on Ptolemy.[20] Even though university education was centered around 'canon-texts', these texts represented a wide variety of ideas. Textual criticism and the discovery of inconsistencies did not mark the end of tradition, rather, it was part of it.

One of the most interesting examples Grafton provides for this conclusion is concerned with the description of native Americans. These people were admired for their strength and bravery. They were also feared and detested for their brutish nature and cannibalistic practices. These conflicting judgements were often present within the same texts. Similar dualities can be found in the description of barbarians by Herodotus (ca. 485-425 BCE). Herodotus' texts were used as a template to describe the Other with both positive and negative attributes. The Americas provided so much new information that familiar frameworks were used to process it all into something coherent. Through this process, cannibalism, an asset of the monstrous races of Pliny, became almost emblematic of the native people of the New World.[21]

Historian Surekha Davies has studied 'ethnographical' depictions of natives on maps, in costume books, in natural histories, in encyclopedias and in travel literature. Ethnography did not exist as a defined discipline, but the term is used by historians to discuss the description of foreign cultures in

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[16] P. Mason, *Before Disenchantment: Images of Exotic Animals and Plants in the Early Modern World* (London 2009) 20-23.
[17] E. Jorink, *Het 'Boeck der Natuere': Nederlandse Geleerden en de Wonderen van Gods Schepping, 1575-1715* (Leiden 2006) 111-114, 361-368.
[18] Jorink, *Boeck der Natuere*, 262-266.
[19] Ibidem, 102-104.
[20] A.T. Grafton, *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge, Massachusetts 1992) 24-30.
[21] Grafton, *New Worlds, Ancient Texts*, 108-109.

this period, for lack of a better word.[22] Davies concludes that map-makers combined new accounts and familiar frameworks (she calls them *visual codes*) to create a synthesis of observational and literary evidence. These syntheses often displayed both the civility and barbarism of natives in a single picture that Grafton also refers to.

The historical research of Grafton and Davies is interesting for an investigation of the Arctic, because the native people of the North were also known for dual traits. It might be said that magic, idolatry and devil-worship were as 'emblematic' of the North as cannibalism was for the New World. The people from Lapland and Finland were often presented as civil and strong but also wild and barbarous.

Grafton explains that even those that tried to expose the inconsistencies of 'the' literary tradition, like Francis Bacon, were often more indebted to the classics than they would like to admit. Bacon looked for confirmation of his own views in the pre-Socratics, and "hoped to find profound ideas about nature in the Greek myths."[23] The same was true for navigators and conquerors. These 'practical men' had their own book culture. The maps in editions of Ptolemy's *Geography* provided an overview of the globe that was still useful in the seventeenth century. In travel accounts the same frameworks were used as in the map-decorations of atlas-makers with the dual image of civility and barbary.[24] Furthermore, the travel literature in the style of John Mandeville, that described a world with monstrous races, in the tradition of Ctesias (ca. 4th century BCE), Megasthenes (ca. 350-290 BCE) and Pliny, still flourished in the seventeenth century.[25]

The problem with concepts like *disenchantment* and the *rise of modern science*, is that they are highly abstracted notions. They describe a collection of ideas and practices that developed over decades or even centuries. Some historians have argued that the 'disenchantment' of the world occurred later, in the early eighteenth century, but there is no point in pushing the notion forward in time.[26] It is something that was never completed (just think of the horoscope-sections in some newspapers and magazines today). There is no such thing as 'the' (modern) science, or 'the' enchanted world. Martinière and De Vries could disagree about the existence of unicorns while agreeing that the native inhabitants of the Arctic were devil-worshippers and magicians. The literary traditions and fringes of nature expose only gradually shifting attitudes. The rise of modern science is not the same as the disenchantment of the world, but the notions are deeply connected. The supernatural and preternatural that had been the focus of scholarship for centuries was in the seventeenth century under continuous pressure from skepticism and newly discovered facts. Instead of looking at the downfall of a static 'enchanted world', I will investigate how ideas and traditions continuously adapted. I will also look at new methods of description from merchants and explorers to see how they used and criticized the sources that described a Northern World that differed from the one they observed.

There existed no unified literary tradition: not everyone relied on the same texts, and not everyone borrowed the same things from the manuscripts used. The authority of the texts was hardly ever taken for granted. As Grafton explains, the literary traditions provided tools, not static truths. Although some chose to ignore the ancient and medieval literature completely, such as Frederick Martens, for many it was more a case of disregarding some of its parts while expanding on others.

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[22] For example: F. Egmond and P. Mason, '"These Are People Who Eat Raw Fish": Contours of the Ethnographic Imagination in the Sixteenth Century', *Viator* 31 (2000) 311-360. S. Davies, *Renaissance Ethnography and the Invention of the Human: New Worlds, Maps and Monsters* (London 2016).

[23] Grafton, *New Worlds, Ancient Texts*, 213.

[24] Ibidem, 71.

[25] Ibidem, 105-106.

[26] For an overview of historians that argue against the disenchantment-thesis see: A. Walsham, 'The Reformation and 'The Disenchantment of the World' Reassessed', *The Historical Journal* 51 (2008) 497-528. For a discussion of disenchantment and the Scientific Revolution and the Enlightenment pages 522-527 are most relevant.

## Primary Sources and Method

Historians of science have written much about the exploration and exploitation of the Indies and the New World when discussing developments in natural history, 'ethnography', and geography. In a recent double edition of the *Journal of Early Modern History* on "Science, New Worlds, and the Classical Tradition", there are no articles on the North or the Arctic.[27] Perhaps the region has not received the same attention because it was never colonized, and the White Sea trade was insignificant compared to the thriving commerce in the New World and the Indies.[28]

The Arctic provides an interesting case-study because the region had for centuries been clouded in mystery due to its harsh climate. The motivation to finally explore the region had more to do with finding a passage to the East than with any riches that could be extracted from the North and its inhabitants, but when merchant-explorers began to chart the region, they found that although it was geographically much closer to home than the New World and the Indies, it was just as foreign. This final wave of early modern exploration did not only produce detailed descriptions of Greenland and Spitsbergen, but also of Iceland, Scandinavia, the Baltic, and Russia. There was an important difference between the exploration of the North and the discovery of the New World: the histories of the peoples of the North were more easily accessible to Europeans through medieval chronicles and Viking sagas. Land descriptions often involved chronologies and histories of medieval kings. King Christian IV of Denmark even ordered expeditions to Greenland in search of the lost Norse colony.[29]

This thesis focuses on the natural history, geography and 'ethnography' of the Arctic. It is centered on books that appeared in the Netherlands, because next to the English, the Dutch were most involved in Arctic exploration and subsequent commercial whaling. Descriptions of the Arctic were readily available to anyone who was interested. Furthermore, the Dutch Golden Age was not only a period of economic prosper and blooming art, but also a period in which the Netherlands had a central part in the developments in natural philosophy and natural history.[30]

The thesis is divided into three chapters. In each chapter some key publications and maps of the Arctic will be discussed. The chapters are in chronological order and focus in on the following time periods: 1555-1585, 1598-1612, 1662-1685. The specific dates of the chapters refer to key publications from these periods. The first chapter is about the sixteenth century 'literary tradition'. It also focuses on map decorations of monsters and on the culture of collecting curiosities. The second chapter focuses in on shipping logs and geographical descriptions based on firsthand experience. The authors of the logs refuted many of the claims from both ancient and contemporary authors. Paradoxically, literary sources also drove the thirst for exploration. The final chapter is about the various new syntheses that combined both literary evidence and firsthand observations. The sources discussed are atlases, popular travel literature and land descriptions. Land descriptions were encyclopedic accounts of a region or land that described everything from the customs and

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[27] S. Davies, 'Science, New Worlds, and the Classical Tradition', *Journal of Early Modern History* 18 1-2 (2014) 1-13.

[28] Twentieth century histories about exploration and whaling in the Arctic presented mostly grand overviews. For example: F. Nansen, *In Northern Mists: Arctic Exploration in Early Times* (Cambridge 2014) (originally published in 1911), or: J. Mirsky, *To the Arctic! The Story of Northern Exploration from Earliest Times to the Present* (London 1934). These books countered the more nationalistic books about the Arctic from the nineteenth century that aimed at reliving the glory of the past and promoting new expeditions (for example: S.R. van Kampen, *The Dutch in the Arctic Seas* (Cambridge 2013) (originally published in 1876). More recent historiography has centered on commercial whaling. The voyages of discovery from 1594, 1595, and 1596 are used as a prelude to later voyages (for example: L. Hacquebord, *Geschiedenis van de Noordse Compagnie (1614-1642): Opkomst, Bloei en Ondergang* (Zutphen 2014).) Modern translations of the logs such as V. Roeper and D. Wildeman (eds.), *Om de Noord: De Tochten van Willem Barentsz en Jacob van Heemskerck en de Overwintering op Nova Zembla, Zoals Opgetekend door Gerrit de Veer* (Nijmegen 1996) are provided with extended introductions but these focus mostly on the specific logs and do not often put these in a broader context of natural history and exploration.

[29] Gillis Joosten Saeghman, *Drie Voyagien Gedaen na Groenlandt … Alle ten Versoecke van Christianus de IIII. Koning van Denemarcken...* (Amsterdam 1665).

[30] See: Cook, *Matters of Exchange*. Jorink, *Boeck der Natuere.*

clothing of the people to the animals, plants, and minerals present in the region.

As the attentive reader will have noticed there is quite a large gap between the second and third chapter. Between 1612 and 1662 there did appear many publications on the Arctic. Most of these were whaling logs. Although whalers were important to the improvement of maps and increased knowledge of some marine species, key publications were continuously reproduced later in the seventeenth century. The more cohesive land descriptions that appeared later in the century are more interesting for descriptions of nature and people.

The primary sources range from logs, maps and inventories of cabinets of curiosities, to encyclopedic land descriptions, atlases, and popular travel literature. The topics treated within these sources are also very broad: ranging from discussions of native people, animals, minerals and plants, to strange weather phenomena, divine omens and magic. Narrowing the scope of topics down to only one of these subjects would distort the encyclopedic nature of the sources. Because these categories are only loosely separated by the authors, terms such as zoology and ethnography are mostly avoided in the chapters. Instead, each chapter presents some representative examples of certain topics. These examples are only a handful of the many examples that could have been used. For clarity's sake it was necessary to limit the number of examples while still providing a general sense of the topics discussed in the primary sources.

There were no clear boundaries between (natural) history, geography, and 'ethnography'. Because of this, Ashworth has drawn parallels between the quest for historical truth and developments in natural history.[31] He argues that the interest into the origins of language, and into the history of China, Egypt, and early Christianity, coincided with an increased interest in the geological history of the earth, the settlement of the New World and the collection of fossils.[32] Scholars interested in the Arctic, were often interested both in the history and culture of the natives and in the natural world.

Before moving on to the first chapter, it might be helpful to provide some definitions of the terms used in this thesis. Three main categories dominated natural history in the sixteenth century: the natural, the supernatural (or divine), and the preternatural, which was everything outside of nature, but not of a divine origin. The preternatural or supernatural could also be magical arts performed by people (*magia naturalis*), or magical arts performed by demons (*magia daemonica*).[33] The latter categories are mostly just referred to as *magic*, while with the preternatural are meant the extraordinary or marvelous animals and artefacts that people collected. The fringes of nature were seen as representative of the diversity and ingenuity of Creation. Prized objects were things like unicorn horns and birds of paradise that were believed to never touch the ground. Other collector's items were *lusus*, or 'jokes of nature', which have been investigated thoroughly by Paula Findlen.[34] These were objects that did not fit the standard categories like 'animal' or 'plant' but fell somewhere in between. It is important to note that these objects, as well as the descriptions of exotic places were not just study materials and means to understand nature and reveal God's design – they also had entertainment value. Many curiosities were constructed by collectors to mimic fabled creatures such as dragons, hydras, and basilisks.[35] Some of the monsters and monstrous races that appeared on sixteenth – and seventeenth centuries maps could also function as emblems of a region, or simply as decoration. Throughout the seventeenth century many cabinets of curiosities slowly transformed into natural cabinets: emphasis shifted from the marvelous to the categorization

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[31] Ashworth, 'Natural History and the Emblematic World View', 324.

[32] Ibidem, 320-322.

[33] S. Clark, 'Het Buitennatuurlijke – een Onstabiel Begrip', in F. Egmond (ed.), *Kometen, Monsters en Muilezels* (Haarlem 1999) 21-34; 21-23.

[34] P. Findlen, 'Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe', *Renaissance Quarterly* 43 (1990) 292-331.

[35] P. Findlen, 'Inventing Nature: Commerce, Art, and Science in the Early Modern Cabinet of Curiosities', in P.H. Smith and P. Findlen (eds.), *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe* (London 2002) 297-323; 305-311.

of nature based on patterns and regularities.[36]

In the sixteenth and seventeenth centuries the far reaches of the earth were brought into the living room by maps, stories of travelers, and detailed descriptions of the strange and marvelous creatures, plants, and people that lived across the globe. Cartographers, scholars, and collectors of *naturalia* and *mirabilia* searched for new syntheses of the many, often contradictory, sources. They pieced together books, artefacts and maps to present a Northern World that was both familiar and radically different from the worlds described by ancient and medieval authorities.

[36] Ashworth, 'Remarkable Humans and Singular Beasts', in J. Kenseth (ed.), *The Age of the Marvelous* (Chicago 1991) 113-141; 135-141. Jorink, *Boeck der Natuere*, 337-348.

# The Midnight Lands, 1555-1585

The assimilation and re-interpretation of knowledge from earlier literary sources was not an invention of the sixteenth century. The medieval accounts had borrowed from the Romans, and the Romans from the Greeks, everchanging and re-interpreting what had been known about the Arctic. Even when a scholar was wary of some piece of information, or the sources of his colleagues, it could be safer to include it in his own manuscript for the odd chance that it was true. As will be seen, the strive towards all-encompassing works of nature in the late renaissance often led to the inclusion of even those ideas that were scrutinized.

Ashworth has shown that in natural history emblematic meanings based on classical authorities were of equal, or even more, importance than empirical evidence. This was not entirely true for descriptions of nature in the North. The highest authority on the (natural) history of the North was Olaus Magnus (1490-1557). Although he intimately knew the works of classical authorities like Pliny, he noticed the ancients were often erroneous because they had not visited the places they described. Magnus relied not only on classical authorities, but also on his own observations, on stories he heard from hunters and fishermen, and on medieval chronicles.

The aim of this chapter is to explain how the long literary traditions affected ideas about the Arctic in the late sixteenth century, and how these ideas were brought into harmony, and conflicted, with the steady increase of firsthand observations. In the second half of the sixteenth century, most scholars were obsessed with magic, monsters, and the supernatural, but these topics were strikingly absent from many travel accounts. English merchant-adventurers were the first to attempt to cross the Arctic ocean to the East in 1553. This voyage established an overland trade route with Russia. After their voyages explorers brought back curiosities, and even people from the North. The travel logs produced during these voyages were also read in the Netherlands.

Scholars became more critical of ancient and medieval authorities but did not dissociate themselves from their predecessors. They often adapted new evidence to the histories of Saxo Grammaticus (1160-1220) and Jacob Ziegler (ca. 1470-1549), or to the natural history of Pliny. The image of the North was in a slow-moving transition. Rather than breaking with tradition, the maps and books discussed often provided logical advancements to the literary evidence.

## Mapping the Unknown

Maps in the later middle ages were exceedingly decorated by legends and *mirabilia* that had not originally appeared in ancient accounts. The maps based on the *Geography* of Ptolemy (ca. 100-170) showed the Arctic as a blank *Terra Incognita*. Only in the fourteenth century were versions of Ptolemy's map decorated with legends and creatures that he himself had never imagined. [37] One of the most important sources for these decorations, and for late renaissance natural history in general, was Pliny the Elder (ca. 23-79).

In his *Naturalis Historia*, Pliny inhabited the far corners of the world with strange races and monsters, many borrowed from Greek mythology. Pliny interpreted the mythological creatures and races as historical beings, even though older writers, like Herodotus had questioned their existence outside the realm of fables.[38] The peaceful *Hyperboreans*, for example, a human race with the ability to fly, were treated by Pliny as actual people. Through etymological misconceptions of medieval writers, they were sometimes equated to the people of Scandinavia.[39]

Something similar might have happened to the werewolves that supposedly lived in the Baltic. Historian Stephan Donecker thinks the werewolf combined peasant beliefs and medieval texts with

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[37] C. van Duzer, 'Bring on the Monsters and Marvels: Non-Ptolemaic Legends on Manuscript Maps of Ptolemy's *Geography*', *Viator* 45 (2014) 303-334.

[38] Nansen, *In Northern Mists*, 20.

[39] Ibidem, 14-19.

the Plinian cynocephali race of dog-headed people. The more theoretical debates about werewolves were centered around the question if shape-shifting was truly possible, or rather, if people were tricked by demons or the devil to believe they were werewolves.[40] Cannibals was 'emblematic' of the natives from the Americas. Other traits became linked to different regions: the Baltic was known for its werewolves and the Arctic for its magicians. Olaus Magnus wrote about both.[41]

Interestingly, nowhere did Magnus mention the Hyperboreans – only the Hyperborean mountains. In these mountains lived griffins. He mentions that to Pliny and Albertus Magnus (ca. 1200-1280) griffins were creatures that "belong only to traditions in stories"[42], and then continues with extended descriptions of these birds based on accounts by Isidore (560-636) and Solinus (3d century CE).

It could be hard to distinguish stories from truths. Magnus could ignore the Hyperboreans and at the same time include animals in his description that had been fables to Pliny. The canon-texts were not a unified whole, but a grab bag of different opinions and ideas. The examples of the griffin and the blank North in the *Geography* show that the ancient texts and maps could not provide certainty. The canon was represented in university books as a finished cathedral of absolute knowledge, but reality was messier.[43] The difference between scholarship and the *matters of fact* that many merchants and geographers were after, is not that the scholarship blindly copied the literature, but that it was in continuous dialogue with the past.

Before his book appeared in print, Magnus had published the *Carta Marina* (1539), which says on the top that it is "a marine map and description of the Northern Lands and of their marvels." In the middle of the map Magnus referenced Pliny and Procopius, stating that Scandia, or Scandinavia was a whole world, ten times the size of Britain, that contained thirteen kingdoms.[44] In his book, Magnus stated:

> ''Many writers, and celebrated ones at that, have tried to reveal how many marvels there are connected with the waters, especially in the vast Ocean towards the north of the Norwegian kingdom and its numerous islands, but relying more perhaps on the declarations of others than their own observation or experience. (…) where the theories of earlier times and writers are insufficient, I shall not bar the way to prevent later authorities bringing such subjects more clearly to light, when they so wish and have the requisite ability.''[45]

Pliny and others had not necessarily been wrong, but Magnus pointed out that they had not seen the northern lands for themselves. He would not rely on these sources without question.

Many of Magnus' stories about monsters were more strongly tied to folklore than to classical authorities. Although Magnus knew Pliny's work well, many creatures he depicted were based on tales of fishermen. What is striking is that in the description of some of the monsters, Magnus provides very detailed descriptions of their outward appearance. About a whale-like monster he wrote:

> "In shape they are dreadful, for they have square heads armed everywhere with sharp spines and surrounded by long horns like the roots of an upturned tree. These heads are fifteen to eighteen feet long, jet black and set with huge globular eyes, which are at least twelve to fifteen feet in circumference. The pupil, eighteen inches in diameter, is colored flaming red and during the hours of darkness it seems to far-off fishermen like a blazing fire amid the waves. Hanging down

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[40] S. Donecker, 'The Werewolves of Livonia: Lycanthropy and Shape-Changing in Scholarly Texts, 1550-1720', *Preternature: Critical and Historical Studies on the Preternatural* 1 (2012) 289-322; 311-314.

[41] Donecker, 'The Werewolves of Livonia', 296-297.

[42] Olaus Magnus, *Description of the Northern Peoples*, 977.

[43] Grafton, *New Worlds, Ancient Texts*, 5-10.

[44] L. Miekkavaara, 'Unknown Europe: The Mapping of the Northern Countries by Olaus Magnus in 1539', *Belgeo* 4 (2008) 307-324; 315.

[45] Olaus Magnus, *Description of the Northern Peoples,* 91.

like a beard are long, thick hairs resembling goose-feathers. Compared with their enormous square heads the rest of the body is quite small, not more than nineteen to twenty-three feet long. A single one of these monsters can quite easily capsize or sink several large ships crammed with the strongest sailors."[46]

Unless we believe that these creatures once existed, it begs the question where Magnus had the precise measurements from. His goal seems to have been to convince his audience of the reality of this monster, and to inspire awe for the size of the beast. What is striking about the example is that the description is like the descriptions of animals in shipping logs. Magnus is fascinated by many things preternatural and supernatural, but he presents some of these monsters very much as *matters of fact*. That does not mean the emblematic meaning is nowhere to be found. For the griffin Magnus retold many stories from classical – and medieval literature.[47]

**fig. 1** Olaus Magnus' *Carta Marina* (1539).

Olaus Magnus was a Swedish priest who had fled the Reformation to reside in Italy, where he worked both on his map and on a *Description of the Northern Peoples* (1555), a series of books that were meant as a history of the Swedish people, and that also functioned as an accompaniment to all the things that could be seen on the map. The further North one went the colder and darker the world became. The Arctic was, according to Magnus, a very superstitious place; the realm of

[46] Olaus Magnus, *Description of the Northern Peoples*, 1086-1087.
[47] Ibidem, 978.

demons, and satyr-like elves that accompanied the herdsmen out at night.[48]

Some of the stories in Magnus' work can be connected to actual animals, people, events, or places. Walruses and whales were transformed into monsters, and the strong currents near Lofoton became a ship-devouring whirlpool. They were based on exaggerated eyewitness accounts instead of literature. Although a modern reader would call the eyewitnesses unreliable, in Magnus' work the fishermen and farmers were used to increase the reliability of what he told. Some of Magnus' stories foreshadow what would be confirmed by firsthand travel accounts years later. For example, the people living near the pole in Magnus' history were described as idolaters that performed sacrifices and worshipped the sun. In one of the accounts discussed in the second chapter, merchant-explorer Jan Huyghen van Linschoten (1563-1611) told how the ship landed on an island near Waygats. He found the island littered with small wooden statues. Van Linschoten thought the statues were made to represent the ancestors of the people that lived on or near the island. The statues were placed to look out to the East – towards the rising sun. They were surrounded by antlers of sacrificed deer.[49]

Some of the stories in Magnus' book would be often repeated in seventeenth century travel literature. For example, Magnus told that the Finns were magicians that could influence the wind with magic knots:

> 'This is how these knots were to be managed: when they undid the first they would have gentle breezes; when they unloosed the second the winds would be stiffer; but when they untied the third they must endure such raging gales that, their strength exhausted, they would have no eye to look out for rocks from the bow, nor a footing either in the body of the ship to strike the sails or at the stern to guide the helm.'[50]

The Finns in Magnus' work dealt with demons that gave them the ability to capture strong wind in knots, which they sold to passing sailors. This story is retold almost exactly in the account of Martinière, who claimed to have lived through the experience himself.[51] Magnus' descriptions of natives often made use of the dualism found in Herodotus: the people of the Arctic were stupid and superstitious, but also hardened, brave and pious.[52]

Magnus was largely responsible for introducing Western Europe to the North. Not only to the monsters and magicians, but also to the traditions and culture of the Lapps and the Swedes. Magnus' book told what the natives wore, what instruments they played, what weapons they used to hunt, and how they used skis and sleds to move through the frozen wastes. He contextualized their culture by using medieval chronicles and Viking sagas. He retold many of the tales of Odin, Thor, and Freya.[53]

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[48] Olaus Magnus, *Description of the Northern Peoples*, 150, 164.

[49] S.P. L'Honoré Naber (ed.), *Reizen van Jan Huyghen van Linschoten Naar het Noorden (1594-1595)* (The Hague 1914) 75-77. The original work of Jan Huyghen van Linschoten was published in 1601. The primary sources used to discuss Van Linschoten and Hessel Gerritsz are modern reprints of the originals by *De Linschoten-Vereeniging*.
75-77.

[50] Olaus Magnus, *Description of the Northern Peoples*, 172.

[51] Pierre Martin de la Martinière, *Nieuwe, Aenmerkelijcke Reys*, 19.

[52] Olaus Magnus, *Description of the Northern Peoples*, 204-206.

[53] Ibidem, 151-156.

**fig. 2** Insula Magnetum (top right). Detail from the *Carta Marina*.

To explain the magnetism in the north, it was thought that there had to be an island or mountain of ‘magnetic stone’. On Magnus’ map the source of magnetism appeared as a group of islands called *Insula Magetum*. Abraham Ortelius (1527-1598) and Gerard Mercator (1512-1594) presented the pole itself as a magnetic rock. This idea originated in the fourteenth century travel account of a monk.[54] The magnetic pole was surrounded by a whirlpool and four large land masses. Between the land masses were rivers that flowed towards the center.

On the maps of Mercator and Ortelius, the southeast continent was home to the pygmies. The pygmies were a race of tiny men that originated in Greek mythology. They were in ancient times connected to Ethiopia, but were later confused with *Skraelings*, a word from medieval Norse sagas that was used for the native people of North America, and the Inuit.[55] Magnus’ map also shows a pygmy – it is battling a larger man in Greenland. The pygmies show how ‘monstrous’ races could combine observations, classical mythology, and medieval literature. The pygmies also appeared in the travel stories of John Mandeville. They were portrayed as wise, just, skillful craftsmen and brave warriors. However, they were very hateful towards large men.[56] Again, an example of the Herodotian dualism.

[54] E.G.R. Taylor, ‘A Letter Dated 1577 from Mercator to John Dee’, *Imago Mundi* 13 (1956) 56-68.
[55] Nansen, *In Northern Mists*, 298-299.
[56] Grafton, *New Worlds, Ancient Texts*, 71.

**fig. 3** Map of the north pole by Gerard Mercator (1595).

The idea of collecting all knowledge of the world in single volumes was popular in the sixteenth century. One of the most well-known authors that strived to be all-encompassing was Sebastian Münster, who wrote the *Cosmographia*, a study of the lands and peoples of the world.[57] Grafton remarks that it described everything "from the dynasties of royal houses to the monsters that inhabit northern and eastern lands and waters."[58] Münster used methods and content that was often contradictory. He would label writers such as Ctesias and Methasthenes as "tellers of tall tales", but then retell and illustrate their stories.[59] This is somewhat comparable to Olaus Magnus' account of the griffin: he first notified the reader that Pliny and Albertus Magnus thought the griffin did not exist, and then gave a detailed description of the creature.

Ortelius was author of the *Theatrum Orbis Terrarum* (1570), which is known as the first world atlas. Atlas-makers also strived for all-encompassing books. They made use of both literary evidence and the new facts gathered by travelers. On Ortelius' map of Iceland, the land is surrounded by giants of the sea, some of which are reminiscent of the creatures depicted by Olaus Magnus. One creature is especially interesting. The map shows on the top right a narwhal (letter A.). In the description that accompanied the map in Ortelius' atlas, the narwhal's tooth is said to be

[57] Grafton, *New Worlds, Ancient Texts*, 102-107.
[58] Ibidem, 97-98.
[59] Ibidem, 101.

often mistaken for the horn of a unicorn. As discussed in the introduction, the debate on the existence of unicorns (between De Vries and Martinière) was still relevant more than a hundred years later. Theologian and scholar Isaac la Peyrère (1596-1676) wrote a description of Greenland in 1647 (translated by Simon de Vries in 1678). La Peyrère blamed the Danish for withholding information about the narwhal to keep selling the teeth as unicorn horns.[60] As will be seen, false objects and artful fabrications were a big part of the culture of collecting. Even those who knew the unicorn horns were really narwhal-teeth, did not lose their interest in the objects. It could still be a prized part of a collection because scholars claimed the narwhal-tooth had strong healing powers.[61] The culture of commerce and collecting was not free from ascribing special meaning to natural objects.

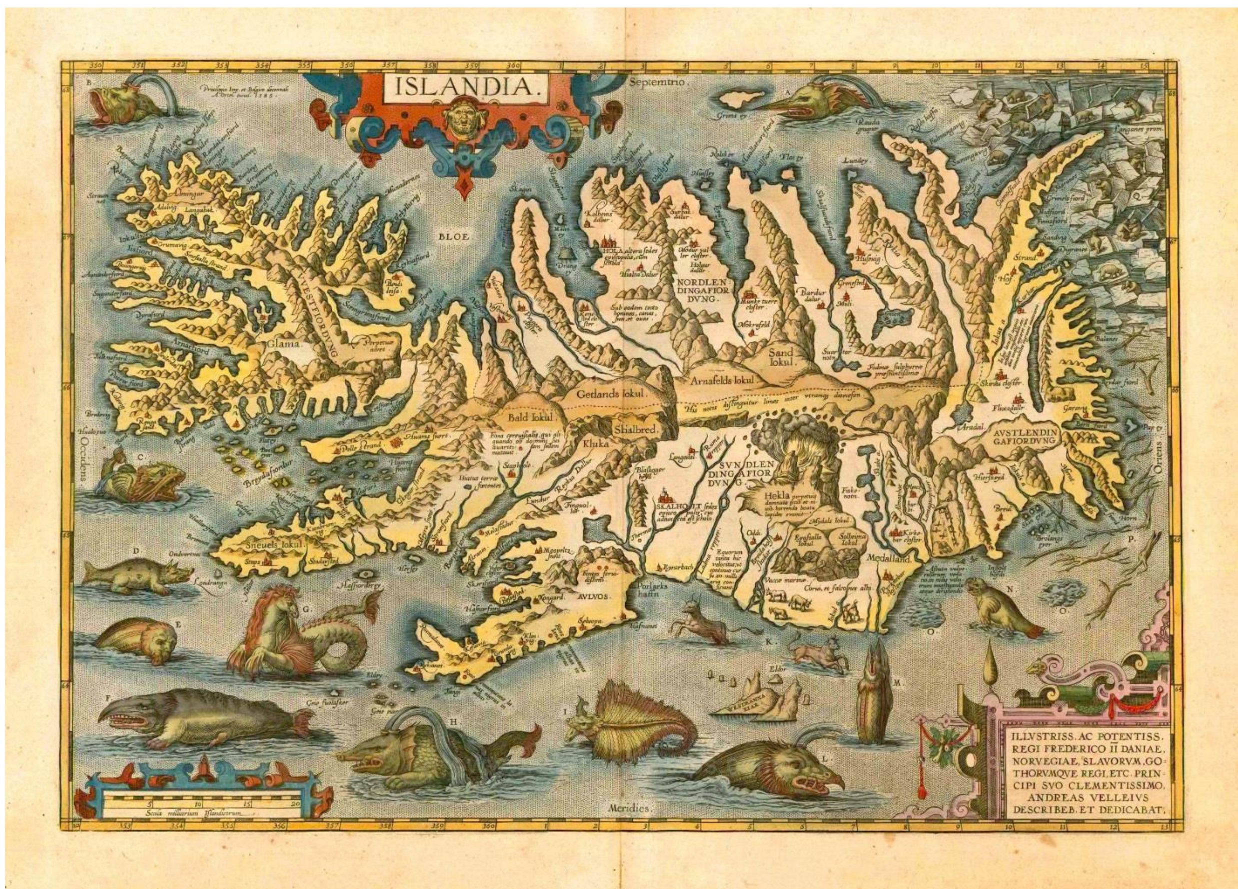


**fig. 4** Map of Iceland by Abraham Ortelius (1570).

Ortelius retold some of the wondrous things of nature described by Saxo Grammaticus and Olaus Magnus. He wrote that at Mount Hecla, the biggest volcano of the country, there was a hole in the ground in which night-ghosts appeared that looked like deceased family members of the one to encounter them. Other ghosts that appeared near Hecla were of people that died violent deaths, or deaths by accidents. They asked passers-by for help.[62]

[60] Isaac la Peyrère, *Nauwkeurige Beschrijvingh van Oud en Nieuw Groenland* (Amsterdam 1678) 27-29, 78. Simon de Vries again added many elucidations to the text.

[61] Abraham Ortelius, *Theatrum Orbis Terrarum* (1570). Translation by M. van den Broecke and D. van den Broecke-Günzburger, *Cartographica Neerlandica Map Text for Ortelius Map No. 161* http://www.orteliusmaps.com/book/ort_text161.html (version 30-5-2018).

[62] Ibidem.

These stories were undoubtedly connected to the medieval myth that Mount Hecla was a gateway to hell. In 1598, Richard Hakluyt, an English church official who promoted the colonization of the New World, wrote that the Hecla myth was false and damnable. He blamed Olaus Magnus and the geographers Gemma Frisius (1508-1555) and Jacob Ziegler for keeping the myth alive. Hakluyt remarked that for too long commoners had tricked scholars and cosmographers.[63] Beside these erroneous fables, however, he thought of Magnus, Frisius, and Ziegler as excellent scholars. As will be seen, Hakluyt was part of a network of geographers and merchants. It is interesting that already in the late sixteenth century he wanted to rid the world of fables.

Ortelius himself was for the most part no uncritical compiler of sources. In his description of Iceland, he questioned the oldest known source on the history of Iceland, that claimed that King Arthur Christianized the natives in 470. Ortelius remarks that the claim, often said to come from Sigebertus Gemblacensis, can only be found in some versions of the source, and not in others.

Ortelius also made use of linguistics to discuss the locations he depicted. He provided an etymological history of the word *Thule*, a name that some authors connected to Iceland. *Thule* meant the highest northern land-mass in most classical accounts but was put in different latitudes and longitudes depending on the author. On Magnus' map it appeared as *Tile*, above the Orkney-islands. Ortelius referred to Procopius, "a serious, reliable writer", that *Thule* was not Iceland, but part of Scandia, Norway.[64]

What all these examples amount to is that the literature was not straightforward. Knowledge of the North was embedded in centuries of debate, and confusion. In a sense, Olaus Magnus became 'canon' for discussions of the Northern World, but that would not make him free of criticism. On the other hand, criticism did not harm his authority. Sebastian Münster used many medieval German sources for his *Cosmographia* that enhanced the work of Ptolemy with new discoveries. Grafton notices that "Münster saw himself as continuing, not contradicting, his ancient authority.''[65] The same was true for many authors that expanded on Magnus' work. Hakluyt thought the Hecla myth was false and damnable, but for the most part he trusted Magnus' judgement.

At the same time, it became hard for geographers to reconcile new facts to old authorities. Grafton remarks that Ortelius, in his atlas, "departed from all classical precedent to lay out a panorama of modern discoveries, area by area.''[66] Many geographers and merchants found themselves literally in a new world, unknown to the ancients. Their references to classical literature became subtler: they might have used familiar frameworks in their own presentations of nature and different cultures but looked at ancient sources with increasing distrust. However, the engagement with, and expansion of old sources was not new: it had been part of the literary traditions that had always been ridden with contradictions and inconsistencies.

## Mirrors and Omens

Scholarship based on literary evidence was not separated from *matters of fact* or firsthand observations. However, firsthand observations and objects did affect the representation and reliability of certain 'facts'. Looking deeper into the culture of collecting *naturalia* and *mirabilia* can explain something about how objects and facts were used to argue both for, and against literary evidence.

Adriaen Coenen was no scholar. He was a fisherman that catalogued and collected marine life, with a keen interest in the natural histories of his day. Coenen was often skeptical of the existence

[63] Richard Hakluyt, *The Principal Navigations, Voyages, Traffiques and Discoveries of the English Nation* (1598) volume I (section 6-8).
[64] Abraham Ortelius, *Map Text No. 161*.
[65] Grafton, *New Worlds, Ancient Texts*, 106.
[66] Ibidem, 126-127.

of fantastical creatures like mermaids and monsters. He often referred to them as fables and old wives' tales. Coenen studied everything from insects to octopuses, to starfish, crabs, herrings, and whales. He produced three manuscripts about marine life and the monsters and marvels of the sea. His most general work was the *Fish Book*. His other manuscript, the *Whale Book* focused mostly on different whale species. The last manuscript was unfinished but would have focused on the fish-trade. The books were never published, but his knowledge of the sea brought him into contact with local government officials and collectors, even leading him to perform functions as member of the city council.[67]

The manuscripts of Adriaen Coenen borrowed from many authors, ranging from Rondelet and Belon to Conrad Gesner (1516-1565) and Ulisse Aldrovandi (1522-1605). These works were available to him through popular translations and shortened versions.[68] Ashworth stated that the world of Rondelet and Belon "had lost too much of its richness and meaning" for the renaissance man.[69] It is noteworthy that Coenen did not differentiate between their books and the *emblematic* works of Gesner and Aldrovandi. It is also telling that Coenen regarded many of the stories about the creatures of the deep as fables.

The *emblematic* meaning in Coenen's manuscripts is not so much found in the stories, as in his belief in the unity of God's design. Coenen remarked that God's intentions were sometimes revealed through divine omens, like comets or stranded whales. He believed that when a large group of whales passed the shores of Holland it meant a great storm was on its way.[70] Magnus also recounted that witnessing or fishing up marine monsters was a sign of a coming catastrophe. Simon de Vries still believed something similar a century later. In an elucidation to Martinière's text he told the story of the giant snake living in the lake of *Mos* in Norway. Witnessing the snake was an announcement of grave political turmoil.[71]

The belief that future events were announced by divine omens was widespread. These omens could be anything from the birth of a deformed child to the passing of a comet. As will be seen in the second chapter, divine omens seem to have been one of the few exceptions of supernatural phenomena that the Dutch merchant-explorers believed in. In the sixteenth century God was thought to be able to directly intervene in nature. As Eric Jorink has shown, when more scholars began to understand God as a law-maker, the belief in divine omens declined, although they never fully disappeared.[72]

Both Coenen and Magnus were convinced that everything living on land was in some way mirrored in the sea, because God's design was uniform. The belief that the universe was mirrored in man, seems to have sparked the idea that the earth was mirrored in the sea. A horse was 'mirrored' by the sea-horse, an elephant by the sea-elephant, a man by a merman, a woman by a mermaid. Coenen even drew creatures that 'mirrored' certain vocations, like the sea-knight, the sea-bishop, and the sea-monk. For many of the drawings he relied on medieval bestiaries. Magnus referred to Pliny (the last chapter of book xxxii), and St. Ambrose's *Hexameron* for a deeper understanding of how marine creatures mirror land animals.[73]

What divine omens and the 'mirroring' of land and sea tell us about the worlds of Olaus Magnus and Adriaen Coenen is that even though the existence of many creatures was up for debate, certain themes and beliefs transcended the importance of what was real. The reality of a story or fact was less relevant than what it meant in the order of things. In that regard, Ashworth is right about the symbolic universe of the renaissance man. The worlds of Magnus and Coenen were not dictated by

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[67] F. Egmond, *Een Bekende Scheveninger: Adriaen Coenen en Zijn Visboeck van 1578* (Den Haag 1997).

[68] F. Egmond and P. Mason (eds.), *Het Walvisboek: Walvissen en Andere Zeewezens Beschreven door Adriaen Coenen in 1585* (Zutphen 2003) viii-xiv. This book presents a selection of drawings from Adriaen Coenen with modern translations.

[69] Adriaen Coenen, *Het Walvisboek*, 312.

[70] Ibidem, 108.

[71] Elucidation to Martinière's text by Simon de Vries, 6.

[72] Jorink, *Het 'Boeck der Natuere'*, 183-186.

[73] Magnus, *Description of the Northern Peoples*, 1081.

incompatible facts, but by a deeper sense of the unity of nature and God. This explains the emphasis on the preternatural and supernatural. The extraordinary and marvelous was where nature transcended *matters of fact*. Like divine omens, the stories were connected to something bigger than themselves. The reality of a creature or story could be disputed, without disregarding the underlying framework that made it a subject for discussion in the first place.

## The Walrus, the Stingray, and the Wild Man

Before moving onto the Dutch voyages in search of a northeast passage, something more must be said about how new facts altered the imagery of the North during the second half of the sixteenth century. Changing images of the walrus, and Coenen's descriptions of the 'wild man' that was captured by Martin Frobisher, can shed light on the importance of firsthand observations and objects. Finally, Coenen's involvement in the culture of collecting can clarify more about the status of facts during the renaissance.

In Coenen's manuscript the drawing of a walrus was directly copied from Conrad Gesner. Coenen called the creature a sea-elephant, or sea-horse/sea-ross. In the bottom corner of the picture, Coenen remarked that a walrus-head was given to the pope in 1519 by a Norse bishop. Magnus also mentioned this event, but instead of talking about a walrus, he only referred to the object as the head of a monster.[74]

**fig. 5** Walrus in Adriaen Coenen's *Fish Book*.

In a different section of the book, Coenen drew a walrus-like creature with three golden tusks which he copied from the *Carta Marina*. He stated that the creature was enormous.[75] Although Coenen distrusted many sailors' stories and even some of Magnus' more outlandish claims, he did try to incorporate all the things he heard and read. He also provided this animal with as many names as he could find.

On the bottom right of Ortelius' map (letter N.) there can also be seen a walrus (or *rostunger*, or

[74] Olaus Magnus, *Description of the Northern Peoples*, 1086-1087.

[75] Adriaen Coenen, *Visboeck*, folio 85. The *Fish Book* (*Visboeck*) is digitized by the Dutch Royal Library: https://www.kb.nl/themas/middeleeuwen/visboek-van-adriaen-coenen (version 30-5-2018).

*rosmar*). It is “somewhat like a sea calf” and goes “to the bottom of the sea on all four of its feet.”[76] The mention of feet, Ortelius probably borrowed from Gesner. In Coenen’s picture can be seen that the walrus has thick strong legs. Ortelius states “[The walrus’] skin can hardly be penetrated by any weapon” and “It sleeps for twelve hours on end, hanging on some rock by its two long teeth.” The idea that a walrus climbed rocks with their tusks came from Olaus Magnus. He depicted them trying to escape hunters by seeking high ground. “Each of its [the walrus’] teeth are at least one ell long” – which is approximately an arm’s length and seems reasonable. However, “the length of its whole body is fourteen ells”; around seven or eight meters – twice the size of an actual grown walrus. In Magnus’ work the walrus is depicted as being very large.

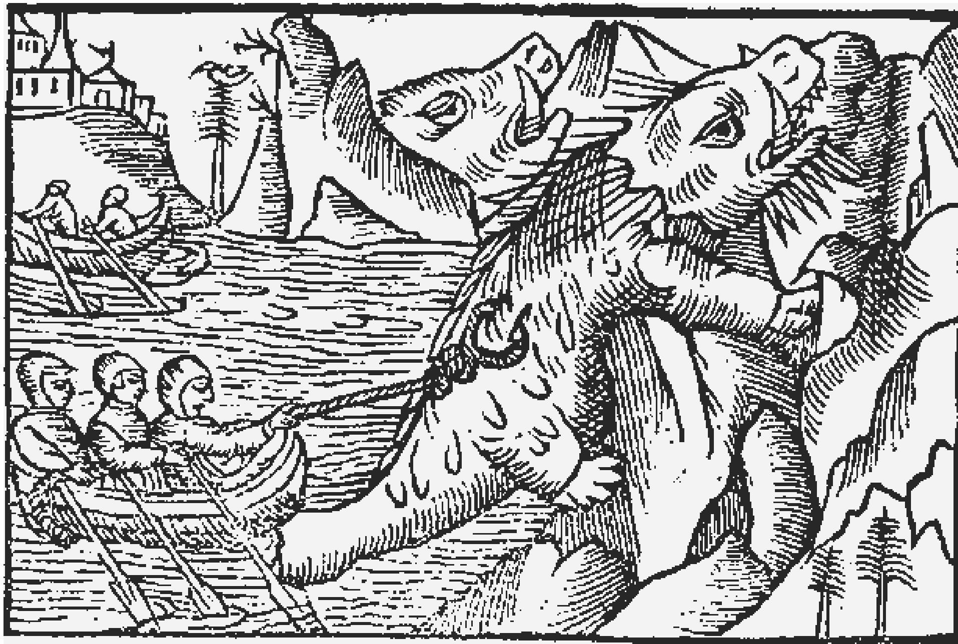

**fig. 6** Walrus in Olaus Magnus’ book.

Did Olaus Magnus purposefully lie about the size of a walrus? Although it is impossible to be certain, it is probable. Especially considering the detailed measurements of the monster discussed earlier, purposeful embellishment is not unlikely. The measurements might not have been put in the text just to convince the reader, but to inspire a sense of wonder.

Think of the Danish who, according to Isaac la Peyrère kept the myth alive that unicorn horns were real.[77] Or of merchants that sew in the feet of birds of paradise to keep up the story that these birds never touched the ground.[78] Adriaen Coenen would sometimes paint stingrays to look like dragons before he sold them.[79]

These were not isolated incidents. Historian Paula Findlen has studied forged curiosities. Stingrays were often made to look like dragons, and parts of animals were combined to create basilisks and hydras. For Gesner and Aldrovandi the forgeries were substitutes: it did not mean the real animals did not exist, only that they were harder to come by.[80] Paula Findlen thinks that from the 1550s onward, the forgeries were perceived by most scholars as ‘pleasant’ instead of heretical.

[76] Abraham Ortelius, *Map Text No. 161*.

[77] Isaac la Peyrère, *Nauwkeurige Beschrijvingh*, 39.

[78] R. van Gelder, 'Arken van Noach: Dieren op de Schepen van de VOC', in F. Egmond (ed.), *Kometen, Monsters en Muilezels* (Haarlem 1999) 35-54; 49.

[79] F. Egmond, *Een Bekende Scheveninger: Adriaen Coenen en Zijn Visboeck van 1578* (Den Haag 1997) 27-28.

[80] Findlen, ‘Inventing Nature: Commerce, Art, and Science in the Early Modern Cabinet of Curiosities’, 308-309.

She states that commerce invented what people wanted to see, and scholars responded by disregarding strict boundaries between art and nature.[81]

Again, the *matters of fact* were inferior to an admiration of nature. This admiration did not always entail philosophies on God or the relationship between the universe and man: it could be entertaining or 'pleasant'. The same was true for the stories of monsters and strange races in faraway lands.

When a family from Greenland was put on display in an inn in The Hague, Adriaen Coenen went to see them for himself. He paid the small entrance fee to watch an Inuit-woman and her child. The pictures of the whole family he drew after a pamphlet. Above the drawing Coenen states: "These are people who eat raw fish" (fig. 7). Peter Mason and Florike Egmond have noticed that Coenen did not reference the classical and contemporary accounts of gigantism and cannibalism used in his description of these people. [82] In a different drawing of an Inuit, Coenen notices that the man belongs to a people unknown to the ancients. Coenen did not refer to literary evidence because he was aware that what he witnessed was new.

**fig. 7** Adriaen Coenen. The Inuit-family.

The other Inuit, the "wild man" was a prisoner of Martin Frobisher. While searching for a northwest passage to Cathay in 1576, Frobisher came across a group of Inuit. When one of them was out at sea in his kayak the captain attracted him with the sound of bells. Coenen explains that the man was under the impression that Frobisher reached out his hand, to give him the bell as a gift, but instead the sailors pulled the man in, together with his kayak. Coenen mentions that the wild man only ate raw meat. After his imprisonment he survived for fifteen days.

These types of encounters would happen time and again when Europeans set sail for Greenland.

[81] Findlen, 'Inventing Nature', 310.

[82] Egmond and Mason, "These Are People Who Eat Raw Fish'', 313-317.

They would imprison natives and take them home to study or to put them on display. Often the people were made to perform how to row a kayak. Their weapons, clothing, and boats ended up in cabinets of curiosities. Most of the captured Inuit did not survive for more than a few weeks.[83]

**fig. 8** Adriaen Coenen. The wild man captured by Frobisher.

The Inuit had, as far as Coenen was concerned, not been known to ancient or medieval authors. In his observations he was concerned with the materials of their clothing (deerskins and sealskins) and of the kayak (sealskin), not with the stories of cannibals and giants. His writing style was sober. He put down some measurements of the length of the people and the color of their skin and hair. He did mention that they had a somewhat stupid look in their eyes, but also that they seemed strong and brave. They are presented with the familiar dual image. This is perhaps no wonder, concerning the books Coenen read.

In the second half of the seventeenth century the relationship to the animals and natives of the Arctic was ambiguous. Literary evidence, firsthand observations, and hearsay were combined in different ways depending on the author. What accounts were true was always a subject for debate, but this did not necessarily lead to the discredit of authors that had gotten some of their facts wrong. Measurements and detailed descriptions could be used to convince readers, inspire awe, or simply to write a cohesive account of something unknown. Many scholars were not primarily after *matters of fact*, but after ways to create syntheses and cohesion in the steady increase of new information, sometimes relying on already familiar frameworks for their dense encyclopedic accounts.

[83] Isaac la Peyrère, *Nauwkeurige Beschrijvingh*, 72-74.

# Dreams of Cathay, 1598 – 1612

Central to this chapter are the Dutch shipping logs by Gerrit de Veer and Jan Huyghen van Linshoten who published their notes on the voyages in search of a northeast passage. The logs were published in 1598 and 1601 respectively. Gerrit de Veer's account became most famous, for it described the tragic voyage of William Barentsz who lost his life after being forced to winter on Nova Zembla. Jan Huyghen van Linschoten is known mostly for his *Itinerario* (1596); a book on his voyage aboard a Portuguese ship, that commented on natural history and riches of the East Indies and contributed to the foundation of the Dutch East Indies Company (*VOC*). His work on the Indies intensified his relationship with Paludanus, the town physician of Enkhuizen whose cabinet of curiosities was famed throughout Europe. Van Linschoten had brought Paludanus many natural objects from the Indies, and during his travels North he made sure to find new objects and artefacts for his friend. [84]

In this chapter the land descriptions of the geographer Hessel Gerritsz on Spitsbergen and on the land of the Samoyeds (Lapland) are also discussed. Gerritsz used mostly information gathered by merchants, and maps made by the diplomat Isaac Massa.[85] Massa had spent time at the Russian court and had gathered information on Russian history. Other sources used by Gerritsz, were notes from Olivier Brunel, a Flemish merchant-explorer who was one of the pioneers of the White Sea trade.[86]

The travel logs and land descriptions contain great stories of human perseverance and survival, as well as interesting characters and encounters. For contemporaries, these accounts also contained a wealth of new information about a region which not many Western-Europeans had visited. The central aim of this chapter is to present how travelers, collectors, and geographers wrote about the Arctic. There is special attention for how explorers reflected on classical authors and sixteenth century natural histories.

Harold Cook has shown that merchants and geographers were mostly interested in *matters of fact*. Indeed, in the accounts of De Veer, Van Linschoten, and Gerritsz, the emphasis on the supernatural and preternatural is strikingly absent. They distrusted ancient literature about the Arctic. Paradoxically, the belief that it was possible to find a northern passage to Cathay was primarily based on literary evidence.

## Geographers and Merchants

The wastes of the *cold-and-icy North* did not hold the exotic lure of the Indies or the New World. Only when explorers searched for a passage to the fabled kingdom of Cathay did they become aware of what was to be gained by traveling north. The wealth of the Arctic existed of valuable furs, stock fish, walrus ivory, and most importantly whale oil. In their travel logs the explorers wrote about the northern lights, the snow-covered hills, and drift-ice the size of mountains. They also wrote about the birds, beasts and the mysterious native cultures of fishermen and hunters that roamed the land on sleds and skis. The new accounts left enough to be feared: many travelers died in storms and facing polar bears, some were murdered by the natives and others passed from the cold and starvation after their ships were stranded on the ice.

The first voyage in search of Cathay happened in 1553, when Hugh Willoughby and Stephen Burrough stranded on the coast of Norway. Only Richard Chancellor made it to the White Sea. He established an overland trade with Moscow.[87] The company that grew out of this endeavor was

[84] S.P. L'Honoré Naber, Jan Huyghen van Linschoten, xxix-xxx.
[85] S.P. L'Honoré Naber (ed.), *Beschryvinghe vander Samoyeden Landt in Tartarien* (The Hague 1923) introduction, xxv.
[86] Hessel Gerritsz, 2-3.
[87] A.F. Meyendorff, 'Anglo-Russian Trade in the 16th Century', *The Slavonic and East European Review* 25 (1946) 109-121; 117-118.

called the Muscovy Company, and would evolve into the leading whaling company of England.

When finding a northeast passage failed, the English headed west. Martin Frobisher (1576, 1577, 1578), John Davis (1585, 1586, 1587), Henry Hudson (1607, 1608, 1609, 1610) [88] and William Baffin (1615, 1616) all looked for a passage or street to lead them through the icy waters of Greenland to the East-Indies and Cathay. The Danish also attempted to find a northwest passage to India, simultaneously looking for the lost Norse colony on Greenland. In cooperation with the English, Danish king Christian IV ordered three missions that were led by James Hall. When these attempts failed, Norwegian-Danish navigator Jens Munk led an expedition in 1619 and returned only after having lost almost the entire crew.[89]

Logs of these expeditions were published widely. Throughout the seventeenth century there appeared popular reworkings of the expeditions, and they were often referred to in land descriptions of the North.[90] Besides the Dutch shipping logs there existed many more publications about the Arctic that were based almost solely on firsthand experience.

In the Dutch Republic investors from the trade with Moscow, most notably Balthasar Moucheron, also invested in the northern voyages. In Hessel Gerritsz' preface to his book on the Samoyeds, he noted the benefits of exploring unknown countries and establishing contact with native people. Gerritsz mentions the beautiful Russian furs and the spread of the Christian faith to the peoples of Petzora in 1518.[91] Olivier Brunel traded in furs and skins, mica, or Russian glass, and mountain crystals. Gerritsz made a direct connection between this merchant-explorer and the later voyages of William Barentsz and Van Linschoten. Besides looking for a passage to Cathay, the voyages were also meant as trading missions. During the voyage of 1595 merchant ships came along because the States-General was afraid of the losses if the passage to Cathay could not be found. The many voyages North brought about a wealth of new knowledge, but the travelers were also motivated by the promise of monetary gain. Gerritsz remarked that it seemed as if nature put the cold and ice in the North up as barriers to restrain merchant's greed.[92]

The growing merchant class existed of tight networks. The merchants and geographers that invested in the White Sea trade and the northern voyages, were also invested in the Indies. Where Van Linschoten provided Paludanus with prized objects for his collection, Gerritsz received many of the sources for his book from theologian and geographer Petrus Plancius. Plancius would help Gerritsz to become official cartographer for the Dutch *East-India Company* (*VOC*) in 1617, and to the West-India Society in 1621 (precursor to the West-Indies Company (*WIC*)). Plancius was also involved in the voyages in search of a northeast passage, and in the foundation of the Dutch whaling company (*Noordsche Compagnie*).[93] Another important contact of Hessel Gerritsz was William Blaeu, who taught him cartography. Blaeu's son would later publish the most complete atlas of his time: an impressive twelve-tome book with maps and descriptions.[94]

The market for atlases and land descriptions was on the rise. A number of Gerritsz' maps were published in *New World* (*Nieuwe Wereldt*, 1625), a work on the natural history and geography of the Americas, written by Johannes de Laet, officer of the *WIC*.[95] Gerritsz also provided an account of the discovery of New Zealand by the Portuguese explorer Pedro Fernandes de Queirós in his book on the land of the Samoyeds. This voyage was aimed at finding *Terra Australis* which appeared on

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[88] The voyages in 1608 and 1609 were in search of a northeast passage. The voyage in 1610 began in search of a northeast passage but the ship turned west because the crew protested. In 1609 and 1610 Hudson traveled under the Dutch flag. On his last voyage there was a mutiny because the crew wanted to turn around. Hudson and some officers were put overboard in a rowing boat.

[89] Gillis Joosten Saeghman, *Drie Voyagien Gedaen na Groenlandt*.

[90] For example: Isaac la Peyrère, *Nauwkeurige Beschrijvingh*, 1-5.

[91] Hessel Gerritsz, 3.

[92] Ibidem, 6.

[93] G.W. Kernkamp, 'Stukken Over de Noordsche Compagnie', *Bijdragen en Mededeelingen van het Historisch Genootschap* 19 (1898) 263-379; 278.

[94] Joan Blaeu, *Atlas Maior* (Amsterdam 1662).

[95] L'Honoré Naber, Hessel Gerritsz, xlvii-xlviii.

Ptolemy's map. [96] That Gerritsz added this seemingly unrelated account to his book on the Samoyeds reveals that in his mind the voyages of discovery were related. The prefaces to land descriptions often summed up the results of many different travels. They reveal that, even though the European countries were in competition, there was some sense of a joined effort to map and describe the world among the merchant class.

There existed a network of geographers, collectors, and merchants that aimed to map the globe and advance global trade. Harold Cook has shown that this world of merchants and geographers also infiltrated universities by providing *naturalia* for collections and botanical gardens.[97] Paludanus' collection and botanical garden were so impressive that he was asked to run the gardens of Leiden University, but he declined the offer.[98] In their maps and descriptions, the geographers and merchants focused on *matters of fact*. Where earlier maps were heavily decorated with sea monsters and ships, the maps of Gerritsz and Van Linschoten were increasingly to the point, at most providing images of the things personally encountered by travelers. Descriptions were often sober and focused on detailed descriptions and measurements. Even though bloody accounts with polar bears or natives always appeared in the logs, they seem to be seldom exaggerated.

De Veer and Van Linschoten wrote down anything and everything that could be of interest. Descriptions of animals and foreign coasts were mixed with descriptions of the behavior, customs, and beliefs of foreign people, as well as descriptions and maps of northern towns. This could be either because they thought what they encountered was extraordinary, or because no one that they knew of had taken the time to publish similar information. Itineraries contained knowledge about a multitude of things that were brought together in land descriptions like the ones written by Hessel Gerritsz. The style of description in shipping logs and the books of Hessel Gerritsz were different from earlier books about the Arctic. Seldom do the authors connect what they observed to other texts. At the same time, the authors did cover a wide variety of topics: they strived for all-encompassing, almost encyclopedic accounts, which is reminiscent of the books of Magnus and Coenen.

## Literature and Navigation

Geographers and merchants did use ancient and medieval geographical information. When the first Dutch explorers left the island of Texel on the fifth of June 1594, the sailors were in search of Cape Tabin; a legendary cape of the Asian continent, that Ptolemy wrote about in his *Geography*. Gerard Mercator was one of the geographers convinced by Pliny that one could sail to Cape Tabin, and from there follow a river into Cathay.[99] There did exist rivers that led deep into the steppes, but any trace of the Mongol empire of Cathay, or Kitthay, had long been erased.[100]

William Barentsz captained one of the ships funded by the Amsterdam city council. Plancius had ordered him to separate from the other ships at the island of Waygats. The other captain, Cornelis Nay, would try to sail through Nassau Street (Jugor Street), while Barentsz would follow the Nova Zembla coast. Plancius wanted to see if Nova Zembla was attached to Asia. He thought that following the coast would lead the explorers over the pole to Cathay. He was convinced the Arctic was surrounded by a ring of ice, but that once the ring was breached, the ship would reach the open ocean.

Van Linschoten did not believe in Plancius' ice-free pole but thought the open ocean lay behind Nassau Street, because "Cornelis Nepos, Pliny, and more ancient writers (…) are certain of a route

[96] L'Honoré Naber, Hessel Gerritsz, xv.
[97] Cook, *Matters of Exchange*, 26, 117-118.
[98] F. Egmond, 'Een Mislukte Benoeming: Paludanus en de Leidse Universiteit', *Souffrir pour Parvenir*, 51-64.
[99] J.D. Tracy (ed. and translator), *True Ocean Found: Paludanus's Letters on Dutch Voyages to the Kara Sea, 1595-1596* (Minneapolis 1980) introduction, 14-16.
[100] Tracy, *True Ocean Found*, introduction, 7.

to Cathay and China, as they tell of some Indians that have traveled over the North [*by Noorden om*] and stranded on the coasts of Norway (…) which is only to be reached through Waygats."[101]

De Veer began his travel account by addressing the States General and prince Maurits. He argued that navigation and mathematics had proven more important than book-knowledge about the earth. Explorers had found countries unknown to even the likes of Ptolemy and Strabo and merchants now had access to goods from all over the world. Even after the third failed attempt to reach Cathay De Veer still believed the kingdom could be reached through a northeast passage. Plancius also had been undeterred by the failure of the second expedition, in which all ships went the same route through Nassau Street. He had never believed in going south of Nova Zembla and found William Barentsz and two other merchants willing to try again; this was the voyage that led to the disastrous wintering.[102] Gerrit de Veer tried to convince the States General that greatness was only ever achieved through hardship, and that the failure of the three expeditions was no sign of stupidity but of perseverance.[103] The third failed expedition had led the States General and Amsterdam city council to quit all funds for voyages of discovery in the Arctic. Instead, they focused their attention on commercial whaling.

The opening statement reveals De Veers dual attitude towards ancient authorities. The belief in Cathay and the passage was based on literary evidence. At the same time, he knew the literary sources were ridden with errors. He trusted more in navigation and mathematics than in the wisdom of ancient books.

During the first expedition to Cathay, the ships had returned after they found what the sailors interpreted as the Kara Sea, which should lead to Cape Tabin. The States of Holland were not convinced and thought the captain had turned around too quickly. Balthasar de Moucheron, the primary merchant of the White Sea trade, bought information from Richard Hakluyt for 140 guilders, to make sure the ship had followed the right course. This was the same Hakluyt that commented on the failure of Magnus to see through the fables of commoners. Hakluyt possessed many ancient sources, as well as a travel account of John of Plano de Carpiny who claimed to have traveled to Cathay, in a source that was older than the book of Marco Polo.[104]

No one was certain about the exact relations between Cathay and China. For many the names were interchangeable. The idea of a paradise-empire in the East originated in medieval legends of Christian potentates, and stories of converted khans.[105] Like the legend of the fountain of youth in Florida, and the mountain of silver in Argentina, the fable of Cathay proved strong enough to motivate a leap of faith into the unknown.[106] Jan Huyghen van Linschoten, Gerrit de Veer, Petrus Planicus, Richard Hakluyt, and William Barentsz all had a rock-solid belief in a route to Cathay based on the same sources they mistrusted in almost anything else. Of course, there were also people that questioned the myth, and the stubbornness of the explorers that kept trying after multiple expeditions had failed. Albert Haeyen, a great sailor and geographer criticized Plancius for consistently underestimating the distance to China.[107] Gerritsz also doubted the possibility of a northeast – or northwest passage. He thought it was foolish of Jan Cornelisz May to try again in 1611. May and most of his crew had been murdered by the natives in Greenland.[108]

At first sight it seems as if the lure of riches blinded the otherwise critical judgement of the merchants. The route was inspired by ancient and medieval literature, but the merchants and geographers also collected empirical evidence for why a route should exist. The main debate about the route to Cathay had to do with the nature of the Kara Sea, the body of water to the east of Nova

[101] Jan Huyghen van Linschoten, 4-5.

[102] Gerrit de Veer, 18. Edition used: V. Roeper and D. Wildeman (eds.), *Om de Noord: De Tochten van Willem Barentsz en Jacob van Heemskerck en de Overwintering op Nova Zembla, Zoals Opgetekend door Gerrit de Veer*.

[103] Ibidem, 44-45.

[104] Marijke Spies, *Bij Noorden Om*, 128.

[105] R.N. Schantz, 'The International Double Image of 'China' and 'Cathay'', *The Historian* 33 (1970) 83-93.

[106] F.F. Armesto, *Pathfinders: A Global History of Exploration* (New York 2006), 194, 252.

[107] Tracy, *True Ocean Found*, introduction, 4-5.

[108] Hessel Gerritsz, 6-7.

Zembla. Opponents of Plancius' route wanted to prove that the Kara Sea was part of the open ocean. On multiple occasions Van Linschoten referred to the salinity and color of the sea water behind Nassau Street, and to the abundance of whales and the magnitude of the waves, to argue that the Kara Sea was not an enclosed body of water, but part of the ocean. For Plancius, however, the drift-ice pointed to an enclosed space. He believed that the ice amounted near the coast, not on open water.[109]

In a letter to Abraham Ortelius, Paludanus wrote that the voyage of Jan Huyghen van Linschoten had not gone well because of the weather and the drift-ice, but that there was convincing evidence that the Kara Sea was part of the open ocean. He came up with the following arguments: It was unlikely that water should be lacking in a place as humid as the Arctic. He borrowed this argument from Pliny. Furthermore, the tides came in from the east. Winds that came in from the north were warmer than the winds coming in from the south. This argument was meant to prove that the ice amounted on land, not on the sea. The sea was home to almost every type of fish, which proved it was part of the ocean. Finally, foreign ships were spotted on the Kara Sea, that Paludanus interpreted as travelers from Asia.

That God surrounded the earth with water was confirmed by almost all physicists and geographers, argued Paludanus. Because he believed Nova Zembla was an island, both a northern and southern route to Cathay had to be possible. Paludanus stated that Plancius was the only one to disagree. Plancius used every occasion to convince the Amsterdam city council to pay for their own ships so they could deviate from the routes taken by the ships sponsored by the States General.[110] Hessel Gerritsz did not believe in a route over sea but thought that Cathay could be reached by land.[111] He mentioned the sound of bells heard during a Russian expedition. According to the medieval accounts about Cathay, the kingdom was known for the sound of bells.[112] For some reason Gerritsz trusted the medieval accounts more than the ancient maps. Probably the many failed expeditions had convinced him that the ancients had never been in the Arctic.

Near the end of his book, Van Linschoten explained that the east was colder than the west, and that this temperature-difference was unrelated to latitude. He was aware that this went against anything the ancients had written about climate zones. Van Linschoten wanted to leave further speculation to scholars but regarded it as one of God's wonders that the crew had encountered plants, animals, trees, and even people in some of the highest latitudes they crossed, while in lower latitudes they had found only ice and snow.[113] De Veer noticed the same thing. The sailors from Amsterdam encountered plants and even grazing animals on Greenland (they were not on Greenland but on the island later known as Spitsbergen) while on Nova Zembla, they had encountered only snow and predators.[114]

The discussions on climate zones and the possibility of routes reveal that empirical evidence became increasingly important. Especially the classical authorities were distrusted by merchants and geographers. Even if the literature had initially guided their travels, Gerrit de Veer and Jan Huyghen van Linschoten made sure to correct any errors they found based on their own observations.

As has been mentioned briefly, maps became less decorative. Especially the later maps of Hessel Gerritsz only depicted the contours of coastlines, major rivers and striking geographical features. Van Linschoten and De Veer did still decorate their maps, but only with scenes from their travel logs, and animals and people they had personally encountered. Historian James Welu has shown that many previously unknown animal species were first drawn as map decorations, before they appeared in natural histories. He mentions that the first known drawing of the opossum appeared on Waldseemüller's world map (1507). The map-maker also made some of the earliest drawings of the

[109] Letter from Paludanus to Ortelius, 22 March 1596, from Tracy, *True Ocean Found*, 55-57.
[110] Ibidem, 55-57.
[111] Hessel Gerritsz, 33.
[112] Ibidem, 31.
[113] Jan Huyghen van Linschoten, 200-206.
[114] Gerrit de Veer, 89.

Tartary reindeer and the African rhinoceros.[115] Decorated maps were, according to Welu, comparable to cabinets of curiosities: they captured the whole extent of the natural (and cultural) world in a single frame. Welu remarks: “The mythical and legendary creatures that had accompanied maps since medieval times were giving way to specimens that, although often as unusual, were actually observed. What was considered marvelous was now more a matter of documentation than of speculation.”[116] Decorated maps were treated as collector’s items. Especially in the Netherlands the collection of maps was a prelude to gathering multiple maps together in atlases.[117] Van Linschoten added to most of his map decorations that the drawings were “true to life”.[118] Both him and De Veer continuously emphasized that they wrote down and drew only what they had seen for themselves; they presented the facts. Even though authors like Ptolemy and Pliny influenced what routes they chose, they were clearly aware that most of the information they gathered was essentially new.

**fig. 9** Map by Gerrit de Veer of Nova Zembla, with a detail of Loms Bay. It shows lommen (or ‘northern parrots’; probably puffins), the ship, a whale, and seals, as well as many place names.

## Animals and Curiosities

Animals were given detailed descriptions in the logs. These descriptions were seldomly enhanced by literary evidence. Often, the authors seemed simply intrigued by what they encountered and wrote down what they had experienced as best they could. At other times, the logs served a more practical use: the authors mentioned which animals and eggs were edible, and where to find scurvy-grass, a known cure for – what’s in a name – scurvy. De Veer, who had firsthand experience with scurvy noted that it was a wondrously powerful medicine.[119] Besides describing encounters, the crews would sometimes take objects and animal remains back to the ship, to take them home, or to

[115] Welu, ‘Strange New Worlds’, 105-106.
[116] Ibidem, 105.
[117] Ibidem, 106.
[118] For example: Jan Huyghen van Linschoten, 76-77.
[119] Gerrit de Veer, 179.

have them put on display in a cabinet or town hall.

During the wintering on Nova Zembla the crew wanted to preserve a dead polar bear by sticking it upright in the snow and removing its internal organs.[120] Unfortunately, the dead animal drew other bears to the area. When some of the crew members realized they would not be taking the bear home, they went outside to take some of its teeth, but ended up having to fight off multiple bears from the stranded ship.

The crew was often violent towards the animals they encountered. Barentsz' crew once attacked a group of two-hundred walruses lying on a beach. They were partially motivated to kill the animals for their tusks but also seem to have simply enjoyed the act of fighting the animals.[121] De Veer provided a description of what the walruses looked like: they had a seal-like skin, four feet (flippers), no ears, and the mouth of a lion. Most females had one or two young that they threw in the water to protect them from the attacking sailors. De Veer stated that they were "wondrously strong sea monsters, most of them bigger than an ox."[122] The crew destroyed many spears and halberds during the fight. After going back to the ship to get the muskets out, it started to rain, and the crew gave up on the endeavor.

De Veer described the walrus as a sea monster but followed with a very sober description: he said something about its behavior and what it looked like. Olaus Magnus had done much the same thing for some of the sea monsters in his book. Only for the 'well-known' monsters like the griffin did he refer to other authors. Van Linschoten was aware of the existence of Magnus' book, but only referred to it once, to provide different names for deer.[123] He seems to have trusted his own judgement more when it came to a description of the animal.

One of the most striking animal observations in the logs was made by Gerrit de Veer. After the Amsterdam ship landed on a small island he found a group of barnacle geese brooding. De Veer knew that many natural historians claimed that these birds grew on trees in Scotland. He thought that his observation would finally put an end to this fable.[124] In Van Linschoten's account, the brooding barnacle geese were only mentioned in passing. His account appeared later, and apparently there was no need to emphasize again that they bred like other birds.

The barnacle goose was a '*joke of nature*'. Paula Findlen has shown that many of the species and objects that did not fit natural categories had origins in the ancient texts by Aristotle, Ovid, and Pliny.[125] The 'jokes', or *lusus*, challenged natural categorization.[126] Besides providing explanations for some remarkable natural phenomena, the *lusus* had a poetic or symbolic element. They provided lessons about the interconnectedness, and diversity of nature, while simultaneously being something to marvel at.

Adriaen Coenen owned a barnacle goose.[127] Peter Mason has shown that Coenen's account of the birds was conflicted. He provided both sources that claimed the birds lay eggs, and sources that claimed they grew on trees. Peter Mason agrees with Paula Findlen that objects that did not fit natural categories like 'plant' or 'animal' were what cabinets of curiosities thrived on.

Because there existed no consensus on brooding barnacle geese, Coenen simply included both positions in his manuscript. The fact was subservient to his interest in the preternatural. For De Veer, the fact was decisive: his observation of the brooding geese meant that the natural historians were wrong. Van Linschoten did not even feel the need to explain something as normal as a bird that lay eggs. At the beginning of his book, Van Linschoten explicitly states that other voyages North have not yielded valuable descriptions but served mostly as entertainment. His goal is to

[120] Gerrit de Veer, 103.
[121] Ibidem, 57.
[122] Ibidem, 55.
[123] Jan Huyghen van Linschoten, 41.
[124] Gerrit de Veer, 88-89.
[125] Findlen, 'Jokes of Nature and Jokes of Knowledge', 292-296.
[126] Ibidem, 308.
[127] Mason, *Before Disenchantment*, 68-76.

provide an account that is useful, and pragmatic, just as he did for the Indies with his *Itinerario*.[128] That he only referred to Olaus Magnus once – the greatest authority on the North of his time – speaks volumes.

However, Van Linschoten was not immune to the wonders of nature. One observation from his *Itinerario* provided evidence for the almost supernatural power of a sucking fish. When the Portuguese ship laid still in the water for a couple of days, the captain mentioned to Van Linschoten that the ship was held by a *remora*.[129] These tiny fish were known for their tremendous sucking power. Van Linschoten wrote it down in his account without asking further questions. Like birds of paradise and unicorn horns, the sucking fish was one of the objects that was almost a mandatory possession for any serious collector of curiosities.[130]

Van Linschoten provided Paludanus only with objects he thought were marvelous. During his travels to the North he took home a walrus skull. Remember that in Magnus' time such a monstrous head was so prized that it could serve as a gift to the pope.[131] The gifts Van Linschoten brought for the town center of Enkuizen and the town hall of Harlem were two "wondrous" whale jaws.[132]

After Paludanus passed away, his collection was sold to Frederick III, the duke of Shleswig-Holstein. Seeing that Paludanus did not publish an inventory himself, the objects are more easily traced in the inventory published by the duke. It was written by one of his diplomats; Adam Olearius (1603-1671). In the inventory Olearius used the observation of Van Linschoten to prove that the incredible power of the sucking fish was real.[133]

Tabula 23 in Orealius' catalogue presented two walruses; a mother and child. The picture seems to have been copied from the account of Hessel Gerritsz, but with the background and the child left out (see fig. 10 and 11). The description stated that the collection only had the head of a walrus (the head that Paludanus received from Van Linschoten), and that the creature was also known as a *rosmaros*, *walross*, or sea horse. Olearius noted that it was as big as a horse and that the head and penis also resembled that of a horse. It seems as if he still tried to 'mirror' marine animals and land animals, like Olaus Magnus and Adriaen Coenen had done. The inventory was published in 1674.

[128] Jan Huyghen van Linschoten, 4-5.
[129] Adam Olearius, *Gottorffische Kunst-Kammer* (Schleswig 1674) 39.
[130] Jorink, *Boeck der Natuere*, 282-283.
[131] Olaus Magnus, *Description of the Northern Peoples*, 1088.
[132] Jan Huyghen van Linschoten, 184.
[133] Adam Olearius, *Kunst-Kammer*, 39.

**fig. 10** Walruses in Hessel Gerritsz' land description of Spitsbergen.

**fig. 11** Animals and curiosities in Olearius' inventory.

The books of Van Linschoten and De Veer did not instantly change how scholars thought about the Arctic. Olearius' inventory shows that some debates from the sixteenth century were still relevant decades later. The duke of course possessed a unicorn horn. Although Olearius knew the existence of the unicorn was problematic, he summed up every authority that had written about these creatures. Some of his prime examples came from Pliny and the Bible. He knew that unicorns were not witnessed in his own day: "Es wird disputiret ob auch in der Welt solche Thiere, nemlich Einhorner, zu finden oder gewesen seynd, weil zu unser Zeit, da die Welt doch ziemlich durchgewandert, keines van jemand gesehen, und davon Bericht gethan worden."[134] Olearius then

[134] Adam Olearius, *Kunst-Kammer*, 9-10.

presented a long contemporary discussion, between scholars like Ole Worm and Thomas Bartholinus. Their debate was no longer about the possibility of the existence of unicorns, but about the medicinal qualities of narwhal-teeth. The suggestion that narwhal-teeth had healing properties could already be found in Ortelius' description of Iceland. Ole Worm, who was himself an avid collector of Arctic *mirabilia* believed in the medicinal properties of the teeth and stated that he knew trustworthy eyewitnesses who had tested the tooth as an antidote to poison.[135] The walrus penis could also be used as a medicine. Olearius noted that Muscovites would crush the walrus penis-bone into small grains as a cure for kidney – or gall stones.[136]

The inventory presents how literary evidence and experiment could come together. To provide a complete account of the supposed unicorn horn, Olearius presented all different opinions on the matter. The cabinet had originally belonged to Paludanus, who had relied on an explorer that mostly denied the fruitfulness of old literature. That Van Linschoten trusted his own judgement first, did not mean that his judgement was always different from contemporaries: he thought to have personally witnessed the strength of a sucking fish. The relationship between literary evidence and firsthand experience was not straightforward, but ambiguous. Merchant-explorers relied mostly on their own observations and tried to correct the errors they found in textual sources but were at the same time driven by ancient authorities to explore. Their criticism of ancient authors was not that different from that of Olaus Magnus, who had also argued that he knew things from experience, unknown to his predecessors.

For Harold Cook, global commerce was the most important drive behind the Scientific Revolution.[137] Not theory, but practice changed the world. Both Cook, and Ashworth, are convinced that new information was incompatible with ancient texts. However, the ancient, medieval, and renaissance scholars were not unified in their opinions. Instead, the literature presented a continuous debate. The main difference between merchant-explorers and sixteenth-century scholars was that the merchants did not connect the *matters of fact* to a broader worldview. That they detached the facts from a broader framework must have affected some scholars and geographers. Still, Olearius' inventory shows that many of the debates that were relevant to Abraham Ortelius and Olaus Magnus were still going on a century later. The supernatural and preternatural discussions were mostly ignored by Van Linschoten and De Veer. The only supernatural that could be found in their books were divine omens.

## Observing the Supernatural

During the wintering on Nova Zembla Gerrit de Veer often called upon God to help him and the crew survive the bitter cold. He also thanked God for sending enough food (foxes) for the crew, and for sending the driftwood they used to build *The Saved House* (*Het Behouden Huys*). The biggest miracle, however, was the sun appearing over the horizon on 24 January. The officers had calculated the end of winter, but the sun appeared much sooner than anticipated. De Veer tried his best to verify the date by looking at the position of other planets like Jupiter. His claim that he saw the sun on 24 January would afterwards be widely disputed, but more recent research has found that he probably witnessed an optical illusion, now called the Nova Zembla effect, created by a certain inversion of light that occurs at low temperatures if the sun comes in horizontally.[138] Other light effects that amazed De Veer three suns in the sky during the last voyage. He interpreted this as a divine omen.[139] This effect is created when a low sun reflects on ice crystals in the atmosphere and is now known as a *parhelia*.

[135] Adam Olearius, *Kunst-Kammer*, 10-11.
[136] Ibidem, 35.
[137] Cook, *Matters of Exchange*, 410-411.
[138] R. van den Berg, 'Nova Zembla-Effect', *NRC* (08-04-2000).
[139] Gerrit de Veer, 83.

What is telling about these examples, is that the only time De Veer referred to something supernatural, was when he observed something that he could not explain. They were always omens and weather phenomena. Van Linschoten interpreted blowing whales as a sign of a coming storm.[140] Connecting blowing whales to the weather, and beached whales to political turmoil had also been done by Adriaen Coenen. It appears that certain omens were common knowledge.

The entrance to cabinet of curiosities of the Duke of Shleswig-Holstein, was decorated with two whale jaws, 16 feet long and 2 feet in diameter. Olearius mentioned that a long person could stand inside the opened jaws with stretched arms without touching the top of the mouth. The whale was found on the shore near Westerhefen in 1659. Olearius noticed that a year after the whale had been found, Sweden and Denmark made peace. He left it to the reader to decide if the beached whale and the peace treaty were related. He then referred to Procopius and other ancient writers that connected beached whales and world events.[141] (Divine) omens were still a serious topic, although Olearius left it to the reader to decide if this specific omen was real. Contrary to the sailors, he linked the beached whale to omens known to the ancients.

It seems that for Van Linschoten and De Veer divine omens had a different status than other preternatural and supernatural phenomena. The idea that God could intervene in the weather and the heavens was persistent. When a particularly great storm hit England on 26-27 November 1703 many still interpreted it as a prodigy and questioned if the storm was natural. Historian Jan Golinski argued that most took it as a heavenly wonder and a judgement of "the moral corruption of society at large."[142] There was a growing group of naturalists that tried to come up with natural explanations for the storm, even though some of them thought that natural causes did not necessarily take away the divine implications.[143]

Many 'enchanted' ideas became less dominant during the Enlightenment, even if they never fully disappeared. Because the weather and heavenly phenomena like the ones witnessed by De Veer were too complex to explain, they were attributed divine significance. It was a God of ever-receding ignorance: many things that had once held the same significance as the weather, like comets, were already naturalized near the end of the seventeenth century. Newton and Halley worked out that comets were returning objects whose appearance could be calculated, like planetary orbits.[144] There must have been other cultural reasons for a decline in astrological prognostications, but the observations certainly helped. Even if the mechanistic philosophers did not make the preternatural and supernatural disappear, they put the same emphasis on observation as merchant-explorers like De Veer and Van Linschoten. That many ideas persisted into the early decades of the eighteenth century shows that change was gradual.

Some ideas about the supernatural and preternatural were more persistent than others. The debate about unicorns was still not completely settled in the late seventeenth century, but almost nobody believed in the existence of pygmies anymore. This is what makes a proper discussion of the preternatural and supernatural so difficult. If there was an 'enchanted' world, it consisted of a wide variety of ideas and a wide variety of interpretations. The dominance of some of them lasted longer than that of others.

De Veer, Van Linschoten, and Gerritsz all marveled at nature, like their contemporaries, but they wanted to marvel only at what they perceived as 'real'. The preternatural and supernatural were not completely disregarded but were not central to their accounts; facts were. They used new methods of description, but many scholars remained 'enchanted'. Different interpretations of the Arctic were not mutually exclusive but developed in parallel. Even when many firsthand accounts of the North became available, this did not discredit ancient and medieval authors. As will be seen in the third chapter, the firsthand accounts of merchants and explorers renewed the interest in the region,

[140] Jan Huyghen van Linschoten, 134.
[141] Ibidem, 1-2.
[142] J. Golinski, *British Weather and the Climate of Enlightenment* (Chicago 2007) 47.
[143] Golinski, *British Weather*, 49.
[144] S. Schaffer, 'Newton's Comets and the Transformation of Astrology' in P. Curry (ed.), *Astrology, Science and Society: Historical Essays* (Suffolk 1987) 219-245.

leading to an increase of both academic and popular literature about the Northern World that consisted of widely divergent interpretations.

## People of the Arctic

In their descriptions of the people of the Arctic, Van Linschoten, Gerritsz, and De Veer do not seem affected by the classical framework of Herodotus. The drawings of native cultures did have recurring elements that made the people depicted recognizable. Like Adriaen Coenen, the authors had much attention for things like the materials used in clothing. Their observations of people were more value-laden than those of animals: especially Van Linschoten and De Veer shared how they felt about the natives they encountered.

On a map of the first Arctic journey, Van Linschoten depicted the Samoyeds, or Sami together with their idols. He also showed one on a reindeer-sled. The Samoyeds in the picture all carry bow and arrows and wear simple clothes with fur hoods and fur hats. The arrows have split ends, which was apparently a distinctive feature because it returned in every drawing Van Linschoten made of them. The idols were wooden, tower-like figures, some with multiple faces and pointy heads. On *Cape Cross*, Van Linschoten and the rest of the crew encountered a group of around fifteen Samoyeds. They bowed and greeted the Dutch but were also very wary of the foreigners. They declined to show them their bows and arrows and kept their reindeer-sleds ready to escape if necessary. Van Linschoten noticed that the Samoyeds had different sleds than the Lapps, and that they lived only from hunting, not fishing. They were quick and jumpy. Some of them, he mentioned looked like apes or monsters, their faces blackened by smoke.[145] Van Linschoten also described the Lapps and Finns as ignorant, ugly and dirty.[146]Although he does not like the people, they appear nowhere near as monstrous as the cannibals and giants in some of the accounts of the Americas. They might have been idolaters, but Van Linschoten never mentioned them performing magic or dealing with the devil.

Gerrit de Veer’s judgement of the native inhabitants was far more kind. During his first encounter with the Sami, he mentioned that they looked like wildlings, but that they were not that wild. He thought they had a good intellect, or wit, and noticed that they spoke some Russian. Barentsz had the Russian translators announce that the Dutch came as friends. The Sami responded with kind greetings and offered to trade some small items. The natives were cloaked in deer skins. The elite wore fur hats with cloth, while the rest wore hats of deer skin. Their hair hung in thick braids on their backs. They had broad, flat heads and were strong and sturdy. The trade and gift exchanges were closely monitored by the elder that De Veer referred to as the king. When they separated, Barentsz’ crew left happy and with a deep respect for the natives.[147]

Although he felt very differently about the Samoyeds than Van Linschoten, De Veer also mentioned the people were suspicious and very shy. His descriptions of some of the clothing and hair-styles was different from Van Linschoten, but this could be due to cultural differences between tribes. De Veer also referred to a clear hierarchy within the group that Van Linschoten did not mention. Surekha Davies and Anthony Grafton have argued that atlas-makers relied on established frameworks and embellished certain traits in foreign cultures to create visual codes to represent foreign peoples. People from the Arctic were often presented as devil-worshippers and magicians. Van Linschoten, De Veer, and Gerritsz used different imagery: the Samoyeds were people with reindeer-sleds, fur hoods and split arrow-heads.

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[145] Jan Huyghen van Linschoten, 84-87.
[146] Ibidem, 41-43.
[147] Gerrit de Veer, 73-75.

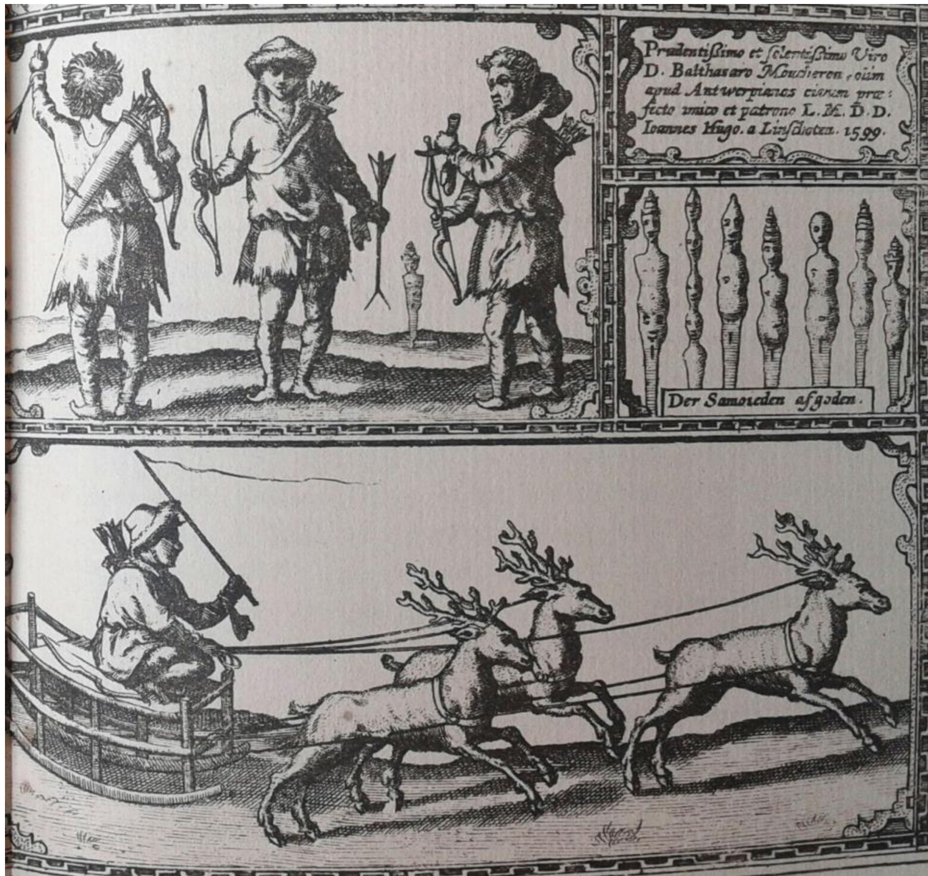


**fig. 12** Samoyeds and their idols in Jan Huyghen van Linschoten’s shipping log.

**fig. 13** Samoyeds, a polar bear, and foxes in the Great Atlas (*Grooten Atlas*) of Joan Blaeu (1664). Detail of a map of the Arctic circle. The figure on the left is holding an arrow with a split head.

When encounters between Europeans and natives ended badly, this could damage the reputation of a people for years to come. Hessel Gerritsz mentioned the murder of Cornelis May and part of his crew by the people of Greenland. This, and similar accounts led to the Inuit being judged as untrustworthy and dangerous even in the early eighteenth century.[148] In a sense the value judgements expressed by Van Linschoten, De Veer and Gerritsz were no different from other forms of practical knowledge: during expeditions, it was important to know which people were to be trusted.

Hessel Gerritsz' account of the people living in the land of the Samoyeds was more complete than the logs of Van Linschoten and De Veer. From Massa's notes and maps he had learned that the Russians had themselves performed many expeditions to Siberia to subdue the different Arctic tribes and Christianize them. In Gerritsz' book, this all happened through polite interactions, which were later refuted by Nicolaas Witsen's book on Tartary (1705). Witsen claimed many of the tsar's expeditions had been violent.[149] The *Anicouvij* were the main family, according to Gerritsz that led Russian expeditions into Siberia. Gerritsz remained rather vague about what the Anicouvij encountered in the distant lands. He knew that to the east there were beautiful forests, fountains, many herbs, and rare animals, but he blamed the Russians for not caring too much about knowledge, and not having published anything about their discoveries. The Russians took some of the Samoyeds home to Moscow where the visitors marveled at the many riches of the tsar, and the bustle of the city. At court the Samoyeds exhibited their exceptional skills with bow and arrow by shooting coins.[150]

Gerritsz account gave some idea of marvels and wonders in Tartary and Siberia. What can be gathered from the book on the land of the Samoyeds is that the author was very much interested in the origins of different people. He has much attention for the names of tribes and important Russian families. This focus on history and migration would return in some later land descriptions. That Gerritsz complained about a lack of sources reveals that he was interested in what the Russians themselves had written about their expeditions. Instead of relying on classical literature, he wanted to use sources closer to his subjects. If there were no literary sources, he preferred firsthand observations. Something of this historical interest could already be seen in Olaus Magnus, who made use of Viking sagas, chronicles of kings, and eyewitnesses. Johannes Schefferus, who would write the most extensive account of the Samoyeds in the seventeenth century, also used government records for his historical inquiry.

Ashworth connected the growing antiquarian interest to changing views of nature and history.[151] As has been discussed, collectors of curiosities did not distinguish between cultural and natural artefacts. In the second half of the seventeenth century the categorization of nature as well as well as the collection of human artefacts became increasingly important to collectors. Curiosities were traded for *naturalia* and cultural objects. This interest could already be found in Van Linschoten's log: he took one of the wooden idols from the island near Waygats with him, and transcribed symbols he found on a Russian cross. History and nature were made tangible and treated at least partially as subjects that could be studied without referring to existing literature.

[148] For example: Cornelis G. Zorgdragers, *Bloeyende Opkomst der Aloude en Hedendaagsche Groenlandsche Visschery* (Amsterdam 1720) 16. He stated that the people from Greenland were treacherous and retold stories of sailors that were murdered by the Inuit.
[149] Nicolaas Witsen, *Noord en Oost Tartaryen* (Amsterdam 1705).
[150] Hessel Gerritsz, 10-19, 26-29.
[151] Ashworth, 'Natural History and the Emblematic World View', 307-311.

# Different Worlds, 1662-1685

In 1662 Joan Blaeu, son of the cartographer that had tutored Hessel Gerritsz, published the *Atlas Maior*, an atlas-series in which he systematically mapped the globe, and provided an encyclopedic overview of the locations depicted. It was translated into Dutch two years later. The *Great Atlas* opened with maps and descriptions of *Arctica*, by which Blaeu meant "the lands under the north pole, and the northern parts of Europe; the kingdoms of Norway, Denmark (with the dukedom of Schleswig), Sweden, Russia, and Poland (…)"[152] With the lands under the north pole he meant Greenland, Spitsbergen (or Newland), Jan Mayen Island and part of New-England, Iceland, Nova Zembla, as well as the frozen ice-sea and the streets of Waygats, Davis and Hudson.[153]

Not every author meant the exact same locations by Arctica, or the Northern World, but already since Olaus Magnus' book there was a sense that the countries in the North formed a cohesive region, like the Indies or the New World. It was a world of long nights and endless days, of shy and treacherous people, of snow and cold, of bears, wolves, reindeer, and whales.

Like the collectors and natural historians that emphasized the symbolism in nature during the late renaissance, Blaeu tried to capture all knowledge of the world in a single work: the sea, the land, and even the heavens. To him, geography was the most important source of knowledge. It was the knowledge [*wetenschap*] that paved the way to honor and happiness, and that had many practical uses. According to Blaeu world history could only be understood as a series of events happening in geographical spaces. Geography could also be used to illustrate biblical events like the pilgrimage of Abraham, and Paul's journey through Asia in a single image. Furthermore, it could present the origin of the newly discovered herbs, roots, seeds, and animals. Lastly, Blaeu thought there was nothing more entertaining than wandering the entire world through the pages of a book.[154]

Blaeu's enthusiasm for geography is reminiscent of Gerrit de Veer's excitement for mathematics and navigation. Explorers armed with new navigational tools had discovered lands and seas the ancients could not have dreamed up.[155] Both explorers and geographers searched for factual, and practical knowledge that was free of the dangerously subjective interpretations of the natural historians and philosophers of old. Blaeu asked his readers to notify him if they found any errors in his book, so reprints could continuously improve his work; he wanted his atlas to be the definitive description of the world.[156]

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[152] Joan Blaeu, *Grooten Atlas* (1664) 28.
[153] Ibidem, 38.
[154] Ibidem, 13-15.
[155] Gerrit de Veer, 44-45.
[156] Ibidem, 7-8.

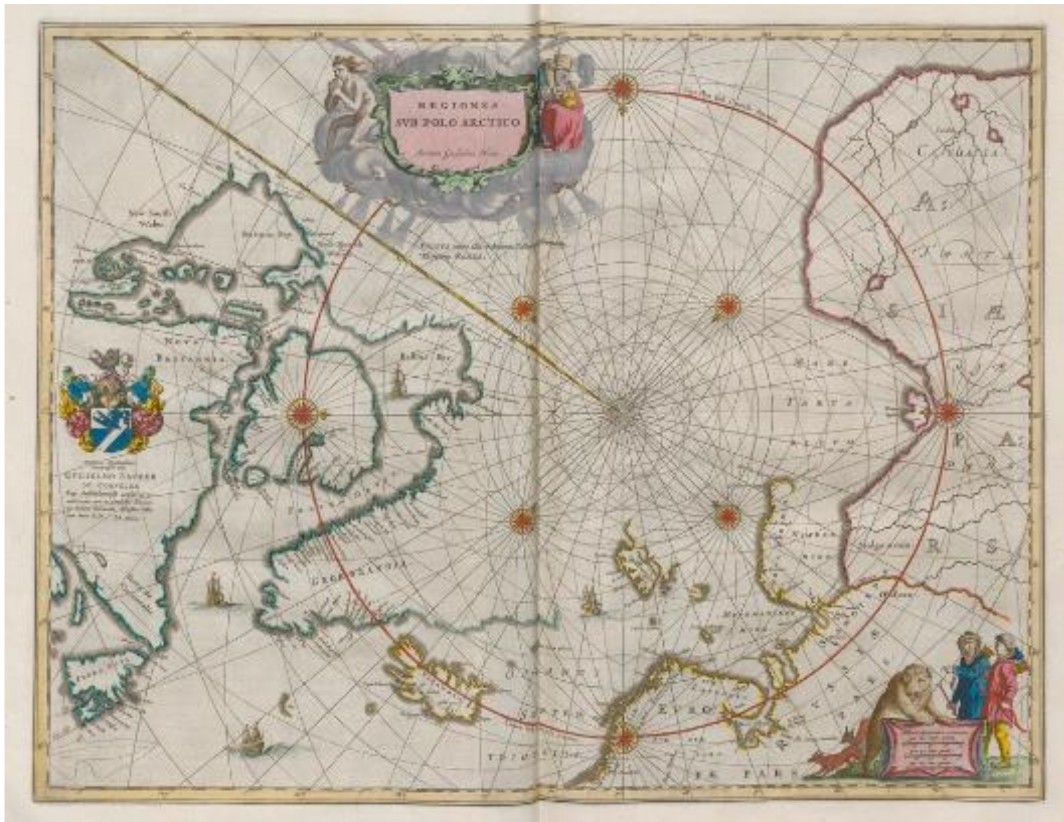


**fig. 14** Joan Blaeu. Map of the Arctic circle in the Grooten Atlas (1664). The four continents of Mercator's map have disappeared.

When history is viewed through the network of explorers, merchants, whalers and physicians, surgeons, botanists, and geographers, Cook's narrative of global commerce and the rise of modern science seems accurate. Nevertheless, as has been shown in the previous chapters, the distrust for classical authorities, Scripture and hearsay did not lead to a decisive break with tradition. As Peter Mason, Eric Jorink, Surekha Davies, and Anthony Grafton all emphasize, change was gradual and slow.

Many seventeenth century land descriptions that focused on parts of the Arctic world, like Greenland, Iceland, Lapland, or Spitsbergen both criticized *and* expanded on the literary tradition. These land descriptions are central to this chapter because they combined literary evidence with personal experience and eyewitness accounts. For accurate cultural descriptions the authors used historical sources and even learned about the native languages of the people from the Arctic.

*The Northern World* published by Simon de Vries discussed the two seemingly contradictory books of Martinière and Martens. That these books were published side by side reveals that the different styles of description were not necessarily perceived as incompatible. Travelers and geographers were also partially indebted to the books of Herodotus and Ptolemy. For Martens, however, even these books seem to have lost their relevance. His work was solely based on direct observations.

Although there existed great contrasts in interpretations of nature in this period, it would be overly simplified to think of the sober descriptions of Gerrit de Veer and Frederick Martens as the opposite of 'literary' and historical interpretations by scholars like Olaus Magnus and Johannes Schefferus. Often differences were subtler. In this chapter the incompatibilities and tensions between different authors are discussed. Different methods of description did co-exist, but the problems these different interpretations raised became increasingly harder to ignore.

## Copied Logs, Recurring Fables

The decades after the appearance of Gerritsz' land descriptions had seen the rise and fall of the centralized Dutch whaling company *The Northern Company* (*Noordsche Compagnie* 1614-1642).[157] During this time Jan Mayen Island was discovered, and two outposts were temporarily set up to process whales; one on Jan Mayen and one on Spitsbergen. After the fall of the *Northern Company*, whalers continued to hunt in smaller private companies. Most striking accounts published during this period were copied as cheap booklets in the 1660s and 1670s. Often these whaling logs were not very interesting for the natural history of the North. They were published to present the stories of survival of the sailors in the harsh climate of the North. The booklets did provide some general information about whaling, as well as descriptions of certain whale species, which will be discussed briefly. These whaling expeditions also further improved maps by including the newly discovered islands.

The logs that were published often told something extraordinary about the sailors' misadventures; they told of ships that had capsized in a storm, or people that had to winter in a foreign land.[158] During the era of the *Northern Company*, small crews of seven were sometimes left on Jan Mayen Island and Spitsbergen to see if it was possible to survive the long winter. The crew-members were volunteers. Some of them survived the winter, but others were less fortunate, their logs sometimes ending mid-sentence.[159] Their stories were copied multiple times in the seventeenth century. They told how the crews battled the elements and tried to survive while being haunted by polar bears. Logs by pioneers like Martin Frobisher, Jens Munk, and Gerrit de Veer, had become classics that were constantly republished and referred to.[160]

Whaling increased some knowledge of whale species and whale anatomy. The *Short Account of the Appearance of Whales* which appeared as an add-on to one of the journal-publications of the *Northern Company* about a wintering on Mauritius (Jan Mayen Island) in 1633-1634 told of the *Grandbay*-whale.[161] The *Grandbay* is described as stupid, but big and strong. It is the species that provided most blubber and oil, and was, because of its stupidity, most easily caught. Its eyes were no larger than that of an ox, with pupils the size of peas. Its ears were so small that they could hardly be found according to the author, although they widened on the inside and provided the whale with a sharp hearing. On its head were two blow holes through which the monster could blow out the water it drew in when breathing. The *Grandbay*'s tongue was eighteen feet long, and ten feet wide. The mouth was filled with beards, around 800 pieces, that were like sharp knives or swords. In the belly were sometimes found sea spiders and sea moss, which the author suspected to be its main diet. An abundance of sea spiders and sea moss was therefore a good indicator that whales were nearby.

The description exists solely of these types of observations and measurements. Like De Veer, the large marine animals are at times referred to as monsters, but the descriptions that follow are mostly sober and dry. There is one livelier passage in the account of the *Grandbay* about narwhals ripping away the fins of a whale and then eating out its tongue. However, most of the text is concerned only with the whale's outward appearance, and measurements of its different body parts.[162]

The account was added to a re-publication of three voyages to Greenland by Gillis Joosten Saeghman, which retold the expeditions ordered by the Danish king Christian IV. Historian and curator of Amsterdam University, Garrelt Verhoeven mentioned that Saeghman copied freely from

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[157] Hacquebord, *De Noordse Compagnie*.

[158] For example: Dirck Albertsz Raven, *Journael van de Ongeluckighe Voyage … Naer Groenlandt, in den Iare 1639* (Amsterdam 1665).

[159] Abraham Nering, *Iournael ofte Voyagie vande Groenlantsvaerders, Namelijck vande Seven Matrosz. die Ghebleven Waren op het Eylant Genaemt Mauritius …* (Rotterdam 1634).

[160] For example: Gillis Joosten Saeghman, *Drie Voyagien Gedaen Na Groenlandt*, or: Blaeu, *Grooten Atlas*.

[161] Add-on to Gillis Joosten Saeghman, *Drie Voyagien Gedaen Na Groenlandt*, 'Kort Verhael van de Gedaente der Walvisschen'.

[162] 'Kort Verhael van de Gedaente der Walvisschen'.

both shipping logs and scholarly texts. Sometimes he copied entire works, but more often he created shortened, cheap versions that were purposefully embellished, combining some account of the history, culture, and nature of foreign lands, but mostly emphasizing anything bizarre, wonderful or magical.[163]

Saeghman published a short land description of Scandinavia, in which he delved into the customs and appearance of Scandinavians, and the natural world of the North. About the 'unicorn', which in Saeghman's account was equal to the narwhal, he stated that it could punctures ships with its horn, leaving the crew to drown at sea.[164] Much of his account seems borrowed from Olaus Magnus. He told of werewolves, and magicians, and of even stranger things like a harp-player that appeared near the Finnish coast. Witnessing the harp-player was a bad omen. It meant that the highest civil superior of Finland would die, or that a sentry that had fallen asleep on duty would soon be thrown from the city wall. Saeghman finished the story of the harp-player by mentioning that the seas around Finland were filled with a variety of ghosts and monsters.[165] Some of his stories seem unfinished or written in a hurry. The popular booklets were far less complete than the more serious books of Olaus Magnus and Johannes Schefferus.

The popular imagery of the North had entertainment value. As will be seen from the discussions below, the reality of the fantastical claims about the North became ever more hotly debated. The cheap booklets were primarily a way to make money from the marvels of the North. They could be pleasant on their own account, like the forged basilisks and dragons. Saeghman was not primarily concerned with the truth but with creating a sense of wonder.

This does not mean that nobody believed in the fantasy world he portrayed. As has already been mentioned in the introduction, Simon de Vries was often inclined to give stories that the authors he translated designated as 'fables' the benefit of the doubt. The publishing company of De Vries also produced 'Books of Wonders': these were encyclopedias of preternatural and supernatural mysteries, animals, and objects, and 'jokes of nature'.[166] They were like cabinets of curiosities that celebrated the wonders of God through a series of supernatural animals and objects.[167]

The existence of unicorns was not the only thing that De Vries and Martinière disagreed on. During his travels Martinière was given a hoof by a Norse nobleman. It would supposedly work as a cure for 'falling sickness' (epilepsy). Martinière laughed off what to him seemed quite a ridiculous fable. The nobleman smiled and admitted that it had never been satisfactorily tested. De Vries added in an elucidation to the text that they were too soon to laugh it off: Olaus Magnus had written that someone would instantly recover from falling sickness if one would hang the outermost hoof of the right hindleg of a moose around his neck. Magnus specified that it would only work if the hoof belonged to a virgin male. It was also necessary that the hoof was cut off from a living moose, with an axe or another sharp object. The hoof had to be cut off after the middle of the harvest month. De Vries tried to strengthen his case by mentioning other doctors and writers that had published recipes for similar cures. It is one of the more obvious clashes of worldviews in the book.[168]

What the differences between De Vries' and Martinière's interpretations amount to are different values: Martinière presented himself as an eyewitness, while De Vries built his arguments by amassing literary evidence. An emphasis on observation did not equate to *disenchantment*. Martinière claimed to have personally witnessed many magical feats. And many of the things he supposedly witnessed came straight from the literature. He claimed that the captain of his ship bought wind from a magician from Lapland. The wind was tied into three knots, exactly like the story of Olaus Magnus discussed in the first chapter (although he claimed it were the Finns that sold wind). When the crew untied the first knot the ship took them straight to the maelstrom, the giant

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[163] G. Verhoeven, 'De Reisuitgaven van Gillis Joosten Saeghman "En Koopt er Geen dan met dees Fraaie Faem"', *Literatuur* 9 (1992) 330-338.

[164] Gillis Joosten Saeghman, *Beschrijvinghe van de Noordtsche Landen …* (Amsterdam 1663) 39.

[165] Gillis Joosten Saeghman, *Beschrijvinghe van de Noordtsche Landen*, 27.

[166] For example: Simon de Vries, *Groote Historische Rariteyt-Kamer* (1683).

[167] Jorink, *Boeck der Natuere*, 361-371, 404-407.

[168] Ibidem, 10-11.

whirlpool that appeared near Lofoten on the *Carta Marina*. When the Danish crew undid the second knot the wind swept them away to the Roxella mountains. There the compass of Martinière began to act strangely for the sailors neared the magnetic stones – the *Insula Magnetum*. When the third knot was untied, it conjured a great storm, and the ship crashed against the cliffs.[169]

Martinière refuted many fables while simultaneously stating he had lived through the well-known stories himself. He also created new stories of his own. He told for example that each Lapp family had a black cat with which they conversed: the cats were devils in disguise. They also spoke to their reindeer which could take them anywhere unnaturally fast. Martinière noted that the reindeer were spurred on by demons.[170]

The interest in these types of stories was not confined to the lower classes. Adriaen van Nispen, one of the lawyers of Johan de Witt, and translator of classical literature, also edited a book of travels in the style of Saeghman. This compilation work of travel accounts included voyages to Russia, Iceland, and Greenland. The book retold many of the northern tales of dwarves and magic and provided cultural descriptions that emphasized the bizarre and sinful practices in foreign cultures. The book contained an entire chapter on bestiality and sodomy in Russia.[171] A different traveler told that Icelanders washed themselves with their own urine.[172] The travel accounts on which these stories were based had been circulating for a long time: the travel account about Russia came from the hand of the fifteenth century priest Nicolaes Cleynaerts. The work on Iceland and Greenland was originally written by Dithmar Blefken and told of a voyage made in 1563. Pieter van der Aa still reproduced this travel account – "now translated for the first time" – in 1706.[173] Sixteenth century literature on the North remained popular and inspired original works like the books of Saeghman. Olaus Magnus was still in favor; Dutch translations of his book still appeared in the 1660s.[174]

In the travel account of Blefken, a blind monk told the traveler that in the monastery of St. Thomas on Greenland lived hairy dwarves with beards up to their knees. They could not talk but made quacking noises, like geese.[175] A shortened version of this tale could be found in Saeghman's land description of the North and was probably one of the accounts that kept the myth about pygmies alive.[176] It seems almost as if Blefken was poking fun at the reliability of the eyewitness (the monk is blind), but nowhere did he question what he was being told.

De Vries and Saeghman borrowed elements from sixteenth century natural histories, but the wonders of nature had lost much of their symbolic significance and became something entertaining and interesting for their own sake. Popular travels and descriptions focused on stories, partly stripped of the underlying metaphysical assumptions that were central to the works of Olaus Magnus and Adriaen Coenen. What had not changed was that some of the stories were believed while others were regarded as fables. Which story was true depended on the author. The combined narratives made up a consistent imagery of the North: it was a cold and magical place, with its own gods and demons, shrouded in dark and with a long history of wars and kings.

As mentioned in the introduction to this chapter, the different emphases in popular literature and more systematic land descriptions and atlases was gradual. Joan Blaeu expressed appreciation for Abraham Ortelius and Gerard Mercator, his forebears, even though they had been more inclined to copy from ancient and medieval literature. Again, disagreement with predecessors did not mean the

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[169] Pierre Martin de la Martinière, *Nieuwe, Aenmerkelijcke Reys*, 19-22.

[170] Ibidem, 32.

[171] Adriaen van Nispen, *Verscheyde Voyagien*, Voyage by Nicolaes Cleynaerts, 120-122.

[172] Adriaen van Nispen, *Verscheyde Voyagien*, Dithmarum Blefkenium, *Voyagie ofte Reyse na Ys-lant ende Groenlant*, 182-183.

[173] Pieter van der Aa, *Scheeps-Togt na Ysland en Groenland, Gedaan door Dithmar Blefkenius In 't Jaar 1563 … Nu Aldereerst Vertaald* (Leiden 1706).

[174] Olaus de Groot, *Toonneel der Noordsche Landen* (Nicolaes van Ravesteyn, Amsterdam 1652). Olaus de Groot, *Toonneel der Noordsche Landen* (Hieronymus Sweerts, Amsterdam 1665).

[175] Adriaen van Nispen, *Verscheyde Voyagien*, 203-206.

[176] Gillis Joosten Saeghman, *Beschryvinghe van de Noordtsche Landen*, 24.

downfall of their authority. Blaeu still thought of Ptolemy as geography's prince.[177] Like Sebastian Münster, he thought of himself as continuing the work of is hero, not undermining it. The Arctic circle was on Blaeu's map again largely *terra incognita* (see fig. 14): the four continent, the pygmies, and the magnetic rock had disappeared.

In his description of Iceland, Blaeu referred to the special fountains from Ortelius' description, but his account is less fantastical: he stated that on Iceland there was a fountain that *tastes like* beer, not that it was a fountain of beer. When he told the story of mount Hecla and the pits of hell, he mentioned it as a story that was believed by the locals.[178] Martinière, whose book was somewhere between a popular travel book and a comprehensive land description also thought the stories about Hecla were made up.[179] Simon de Vries of course took the myth more seriously. In an elucidation to the text by Isaac la Peyrère, de Vries explained Mount Hecla was indeed a gateway to hell.[180]

Although whalers annually sailed for Jan Mayen Island and Spitsbergen, many other Arctic locations had not seen Dutch explorers since the voyages of Gerrit de Veer and Jan Huyghen van Linschoten. Their logs were largely reworked into the descriptions of Joan Blaeu. Many of the images used were also familiar: the walrus mother and child from Hessel Gerritsz's book on Spitsbergen and the *parhelia* witnessed by De Veer.[181] Blaeu also used Van Linschoten's imagery of the natives for a map decoration (see fig. 13 in the previous chapter). Like Surekha Davies has shown, atlas-makers relied on multiple sources to create a synthesis of different sources. They were often not the ones that traveled to the locations they depicted and were inclined to bring the overload of new information back to familiar-looking essentials.[182] Blaeu seemed to have been more skeptical than his forebears because of his familiarity with the books of Van Linschoten and De Veer. Still he fused information from their accounts with literary evidence to create a sober interpretation of the Arctic that was more complete than if he had used only the travel logs. That he asked readers to notify him if they found any errors shows that his attitude towards geography was much the same as that of his hero, Ptolemy. Maps and atlases were there to be improved.

Many stories about the Arctic were debated, but decisive evidence was hard to come by. Even the stories that were predominantly considered fables were entertaining enough to publish. Both Adriaen van Nispen and Gillis Joosten Saeghman included the tales about dwarves in Greenland in their book, which were even by Simon de Vries considered to be made up. It might be comparable to Adriaen Coenen who incorporated many "old wives' tales" into his manuscripts. As will be seen, more serious authors like as Johannes Schefferus and Isaac la Peyrère complained about the many erroneous tales that circulated about the Arctic.

## Animals, Curiosities, and Dissections

The second part of *The Northern World* contained the detailed observations and drawings of animals and plants by Frederick Martens. It was of a very different nature than the book by Martinière. Martens began his book with a short log of his travels, to which he added a rich catalogue of the natural world of Spitsbergen. The chapters were divided into different categories: mountains, rivers, animals, plants, herbs, minerals, ice, and weather. Nowhere did it mention anything monstrous or supernatural.

Martens had dissected many of the animals he discussed in the book. Through these dissections he found out about their diet and internal organs. For the puffin, for example, he mentioned that seaspiders and starfish were sometimes found in their stomachs.[183] He also mentioned that he had

[177] Joan Blaeu, *Grooten Atlas*, 29-30.
[178] Ibidem, 101.
[179] Pierre Martin de la Martinière, *Nieuwe, Aenmerckelijke Reys*, 118.
[180] Elucidation by Simon de Vries to the text of Isaac la Peyrère, *Nauwkeurige Beschrijvingh*, 43.
[181] Joan Blaeu, *Grooten Atlas*, 71, 72, 89.
[182] Davies, *Renaissance Ethnography*, 11.
[183] Frederick Martens, *Spitsbergen*, 243-244.

witnessed the dissection of the breast of a polar bear and remarked that the breast milk was white and very fatty.[184]

In the introduction to the text, Simon de Vries mentioned that Martens had contact with doctor Fogelius and doctor Kirstenius with whom he discussed the properties and characteristics of the plants and animal species that appeared in the book.[185] He probably meant the German doctor and linguist Martinus Fogelius (1634-1675) and seeing that Martens made his trip in 1670, Kirstenius was possibly a relative of the physician and orientalist Petrus Kirstenius (1577-1640). Martens took with him some samples for the doctors to investigate.[186] Surprisingly Martens did not mention the healing qualities of scurvy-grass, so Simon de Vries added an explanation by Van Linschoten.[187]

The cooperation between Martens and the doctors is comparable to that of Van Linschoten and Paludanus. The main difference is that Van Linschoten presented Paludanus only with marvelous objects, like the walrus skull, while Martens also wanted the doctors to study things like herbs and weeds. Martens described everything from snails and weeds to whales and polar bears. He was interested in categorizing and understanding nature as it presented itself. Jorink has shown that in the second half of the seventeenth century many cabinets of curiosities had transformed into collections and catalogues of nature: it was no longer about marveling at the uniqueness of an object, but about recognizing patterns and regularities.[188] For those interested in laws and regularities the importance of the emblematic and marvelous declined. It is striking that for De Vries this new world was not incompatible with the world of Martinière.

Martens sometimes performed little 'experiments'. He mentioned that the seed of the male smelled of wheat flower and floated on the surface of the water. He put it in a bucket and tried to dry the seed in the sun after boiling it with water. First, he tried it with sea water, and then with fresh water. Both attempts failed: the whale seed became brown and began to rot. What he was after was to keep the seed in a jar and take it to Hamburg because spermaceti was prized by apothecaries. Spermaceti is a wax like substance with which one could produce candles. The spermaceti, however, was a substance from the head of a sperm whale. Martens does not delve deeper into the subject, but it seems he went after the wrong substance.[189]

Much of what Martens wrote, was intended for practical use. For example, he provided suggestions of herbs to chew against sea sickness.[190] He also mentioned warning signs of a coming storm, such as the appearance of tuna or other big fish near the surface of the water.[191] Furthermore, he provided suggestions for how to navigate the icy seas.[192] Like Gerrit de Veer and Van Linschoten, Martens mentioned which animals and plants were edible. Polar bear meat looked sheep-like, but when you ate it, the sailors said that you would turn grey, so Martens did not recommend it. The polar bear did have other uses; Martens said that grinding the polar bear's teeth could help as a medicine against clotted blood.[193]

The focus on useful knowledge and tiny details corresponds to the developments described by Harold Cook and Eric Jorink. The sober account of Spitsbergen was based on personal experience. Martens presented nature as a collection of *matters of fact* and withheld underlying interpretations. Eric Jorink argues that the increased interest in anatomy and in the microscopic world of insects and

[184] Frederick Martens, *Spitsbergen*, 254-255.
[185] Introduction by Simon de Vries to Martens's text. Martens explains which herbs or animal remains he sent to the doctors, just like Van Linschoten did with the curiosities he had sent to Paludanus. Sometimes Martens notifies the reader about having sent a specimen to one of the doctors.
[186] Frederick Martens, *Spitsbergen*, 217-219.
[187] Elucidation to Martens' text by Simon de Vries, 219-220.
[188] Jorink, *Boeck der Natuere*, 111-114, 361-368.
[189] Frederick Martens, *Spitsbergen*, 296-297.
[190] Ibidem, 190-192.
[191] Ibidem, 193-194.
[192] Ibidem, 198-213.
[193] Ibidem, 257.

plants led to an appreciation of regularities and patterns in nature.[194] A similar interest could be found in Martens' categorization of plants and animals: his book reads like an orderly cabinet in which every animal or plant had its own place in the natural world.

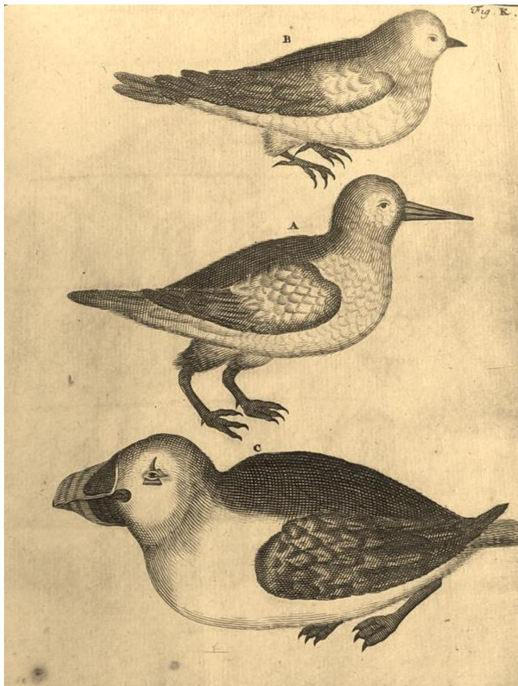

fig. 15 Frederick Martens' drawings of sea birds.

**fig. 16** Pierre Martin de la Martinière's drawings of sea bird, Samoyeds, and a monstrous looking narwhal.

The last book of the Swedish scholar Johannes Schefferus about Lapland was categorized similarly to the book of Frederick Martens. Because of his interest in culture he provided linguistic backgrounds to his descriptions. The interest in linguistics (and history) by scholars like Schefferus and Isaac la Peyrère separated them from Martens. Although Schefferus often disagreed with authors like Olaus Magnus and Albertus Magnus, he was in continuous debate with them.

Schefferus relied on a wide variety of sources. He argued reindeer were often misunderstood by ancient authors. Peucerus had called them *Taranden*. These were not reindeer, according to Schefferus, but animals made up by Pliny. Pliny wrote *Taranden* were as big as an ox and had long hair that could have any color of the rainbow. Schefferus thought Olaus Magnus' description of reindeer was slightly better. Magnus had explained the etymological heritage of the word (*rhee*): it came from *rancha* or *locha*, the wooden chain used to attach them to a sled.[195] In his description Schefferus not only argued with other authors, but also made use of anatomical studies. He explained that reindeer did not ruminate like cows. He knew this from the Dutch anatomist Frederik Ruysch. Ruysch' anatomical cabinet was home to many whale-remains.[196] Probably these objects were gathered for him by whalers, like Martens did for Fogelius and Kirstenius. Schefferus debated with the literature but was also aware of the more fact-based scholarship from collectors and the merchant class.

Although Schefferus' work was more in line with his predecessors than that of Frederick Martens, he also made use of new methods. He used not only anatomical studies, but also delved

[194] Jorink, *Boeck der Natuere*, 321-323, 262-265.
[195] Johannes Schefferus, *Lapland*, Book 3, 2.
[196] Frederik Ruysch, *Alle de Ontleed – Genees – en Heelkundige Werken van Frederik Ruysch*, Book 1 (edited by Ysbrand Gysbert Arlebout, Amsterdam 1744) 330.

into the history and languages of the Arctic. To a lesser extent this could also be seen in Van Linschoten, De Veer, and Adriaen Coenen who often provided animals with all their known names.

Animals and people, as well as cultural artefacts were often treated as curiosities, to be collected, described, and put on display. The account of Spitsbergen and Greenland by Isaac la Peyrère, provide many examples of natives that were taken from Greenland to Europe. La Peyrère mentioned, like Adriaen Coenen, that the natives only ate raw meat. He also mentioned they drank whale oil. After they were captured, some Inuit tried to escape from Denmark with their kayaks, but they were either caught or went missing at sea. The ones that remained died of grief, according to La Peyrère, because they could not return to their homeland.[197] Many of the objects taken from these captured Inuit, such as the kayaks, were donated to the cabinet of Ole Worm.[198] In the famous frontispiece of the inventory of the *Musei Wormiani Historia* one of the kayaks can be seen hanging from the ceiling (see fig. 17).

**fig. 17** Frontispiece of the cabinet of Ole Worm (1655). This cabinet is often taken as representative of cabinets of curiosities.[199] The cabinet holds many objects from the Arctic: in the back can be seen a narwhal-tooth. To the right can be seen the skull of a walrus. Suspended from the ceiling hangs a kayak and a polar bear.

Some of the captured natives were temporarily sent to the house of Olearius, the one who had written the inventory for the duke of Schleswig-Holstein. He included drawings and descriptions of them in the inventory. The cabinet was also enriched by an idol from Davis Street. The idol was

[197] Isaac la Peyrère, *Nauwkeurige Beschrijvingh*, 71-79.
[198] Ibidem, 76.
[199] Harold Cook, William Ashworth, and Eric Jorink all use the cabinet as an example: Cook, *Matters of Exchange*, 269. Ashworth, 'Remarkable Humans and Singular Beasts', 114. Jorink, *Boeck der Natuere*, 271.

clothed in sheepskin, bird feathers and chains of small fish teeth. Olearius said the Inuit's ritual with the idol was meant to honor the elements.[200]

Besides Inuit, other northern people were also taken from their homes. Martinière told how the Danish captured two people on Nova Zembla on behalf of the king.[201] Schefferus told a story of a young Swedish prince who had sent a Lapp and his wife to the duke of Schleswig-Holstein. The Lapps, together with their reindeer, did not last long at the duke's home, because, Schefferus explains, they were not fit for living in a different country and were saddened by the idea of never returning home.[202] Collectors were interested in everything from the North; objects, animals, and people. They were all treated as curiosities and things to study.

## History, Linguistics, and Magic

> "(…) as of yet we have had no good description [of the North], because [the books] the interested amateurs [*liefhebbers*] have used for so long, they will find here, are more childish fairytales than truth, and even the truths have been handled so strangely [*op zulk een vreemde wijs*] that they can hardly be taken for truths."[203]

Jan ten Hoorn, Dutch translator of Johannes Schefferus argued in the introduction to the book that Schefferus would rid the Arctic of the many erroneous tales that circulated. Schefferus would enlighten the public to the last area of the globe shrouded in darkness. Ten Hoorn noted that the book was based on a great many sources: Schefferus did not rely only on medieval manuscripts, but also on his own observations and sources from governmental and missionary missions. The book covered the customs, language, religion and history of the Lapps and Finns. Throughout the work, Schefferus critically analyzed the remarks of other authors, not only marking their errors, but also expanding upon some of the things they had written.

The book is filled with interesting remarks on the culture and customs of Lapps. In general, Schefferus is not very positive about his subjects. He viewed the natives as a slightly backward people, and overall impious Christians, although he claimed the Swedish schools were starting to improve the situation. Schefferus noted that many authors wrote about the Lapps and Samoyeds as if they were different people, they were one and the same: the people called themselves 'Samoyeds' and understood 'Lapps' as a derisive term.[204] Lapland was divided in a Russian, Danish and Swedish part, which were subdivided in *marks*, or provinces with multiple *biars*; tribes of blood relations.

The Lapps were the smallest people of the North, according to Schefferus.[205] Their short stature was a consequence of the cold and their diet. He described them as ugly and crooked, although the women were more beautiful than the men. Schefferus described their heads as broad and wide, with blue eyes, short, flat noses, sunken cheeks, long chins and short hair. He noted their beards were thin even though the hair was very black. Then the account became more positive: Schefferus mentioned the Lapps were more powerful than most other peoples. Their strong legs made them extraordinarily good at running and climbing.[206] He then returned again to more negative remarks: the Lapps were often angry and behaved like animals. Especially the women were violent. They also easily revealed their naked bodies "that should be covered by shame."[207]

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[200] Adam Olearius, *Kunst-Kammer*, 5.
[201] Pierre Martin de la Martinière, *Nieuwe, Aenmerkelijcke Reys*, 101.
[202] Johannes Schefferus, *Lapland*, Book 1, 11-12.
[203] Jan ten Hoorn in the introduction to the text of Schefferus, *Lapland*, Book 1, 3.
[204] Johannes Schefferus, *Lapland*, Book 1, 2-10.
[205] The translator probably made an error for he states that the Lapps are around three el long (though sometimes much shorter). Three el corresponds to approximately two meters.
[206] Johannes Schefferus, *Lapland*, Book 1, 10-11.
[207] Ibidem, 11-12.

There were tribes, such as the Torna, that were better off than the average Lapp. They cared for their parents, were monogamous and had marriage customs. Schefferus noted that even among the Lapps there were people that detested robbery and were good and kind to the poor.[208] It is a prime example of the duality that could also be found in the description of cannibals and pygmies. The Lapps were impious idolaters that dealt with the devil, and they were also strong, brave, and social. It was the dual image, that could also be found in the books of Olaus Magnus. This duality might have originated in ancient authorities, but it is striking that these authorities are never explicitly mentioned. Grafton linked the dual image to Herodotus, but Herodotus is never referred to by Schefferus. The use of frameworks might have been subtler than borrowing specific stories and descriptions from the literature. The frameworks might have been so engrained in the description of people that they were no longer regarded as a literary invention. Maybe to Schefferus it did not feel like borrowing something from ancient tradition but merely the only way to describe peoples that he had conflicting feelings about.

| *Neerduidſe taal.* | Laplandſe taal. | Finlandſe taal. |
|---|---|---|
| De Son | *Beivve* | *Auringa.* |
| Den Hemel | *Albme* | *Taivvas.* |
| Water | *Kietze* | *Weſi.* |
| Regen | *Abbra* | *Sade.* |
| Sneeuw | *Mota* | *Lumi.* |
| Een Man | *Vlmugd* | *Ihminen.* |
| Een Vrouw | *Niſſum* | *Waimo.* |
| Het hair | *Waopt* | *Hiuxi.* |
| Het aanſigt | *Nialbme* | *Suu.* |
| De kin | *Kaig* | *Leuca.* |
| Het hert | *Waibmi* | *Sydaon.* |
| Vleiſch | *Ogge* | *Liha.* |
| Een wolf | *Seibik* | *Suſi.* |
| Beer | *Muriet* | *Karhu.* |
| Vos | *Riemnes* | *Kettu.* |
| Een getrouwt man. | *Albma* of *Olma* | *Mies.* |

**fig. 18** Language comparisons in Schefferus' book that show that Finnish and Lappish are unrelated.

Although the Lapps were officially christened they were not very pious. They combined the new Christian religion enforced by the Swedish church with their native beliefs. Schefferus noted that they held their ancestors in high esteem and honored them as if they were gods. The three most important gods were Thor, Storjunkare and the sun. Thor, or Thoron was represented by a tree-trunk with an inserted hammer; a remnant from Norse mythology. Schefferus mentioned a story of Johannes Tornaeus, who wrote that Storjunkare sometimes appeared as a man in black before fishermen and hunters, which signified they would have a good catch that day.[209] Next to universal gods the Lapps had different *Seiten*, or house-gods and knew of ghosts and night spirits that

[208] Johannes Schefferus, *Lapland*, Book 1, 12-14.
[209] Ibidem, 55-56.

appeared in the mountains and swamps.[210] When a ghost or spirit was witnessed, the natives marked the place with poles and made it into a sacrificial altar for Storjunkare. The place then could only be visited by men because the women were deemed impure, especially if they were menstruating.[211] Schefferus followed up on this with a story that also appears in the travel account of Nicolaes Cleynaerts: when ships were bewitched by the devil so that they could no longer move forward, menstruation blood could be used to break the spell because it was so impure that even the devil disliked the stench.[212]

**fig. 19** A Lapp conversing with the devil and his dwarves [*kaboutermannetjes*] in Schefferus' book.
The drawing was added by a Dutch artist (Jan Luyken).

Every family had its own demons to protect them against enemies, to fend of bad thoughts, or to harm someone they disliked. The devils that seduced them and gifted them with magical powers appeared sometimes in the shape of little dwarves [*kaboutermannetjes*]. The dwarves were for some unexplained reason never with more than nine. Sometimes the devil appeared to his followers while singing a melody. By chanting his song, the magicians could conjure him in the forest.[213]

The only way to find out about the magic of the natives, according to Schefferus was by talking to the children or feeding the natives drunk. He stated that all he found out, he put into his book. Like their ancestors the Biarmers, the Lapps were great wizards, something that Ziegler, Olaus Magnus and Tornaeus all confirmed. [214]

It is striking that in writing about their magic, Schefferus is very uncritical compared to the other sections of the book where he points out exactly how his interpretations differ from those of

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[210] Johannes Schefferus, *Lapland*, Book 1, 50.
[211] Ibidem, 60.
[212] Adriaen van Nispen, *Verscheyde Voyagien*, Voyage by Dithmarum Blefkenium, 179-180.
[213] Ibidem, 72-73.
[214] Johannes Schefferus, *Lapland*, Book 1, 70.

sixteenth century authorities and contemporaries. His studies into the language, hierarchy, and customs were much more thorough than those of other authors. He used the Viking sagas and Swedish sources to relate where the Lapps and Finns came from, under which kings they were banished from the realms of Sweden and when they were first Christianized. He tried to understand their history and relationships between tribes, pointing out subtle cultural differences.

Maybe he was less critical because he personally witnessed their magical rituals. The natives themselves had many ritualized practices that were used to guarantee a good hunt. For their magic the Lapps used drums that they beat with a small hammer. They also supposedly used animals that were connected to demons and the devil such as frogs or serpents. The drums were decorated with their gods, and sometimes combined native and Christian symbols. Schefferus suspected the natives to be able to perform magical feats from the literature he had read, and this was confirmed by the things he personally observed.

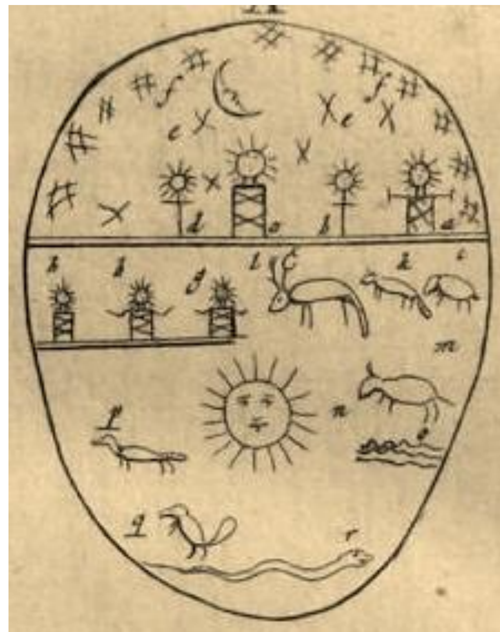

**fig. 20** Drawing of a magic drum in Johannes Schefferus' book. It combines Christian – and native symbolism. On the top are Storjunkare and Thor with servants. The three figures below the gods are supposedly Christ and two apostles.
Other symbols are the sun, the moon, and animals.

Although large sections of the book involve magic, Schefferus also mentioned other ritualized customs: their ways of hunting and their (Christianized) marriage, burial, and baptism rituals. Like Joan Blaeu, he had the tendency to provide a complete, or even definitive account. The examples of a different religion, and magic are highlighted here, because they also appeared in the other travel accounts and signify that for many the North was still very much an enchanted place. It had been a consistent element of Arctic imagery since Olaus Magnus' book, and probably even before. A critical attitude, and a methodology based on personal observations did not necessarily equate to a disbelief in magic. On the other hand, many beliefs and dubious claims that were still important enough in the late sixteenth century to record on maps and in texts, such as the magnetic island on the north pole, the sea monsters, the unicorns, and the pygmies, disappeared from most scholarly texts or were marked as ignorant fables and left to the popular literature.

Ashworth made a connection between the antiquarian interest that developed in parallel to new

interpretations of nature.[215] As has been shown by Jorink and Grafton, the initial interest in history and linguistics was motivated by ancient and biblical literature: scholars searched for the original language of Adam, and a deeper understanding of the Bible.[216] Like Olaus Magnus and Johannes Schefferus, Isaac la Peyrère was interested in the history of the people of the North. For La Peyrère this interest was connected to his understanding of the Bible. The historical research done by Joseph Scaliger (1540-1609) had uncovered facts that were hard to reconcile with Scripture: the history of Egyptian pharaohs for example, went further back in time than the history of the earth according to Christian doctrine. These problems led to creative new histories that tried to reconcile Scripture and the origin of different peoples. For La Peyrère, Adam was not the first man, but a metaphorical father of men, because he was the father of all sinners.[217] The newly discovered native cultures created tensions that convinced some to alter their views, while others simply adapted their framework to fit the new information. La Peyrère made no mention of his biblical studies in his history of Greenland and its peoples, but it is interesting that his antiquarian interest was partially motivated by his views on Scripture. Again, it depended on the author if new methods stimulated a break with literary traditions or led to an adaptation of the literature.

## Methods of Description

In the late seventeenth century ancient and medieval authors were increasingly criticized, but this did not lead to the immediate downfall of old authorities. The believability of certain stories stood the test of time because they kept being repeated and expanded upon. The magicians selling wind in the Arctic that could be found in Olaus Magnus, also appeared in the accounts of Martinière and Schefferus.[218] Simon de Vries showed with his discussion on unicorns that even overwhelming evidence could not definitively settle a matter. Still, the disappearance of pygmies and sea monsters from marine maps and the more serious land descriptions, show that some fables fell out of favor. The books of wonders that Simon de Vries worked on demonstrate that, even so, the supernatural and preternatural had a continuous popular appeal.

**fig. 21** Finns selling wind in Olaus Magnus' *Description of the Northern Peoples* (1555)

Gillis Joosten Saeghman, Simon de Vries, and Adriaen van Nispen were mostly invested in the

[215] Ashworth, 'Natural History and the Emblematic World View', 307-311.
[216] Jorink, *Boeck der Natuere*, 109-110. Grafton, *New Worlds, Ancient Texts*, 210-211.
[217] Grafton, *New Worlds, Ancient Texts*, 210-211.
[218] Pierre Martin de la Martinière, *Nieuwe, Aenmerkelijcke Reys*, 19. Johannes Schefferus, *Lapland*, Book 1, 93.

extraordinary and the wonders of nature. Martinière's book was an odd mix: he criticized many 'fables', but also reproduced fables, and claimed to have experienced some of the well-known stories for himself. It shows that being a merchant-explorer did not necessarily equate to objective or truthful accounts. His book combined knowledge and entertainment.

Stories and logs about the North were continuously recycled and slightly altered throughout the century. Many – though definitely not all – of the well-known stories had some basis in reality. That so many books commented on Lapps and Finns selling wind might also have also been 'true' from the point of view of the natives, seeing that they had an entire culture based on influencing the natural world through rituals.

Johannes Schefferus based his account mostly on personal experience. It would be anachronistic to blame him for interpreting the Lapps as magicians when he saw them perform rituals that were probably interpreted by themselves as magical. That he then assumed some of the other stories of devils and ghosts to be true, fitted his worldview. It might be comparable to the divine omens witnessed by Gerrit de Veer: there was no other way for De Veer to understand the Nova Zembla-effect or the parhelia he witnessed. The three suns witnessed by De Veer were also witnessed by Jens Munk. Saeghman and La Peyrère both reproduced the account from Munk's shipping log. What is harder to explain is that the appearance of the three suns was followed by an eclipse during which the symbol of the cross appeared on the moon.[219] In the mid-seventeenth century accounts of the Arctic were a tangled web of *matters of fact*, textual criticisms and strange observations.

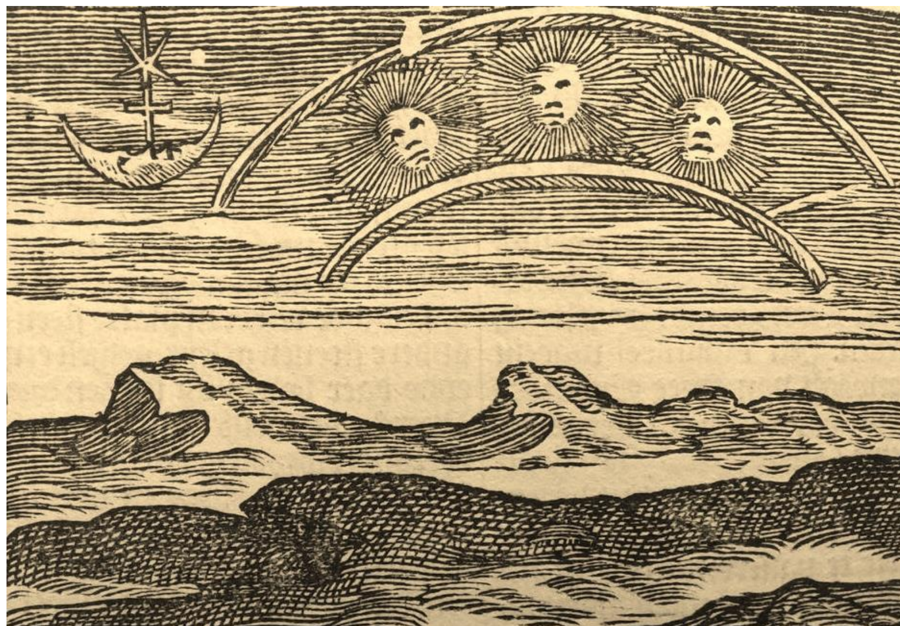

**fig. 22** The three suns and the moon with a cross symbol that were witnessed by Jens Munk. The drawing is from the publication of Gillis Joosten Saeghman.

In Schefferus' work, history and linguistics were integrated into his land description. He was also very systematic in his writing about nature, although his descriptions were less in-depth than the anatomical descriptions that could be found in the work of Frederick Martens. Martens seemed to extend the tradition of 'objectivity' strived for by Gerrit de Veer and Jan Huyghen van Linschoten. These types of descriptions of nature were part of the core of Harold Cook's argument that global commerce and modern science were deeply connected. Martens' relationships to collectors and scholars at home are reminiscent of the relationships between explorers and geographers at the end

[219] Isaac la Peyrère, *Nauwkeurige Beschrijvingh*, 93-95.

of the sixteenth century. Hessel Gerritsz and his mentor William Blaeu used the knowledge gathered by these networks to produce their own maps and descriptions, mixed with what they knew from the literature.

The people of the North were in most sources described as magicians that were easily fooled by demons. Besides the account of Gerrit de Veer, many authors were mostly negative about Lapps, Finns, Muscovites, Icelanders and the Inuit. They were sometimes presented as more beast than man, but still they were people with a distinct history and culture; not Plinian monsters.

The narrative of the *disenchantment* of the world is a too direct and linear account of the seventeenth century. At the same time many geographers and explorers did distance themselves from the literary traditions and created new methods for describing nature and people. Authors like Schefferus, La Peyrère and Martinière criticized their forebears but still showed whenever they indebted to them, just like Joan Blaeu did for Ptolemy, Ortelius, and Mercator. As the seventeenth century drew to a close, the methods of Frederick Martens became increasingly more dominant in the 'sciences', but the more literary interpretations never went away. Even when scholars would distance themselves more from the sixteenth century literature, there was still a place for the enchanted world in the popular literature.

# The Paradox of the North

In hindsight, the narrative of *disenchantment* and the 'rise of modern science' is difficult to resist with the knowledge that the methods used by Frederick Martens would eventually become dominant in natural history. A focus on merchants and explorers could create a sense of linear scientific progress. A few general assumptions in this narrative are problematic. Eric Jorink has shown that new methodologies might have become more dominant, but the older worldview did not suddenly disappear. Rather, it was adapted. Peter Mason has pointed out that change in natural history was gradual: stating that a handful of key texts directly changed the course of history is overly simplified. Anthony Grafton and Surekha Davies have shown that even within the culture of geographers and merchants, frameworks from the classical literature were sometimes used to create a sense of familiarity.

Debates had always been part of the literary tradition(s). There was no unified body of texts that described nature without problems and inconsistencies. New facts brought in from previously unexplored locations could lead to both an adaptation of old frameworks, or to a distrust of literary evidence. Some explorers and merchants became increasingly more dependent on their own observations, but they still relied in their own ways on books. The main difference with the sixteenth century scholarship was that they understood nature more as a collection of facts than as a collection of symbols. Around the mid-seventeenth century, however, it was still impossible to know for certain that this would become the dominant interpretation of nature. Furthermore, descriptions based on observation, and literary criticism were not new: already in the sixteenth century authors combined textual criticism and personal observations in their descriptions of foreign worlds.

Although there were many classical sources to create a lasting mythology of *Hyperboreans* and *pygmies*, more important to the imagery of the Arctic were the medieval chronicles and the folklore of hunters and fishermen. The world created by medieval and sixteenth century authors created a lasting imagery of magic and monsters for the Arctic. Even though Schefferus based most of his descriptions on his own observations, this did not *disenchant* his world. Instead, many of his observations of the strange rituals of natives fitted with what he expected to find: a country of powerful magicians.

Around the beginning of the seventeenth century, it seemed that descriptions of the Arctic would radically change. Geographers and explorers were the main persons invested in Arctic descriptions and found that what they observed differed from what was 'known' to ancient and medieval authorities. As the century progressed, however, the Arctic became more of general cultural phenomenon that appeared in many forms of literature; from atlases to shipping logs, to short booklets and thorough land descriptions. In this literature many of the debates from the sixteenth century still had a place.

It might be worthwhile to investigate to what extent general attitudes in the Netherlands on magic (and other supernatural phenomena) differed from those in other countries. It might be telling that most of the books about magic in the North were originally not written by Dutch scholars. The only original Dutch works were the small, popular booklets. It could reveal something about how seriously the more academic books of Schefferus and Olaus Magnus were taken, as well as the more embellished travel account of Martinière.

Although change was non-linear and gradual, there was a slow development towards less literary, and more sober descriptions based on eyewitness accounts and experiment. This was not the full story, but it should be emphasized. What makes the historical narrative complex is that there was no clearly defined 'enchanted world': there only existed a wide variety of non-cohesive ideas about the preternatural and supernatural. Some of these ideas survived the seventeenth century, while others did not. From the manuscripts of Adriaen Coenen and the logs of Van Linschoten and De Veer it becomes clear that divine omens held a different status than the sea monsters described

by Olaus Magnus. That pygmies were degraded to popular literature reveals that at least some old debates lost their relevance near the end of the seventeenth century.

The literature could not explain many newly discovered phenomena, and some of the supposed creatures from the literature were never encountered in real life. Eric Jorink has shown how studies of Scripture revealed inconsistencies in the Bible that became incompatible with readings of the *Book of Nature*. The same happened with authoritative texts about the natural history, geography, people of the Arctic: although many scholars built their own works around old authorities, their consistent criticism of the same authorities problematized much of what these sources had to offer. The (natural) history of the Arctic was since classical times constantly rewritten, and the seventeenth century was, in that regard, no exception: there existed no static literary tradition, only a tradition of continuous debate.

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