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"Northern Lights and bears and icebergs and everything': The Arctic in *His Dark Materials*"

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1. Introduction

"Why can't I come to the North with you? I want to see the Northern Lights and bears and icebergs and everything." (Lyra, in NL 29)

How many readers of Philip Pullman's *His Dark Materials* trilogy would not love to accompany child heroine Lyra to the Arctic to see all these wonders with their own eyes! And how surprised they must be when they exit their plane on a summer-trip to Svalbard and find that flowers grow where the novels mention landscapes of snow and ice. Widespread images of the Arctic are powerful and make Pullman's tales of an icy kingdom inhabited by armoured polar bears ring true, even if they are not. Thereby, they contribute to the enjoyment of the trilogy.

Such discourses do more than entertain, however. Ideas about a region can exert power over the people living there. A famous example for this is described by Edward Said in his study *Orientalism*, where he examines ideas about an imagined Orient. He shows that Western writers and academics have propagated Orientalist ideas, which have figured in the construction of an identity standing in contrast to the Oriental other. For instance, Said analyses texts by Arthur James Balfour and Evelyn Baring, and finds that they imply that "[t]he Oriental is irrational, depraved (fallen), childlike, 'different'; thus the European is rational, virtuous, mature, 'normal'" (40). Furthermore, as "colonial rule was justified in advance by Orientalism" (39), ideas about the Orient supported colonial expansion towards the East. Said discusses not only past practices, but dedicates a large part of his study to determining the continuing influence of Orientalist ideas. From this it can be inferred that ways of thinking and speaking about a region may be powerful and quite long-lived.

While Orientalism has been widely discussed, postcolonial interest in discourses of the Arctic is comparatively scarce. One of the scholars raising awareness of this is Lars Jensen, who remarks that "postcolonialism has not evolved as a critique of Eurocentric patterns of domination in the Arctic," even though its interdisciplinary nature would render it particularly suitable for analysing the complex situation in the high North ("Approaching" 50). Slightly earlier, at the beginning of the 21st century, Robert G. David makes a similar observation. He argues that the Arctic and Antarctic are hardly ever studied by contemporary scholars focusing on the historical representation of colonised regions (2).

The studies that do consider Arctic images often draw parallels between ideas of the North and Orientalism. Some researchers simply liken images of the Arctic to Orientalism without introducing a specific label (e.g., Keskitalo, *Negotiating* 179–180). Others suggest concepts like arcticality (Pálsson) or Arcticism (Huggan, "Introduction" 11; Ryall, Schimanski, and Wærp x). Some possible issues have been raised as to whether this is a valid course of action or not. It has been argued, for instance, that no simple analogy can be drawn due to the differing contexts (David 15–17), and the need for practical application to specific situations has been pointed out (Jensen, "Greenland" 142–143). The concept used in this work is a synthesis of previously suggested definitions of Arcticism, which is general enough to refute the abovementioned objections. Here, Arcticism refers to the reproduction of ideas about the Arctic that are used to gain power over the region, or parts of the region, from outside. This is achieved by othering Arctic nature and inhabitants, as well as by constructing individual and group identities.

Even though postcolonial criticism has considered the Orient in far more detail than the North, scholarly interest in the Arctic is growing. To name just a few of the more recent contributions, the journal *Moving Worlds* has chosen *The Postcolonial Arctic* as topic of one of their issues in 2015, edited by Graham Huggan and Roger Norum, and the journal *Kult*, which has published on "postcolonial Denmark" since 2004 according to the "About" section of their website Postkolonial.dk, issued *New Narratives of the Postcolonial Arctic* in 2016. In the same year, Graham Huggan and Lars Jensen published the edited volume *Postcolonial Perspectives on the European High North: Unscrambling the Arctic*.

At the same time, also public interest in the Arctic is growing. As Joan Nymand Larsen and Gail Fondahl argue, climate change is certainly one reason for the rapidly rising interest in the Arctic. Reports of melting Arctic ice have not only been met with unease, but also with expectancy, as the disappearance of ice facilitates the extraction of natural resources and provides access to formerly closed shipping routes (29). The reactions to the diminishing of the ice cover have led scholars to write of a "twenty-first century scramble for the Arctic" (Craciun 104) and "a new era of saber-rattling" followed by "claims of sovereignty over disputed regions, especially those harboring natural resources" (Doel, Wråkberg, and Zeller 4).

These perceptions of the region can only be fully understood when taking colonial relationships into account. Various Arctic regions have colonial histories (for an informative overview of colonialism in the Arctic, see, e.g., Schweitzer), whose legacies continue to this day (e.g.,

Huggan, "Introduction" 5; Huggan and Norum 3). The current "scramble for the Arctic," for instance, "is [...] part of a centuries-long struggle to control a transcontinental access point to 'almost all countries of the world" (Craciun 104). Huggan mentions "end-is-nigh' alarmism and 'get-rich-quick' opportunism" as part of the scramble and as figuring in "a binary 'Arcticist' discourse" ("Introduction" 11).

Clearly, Arcticism, like Orientalism, is a mode of thought that persists. As part of the totality of discourses of the Arctic, which "regulates what can be said and thought about the Arctic at a specific time and place and determines what is regarded as the 'truth' about the region" (Hansson, "Arctic Crime" 225), Arcticist ideas influence how most of us imagine the Arctic. It is therefore to be expected that Arcticism also appears in representations of the Arctic in works of Young Adult literature such as Pullman's well-known *His Dark Materials* trilogy, published between 1995 and 2000 in the United Kingdom. Conversely, representations of the Arctic in the trilogy may also challenge existing discourses and shape how readers think of the North.

An analysis of Arctic discourses in the *His Dark Materials* trilogy can provide valuable insights into current outside perceptions of the region. Arctic discourses articulated by the narrator of *His Dark Materials* may be interpreted in the context of the past and present situation of our world's Arctic due to the principle of minimal departure. This concept has been suggested by Marie-Laure Ryan and states that readers assume the fictional world to be a duplicate of the actual world, deviating only in aspects explicitly stated (51). It allows for the premise that Pullman's discourses of a fictional Arctic are indistinguishable from images of our world's Arctic, except when differences are explicitly mentioned. In part, this is even supported by the texts, as the preface to *The Subtle Knife* states that Lyra's universe "is like ours but different in many ways" and Will's world is "the universe we know" (*SK* n.pag.).

Due to their overlap, fictional and actual Arctic discourses may interact. The uncritical repetition of Arcticist discourses in the fictional world reinforces existing inequalities in the actual world. Any deviations from existing Arctic images, however, might be understood as a questioning of these discourses. The disruption of established conceptions of the Arctic holds the potential to influence the actual world by changing readers' perceptions of the Arctic. What Said says with respect to Orientalist discourses in literature can also be considered to be true for images of the Arctic in *His Dark Materials*: "Too often literature and culture are presumed to be politically, even historically innocent; it has regularly seemed otherwise to me, and

certainly my study of Orientalism has convinced me [...] that society and literary culture can only be understood and studied together" (27).

Pullman's trilogy features Northern settings in many parts of the story and thereby takes up a location that has received increased international attention in the last two decades. The Arctic keeps reappearing throughout the novels. The first installation of the trilogy, *Northern Lights* (*NL*), opens with child protagonist Lyra and her dæmon Pantalaimon, who is an externalised part of her person in the form of a shapeshifting animal, hiding in a closet of their home, Oxford's Jordan College. From there, Lyra hears Lord Asriel's presentation about his travels to the Arctic and sees his photograms of Northern phenomena, which depict a mysterious fundamental particle called Dust and a city visible in the Aurora. Asriel also brings a frozen severed head back from his journey, which he claims to have belonged to scientist-explorer Stanislaus Grumman, who had vanished on an expedition to the North. Even though Lyra wishes to accompany Asriel on his next Arctic expedition, "to see the Northern Lights and bears and icebergs and everything" (NL 29), he does not permit her to accompany him. Lyra later finds out that Lord Asriel is her father, whom she had always believed to have perished in the Arctic.

Eventually, Lyra manages to travel to the North after all. An organisation called the General Oblation Board abducts Lyra's friend Roger and brings him to Bolvangar, a facility in the North, where horrible experiments on children and their connection to Dust are conducted. The organisation is headed by Mrs Coulter, who is revealed to be the protagonist's mother. To save Roger, Lyra joins a rescue mission organised by the gyptians, a people living on boats, who wish to retrieve their lost children from Bolvangar. Together, they journey to the Arctic, where they approach Bolvangar with the aid of an outcast panserbjørne called Iorek Byrnison, who is an armoured polar bear, and a balloonist, Lee Scoresby. A group of witches led by Serafina Pekkala help them finally bring the children to safety.

Lyra's Arctic expedition is not yet completed at this point. In order to free her father Lord Asriel, who has been taken prisoner and is guarded by the panserbjørne, she and Roger travel even further North to Svalbard, the kingdom of bears. She manages to re-establish Iorek Byrnison as the rightful king of Svalbard by tricking the false king Iofur Raknison and, at the climax of the novel, meets her father. What she does not expect is that he sacrifices Roger to force access to the city in the Aurora whose picture she saw in the beginning of the novel. After hesitating briefly, she follows him over the newly forged bridge to the new world in the sky.

The second instalment of the trilogy, *The Subtle Knife (SK)*, partly takes place in this parallel universe. There, Lyra meets another central character named Will, whose father John Parry vanished on an expedition in the Alaskan North. As it turns out, John Parry had crossed to Lyra's parallel universe, where he, unable to return, built himself a new life under the name of Stanislaus Grumman and later lived as a shaman in Siberia. Will acquires a powerful tool, the subtle knife, which is able to cut the fabric between parallel worlds. By the end of the book, he finally finds his father, whose last wish is that Will as the bearer of the subtle knife aids Lord Asriel's cause.

The last part of the trilogy, *The Amber Spyglass (AS)*, features the show-down between Lord Asriel's army and the forces of the Authority and his regent, whom Asriel believes to be responsible for all misery. The decisive factor, which leads to a happy ending, is the love between Lyra and Will. As a side-story, the consequences of climate change are related. Since the creation of Lord Asriel's bridge influences the multiverse's weather, various peoples, including the panserbjørne, need to deal with a warming Arctic. Another people, the mulefa, suffer from the consequences of Dust leaking from their world. Iorek Byrnison leads his subjects to colder regions in the mountains to evade the negative consequences of climate change, but finally decides that his place is in the Arctic after all. In the end, the portals between worlds are closed, so that Dust cannot escape from the multiverse and the climate presumably stabilises again.

Evidently, the North is an important location in *His Dark Materials*. Especially the themes of Arctic exploration, scientific investigation of the North, and the effects of climate change on Arctic inhabitants and ecosystems are noteworthy. A postcolonial investigation of these images in the trilogy promises to be particularly relevant because the colonial history of Arctic regions shapes many of the discourses which are popular today. Notwithstanding the widespread scholarly attention the trilogy has enjoyed, a comprehensive postcolonial analysis of the representation of the Arctic in *His Dark Materials* has not yet been attempted. Studies tend to focus either on the North (Cudmore; Mackey; Wood) or on postcolonial research questions (Berry; Hartney; Oziewicz; Peters). The overlap between the two fields has not yet been considered in detail and, even though several of the authors refer to Said's ideas (Berry 273; Cudmore 218; Hartney 254; Peters 94), the Arcticism debate has not yet been taken into account. Notably, all of these studies, with the exception of Margaret Mackey's article, comment in some way on how Pullman repeats common narratives, stereotypes or processes of

othering, questions them, or does both at the same time. A common conclusion is not reached, however.

This thesis fuses the two fields by analysing Pullman's representation of the Arctic and contextualising the findings in a postcolonial framework to add further insights of interest and relevance to the existing body of literature. The aim is to answer the following three research questions: How are the British discourses of Arctic exploration, science, and climate change articulated in *His Dark Materials*? In which aspects of the articulation are Arcticist notions, which support an unequal power relationship, taken up? Where are Arcticist discourses questioned?

The thesis is structured as follows. In section 2, literary criticism of *His Dark Materials* is reviewed, in particular studies of Pullman's North (section 2.1.) and postcolonial interpretations of the trilogy (section 2.2.). In section 3, the theory and method this thesis employs are discussed. First of all, a discursive definition of the Arctic is provided in section 3.1. After this, Laclau and Mouffe's discourse theory is briefly presented in section 3.2, which includes a definition of the term discourse and a suggestion for an appropriate method for analysing discourses in the text. Conceptions of the Arctic are then briefly characterised in section 3.3., which focuses on British notions of exploration, science, and climate change in the North. In section 3.4., ways of criticising dominant Arctic discourses are examined, including criticism in literature and the concept of Arcticism. All these ideas are applied to the text in section 4, which is subdivided along the three central discourses discussed here, Arctic exploration, science, and climate change.

2. Critical perspectives on Pullman's North¹

An extensive body of research exists on Pullman's *His Dark Materials*. Notably, central motifs such as religious elements (e.g. Feldt; Pinsent), parallel worlds (e.g. Cantrell, "Nothing Like Pretend"; Vassilopoulou and Ganeri), and the fundamental particle Dust (e.g. Bird; Fitzsimmons) have been thoroughly analysed. The Arctic is a further element of the narrative that merits close scholarly attention due to its great symbolic value and regular appearance in all three installations of the trilogy. The history of colonialism in the Arctic, which has shaped

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¹ Parts of my literature review assignment for the course English for Academic Purposes (winter term 2016/2017, course number 121220, group number 2) at the University of Vienna have been adapted and re-used in this section (introductory paragraph and subsection 2.2.). The title of the assignment is "Arctic Discourses in Philip Pullman's *His Dark Materials:* A Postcolonial Analysis," the length is three pages.

contemporary discourses, make a postcolonial analysis of Pullman's Arctic particularly relevant. Nevertheless, studies focusing on the North in *His Dark Materials* are reluctant to discuss the postcolonial implications of their findings in detail, whereas postcolonial analyses of the trilogy only pay marginal attention to the Arctic region, if they consider it at all. Research in these two fields is reviewed in the following two sections.

2.1. Representations of the North in His Dark Materials

Scholarly analyses of Pullman's North examine his representation of the region in contrast to other images. While Margaret Mackey primarily uses her personal experiences with Northernness for comparison, Naomi Wood and Danielle Marie Cudmore choose ideas of the North found in other works of literature. Mackey, in her study "Northern Lights and Northern Readers: Background Knowledge, Affect Linking, and Literary Understanding," compares a "fictional North," which denotes the region as understood by Pullman and the readers, with an "experiential North," which she maintains to be a "real territory on whose margins [she] happen[s] to live" (58). According to Mackey, Pullman's fictional North serves several functions. First of all, it can be considered a recurring theme since dust is linked to the aurora borealis in all three installations. In addition, it plays a role in the panserbjørnes' character arc. The North is furthermore not only the location where plot happens, but also a "plot ingredient," as Mrs Coulter's horrifying experiments are concealed by Northern remoteness (59–60). At the same time, Mackey observes that when she read Northern Lights, the fictional North seemed fabricated to her. She surmises that the reason for this might be that the fictional North does not conform to her own experiences with the experiential North (60-61). Mackey concludes that her familiarity with the region, which activates a wide range of emotions and experiences while reading, prevents her from perceiving the location in a similar way as non-Northerner Lyra (65). All this is to be seen in light of Mackey's mention of "[t]he laments of colonized readers about how they never see their own realities in this [fictional] shaping [of reality]" (59). The study raises awareness of an important perspective in the analysis of discourses, namely the inside view on texts written by, and mainly for, outsiders. A presentation of a broader range of Northern receptions of the trilogy would have been interesting, however. Mackey is clearly aware of the disadvantages of solely relying on her own perceptions (58) and even though she claims to provide a perspective "as in-dweller" of the North (65), she also mentions that "Arctic dwellers would not recognize [her] as a northerner" (61). Her discussion of reader receptions of a different novel set in London (63–64) could therefore have been profitably replaced by an analysis of Northern reader responses to His Dark Materials.

In contrast to Mackey, two other scholars, Wood and Cudmore, adopt outsiders' perspectives on the North when they compare Pullman's representation of the region to conceptions expressed in other works of fiction. Wood focuses on the figure of the "cold, albeit loving, mother" (199) embodying a strict and icy version of nature. She notices that the point of origin of the motif is the time of Arctic exploration and imperialism (200), after which it appeared in fantastical children's literature as a "mother to people who define themselves in opposition to the oriental, what we might call the 'boreal'" (203). At the same time, Wood also observes that Pullman's North is articulated as other (202); a dichotomy noticed by Cudmore as well, when she writes that the "idea of North as both 'Self' and 'Other' is central to Pullman's engagement with 'imaginative geography' of the North' (221). Wood proceeds by arguing that while earlier cold mothers teach virtue to subjects willing to subordinate to their harsh regime, Pullman chooses a different portrayal of the cold mother. In His Dark Materials, the icy mother is split into two characters, Mrs Coulter and Serafina Pekkala (203–209). Mrs Coulter personifies the traditional image of beautiful yet harsh female nature, who "disciplines her charges 'for their own good [...]" (209-210). Wood points out that yet, Pullman calls this conception into question in two ways. Firstly, the author's portrayal of Mrs Coulters machinations conveys criticism, and secondly, he introduces a second mother figure, Serafina Pekkala, who stands for a nurturing Northern nature that "does not attempt to alter her charge" (210–212). Serafina Pekkala's permissive attitude also extends to her relationship with nature, which is shown to be very harmonious. Thus, Pullman introduces a more recent view that Northern nature is endangered and that people should cooperate with it instead of struggling against it (212–213).

Wood's view on Pullman's North is supported by Cudmore's analysis of *Northern Lights*. Cudmore's article is based on the assumption that the North is an "imaginative geography" like Said's Orient (218). She finds that even though Pullman "instrumentalizes the North for the purpose of narrative" (227), he also subverts common tropes (222-225) and provides "a clear environmental commentary" in the description of Iorek's kingdom, where the ways of humans are rejected (225–226). Like Wood, she compares Pullman's text to other fantasy narratives, in which the North is stereotypically represented as a woman, and finds criticism of this traditional concept in the trilogy. Her analysis adds two more ways in which Pullman questions the stereotypical representation of the North as a female. Cudmore argues that he achieves this by assigning the role of "the icy femme fatal" to Mrs Coulter, who is not originally from the North, and by letting a female heroine, Lyra, travel to the region (224–225). The author values the variety of perceptions of the North, which different characters and agents, such as the

Magisterium, Lyra, and the bears, convey (227). This last observation is backed by Susanne Voogd's more detailed comparison of how differently Iorek Byrnison and Lyra perceive Svalbard (par. 8–11). Cudmore's overall finding, exhibiting great similarity to Wood's conclusion, is that traditional images of the North, which can be encountered in fiction, are both echoed and questioned by Pullman so that their repercussions, especially for nature, are highlighted (218).

The studies presented so far show that the North is a very central concept in *His Dark Materials*. It has importance on the level of storytelling, but its untypical representation additionally conveys an environmental message. Even though many stereotypes are repeated, the story also breaks with traditional ways of perceiving the North as a cold female. From a Northern perspective, it might be difficult to connect own experiences to Lyra's perceptions. From an outsider's perspective, however, Pullman's North can feature both in a definition of the self and a definition of the other. It is especially this last observation that the next section is concerned about.

2.2. Divided postcolonial readings

The few postcolonial analyses of *His Dark Materials* offer general insights that are applicable to the Arctic as well, and nearly all of them also mention the North in some manner. Much of the available literature (Berry; Hartney; Oziewicz) criticises Pullman's narrative for its perpetuation of colonialist or imperialist ideas, and only Laura Peters commends the author for subverting precisely the same discourses. Marek Oziewicz belongs to the former group and adopts a critical position in his analysis of the representation of the European East in three young adult fiction series, including His Dark Materials. There, he shows how Pullman constructs a version of Britishness that is depicted as superior to North-eastern identities. The various peoples of Pullman's high North are significantly counted among this group of non-British others (7), whose representations articulate already existing stereotypes (8:11). Britain is not only the centre of various worlds (4), the British perspective is also the "natural' vintage point" from which non-British people are perceived as different and other (3). The trilogy thus "endorse[s] subtler forms of British cultural and political supremacy" (3). Throughout his study, Oziewicz mostly limits his focus to the regions' inhabitants, however, without discussing examples of how Pullman's description of space and natural environment adds to the process of othering.

The argument made by Oziewicz is supported by Christopher Hartney, who analyses Pullman's trilogy in terms of the genre epic. He finds that Pullman evokes an imperial version of Britain by fashioning Oxford as nodal point of the multiverse (254) and by offering the reader a British upper class subject position through his choice of focalizer Lyra (255–256). Hartney, unlike Oziewicz, takes the role of space into account when he analyses the central position of Oxford. Yet, he refrains from considering the periphery to the British centre. This curious neglect is explained by his belief that "[p]ost-colonial discourse has failed us to the extent that the effects of empire on colonies are the main focus of study" (255). He makes a further, thought-provoking contribution to a postcolonial analysis of the trilogy when he problematises the overall message "of an ending where everyone returns to their place, both socially and racially" (257).

A further scholar who is critical of Pullman's message is Esther Berry. Similar to Hartney, she draws attention to the central position of Oxford in an "exoticised" and "orientalised" multiverse and comments upon "Western, white subject positions" created by the thoughts and actions of Lyra and Will (271). Her general approach is to draw parallels between *His Dark Materials*'s dæmons and constructions of an Aboriginal authentic other. Even though her research focus is interesting, she fails to specify her assumptions about the readership and how these expectations limit her findings' generalisability.

Contrary to the postcolonial interpretations reviewed so far, Peters is more benevolent in her analysis and identifies critical messages in Pullman's novels. She argues that Pullman deconstructs Victorian colonial stereotypes by changing key elements of traditional discourses (101–106). For instance, Victorian orphan adventure stories often feature a binary opposition of civilisation versus savagery, which is also part of colonial discourses. This articulation is questioned by Pullman when he introduces the female protagonist Lyra and thereby replaces the typically male hero of these stories. Additionally, Pullman inverts the stereotypical allocation of binary characteristics when he portrays British people as highly morally corrupt (101). The only major shortcoming of this otherwise very useful analysis is that Peters at times seems reluctant to criticise Pullman. For example, she notices that Lyra and her British friend Will perceive the North as alien, an observation that would support Oziewicz's interpretation of Pullman constructing a non-British other, but immediately dismisses this fact by asserting that "there is slippage around the sense of otherness. Will and Lyra are foreign wherever they go" (105). Ultimately, Peters believes that "Pullman evokes the Victorian orientalist assumptions regarding race and difference in order to deconstruct them" (105). By identifying

an intentional "post-colonial moment" in the narrative, which Pullman purportedly achieved by developing new values from the old ones (109), Peters interprets *His Dark Materials* as a text that has an explicit political message.

Peters's optimistic view of Pullman's intentions is shared by other researchers. Steven Barfield and Martyn Colebrook hold that "severe social and political retardation" is depicted in the trilogy with the aim to educate readers about it (89). Other researchers focus on the environmental subtext of the novels. As is expounded in the previous section 2.1., Wood detects an ecological message in the text. Similarly, Sarah Cantrell sees a monition about the squandering of our world's resources in the series ("Letting Specters In" 237). Even though Cantrell interprets the text from an ecocritical perspective, she contributes to a postcolonial reading by linking the changing Arctic climate to quasi-antagonist Lord Asriel's "colonialist desire for a new world" ("Letting Specters In" 236).

Overall, the postcolonial studies reviewed here demonstrate how Pullman fashions Britain as the centre, the British perspective as the default mode of viewing the world, and inhabitants of peripheral regions such as the North as other. Even though Peters sees a critical message in this, she agrees with Oziewics, Hartney, and Berry that certain stereotypes are, in fact, articulated. It is noteworthy that a recurring point of reference in these studies is Said's *Orientalism*. Ocziewicz's study stands in the tradition of studies inspired by Said's *Orientalism*, even though this link is not explicitly stated. When Berry describes an example of othering, she explicitly mentions Said's ideas (273), as does Hartney when he points out the function of Oxford as pivot point of the multiverse (254). Peters even alludes to a deliberate consideration of Said's ideas in Pullman's work by remarking that "Pullman addresses [...] the result of imperial expansion, and its relationship to system of orientalism [sic] as outlined by [...] Said" (94). In addition, also Cudmore's analysis of the North refers to Said. She applies his concept of "imaginative geographies," which she describes as denoting regions defined from the outside and often through the process of othering², to the Arctic (Cudmore 218).

Even though these repeated references to Said's ideas in studies of *His Dark Materials* suggest that his theory might be useful for an analysis of Arctic discourses here, it cannot be regarded as given that it really is applicable to images of the Arctic. It is not even self-evident that it is possible to speak of Arctic discourses without focusing on a specific part of the Arctic, as the

² Original source: Said, Edward W. *Orientalism*. 1978. Harmondsworth: Penguin, 1985. ch. 2.

Arctic region is comprised of several national territories with varied colonial histories. These objections are overcome in the following section, which presents the theoretical background of the thesis, starting with a definition of the Arctic.

3. Analysing Arctic discourses in theory

3.1. Discursive definition of the Arctic

Defining the Arctic is not a straightforward enterprise, as various definitions of the region exist. The Arctic Monitoring and Assessment Programme (AMAP), for instance, a working group of the influential Arctic Council, mentions several different ways of delimitating the Arctic. One of these definitions assumes the Arctic circle to be the southern border of the region. The Arctic circle is located at a latitude of approximately 66°N, north of which the midnight sun occurs at least once. Other definitions regard the Arctic as bounded by the 10°C July isotherm or the treeline (AMAP, *Arctic Pollution* 6–7). Carina Keskitalo discusses these and more definitions in greater detail and illustrates how different disciplines, preconceptions, and historical understandings have affected Arctic definitions (*Negotiating* 30–33).

For its report, the AMAP settles for a differing delimitation of the Arctic, which includes areas of all Council member states. The AMAP Arctic roughly consists of Iceland, the northern parts of Norway, Sweden, Finland, Russia and Canada, as well as parts of the Kingdom of Denmark (the Faroe Islands and Greenland) and the United States of America (Alaska) (*Arctic Pollution* 6–7). This is explicitly to be understood as a "guideline" rather than a definition on the grounds that a generally useful delimitation is hard to find (AMAP, *Arctic Pollution* 7). A comparable understanding of the Arctic region is adopted in the *Arctic Human Development Report* (*AHDR*), which was also compiled for the Arctic Council. In their introduction to the *AHDR*, Oran R. Young and Níels Einarsson base the *AHDR* Arctic definition on the AMAP guideline and include similar regions of the same eight countries to ensure consistency with other research (17–18).

As has been aptly expressed by Lassi Heininen in an analysis of Northern geopolitics, "[t]here are no politically and geographically innocent definitions of the Arctic" (241). This observation is shared by Huggan, who summarises ideas of Charles Emmerson to point out the political dimension of Arctic definitions. According to Emmerson, this becomes apparent in the neglect to differentiate between an Arctic region north of the Arctic circle and a sub-Arctic region below. Such a distinction considers climatic conditions, but might not be politically

advantageous (Emmerson qtd. in Huggan, "From Arctic Dreams" 87). The political nature of definitions of the Arctic becomes apparent when considering the member states of the Arctic Council. The Council describes itself as an intergovernmental organisation involving eight member states, six indigenous organisations, and several non-Arctic countries with observer status in the "About Us" section of their webpage. A subsection describing the member states in more detail characterises them as "the eight Arctic States." This designation is certainly justified when the AMAP and *AHDR* definitions are used. They include territory of all member states and no other regions. However, due to Iceland's location just south of the Arctic Circle, it would not be regarded as part of the Arctic by the previously mentioned definition based on latitude. As the distinction between being an Arctic country and being a non-Arctic country decides upon participation in the Arctic Council's policymaking, Arctic definitions can evidently be very far-reaching.

The political nature of the choice of demarcation is more clearly acknowledged in discursive definitions of the Arctic. Keskitalo, for instance, regards "the Arctic as a discourse" ("The North" 24). An example of the usefulness of such a discursive definition of the Arctic can be found in her monograph *Negotiating the Arctic: The Construction of an International Region.* There, she demonstrates how region-building discourses have been employed by the Arctic Council and affiliated parties to establish an understanding of internally differentiated areas as a single Arctic region. Similarly, Anka Ryall, Johan Schimanski, and Henning Howlid Wærp do not regard the Arctic as a given geographical territory. In their introduction to the edited volume *Arctic Discourses*, they propose to characterise the region by the discourses existing about it. For them, what is relevant is "not where the Arctic begins, but where we think and have thought that the Arctic begins" (xii).

Ryall, Schimanski, and Wærp's discursive definition of the Arctic is particularly suitable for the analysis of ideas about the Arctic in *His Dark Materials*. As in their *Arctic Discourses*, also here the exact geographical boundaries of the region are far less important than the ideas about the region and ideological implications of ideas about the Arctic that are foregrounded. Another clear advantage is that the authors chose it to preface a range of studies analysing Arctic discourses in fiction and non-fiction. Therefore, it was proposed for exactly the purpose it serves in this thesis. Accordingly, Ryall, Schimanski, and Wærp's conception of the Arctic is adapted for the analysis of the trilogy. Any location in *His Dark Materials* is regarded as Arctic if its representation makes use of at least one of the Arctic discourses to be analysed. As the subsequent analysis in section 4 shows, Lyra's journey from Trollesund to Bolvangar and her

time on Svalbard, Lee Scoresby's visit of Nova Zembla and the region around the river Yenisei, as well as John Parry's expedition to Alaska are all understood as taking place in an Arctic setting. On the other hand, the home of Serafina Pekkala's clan at Lake Enara, even though it is located within the Arctic Circle on the map depicted in the appendix of *The Subtle Knife*, is not, while some other, more northern areas of their homeland are.

3.1.1. Validity of regarding the Arctic as a single region

Now that a definition of the Arctic to be used in this thesis has been established, a word of caution is in order. The label Arctic refers to such highly disparate areas that it must be questioned whether it makes sense to speak of one generalised region at all. This is not least because different actors such as the Arctic Council and various non-Arctic countries have done so for their own gain. Keskitalo focuses on the work of the Council when she characterises the region as "hav[ing] been discussed into being" (Negotiating 2–3). One reason she provides for this is "policy purposes" (Negotiating 2). Non-Arctic nations are another group that might profit from the construction of an Arctic region in their efforts to secure their interests. The considerable geopolitical attention focused on the Arctic as one territory gives testimony to this fact. In addition, colonial history is attached to the endeavour of constructing an Arctic from the outside. Huggan takes a clear position on this matter when he stresses the great diversity of the region and follows this up with the remark that to pretend otherwise "is perhaps the oldest colonial strategy in the book" ("Introduction" 24). His argument is supported by Gertrude Saxinger, Peter Schweitzer, and Stefan Donecker, who observe that the Arctic has been regarded as a region from the outside for a long time when it served as a target of colonial aspirations. The people living inside the Arctic have only come to perceive themselves as belonging to such a region in the 20th century (18).

At the same time as portraying the Arctic as one region serves the interests of different actors, it also facilitates the investigation of power structures behind the construct. Many people, especially those living in non-Arctic countries, do have conceptions they relate to the entire Arctic region, notwithstanding the Arctic's heterogeneity. Consequently, the Arctic as a discourse exists and is a valid area of research. Denying its existence would neither lessen the concept's influence nor allow for a better understanding of its effects. Of course, studying conceptions of the Arctic not only criticises them, but at the same time also propagates and shapes them. This is amplified by Keskitalo, who points out that researchers in the field of Arctic studies have played a role in the development of the Arctic discourses she examines. Since they are perceived as having professional knowledge of presently relevant discourses,

weight is attributed to their opinion (Keskitalo, *Negotiating* 165–166). The fact that the analysis of discourses leads to their further dissemination should certainly be acknowledged. It should not be a reason, however, for relinquishing the benefits such research can offer. For instance, analysing narratives about the Arctic can lead to a heightened awareness of structural inequalities and a growing understanding of the manifold ways in which discourses consolidate positions of influence. Before proceeding to a consideration of the concept of discourse, where the link between discourses and power is explored in more detail, a brief clarification of terminology is necessary to avoid confusion.

3.1.2. Differentiation between discourses of the Arctic and the North

Frequently linked to ideas about the Arctic is the notion of the North, a concept that is even harder to define with exactness. Michael Bravo and Sverker Sörlin indicate this difficulty when they remark that "Northern' is [...] not as precise as 'Arctic'" ("Narrative" 3). Even though these two notions are often regarded as synonyms (e.g. Nuttall and Callaghan xxix), they also appear as two overlapping yet different discourses in many contexts. It is possible to clarify this by distinguishing between an internal and an external North, referring to a North within a country and outside of it. Clearly, the internal North can only coincide with the Arctic in Arctic countries. While this is the case in Canada (Keskitalo, "The North" 27), northern European states tend to differentiate between Arctic and North (Keskitalo, "The North" 31), as has been mentioned above.

In non-Arctic countries, the internal North necessarily differs from the Arctic and triggers diverse associations. Peter Davidson, in *The Idea of North*, repeatedly reminds his readers that "[e]veryone carries their own idea of north within them" (8–9) and shows that this observation applies to a number of national perceptions of a North located within or bordering their respective territories (9–10). One of the regions he goes on to describe in greater detail is Britain, which finds its North in northern England (199–233), "consistently described in terms of dearth, authenticity and pastness" (199), and Scotland (233–254), "a place of dearth: a mean, negligible land" (233). An older, but not necessarily contradicting, assessment of images of the north of England is provided by Rob Shields, who explores conceptions of the North prevalent in England (207–251) and summarises them "as a pastoral foil to other, collectively romanticised images of London and the South of England" (207). The description is complemented by Ysanne Holt and Angela McClanahan's more recent identification of the idea of the British North as a promise of wealth to investors in the energy sector (203).

At the same time, there exists a second meaning of an external North that comes closer to the conception of the Arctic. Especially in non-Arctic countries, it denotes an imagined region located outside national borders and constitutes the northernmost part of the continent and areas beyond. Eleanor Rosamund Barraclough, Danielle Cudmore, and Stefan Donecker focus on such a generalised imagined region in "Der übernatürliche Norden: Konturen eines Forschungsfeldes." In their study, they provide an insightful historical overview of the connection between European and North American perceptions of the North and the supernatural. As the examples provided in their paper suggest, even though the authors do not explicitly discuss this, Europeans tend to associate a European Arctic region rather than a circumpolar Arctic with the term North.

The differentiation between concepts of the North and the Arctic has relevance for the research focus of this thesis. Notably, Lyra mostly talks of the North and almost never mentions the Arctic on her quest that leads her from Oxford to northern European locations. The European North visited by Lyra is not all Pullman presents his readers though. By including settings in Alaska, where John Parry's expedition takes him, and Russia, where Lee Scoresby tries to locate Parry under the name Stanislaus Grumman, *His Dark Materials* pictures a far more varied circumpolar Arctic and shows that some discourses concern the entire region. In order to acknowledge this comprehensive understanding of an Arctic encompassing regions on different continents, this thesis explicitly focuses on the concept of the Arctic. The term North is sometimes used synonymously with it. Thus far, it has been established that the Arctic can be understood as one discursively defined region which is not necessarily identical to the notion of the North. A critical concept used here, discourse, is discussed in greater detail in the next section.

3.2. Laclau and Mouffe's discourse theory

3.2.1. The theory behind the concept of discourse

From the diverse understandings of discourse, researchers interested in discourses of the Arctic or the North have tended to work with Foucault's influential definition (e.g., Grace; Hansson, "Arctic Crime"; Keskitalo). Heidi Hansson builds on his theories, for instance, when she eloquently explains that "[t]he discursive system regulates what can be said and thought about the Arctic at a specific time and place and determines what is regarded as the 'truth' about the region" ("Arctic Crime" 225). A different choice has been made by Schimanski and Spring, who successfully apply Laclau and Mouffe's understanding of discourse in "A Black Rectangle

Labelled 'Polar Night': Imagining the Arctic after the Austro-Hungarian Expedition of 1872-1874." This definition regards discourse as "[t]he structured totality resulting from [...] articulatory practice," where articulation refers to "any practice establishing a relation among elements such that their identity is modified as a result of the articulatory practice" (Laclau and Mouffe 105). Thus, articulation means that the meaning of two signs is fixed by establishing their relation to each other.

Laclau and Mouffe's understanding of articulation and discourse might become clearer by means of an example. The sign polar bear, for instance, might carry all possible meanings, such as an animal that is dangerous, cute, or endangered. The sign seal might likewise evoke associations with an animal catching fish, living in a zoo, or relaxing on an ice floe. An articulatory practice that establishes polar bears as eating seals, and seals as being eaten by polar bears, establishes the relation between the two signs and fixes their meanings. Temporarily, all other previous associations are thereby lost. An entire network of meanings can be created by adding more signs to the polar bear and seal connection so that, ultimately, the discourse of the Arctic as a natural habitat of wild animals emerges.

The implications of such an understanding of discourse are far-reaching, as it influences notions of truth and power. Laclau and Mouffe stress that while things may exist in "a world external to thought," their significance is determined by articulation. They provide an example for this remark by saying that earthquakes occur independently of any discourse, but are given meaning as "natural phenomena" or "expressions of the wrath of God" according to the specific discourse in use (Laclau and Mouffe 108). Consequently, the articulation determines how reality is perceived and what is believed to be true. Thus, even though Laclau and Mouffe's wording is entirely different from Hansson's, the basic idea of both notions of discourse is, very generally speaking, alike. This is not surprising, as Marianne Jørgensen and Louise Phillips observe in *Discourse Analysis as Theory and Method* that Laclau and Mouffe's theory "largely follows Foucault" (17).

This debt to Foucault holds in particular also true for Laclau and Mouffe's understanding of power, which they obtain from the same theoretician (Jørgensen and Phillips 14). Foucault's crucial connection between discourse and power is explained by Jørgensen and Phillips, who characterise power as "spread across different social practices" (13). Discourses are a consequence of power, so while power restricts what can be said about reality, it simultaneously also produces the same reality (Jørgensen and Phillips 13–14). Examples of the interplay

between discourses and power can be found in the summary of Edward Said's theory of Orientalism and its transfer to the Arctic in section 3.4.2, as well as in the analysis of Arctic discourses in *His Dark Materials* in section 4. Even though Laclau and Mouffe's understanding of discourse and power has many similarities with Foucault's, the decisive advantages of their theory for application in this thesis become apparent upon closer consideration.

Laclau and Mouffe do not simply introduce a definition, they rather describe a more detailed theory of discourse, which is often named discourse theory (e.g. by Carpentier and De Cleen; Jørgensen and Phillips). It includes a range of further concepts such as elements, moments, and the field of discursivity. Moments are "[t]he differential positions, insofar as they appear articulated within a discourse," whereas the term element denotes "any difference that is not discursively articulated" (105). In other words, an act of articulation turns elements into moments by relating them to each other, i.e. the elements obtain specific signifieds. Laclau and Mouffe further specify that all other possible meanings an element could have been assigned, but which were not chosen by the articulatory practice, constitute the field of discursivity (111). The existence of this field of discursivity indicates that each moment of a discourse could possibly be articulated in a different manner. Since a moment is defined by its relationship to the other moments of the discourse, this prevents any discourse from being absolutely, unambiguously, and stably determined (110–113). This means, as Jørgensen and Phillips explain, that discourses are inherently open to change as moments could always be articulated differently (29).

To illustrate Laclau and Mouffe's terminology, the example of polar bears is very useful one more time. Schimanski and Spring have demonstrated how the element of polar bears can acquire different meanings in various discourses ("A Black Rectangle" 32–34). This can be taken up to illustrate the concepts moment, element, and field of discursivity. Schimanski and Spring show, for instance, that polar bears figure in an alterity discourse of the Arctic as other because of the polar bears' white colour deviating from other bears' brown fur. At the same time, they also appear in a winteriness discourse due to their depiction with thick fur. This image is reinforced by the mental connections of German speaking readers between the polar bears' German name *Eisbären*, ice bears, and winter ("A Black Rectangle" 33). In the alterity discourse, the representation of polar bears as other constitutes a practice of articulation that turns the animals into one of many moments in a discourse that regards the Arctic as fundamentally different. At the same time, it is evidently also possible to articulate them as moments in an Arctic winteriness discourse by depicting them with warm fur. Schimanski and

Spring also mention a discourse where polar bears are of minor importance, the idea of the Arctic as discoverable ("A Black Rectangle" 34). This suggests that in many instances where a discoverability discourse is invoked, polar bears are not assigned a special meaning, and then merely constitute elements and not moments of the discourse. Whenever polar bears are articulated in a specific manner, all other choices not made become part of the field of discursivity. In case of the winteriness discourse, polar bears are linked to warm fur, while the connection of polar bears and otherness resides in the field of discursivity together with all other options not realised. One other unrealised option might be the notion of polar bears as endangered animals due to climate change. The set of unrealised possibilities threatens the stability of the discourse, as the image of a furry polar bear might at any time be associated with the melting ice of climate change instead of the solidly frozen Arctic of the winteriness discourse.

Two last aspects of Laclau and Mouffe's theory of discourse that should be mentioned here concern subject positions and identity. As the overview of the theory provided above has postulated so far, nothing has absolute meaning by itself, but obtains significance through its relation to other moments. This does not irrevocably fix the meaning of the sign, however, as the relation could have been forged in a different way and might be altered in the future. Consequently, for Laclau and Mouffe this also holds true for subject positions and identity (113;115). The term subject position refers to the possible roles people can have according to a specific discourse (Laclau and Mouffe 115; see also Jørgensen and Phillips 41). Identity, then, means "identification with a subject position in a discursive structure" (Jørgensen and Phillips 43; emphasis in original). Even though Carpentier and de Cleen, in their overview of discourse theory, conflate the concepts of subject position and identity (267), it seems useful to differentiate between them here to account for the agency of the subject in identity formation. Schimanski and Spring mention an example of subject positions offered by the satirical press upon the return of the Austrian-Hungarian polar exploration. The satirical media frequently portrayed parts of the public as oblivious to basic scientific facts about the Arctic. In doing so, the texts offered "different, class-related subject positions to the readers, i.e. as more or less educated" (Schimanski and Spring, "A Black Rectangle" 27). Hence, readers might choose the former subject position if they feel knowledgeable about science and thereby construct their own identity as educated middle-class individuals.

The theory of discourse described by Laclau and Mouffe has been criticised from many sides (see, e.g., Carpentier and De Cleen 270–273), but the main drawback of its application in this

study is that it seems to require considerable adaptation. As Jørgensen and Phillips mention, Laclau and Mouffe's concept of discourse is originally concerned with social matters (24). Initially, it was formulated in the context of political theory. The choice to work with it here removes it from its original context and introduces it to a field it might be less suited for. As the entire discourse theory is far more complex than the overview above shows, it is furthermore necessary, for practical reasons, to select aspects deemed vital for this study and disregard the rest. It now needs to be questioned whether or not it is advisable to remove portions of a theory from their context and apply them to a different field without qualitatively adapting it. Yet, as the example of Schimanski and Spring's study shows, it is possible to fruitfully apply an abbreviated version of Laclau and Mouffe's theory of discourse to areas of analysis the original authors have not explicitly considered. The results will then provide useful insights into the area under consideration, but they should only be used with extreme caution to draw conclusion about the original theory.

Employing an abridged version of Laclau and Mouffe's theory of discourse has clear advantages, which outweigh the reservations. By confining the theory to those aspects strictly necessary for a successful analysis, the resulting abbreviated theory of discourse can be applied to larger amounts of text, such *His Dark Materials*, more easily. Another decisive advantage is the conceptualisation of multiple, possibly overlapping and competing, discourses occurring at the same time. The terminology introduced above accounts for polysemy, which Schimanski and Spring have shown with their example of polar bears appearing in various discourses. It also provides concepts for describing change in discourses. As will become apparent in section 4, these qualities are very useful for the intended analysis. Lastly, the parts of Laclau and Mouffe's theory selected for practical use in this thesis are broadly compatible with the understanding of discourse based on Foucault's writing that many other researchers of Arctic discourses employ. Therefore, by working with specific parts of Laclau and Mouffe's theory, a framework is obtained whose reduced scope renders its application practical, but which is still sufficiently extensive to conceptualise noteworthy aspects of the discourses found in *His Dark Materials*.

3.2.2. The method of analysing discourses

As Jørgensen and Phillips point out, however, Laclau and Mouffe do not provide a methodology describing how to apply their theory of discourse (24). They proceed to fill this gap by deriving a method from the theory themselves. The result is a selection of concepts, which are to be identified in a text and subsequently employed to examine the discourses in the material

(Jørgensen and Phillips 49–51). This suggestion is largely compatible with Schimanski and Spring's practical application of the theory to specific texts and research questions. For their analysis of Arctic images, they compile a list of 211 moments expressing Arctic qualities and subsequently identify all occurrences of these moments in the primary literature. The moments are then thematically classified as belonging to one of six discourses, three of which are mentioned above, alterity, winteriness, and discoverability (Schimanski and Spring, "A Black Rectangle" 28–29).

For the study of Arctic discourses in *His Dark Materials*, it seems inefficient to first identify all moments and later assign them to discourses, as due to the length and richness of the text's references to the Arctic the total number of moments and discourses is expected to be very high. Furthermore, restricting the identifiable moments to a list determined in advance has the disadvantage that unusually articulated moments may remain undetected. It is therefore preferable to select three Arctic discourses whose function in *His Dark Materials* is particularly worthwhile of attention, subsequently survey the material to identify moments making up these discourses, link them to established ways of representing the Arctic, and finally draw parallels between the findings and Arcticist mechanisms which support existing power inequalities. A second aim is to single out untypically articulated moments constituting the three Arctic conceptions which undermine the Arcticist potential of the discourses. While the selection of three discourses is made in the following section 3.3, the described ways of undermining and criticising Arcticist representations are discussed in more detail in section 3.4.

3.3. Discourses of the Arctic

Discourses of the Arctic are abundant, varied, and frequently overlapping. Those appearing in *His Dark Materials* alone are too numerous to discuss in detail. The text includes ideas about the region as home of indigenous peoples and Arctic animals, repository of natural resources, site of supernatural phenomena, war zone, hostile wilderness, sublime landscape, dark or primitive location, and many more. Three conceptions of particular interest depict the Arctic as a destination for explorers, as a place for scientific research, and as a region affected by climate change. Their noteworthiness derives from two reasons. The first reason is that these visions are taken up throughout large portions of the trilogy and transform as the narrative unfolds, which is suggestive of their high relevance to the text. Furthermore, they are highly topical. Even though these ideas originate from different historical contexts, all of them are still part of contemporary imaginations of the region and influence contemporary geopolitics. For these

reasons, the focus of analysis will be restricted to the discourses conceiving of the Arctic as a region where exploration, scientific enquiry, and climate change take place. Before a more detailed description of these three discourses can be provided, however, it is necessary to clarify their context of articulation, which decisively influences the realisation of a discourse.

3.3.1. Dependence of Arctic discourses on the context of articulation

When Hansson characterises Arctic discourses as "regulat[ing] what can be said and thought about the Arctic at a specific time and place" ("Arctic Crime" 225), she draws attention to an important aspect, namely their dependence on the temporal and spatial context of articulation. This section takes a closer look at these two characteristics of discourses, starting with the historical changeability of Arctic images. Literature makes repeated mention of this attribute (e.g. Doel, Wråkberg, and Zeller 2; Keskitalo, "The North" 24; Schimanski and Spring, "A Black Rectangle" 19), which refers to the process of older images losing popularity with time and new images appearing. It can be understood through direct comparison of different eras' Arctic conceptions. For instance, while in antiquity a so-called Ultima Thule was seen as constituting a margin in the north (Teuber 174), the discourse connecting the Arctic to climate change is certainly more recent. Old images do not have to disappear completely, however, they may simply morph into new shapes. The vision of the Arctic as a site for expeditions is a case in point. It is a discourse that still holds significance today (Young and Einarsson 23), but has undergone frequent changes throughout history. An example of such a shift is provided by Michael F. Robinson in his portrayal of the reception of U.S. American exploration in *The* Coldest Crucible: Arctic Exploration and American Culture. He describes how in the late 19th century, the U.S. American public still believed Arctic exploration to be a way forward to discover new areas, but at the same time began to see it as an opportunity to reject modern life (108-109).

Even though older visions may be replaced by newer ones, it is very likely that traces of them remain in the cultural memory. Thus, historic discourses may retain part of their significance for a long time. Robert G. David finds this to be especially true for some pervasive British perceptions of the Arctic, which persist in relatively unchanged form due to the reduced contact of British people with the region and its inhabitants. He argues that in contrast, stereotypes in Denmark and Canada, which are more closely connected to the Arctic, change faster (19). However, even in these countries, some ideas are enduring, as the example of the British Franklin expedition shows. Its crew disappeared in the mid-19th century in the Arctic and several unsuccessful rescue missions were sent to find it. Margaret Atwood dedicates one of

her four lectures in *Strange Things: The Malevolent North in Canadian Literature* to the more recent Canadian literary reception of the historical expedition (7–34). Evidently, the temporal distance to the event has not succeeded to erase it from the collective memory. Therefore, older images should not be entirely neglected when analysing contemporary discourses.

Not only the temporal, but also the spatial context of articulation determines the shape of discourses. This leads to differences within a country and to distinct national understandings. The first case, varying perceptions of the Arctic within a country, especially an Arctic country, becomes evident when considering indigenous outlooks. Adam Keul et al. conduct interviews to investigate discourses in five Arctic nations and find that northern indigenous people have their own distinct conceptions of the Arctic in comparison with citizens in the south (ch. 1). The opposite perspective is described by Rob Shields, who argues that Canadians living in the south perceive the northern regions as the antipode of their own supposed sophistication. At the same time, southerners use the Arctic in a construction of a Canadian identity (163).

The comparison of official discourses of Arctic countries also reveals major differences. Keskitalo convincingly demonstrates this for all member states of the Arctic Council in *Negotiating the Arctic (Negotiating* 125–147). In her article "'The North' – Is There Such a Thing?" she specifically contrasts the dominant Canadian perception of the Arctic with that of northern European countries. She notes that the main attributes of the Canadian understanding of the Arctic are the construction of an antipode as described by Shields and the idea of a frontier in the north (27-30). In comparison, countries such as Norway, Sweden, Finland, and Iceland have a much more positive view of their northernmost areas, which tend not to be regarded as Arctic, however, but as northern. The term Arctic designates "mainly [...] areas located north of the mainland in each state" (31). This is also observed, apparently less sharply, however, by Michael Bravo and Sverker Sörlin. In their introduction to the edited volume *Narrating the Arctic: A Cultural History of Nordic Scientific Practices*, which focuses on Sweden and Denmark, they point out that "northern is not necessarily as extremely 'northern' as 'Arctic'" (Bravo and Sörlin, "Narrative" 3).

Non-Arctic countries have their own distinct images of the region as well. For instance, representations of the Arctic spread by the media in various countries differ. Schimanski and Spring's study *Passagiere des Eises: Polarhelden und arktische Diskurse 1874* analyses the Viennese press reception in 1874 of the Austro-Hungarian polar expedition. The authors describe how in late 19th century Austria, an Alpine discourse of conquest was employed to

render the Arctic comprehensible. Thus, meaning could be made of an unknown place, the Arctic, by association with the Alps, a region to which most Austrians of the time could relate due to its geographical vicinity (*Passagiere* 398–402). In contrast, Robert G. David dedicates a chapter of his monograph *The Arctic in the British imagination:* 1818-1914 on the British media coverage of Arctic expeditions. This leads him to the finding that the depiction of "polar regions as inhospitable locations ripe for martyrdom and the creation of heroes" was a consequence of public interest in British voyages with disastrous outcome (123). Such voyages include the Franklin expedition, where all members perished, the Nares expedition, which faced major difficulty in the Arctic, and the Scott expedition, which proved fatal to a party of men trying to reach the South Pole (122–123). As these two examples show, some of the popular conceptions of the Arctic in the late 19th and early 20th century in Austria and the United Kingdom were influenced by the geography and history of the respective countries. This leads to the conclusion that the spatial context of articulation is not to be neglected when studying discourses in non-Arctic countries either.

Even though understandings of the Arctic differ within and between countries, they also exhibit similarities. Keul et al. explicitly choose not to compare conceptions of different countries in their analysis of Arctic discourses, but instead focus on six ideas that are common to all interviews conducted (ch. 1). Nationally disparate ideas might also influence each other. For instance, Robinson describes that in the beginning of Arctic exploration, U.S. American interest in the Arctic was aroused by increasing British activities in search for the Northwest passage. This shipping route promised to provide faster access to the Pacific Ocean and was represented as an opportunity to prove valour in British literature. Especially initially, U.S. American news coverage and literary reception of polar voyages drew on British sources (21–24). This shows how U.S. American Arctic discourses were influenced by fashionable British discourses of the time. What more generally becomes clear through this example is how the internationally shared reception of cultural texts, especially those in the English language, can spread Arctic discourses originating from one country to other regions.

All these considerations can now to be applied to the analysis of *His Dark Materials*. Evidently, it is valuable to specify the temporal and spatial context of reception. A brief glance at research on Arctic discourses in fiction and non-fiction reveals this to be relatively common practice. This restricts the scope of discourses that may be identified in the narrative. For this study, it is assumed that the relevant time-frame is the interval between the trilogy's publication and today, i.e. roughly the last twenty years. Considering the spatial aspect, the analysis is limited to a

British perspective. One reason for this is that in the text, the Arctic is mainly perceived through the eyes of Lyra. She originates from the alternative country Brytain, which closely resembles historic Britain in many respects. A further reason is the fact that the trilogy was written by a British author and gained widespread reception in the United Kingdom, which makes an analysis of possible articulations by a British audience relevant. As has been noted, some attention should also be paid to earlier, historic discourses. In addition, U.S. American perceptions of the Arctic presumably influence the British reception of Pullman's Arctic. Therefore, while the predominant focus is on current British discourses, it is occasionally useful to slightly broaden the perspective. With this awareness, the following section describes British notions of the Arctic as a region related to exploration, science, and climate change.

3.3.2. British Arctic discourses of exploration, science, and climate change

3.3.2.1. Exploration

One of the most prominent discourses of the Arctic is centred on the motif of Arctic exploration. This image is described by Young and Einarsson's introduction to the *AHDR*, for instance, which delineates the conception of the region as "[I]and of discovery" (25) as one of several discourses which "spawn dramatically different [...] approaches to Arctic issues of public importance" (22). As the history of journeys to the North can be traced back to antiquity (Barraclough and Donecker), the notion of the Arctic as a destination for explorers and researchers must be quite long-standing. Expeditions are organised even today, ensuring the continuing importance of this conception of the region. A prominent example of comparatively recent Arctic exploration is the Russian seabed mapping expedition of 2007, during which a flag was placed on the seabed at the North Pole (for an example of a British newspaper article on the event see, e.g., "Russia Plants Flag under N Pole"). Johanne M. Bruun analyses some of the media reactions to the flag-planting. She focuses on two Danish newspapers and concludes that for them, "the flag-planting appeared as an imperialist act" (36).

In many exploratory missions, the location of a specific place such as the North pole is to be reached or a passageway such as the Northwest passage is to be traversed. Concerning the Northwest passage, Adriana Craciun observes that it often stands for "a threshold to a desired elsewhere, be it the commercial riches of China, natural resources in the High Arctic, or the paradise imagined to exist at the ice-free North Pole" (104). This can be seen as related to what Hansson describes as "a tradition of imagining the Pole as the entrance to another world"

("Arctopias" 71). Her paper on utopian literature set in the Arctic also indicates that this other world is often idealised.

Closely linked to Arctic exploration is the motif of the rescue mission. When expeditions in pursuit of such exploratory goals do not return from the Arctic, a famous example for this being the Franklin expedition, rescue missions may be launched. As discussed in section 3.3.1., the attempts to find Franklin and his crew is a fruitful theme in cultural production until today.

Discourses of Arctic exploration have decisively shaped contemporary ideas about the Arctic. Davidson, for instance, points out that they have not only influenced the "*idea* of north" in general, but also the "idea of the essential or 'true' north" in works of art and literature of the twentieth century in particular (19; emphasis in original). For instance, he argues that "ideas of north of disaster, loss, expeditions that fail to return," which are frequently found in English literatures, can be linked to the memory of Robert Falcon Scott's failed Antarctic expedition (19). One instance of this connection between exploration and contemporary discourses is studied by Maura Hanrahan in greater detail. In "Enduring polar explorers' Arctic imaginaries and the promotion of neoliberalism and colonialism in modern Greenland," she shows that some notions of Greenland held by explorers of the past reappear in the neoliberal rhetoric of global actors with interest in the region.

A very central moment of many Arctic exploration discourses is the image of a heroic male explorer in a harsh and dangerous natural space. Lisa Bloom pays specific attention to the Arctic hero in her famous study of the Arctic as a land of discovery, *Gender on Ice: American Ideologies of Polar Expeditions*. There, she analyses connections between historic narratives of heroic polar exploration, white masculinity, and national identity in the United States, but also in the United Kingdom. Even though Bloom primarily discusses heroes living in past eras, already the opening paragraph of her preface points out the continuity of these discourses' relevance until the time of publication in the early 90s (ix). Bloom points out that in the late nineteenth and early twentieth century, "[t]he polar explorer represented an epitome of manliness" (6). Robinson's *The Coldest Crucible* provides more detailed insights into how this heroic masculinity was performed. He traces how in the United States, Arctic explorers shifted from donning "the mantle of science to display their high status as men" to "portray[ing] themselves as muscular, primitive men" (6).

Compared to Arctic heroes, the inhabitants of the region are often regarded as lacking in some respect. Bloom, for instance, criticises the "reduc[tion] [of] the vital participation of Inuit men

and women to subordinate 'native bearers' imagined as either 'primitive' or 'unspoiled' figures" (3). This is confirmed by Hanrahan, who notes that Greenland's indigenous population is often regarded as "peripheral, offstage" (103) and as "inferior" (109), and by Keskitalo, who points out that Inuit have often been described as "primitive," "traditional," and close to nature (*Negotiating* 28).

The Arctic of historic exploration discourses is typically imagined as an "environmental, largely uninhabited entity, seen as sublime" (Keskitalo, Negotiating 27; emphasis in original). The first characteristic of the region mentioned here, the Arctic as an environmental space, points towards an understanding of the North in terms of its nature, rather than in terms of its human inhabitants. If Arctic inhabitants do appear, they tend to be represented as living in tune with nature. The second attribute of the North as largely uninhabited overlaps with the conception of the region as a terra nullius, i.e. an unclaimed territory. Several researchers have taken note of this view of an uninhabited or empty Arctic (e.g., Goldman 156; Hanrahan 109; Hansson, "Arctopias" 71; Spufford 58). As Hanrahan locates this idea also in contemporary discourses about Greenland (114–116), it evidently has endured until today. The third attribute Keskitalo mentions in connection to Arctic nature is the sublime. The vision of the Arctic as "a region in which natural phenomena could take strange, almost supernatural, forms, sometimes stunningly beautiful, sometimes terrifying, often both" is linked to the Arctic sublime by Chauncey C. Loomis (96). The conception of the North as sublime is of continued relevance, albeit in diminished (Loomis 112) or altered (Wråkberg, "The Quest" 197) form.

Two other, closely linked, typical moments related to Arctic nature in the exploration discourse are the Arctic as cold and dangerous. As Grace remarks, "the familiar description of North as deadly, cold, empty, barren, isolated, mysterious, and so on create a dramatic atmosphere for challenge and adventure." (16–17). Similarly, Hansson observes that "one of the most persistent discourses about the far North in the last two hundred years is the idea of a cold, empty, dangerous region imbued with notions of heroic masculinity and frontier rhetoric." ("Arctic Crime" 225–226).

3.3.2.2. Science

The image of the Arctic as a place to conduct scientific research is of great contemporary relevance. The *AHDR*, for instance, mentions the stakeholder conception of the region as "a magnet for researchers" (Young and Einarsson 25). Duncan Depledge adopts a more specific focus on British discourses when he demonstrates how three influential conceptions of the

North, including "the notion of the Arctic as a scientific laboratory" ("(Re)Assembling" 187), are taken up by British government officials. Research on climate change features particularly often in these discourses ("(Re)Assembling" 189). Bravo and Sörlin point out that contemporary notions of the Arctic are influenced by older science discourses. More precisely, they mention that the perceptions of the Arctic landscape as "a desolate place" or "a place of evolutionary survival for hunting societies" are shaped by the role scientific research played in the North. The endurance of these images is likened to the durability of Orientalist ideas (Bravo and Sörlin, "Preface" vii).

An important aspect of Arctic science discourses is the role of local knowledges, which have attracted increasing attention in recent years. Bruce C. Forbes and Gary Kofinas observe such an ongoing development since the publication of the first *AHDR* ten years previously in their chapter "Resource Governance" of the second *Arctic Human Development Report (AHDR-II)* from 2015 (259). They add that misconceptions about the nature of local knowledge, which cannot be separated from its context, still exist (259). A similar conclusion is drawn by Anna Roosvall and Matthew Tegelberg in 2013. They argue that the consideration of traditional environmental knowledge is a rather recent phenomenon (396) and add that "limited and superficial [...] representations of indigenous peoples in summit journalism make subtle allusions to these theoretical developments" (396–397).

The representation of indigenous knowledge is often still problematic. For instance, the construction of a binary that positions "[i]ndigenous knowledge [...] in opposition to 'western' or 'scientific' knowledge" has been observed (Kelman et al. 163). Bravo and Sörlin agree with this when they remark that "scientists have constructed 'indigenous knowledge' as its Orientalist 'other'" ("Narrative" 5). Not only the othering of indigenous knowledge, but also the depreciative view of its nature is problematic. As Hanrahan points out, even today, indigenous knowledge is often perceived as inferior to "the knowledge [...] of the west" (108). It is, for instance, "often incorrectly characterized as static and ancient, rather than dynamic and modern" (Kelman et al. 163). It can thus be concluded that an increasingly high value is placed on indigenous or local knowledge, but that misconceptions about it still exist.

3.3.2.3. Climate change

Discourses linking the Arctic with climate change currently enjoy great popularity. While scientific discussions about Arctic ice and its global importance started about 200 years ago (Bravo and Rees 210), Schweitzer, Saxinger, and Donecker observe that the warming Arctic

climate has been especially widely discussed in recent times. One reason for this is that the effects of climate change are particularly evident in the circumpolar North (12). The AMAP points out that global warming leads to an especially high increase of temperatures in the Arctic ("Snow" 3; 8-9), where snow and ice covers are diminishing, permafrost ground is thawing, and plants and animals are affected by changing conditions ("Snow" 4–5).

Some moments of the climate change discourse have a pars pro toto relationship with other moments. For instance, changes in the Arctic often stand for changes in the global climate, possibly due to the high visibility of global warming in the North. Researchers have used colourful designations for this notion, such as "the Arctic as a global environmental bellwether" (Doel, Wråkberg, and Zeller 6), as "an 'early warning system' for global warming" (Huggan, "From Arctic Dreams" 87), or as "canary in the coal mine" (e.g., Duyck 583; Martello, "Global" 108). On a smaller scale, Arctic-related imagery enjoys popularity among those who relate the problematic nature of global warming to the public. Polar bears have a particularly iconic function in this context (e.g., Bravo, "Voices" 257; Duyck 583; Martello, "Arctic Indigenous Peoples" 352).

The changes in the Arctic are not only regarded as symbolising global developments, but also as influencing them. Indeed, the AMAP finds that the melting ice raises worldwide sea-levels. Additionally, the thawing permafrost will release greenhouse gasses into the atmosphere ("Snow" 4–5), thereby increasing global temperatures even more. The weather of countries further to the south is affected as well (AMAP, "Snow" 5). In the United Kingdom, for instance, the changing Arctic climate leads to apprehensions concerning the rising temperatures in the Arctic in general and the possible adverse effects on the British climate in particular (Depledge, "Assembling" 167). This view of climate change in the Arctic leading to global changes adversely affecting populations can be regarded as a form of "climate change crisis narrative." This term is introduced by Bravo, who describes it as the notion "that global-scale climate change is causing physical environmental changes putting human communities at risk" ("Voices" 258).

In contrast, there also exists a widespread belief that Arctic climate change presents opportunities, which has geopolitical consequences. For example, melting sea ice renders natural resources within reach and formerly frozen shipping routes accessible (AMAP, "Snow" 13). These and other advantages are habitually mentioned in geopolitical appraisals of a supposedly frail Arctic (Dittmer et al. 203). As is briefly mentioned in the introduction, some

scholars such as Craciun are thus led to conclude that there is an ongoing "twenty-first century scramble for the Arctic, and specifically for access rights to the rapidly melting Northwest Passage" (Craciun 104). The rhetoric of politicians further contributes to this "new era of saberrattling" (Doel, Wråkberg, and Zeller 4) and media reports even imagine a possible "resource war" (Huggan, "Introduction" 15).

3.4. Criticising dominant Arctic discourses

Hansson's description of Arctic discourses as "determin[ing] what is regarded as the 'truth' about the region" ("Arctic Crime" 225) makes clear how pervasive Arctic discourses are. Even widespread ideas about the region linking it to exploration, science, and climate change do not to remain unchallenged, however. This section examines some possibilities of criticising Arctic discourses. The first focus is on works of fiction, which implicitly criticise Arctic images by subverting or replacing them and explicitly challenge these ideas by addressing legacies of colonialism in their texts. The second focus is on researchers who use the theoretical concept of Arcticism, a parallel to Said's Orientalism, to draw attention to the fact that the region has been used as a means of exerting control over it.

3.4.1. Questioning Arctic discourses through literature

In works of literature, Arctic conceptions are not only taken up because they are part of the worldview of the audience, they might also be employed to criticise popular images of the Arctic. How this is achieved can be studied on the example of three literary critics' interpretations of narratives taking place in the circumpolar north, who find implicit and explicit criticism. Hansson traces what might be labelled implicit criticism in the Kate Shugak series of Alaskan detective novels by Dana Stabenow. There, Arctic stereotypes are undermined in several instances, which indirectly criticises established discourses. One of Hansson's examples of subverted discourses is based on the premise that the novel exhibits characteristics of both the Arctic adventure story and the crime novel. As Hansson explains, Arctic adventure usually demands for a capable male protagonist holding his own in a tough environment, while the crime genre conventions necessitate a populated locale. However, the main character of the series is a female detective investigating in Alaska, which questions the discourses that link the Arctic with masculinity and natural expanses ("Arctic Crime" 224–225). Hansson points out that Stabenow not only rejects, but also recreates dominant images by representing the area through commonly expected tropes ("Arctic Crime" 225–227), for which she finds the

explanation that "it is impossible to form statements from a position outside the discourse" ("Arctic Crime" 225–226).

Two literary critics who find explicit criticism in literary texts are Marlene Goldman and Kirsten Thisted. Goldman concentrates on Aritha van Herk's use of Arctic images to convey feminist messages. Her general approach is reminiscent of Hansson's example described above, as she bases her study on an analysis of genre conventions employed by van Herk's fiction. Ultimately, Goldman argues that van Herk frequently uses and rarely problematises stereotypical images of the North (155–158), although she attests her a change towards more sensitive representations in a comparatively later essay (159). Moreover, Goldman finds the author aware of issues connected to certain conceptions of the Arctic. This is corroborated by the example of a scene in which the protagonist directly questions the imperialist practice of naming spaces regardless of pre-existing indigenous designations (158–159). It thus can be argued that Goldman finds explicit criticism in van Herk's fiction.

Even more profoundly and explicitly critical is Peter Høeg's novel *Smilla's Sense of Snow*, which is the object of Kirsten Thisted's discussion. Thisted regards the text as postcolonial, because it directly portrays the aftereffects of Danish colonialism on Greenland (313–315). The narrative might thus be understood as explicitly criticising dominant discourses of the Arctic country Greenland. Thisted furthermore maintains that the novel can be placed in the tradition of postcolonial writing back as "[the protagonist] Smilla directs the reader's attention back toward the colonizers themselves" (315). Nevertheless, Thisted maintains that also Danish author Høeg is not free from problematic discourses when he fashions Greenlanders as the other in typically colonial tradition (319; 322-323). This prompts Thisted to label the text, with reference to Edward Said's criticism of orientalist practices, as "a piece of 'arctic orientalism'" (319).

These three interpretations by Hansson, Goldman, and Thisted have several aspects in common. Firstly, they all detect criticism of dominant Arctic discourses in the text. It may either appear in implicit form, for instance when key elements of traditional images are changed, or in explicit form, when problematic practices are questioned or described. Secondly, they all find a perpetuation of popular or even problematic conceptions of the circumpolar north. Lastly, they all draw on Said's ideas (Goldman 154;158; Hansson, "Arctic Crime" 225; Thisted 314;319;328), which is an indication of how useful his concepts might be for the study of Arctic discourses. Especially Thisted's introduction of arctic orientialism is noteworthy in this context,

as the following discussion surrounding the postcolonial criticism of Arcticist discourses will show.

3.4.2. Postcolonial criticism of Arcticist discourses³

The presumably most influential postcolonial analysis of discourses about a region has been undertaken by Edward Said, whose monograph *Orientalism* traces the British, French, and U.S. American discursive construction of the Orient. Said draws on an understanding of discourse introduced by Foucault (3) to describe "Orientalism [...] as a system of knowledge about the Orient" (6). According to his theory, Orientalism has influenced how the Orient can be perceived (3), always establishing Europe as superior (7). The Orient has been fashioned as an other which defines Europe by incorporating all that Europe supposedly is not (1–2). As a result of othering, "European culture gained in strength and identity by setting itself off against the Orient" (3). Said furthermore points out the use of Orientalist ideas in the justification of political projects such as colonialism (39). Thus, Said's characterisation of Orientalism makes apparent the dimension of power, which is inherent in discursive practices.

As the previous sections shows, researchers draw upon Said's ideas when analysing Arctic discourses in fiction. However, this presupposes that an appropriate analogy between Orientalism and images pertaining to the entire circumpolar Arctic can be drawn. Some scholars such as Robert G. David and Lars Jensen find this far from self-evident and raise serious doubts whether this is possible. A second group of researchers seems more confident that it is valid to draw analogies between the Orient and the entire Arctic region. Gísli Pálsson, who only works with Orientalism indirectly, suggests the concept of arcticality. Keskitalo (*Negotiating* 179–180), and also Ryall, Schimanski and Wærp (x) demonstrate how Orientalism can be directly applied to the Arctic.

David carefully considers the value of Orientalism for his research in *The Arctic in the British Imagination:* 1818-1914 and mentions several problems in the introduction and conclusion of his monograph. The issue most relevant to the present discussion has to do with recontextualisation. As David shows, the tradition of describing the Arctic differs greatly from that of representing the Orient. The image of the Orient has been constructed more consistently across different disciplines than ideas about the Arctic (15–17). David points out that with regard to the Arctic, only few continually reappearing images exist. They have been around in

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³ Parts of this section are adapted from "Arctic Discourses in Philip Pullman's *His Dark Materials*: A Postcolonial Analysis" (see footnote 1).

the form of stereotypes since the 19th century, often reflecting outsider's ideas about indigenous populations (17–20). From David's observation, it may be concluded that a single coherent Arcticism cannot exist. The simultaneous existence of multiple, possibly contradicting Arcticist notions of the region needs to be acknowledged. Notwithstanding their diversity, these various images establish an unequal power relationship between imperial centres and the Arctic, which makes their study worthwhile.

Jensen's consideration of the applicability of Orientalism to the Arctic leads him to the conclusion that such a transfer is only meaningful under certain conditions. In his study *Greenland, Arctic Orientalism and the Search for Definitions of a Contemporary Postcolonial Geography*, he compares different suggestions of applying Said's theory to the Arctic before examining representations of Greenland in films. Jensen raises the valid point that a practical application of Orientalism to the Arctic should not restrict itself to abstract considerations, but relate the findings to actual situations ("Greenland" 142–143). He maintains that it might be "useful to look at the specific forms that colonial culture took and the particular forms of anticolonialism that developed in various parts of the Arctic" ("Greenland" 142). While this certainly has its merits, as Jensen's film analysis demonstrates, it might be most effective when considering traditional colonial relationships. When, as in this thesis, a contemporary British perspective is assumed that has political and economic interests in large parts of the Arctic region, a more general approach is necessary.

A closer look is now taken at ideas of researchers who believe in the feasibility of applying Orientalism to the entire Arctic region, starting with Pálsson's approach. Pálsson introduces arcticality as an equivalent to tropicality (277). This latter concept was originally proposed by David Arnold to describe the "environmental otherness in European thought" as a form of Orientalism pertaining to the imagined region of the tropics (Arnold 142). Pálsson's study demonstrates how the writings of explorer Vilhjalmur Stefansson, who travelled to the North American Arctic, establish an arcticality discourse. This results in a notion of arcticality that is bound to the Canadian origin of Stefansson and the Arctic regions he visited. Yet, Pálsson claims that Stefansson "both mapped and defined the Arctic in Western discourse" (305), which might imply an understanding of the arcticality discourse that applies to the Arctic in general and makes no difference between the distinct contexts of various Western countries. Even though this might be legitimate, the conclusion is drawn from a specific context and applied to a general situation. It thereby fails to provide a conclusive proof for the applicability of Orientalism and arcticality to Arctic regions outside North America or to the entire circumpolar

Arctic. Furthermore, as David has pointed out that not a single but rather multiple notions of the Arctic have been expressed in different fields, the arcticality that Pálsson identifies might be field-specific as well.

In contrast to Pálsson, Keskitalo works with the concept of Orientalism directly and applies it to the Arctic region in general. In the last chapter of *Negotiating the Arctic*, she employs Said's concept of Orientalism to criticise generalised and essentialised perceptions of the Arctic region. This is supported by the identification of Arctic counterparts to elements of Orientalist discourse. Her main findings are the perception of the Arctic as an "essentialized and fundamentally different unit" (emphasis in original) characterised by its wild nature and indigenous inhabitants, the lack of an equivalent counterpart to Arctic studies, and the representation of indigenous peoples in a manner compatible with the wilderness conception such as "non-modern, authentic, traditional" or absent altogether. Keskitalo mentions these parallels to Orientalist discourse only after making clear that she does not expect a one-to-one correspondence between Orientalism and current ideas of the Arctic, but unfortunately neglects to clarify what the limitations of her approach are (Negotiating 179–180). Indicative of one issue might be the fact that she searches for similarities between conceptions of the Orient and the Arctic without addressing fundamental differences arising from the disparity of contexts. Another point of criticism is made by Jensen, who notes that Keskitalo neglects to consider "the repercussions for the conceptualisation of the Arctic as a region" ("Greenland" 141), which would certainly have been very interesting.

Ryall, Schimanski, and Wærp directly use the concept of Orientalism as a starting point for further considerations as well, as they present the concept of Arcticism as a parallel to Edward Said's Orientalism (x). Their definition of Arcticism hinges less on specific images and more on what the concept does, namely making constructions of an imagined other, in the form of indigenous people or nature, seem self-evident, as well as allowing for a specific understanding of the self and of collective identities:

Within this Arcticism, images of the natural or indigenous other are reproduced and naturalized, taken for granted. Arcticism also becomes a strategy of imagining the self, for example (to take some of the most obvious cases) as an explorer-hero, a scientific worker, or a white, imperial male. It can also be a strong force in the imagining of the collective identities of empires, nations and minorities. (Ryall, Schimanski, and Wærp x)

The mechanism of Arcticist discourses works in a similar way as Thisted's less comprehensive arctic orientalism. As a brief reminder, Thisted introduced arctic orientalism to describe the

novel *Smilla's Sense of Snow* for its perpetuation of "the marginalization and exotization of the colonized as the colonizers' 'other' (319).

Ryall, Schimanski, and Wærp's Arcticism is a very general concept, which is its great advantage. The authors do provide illustrative examples in the form of notions commonly associated with the Arctic to make the workings of Arcticism apparent, but these examples do not seem to be necessary constituents of Arcticism (x). This is unlike Keskitalo's approach, who already proposes specific conceptions of the Arctic that fill the roles originally taken up by images of the Orient in Orientalist discourse. By contrast, Ryall, Schimanski and Wærp's concept has the advantage that it is general enough to be applied to a wide range of Arctic images Keskitalo may not have considered. It furthermore incorporates Pálsson's arcticality, which is primarily concerned with the othering of natural environments, without being rooted in the single perspective of Canadian explorer Vilhjalmur Stefansson. It is also general enough to cease being tied to the context of ideas about an imagined Orient, so that the necessity of an explicit adaptation of Orientalism to the Arctic is avoided. This last observation refutes criticism by Jensen. He objects that "they do not engage with the question of the re-contextualisation required" (Jensen, "Greenland" 140). While this may be true and such a consideration would have been useful, a re-contextualisation does not seem to be crucial for this very general definition of Arcticism. The lack of it does therefore not invalidate the concept.

Two functions are less effectively fulfilled by Ryall, Schimanski, and Wærp's Arcticism. Firstly, it does not directly expose the power inequalities inherent in discourses. Secondly, representations of non-indigenous others, such as Witches, *panserbjørne*, and other groups living in Pullman's Arctic, are not considered. This is remedied by Huggan, who refers to Ryall, Schimanski, and Wærp's ideas when he argues that Arcticism "serves as a self-perpetuating mechanism for exercising control and authority over the part-mythologised region it explores" ("Introduction" 11). His definition offers the same advantages as Ryall, Schimanski, and Wærp's wording, upon which it is based. In contrast to their definition, however, his wording does not specify the nature of the "self-perpetuating mechanism," which must refer to Ryall, Schimanski, and Wærp's discursive othering. Therefore, his mechanism may also apply to the construction of non-indigenous others. It thus appears that the two approaches complement each other.

Taken together, the definition by Ryall, Schimanski and Wærp, and the concept as described by Huggan, constitute the comprehensive final definition of Arcticism. In this thesis, Arcticism

refers to the reproduction of ideas about the Arctic that are used to gain power over the region, or parts of the region, from outside. This is achieved by othering Arctic nature and inhabitants, as well as by constructing individual and group identities. The generality of the concept of Arcticism is of great advantage in the interpretation of texts like *His Dark Materials*, which make use of a wide variety of discourses and depict Arctic regions from different continents. Justifiably, Huggan finds the notion of Arcticism "functional" ("Introduction" 11) and it seems to be particularly suitable to be applied to Pullman's *His Dark Materials*. In the following analysis, Arcticism is therefore the tool for criticising moments of Arctic discourses identified in the text.

4. Analysing Arctic discourses in *His Dark Materials*

4.1. Exploration

4.1.1. Exploration and rescue missions

Several exploratory expeditions to the Arctic are planned and undertaken in *His Dark Materials*. For instance, in Lyra's version of the world, Lord Asriel travels to the North to open a portal between universes which provides him access to the unknown places beyond (*NL* 375). Also in Will's universe, an Arctic expedition is made by Will's father John Parry, whose true reason for his first journey to the Arctic is his wish to locate a door to another world (*SK* 213). Even Lyra imagines a scene where she finds Lord Asriel "and they'd build the bridge together, and be the first across..." (*NL* 191). These characters' search for Arctic portals to other universes is paralleled by the historic goals of reaching the Northwest passage, termed "a threshold to a desired elsewhere" by Craciun (104), and the North Pole. The related idea of a utopic place to be discovered by an Arctic expedition is taken up by Lord Asriel, who does not only voice the mission to abolish "the origin of all the Dust, all the death, the sin, the misery, the destructiveness in the world" (*NL* 375), but later even intends "setting up a world where there are no kingdoms at all" with only "free citizens of the republic of heaven" (*AS* 211).

In *Northern Lights*, the portal "to a desired elsewhere" always appears together with the aurora, which articulates the doorway as Northern. Kaisa, the goose dæmon of Serafina Pekkala, provides a reason for this connection. He explains that the northern lights make the parallel worlds visible "[b]ecause the charged particles in the Aurora have the property of making the matter of this world thin" (*NL* 187). The aurora already appears on the photogram of the otherworldly city Lord Asriel shows the Jordan scholars at the beginning of the story. On his first slide, the northern lights are likened to a curtain, drawn across the open doorway to the city

in the sky: "Streams and veils of light hung like curtains, looped and festooned on invisible hooks hundreds of miles high or blowing out sideways in the stream of some unimaginable wind" (*NL* 23). On the copy of the photogram that is treated with a special emulsion, a city appears "in the middle of the Aurora" (*NL* 24). The northern lights and the portal to another, possibly better world are thus shown to be related. As the Northwest passage or the North Pole, the portal is thereby articulated as specifically Northern and of great interest for Arctic explorers.

Closely connected to exploratory expeditions is the notion of the Arctic rescue mission, which appears in the trilogy in several forms. A relatively large portion of *Northern Lights* is about the expedition Lyra and the gyptians undertake to save the children who were abducted and brought to the Arctic (*NL* 99-298). In addition, both Lyra's and Will's father did not return from the Arctic. For this reason, Lyra imagines staying in the Arctic after the children are taken to safety to liberate her father from the panserbjørnes' prison (*NL* 191). Will finds out that several teams tried to locate his father after his disappearance (*SK* 81). Will's efforts to find his father and his discovery of newspaper articles about the vanished expedition are evocative of the search for the lost Franklin expedition, as has also been noted by Peters (101). The same holds true for Lyra's and the gyptians' rescue mission.

Not only are the historical aims of crossing the Northwest passage, locating the North Pole, and rescuing stranded compatriots frequently taken up in the narrative, also intertextual references to historic explorers and their techniques are numerous. For instance, Pullman states in the "Questions Frequently Asked" section of his webpage that Lee Scoresby shares his last name with "Arctic explorer William Scoresby." In addition, there is a historical William Parry who tried to traverse the Northwest passage (David xvi), which reminds of Pullman's choice to name Will's father, who vanished during an attempt to locate a portal in the Alaskan Arctic, John Parry. Moreover, the means of transport used on characters' journeys to the North, dog-sledges, a balloon, and a zeppelin, have also been employed in past explorations. While dog-sleds were the tried method of transportation until the end of the 19th century (Robinson 107), Salomon Andrée tried to reach the North Pole in an unmotorized balloon in 1998, upon which he vanished (Robinson 114), and several Arctic journeys were undertaken by airship in the first half of the 20th century (Grossman n.pag.). Evidently, many moments of Pullman's exploration discourse refer to actual historic Arctic expeditions. This supports Cudmore's conclusion that "Pullman draws heavily from [...] the culture of nineteenth-century Arctic exploration" (219). The continuing repetition of these old discourses is not entirely unproblematic, however. As Alison Weisburger points out, the view on the situation of the Arctic today is obstructed by the repetition of the old stories of Arctic expeditions (n.pag.), a concern shared by Young and Einarsson (23).

By taking up various influential discourses of Arctic exploration and rescue missions, the trilogy naturalises them. *His Dark Materials* makes it seem self-evident that the North is a destination for explorers, who make previously unexplored Northern spaces and phenomena knowable. The Arctic is also represented as the place to which rescue missions need to be sent to bring compatriots back from danger. In the trilogy, all these aims appear to be natural and their pursuit seems justified. This is likely to suggest to readers that historic and contemporary Arctic expeditions, which are mirrored by the fictional characters' journeys, are legitimate and noble.

However, the seemingly innocent aim of exploration often hides underlying commercial and political purposes. As Peder Roberts and Lize-Marié van der Watt point out, Arctic exploration was of particular importance from a historic British perspective, as the development of magnetic charts and the discovery of new shipping routes promised to provide an advantage in maritime trade (59). When these voyages became less profitable with the ongoing eighteenth century, they turned into "a matter of national prestige" instead (Loomis 95). As Hanrahan points out, expeditions often also led to the exploitation of natural resources, which provided financial advantages to non-Arctic countries (109).

Furthermore, these journeys often had wide-reaching political impact. Exploratory activities by the British Empire can be regarded as "a form of imperial expansion that could be carried out during peacetime" (Garrison par. 1). Several countries, including the British Empire, could gain political influence in the North through exploration (Hanrahan 104). The first explorers to reach the poles marked their achievement with their national flags, which was "symbolic, but given the extent of European power, the symbolism was potent and extended beyond itself to have real meaning for the Antarctic and Arctic" (Hanrahan 116). As the reactions to the Russian flag planting in 2007 show, the symbolic power of exploration has retained its influence until the twenty-first century. Thus, if non-Arctic countries send expeditions to the North, they can gain power over the regions explored. By making enterprises such as Arctic exploration seem natural, *His Dark Materials* provides ideological support for their realisation.

At the same time, the trilogy also shows some of the problematic side-effects of Arctic expeditions. Lord Asriel's exploratory aims, which in *Northern Lights* cumulate in his opening

a gap in the fabric between universes, causes climate change (see section 4.3.5.). Furthermore, Mrs Coulter's influence on Svalbard politics is presented in a negative light, as "Iofur was besotted with her. Couldn't stop talking about her. Would do anything for her" (*NL* 330). Her promise to make the christening of Iofur Raknison attainable (*NL* 340) evokes memories of Christian missionary activities in the Arctic. Bravo and Sörlin mention that such activities have taken place on Greenland ("Narrative" 8), for instance. Another issue connected to Arctic exploration is that it is used by non-Arctic countries as a pretext to obtain access to resources. Tony Costa explains to Lyra that "the Tartars want to move North just as much as the rest, for the coal-spirit and the fire-mines, and there's been rumours of war for even longer than the Gobblers been going" (*NL* 108). This parallels geopolitical interests in our world. Depledge, for instance, discusses British interests in Arctic hydrocarbons ("(Re)Assembling" 189–192) and points out that "broader defence and security issues" arise from this ("(Re)Assembling" 193). Past and present concerns about the consequences of exploration are thereby addressed in the trilogy.

4.1.2. British heroes

The discourse of Arctic exploration often involves an Arctic hero with rather stereotypical characteristics. The British explorers in His Dark Materials conform to some stereotypes, but subvert others. The two most prominent Arctic explorers in the trilogy, Lord Asriel and John Parry, embody masculine ideals, which are found in typical Arctic heroes. Lord Asriel and John Parry conform to the type of "great men" Lyra meets at the Royal Arctic Institute, who "were scholars, no doubt about that, but [...] explorers too" (NL 77). Both are shown to be men of science, for instance when Lord Asriel is described to build up a laboratory as a prisoner on Svalbard (NL 360-361) or when John Parry recounts how he became an academic in the new world he entered through a portal (SK 214). At the same time, they also embody tough masculinity. Lord Asriel enjoys activities such as hunting, for instance, and when Mrs Coulter's former husband breaks into his estate, Asriel challenges him to an ultimately fatal duel (NL 123). Clearly, Lord Asriel is willing to employ violence and fight. John Parry's original professions are stereotypically connotated with masculine valour, as he was "a brave and clever officer in the Royal Marines, who had left the army to become an explorer" (SK 10). Their fierce and strong personality is expressed in their dæmons, a snow leopard (NL 11) and an osprey (SK 210). Their depiction thus conforms to both versions of Arctic heroes Robinson describes, the scientifically minded explorer and the tough male.

The Arcticist moment of masculine Arctic heroism is not only repeated, but also subverted by the characters of Lord Asriel and John Parry. Historically, Arctic heroes played a role in the construction of positive national identities. As Loomis remarks, for instance, "[m]any government officials, the press, and the public came to believe that somehow British manhood and British power were on the line in the continued search for the [Northwest] passage" (95). Correspondingly, in *His Dark Materials*, the scientific rationality and masculine toughness of Lord Asriel and John Parry, which enables them to succeed in their Arctic missions, may be interpreted as reflecting favourably upon a perceived British national character. Therefore, this moment of the Arctic expedition discourse may at first glance be classified as Arcticist.

The positive image of Britishness that Lord Asriel and John Parry embody is marred, however, by the details of their journeys. Lord Asriel can only achieve his goal of building and crossing a bridge between worlds by sacrificing Roger (*NL* 377), upon which he ceases to be a hero in Lyra's (*NL* 395) and the readers' eyes. John Parry, even though he crosses the anomaly without resorting to such means, is unable to return to his world. His search for the portal causes him to abandon his infant son and his wife (*SK* 81), for whom Will had to take responsibility as seven-year-old (*SK* 114), which makes John Parry's actions appear selfish and irresponsible. Ultimately, neither Asriel nor Parry are suitable to embody a positive national identity.

The figure of the Arctic hero is furthermore questioned by inverting a central moment of the Arctic exploration discourse, the masculinity of the explorer. Even though the two Arctic explorers Asriel and Parry are male, the central character travelling North is Lyra. As Cudmore points out, "Pullman's use of a female child protagonist [...] defies the gendering of the Arctic experience" (225). Lyra journeys to the Arctic to save her male friend Roger, thereby inverting expectations about boys typically saving girls. Her second aim is to reach Lord Asriel and cross the bridge to a new universe together with him. Both aims place her into the tradition of accomplished adult male polar explorers in search for the North Pole, the Northwest passage, or stranded compatriots. Thus, the typical exploration narrative appears in *His Dark Materials* in changed form.

The fact that Arctic exploration is typically a male endeavour is not only subtly inverted by using a female protagonist, it is also explicitly addressed by a character in the story. Mrs Coulter remarks that she is "one of the very few female members" of the Royal Arctic Institute (*NL* 77). At the same time, she is described as very feminine. For instance, her flat is "pretty" with lamps, frills, china figures, and lush carpets, which Lyra critically contrasts to the masculine space of

Jordan College, where "much was magnificent, but nothing was pretty" (*NL* 76). Notwithstanding her obvious femininity, Mrs Coulter still partakes in the stereotypically male world of Arctic exploration and the book explicitly draws the readers' attention to it. This may incite the reader to question the traditional discourse.

Even though Pullman's choice of female characters in the exploration discourse subverts the traditional image of male heroism, a crucial element, the superiority of the traditional British Arctic hero, is not questioned. It is striking that, as Oziewicz observes, "the British are in most cases the 'leader nation'" and "[e]verywhere they go, they command the indigenous population" (5). A central moment of Pullman's Arctic exploration discourse is thus the character of a strong and powerful Arctic hero or heroine who dominates Arctic inhabitants. This reproduces an Arcticist image of British heroes being naturally superior to the local population. A closer analysis of the representation of Arctic inhabitants in the exploration discourse is undertaken in the next section.

4.1.3. Othered Arctic inhabitants

As Oziewics shows, in *His Dark Materials*, Northerners are articulated as other (see section 2.2.). A scene in the trilogy, which makes this particularly evident, takes place when Lyra meets Iorek Byrnison for the first time. The narrator tells that Lyra "felt a bolt of cold fear strike at her, because he was so massive and so alien." (*NL* 194). Not only panserbjørne, but also humans are represented as other, as the more detailed analysis below shows. The repeated articulation of an Arctic other is a way of exercising power over the ones described and can thus be classified as Arcticist. The othering of Arctic inhabitants is achieved, amongst other things, by essentialising them as primitive people who are not technologically advanced and live close to nature, as this section analyses in greater detail.

One aspect of otherness can be found in the frequent representation of Arctic inhabitants as primitive. As Oziewicz eloquently expresses it, "[l]ike nineteenth-century imperial explorers, Pullman's protagonists travel through strange worlds of 'primitive' cultures – those of Lapland witches, Svalbard bears, Asiatic Tartars, Himalayan Hindu people, and seed-pod riding Mulefa" (5). The fact that in *His Dark Materials*, Arctic peoples are less technologically advanced than the British contributes to this impression of primitivity. The witches' and Samoyed hunters' arrows (*NL* 289; 231), as well as the bears' mechanical fire-hurler (*NL* 382) seem old-fashioned when compared to the power of the Consistorial Court's bomb (*AS* 355-356). The same holds true for the means of transportation available to Arctic peoples, such as the Samoyed hunters'

dog-sledges (*NL* 232-233) and the witches' pine-branches (*NL* 175). Their construction presumably requires less technological knowledge than the production of Lee's balloon (*NL* 192) or Mrs Coulter's zeppelin (*NL* 262-263).

Another moment suggesting a primitive lifestyle is the representation of the local population as being in tune with the land and the wilderness. Even though this carries positive connotations in the novels, it still repeats stereotypical representations of Arctic peoples. For example, Lyra observes that the Samoyed hunters, who attack the gyptian party and abduct her, are "balanced in the sledge" and "at home in this land in a way that the gyptians weren't" (*NL* 233). Another group, which is portrayed as being especially close to nature, are the witches, who "live in forests and on the tundra, not in a seaport among men and women. Their business is with the wild" (NL 165). Through their special link with nature, they gain knowledge (*SK* 41), and they are untroubled by the central attribute of the Arctic, the cold (*NL* 311).

It thus seems that even though Pullman portrays inhabitants of the Arctic as living a less technologically advanced life, he tries to avoid being evaluative about it. He shows that the witches and panserbjørne are not simply less advanced societies modelled on a British way of living, but that they represent alternative versions of how to organise social interaction. The witches live by their own rules and have their own political system (*NL* 221; 260-261; 306-307). Similarly, also the bears have their own laws, according to which Iorek's murder was punished by exile (*NL* 223) and deprivation of "the privileges of a bear" (*NL* 329). Also their ethics differ from that of humans. According to Professor Jotham Santelia, whom Lyra meets in a Svalbard prison, bears value their own species more than walruses and seals, and hold Skraeling and Tartars in even lower esteem (*NL* 329-330). The message appears to be that Arctic inhabitants have their own lifestyle adapted to Arctic nature, which is different from British ways of life, but not inferior to them. As Cudmore observes, Lyra "comes to accept and appreciate (if not entirely understand)" the lifestyle of these two Northern populations (227). The Victorian fallacy of assuming that "there [is] only one civilization, one path of progress" (Bloom 5) is thus avoided.

What is problematic about Pullman's appreciation of alternative and specifically Northern cultures is that in *His Dark Materials*, Arctic inhabitants take their alternative decisions not by choice, but because the actions comply with their supposedly essential nature. This becomes apparent, for instance, when Iorek does something against what he assumes to be his bear nature and regrets it right afterwards: "I think I have stepped outside bear-nature in mending this knife.

I think I've been as foolish as Iofur Raknison." (AS 192) What Iorek alludes to in his second sentence is former bear-king Iofur Raknison's wish to copy the ways of humans, which he attempts by building a stone palace, and introducing human customs and fashion. This goes against bear nature and quite tellingly, after the panserbjørne get rid of Iofur Raknison's innovations, they become, once again, "true bears, not uncertain semi-humans, conscious only of a torturing inferiority" (NL 352). In addition, their essential nature is described as static. Iorek explains to Will that "[our customs] are firm and solid and we follow them without change" (AS 192). Not only the panserbjørne, but also the witches live their lives according to their essential character. As Serafina Pekkala explains to Lyra, she would have been willing to give up her way of life in order to be together with Farder Coram. What prevented her from doing so was that "you cannot change what you are, only what you do" (NL 312-313). Thus, in His Dark Materials, inhabitants of the Arctic choose their lifestyle because it befits their essential nature, which is distinctly different from British culture. This makes any process of othering seem justified.

These conclusions are applicable only to a lesser extent to the trilogy's representation of indigenous people, however. This is because indigenous people seldom appear in the trilogy. Umaq, Lee's driver on Nova Zembla (*SK* 121-122; 127-128), Matt Kigalik, who describes the location of the Alaskan portal to John Parry (*SK* 114), and the Tartars in whose village John Parry lives as a shaman (*SK* 208-210; 217) are only described briefly and in a superficial way. They are merely characters of minor importance and the reader does not obtain close insights into their ways of life. Indigenous subject positions of any depth are therefore not offered by the story. As this is a typical role of indigenous peoples in many exploration discourses, their representation perpetuates common stereotypes. It also supports other Arcticist moments, for instance by providing a contrast to the far more visible British heroes. In discourses outside *His Dark Materials*, the implied absence and unimportance of indigenous peoples has supported the misconception of the Arctic being an empty place.

4.1.4. Arctic nature

The exploration discourse features the moments of empty, cold and dangerous, yet also beautiful Arctic nature, which are analysed in further detail in this section. The first attribute of Arctic nature, emptiness, mostly pertains to perceptions of Svalbard. When Lyra is brought near the location of Lord Asriel's experiment on Svalbard by Iorek, she ascends an elevation where "[t]o the north lay the frozen sea, [...] flat and white and endless, reaching to the Pole itself and far beyond, featureless, lifeless, colourless, and bleak beyond Lyra's imagination" (*NL* 388). As

Voogd notes about this passage, Lyra perceives the place as empty (par. 10–11). This emptiness also pertains to the land, as becomes clear when the description is continued: "To the south [...] nothing stirred on the wide plain. [Lyra] was not even sure if she could see the burned wreckage of the zeppelin, or the crimson-stained snow around the corpses of the warriors" (*NL* 388). Apparently, the landscape is so intrinsically empty, it even eradicates the sight of anything that Lyra knows is there. Briefer than Lyra, but to the same effect, Lee Scoresby offers the same outsider's perspective on Svalbard, "[t]he bleakest barest most inhospitable godforsaken deadend of nowhere" (*NL* 227).

The emptiness Lyra perceives is closely linked to the concept of a terra nullius. This idea of the Arctic as an uninhabited empty space has been used by generations of outsiders to project their own wishes on the region (e.g., Eglinger 3; Spufford 58), including "British imperial fantasi[ies]" (Bloom 3), and to justify the appropriation of the land and the exploitation of natural resources (e.g., Gritsenko n.pag.; Hanrahan 109). Young and Einarsson furthermore add that the continuing relevance of this idea of an Arctic "wilderness mostly devoid of permanent human residents" often obscures issues connected to indigenous rights or the preservation of natural resources (23). The portrayal of parts of the Arctic as empty therefore repeats a fairly typical element of traditional and contemporary Arcticist discourses of the region.

Incidentally, criticism of the notion of a terra nullius is taken up by Pullman with reference to another landscape, the world where Lord Asriel plans to build his republic of heaven (Oziewicz 5). King Ogunwe explains to Mrs Coulter that "[Lord Asriel] led us here because this world is empty. Empty of conscious life, that is. We are not colonialists, Mrs Coulter. We haven't come to conquer, but to build" (AS 210). Not only Oziewicz, but also Cantrell is not convinced by this assertion, as she observes about this exchange that "Lord Asriel is conquering a natural habitat whether he sees it that way or not" ("Letting Specters In" 237).

At the same time, Pullman offers the reader a chance to realise how biased perceptions are. As Voogd points out, Pullman provides two vastly different descriptions of Svalbard's landscape. She compares Lyra's observations above to another passage, where Iorek talks

of the slow-crawling glaciers; of the rocks and ice-floes where the bright-tusked walruses lay in groups of a hundred or more, of the seas teeming with seals, of narwhals clashing their long white tusks above the icy water; of the great grim iron-bound coast, the cliffs a thousand feet and more high, where the foul cliff-ghasts perched and swooped; of the coal-pits and the fire-mines where the bearsmiths hammered out mighty sheets of iron and riveted them into armour... (*NL* 224)

As Voogd notices about this portrayal, Iorek's perception of his home is far more positive than Lyra's. Everything that Iorek needs can be found on Svalbard, notwithstanding the fact that the island appears so unwelcoming to human visitors (par. 8–11). From his perspective, the island is teeming with life and far from being a terra nullius. Thus, even though the notion of an empty Arctic is articulated in the trilogy, Pullman invites the readers to reconsider their own, mostly outsider's, perceptions of Arctic nature. Cudmore also notices this when she remarks that "Pullman allows for equally valid differences [such as] experiences of the same landscape" (227). This is part of a more general strategy of Pullman's text. As Rachel Falconer points out, "[t]here is a polyphonic openness, in terms of the structuring of characters' voices, which invites debate both within the text and without" (89).

Even though Svalbard appears bleak to Lyra in the scene above, she is also able to appreciate the beauty of the North. In the paragraph immediately preceding her impression of Arctic barrenness, Lyra admires the night-sky, with "billions of stars [that] lay on it like diamonds on velvet" and "brilliant and dramatic" northern lights "danc[ing] across the sky" (NL 388). It is the aurora which especially impresses Lyra. Upon first encountering it in person, "[s]he was moved by it: it was so beautiful it was almost holy; she felt tears prick her eyes, and the tears splintered the light even further into prismatic rainbows" (NL 183). In contrast to the white and still lifelessness Lyra sees in Svalbard's landscape above, the aurora evokes positive notions of colour, delicacy, and graceful movement. The comparison to a dancer makes it seem almost alive, quite unlike the empty terra nullius of Svalbard. The presence of such overpowering beauty in the harsh wasteland of the Arctic invokes notions of the sublime, as also others have noticed (Lenz 128; Barfield and Colebrook 82). For Young and Einarsson, the Arctic sublime is part of a conception they call "the Arctic of the imagination." They describe this idea as more influential on Arctic realities than one might expect. It leads to "severe restrictions on human activities in the Arctic," which can be opposed to the needs of the people living in the region (25–26). Moreover, Urban Wråkberg links the sublime to "today's growth in various kinds of northern wilderness tourism" ("The Quest" 197), which can be regarded as a continuation of historic Arctic expeditions.

Another frequent moment of the expedition discourse is the cold, which also appears in the form of ice and snow. Already upon arriving with the gyptian expedition to Trollesund, the story's entrance to the Arctic, Lyra catches a new smell, "something [...] that was cold and blank and wild: it might have been snow. It was the smell of the North" (168). Snow and the

cold thus are essential attributes characterising the Arctic in *His Dark Materials*. Notably, Lyra's journey to the North takes place in winter (*NL* 217), when the region is coldest and the hours of sunshine reach their minimum. References to the cold, ice, and snow are extremely frequent in the scenes taking place in the Arctic. In the two perceptions of Svalbard analysed above alone, the moment of cold is addressed several times when Lyra regards the "frozen sea" and "crimson-stained snow" (*NL* 388), and Iorek speaks of "slow-crawling glaciers," "ice-floes" and "icy water" (*NL* 224).

The moment of Arctic coldness is closely linked to the moment of dangerous Northern nature. The cold tends to be regarded as dangerous in general (Hansson and Norberg 8). In *His Dark Materials*, Arctic ice and snow creates the impression of harsh and hostile Northern nature. Several scenes can be found where the low temperatures put characters in jeopardy. A blizzard makes it impossible for John Parry to find the way back to his home world (*SK* 213). The cold is a threat to the children escaping from Svalbard (*NL* 292-293), and some children assume the experimental station to be a safer place than Arctic nature, even though the building is on fire (*NL* 293) and they are awaiting intercision there.

The moment of danger extends not only to Arctic nature, but also to the place itself. It renders all expeditions undertaken there risky. To provide just a few examples, in the beginning of *Northern Lights*, Lord Asriel tells the assembled scholars of his search for Grumman, who disappeared in the North, and shows them what he claims to be Grumman's head (*NL* 26). Moreover, Lyra's parents have come to death in the Arctic, as far as Lyra knows at the beginning of the story (*NL* 89). As a last example, when Lyra, Roger, Iorek, and Lee Scoresby fly to Svalbard in Lee's balloon, they are threatened first by strong winds (*NL* 317) and briefly afterwards by cliff-ghasts (*NL* 318-319).

The moments of danger and cold in the discourse of Arctic expeditions are well-suited to the figure of the Arctic hero. The hostile Arctic environment serves as what Hansson terms "a perilous testing ground for heroes" ("Staging" 51). Bloom also takes up this notion when she points out that in late 19th and early 20th century discourses, "[t]he difficulty of life in desolate and freezing regions provided the ideal mythic site where men could show themselves as heroes capable of superhuman feats" (6). Thus, by portraying the landscape that Lyra and the gyptians, Lord Asriel, and John Parry traverse as particularly harsh and cold, their role as Arctic heroes and heroines is emphasised.

Yet, even though the Arctic is articulated as a dangerous place, this relation is repeatedly questioned throughout the story. For instance, when Lyra wishes to accompany Lord Asriel to the Arctic at the beginning of *Northern Lights*, he refuses to let her join him. The reason is not, as might be expected after the scene featuring Grumman's severed head, that the Arctic is too dangerous, but that "the times are too dangerous" (*NL* 29). Furthermore, with the unfolding of the story, the reader learns that neither Grumman (*SK* 210) nor Lyra's parents (*NL* 122-125) died in the North after all. The tales of death are spread by British characters who have their own motives for lying. In another scene where the articulation of Arctic danger is questioned, Lyra visits Will's Oxford. There, "[i]t was much harder for Lyra [...] than it had been even in the Arctic" (*SK* 159). One reason for this is that "even if the tundra was full of danger, you knew the danger when you saw it. Here, in the city that was both hers and not hers, danger could look friendly, and treachery smiled and smelt sweet" (*SK* 160). In a way, Oxford, the British centre of the narrative, is regarded as more dangerous than the Arctic.

4.1.5. Darkness and light

A continually reappearing theme, which supports several moments of the exploration discourse, is the Arctic as a dark place. From the very beginning of the narrative, Lyra and the readers get impressions of Arctic night. In the first chapter of *Northern Lights*, Lord Asriel shows photograms to the scholars at Jordan College, which depict Arctic scenes at night-time (*NL* 21-23). Lyra's travels to the North take place in winter, when it is darkest in the Arctic and the phenomenon of polar night occurs. Darkness seems to be one of the discourses characterising the North. When Lyra is in Trollesund, her entrance point to the Arctic, she notices that "[t]he dim sun was as high in the sky as it was going to get, only a hand's breadth above the horizon" (*NL* 191). After journeying just a few hours northwards into the open country, the sun stays below the horizon (*NL* 207), and Lyra and the gyptians have truly arrived to the Arctic. The vanishing of the sun is accompanied by the appearance of a closed snow cover (*NL* 202) as soon as they leave the port situated at the foot of a "green-flanked and snow-capped" mountain (*NL* 168).

The depiction of the Arctic as a dark place is linked to the notion of it being a primitive place, far removed from civilisation. This becomes apparent, for instance, in John Faa's explanation that "Lord Asriel is held in the farthest coldest darkest regions of the wild, captive, in the fortress of Svalbard" (*NL* 136). Even though John Faa knows that the island is populated by panserbjørne, who even built a fortress there, he still imagines it as a dark wilderness. Another character who articulates the Arctic as dark and primitive is Lord Asriel. He explains to Lyra

that intercision, the separation of a person and the animal-shaped dæmon representing their soul, which is researched by the General Oblation Board, is horrible and "[t]hat's why [the General Oblation Board] had to hide away in the far North, in darkness and obscurity" (*NL* 372). Here, the Arctic is depicted as a dark place so far removed from civilisation that no-one is there to witness the atrocities of the scientists, who conduct immoral experiments on children. As the high Arctic is only such a dark place in winter, the adjective dark seems to imply not simply lack of light in *His Dark Materials*, but also the absence of the metaphorical light of civilisation.

Even though the North appears as dark, this articulation obtains a positive connotation during Lyra's flight from Bolvangar. Upon fleeing from the Tartar guards of the station, the stolen children are "racing as hard as they [can] down the avenue [of lights] towards the beckoning open dark beyond" (289). When the Tartars are taking aim at the children who are running down the illuminated avenue, it is suddenly the light which symbolises danger and the dark which stands for safety. This thought is also taken up by Lyra: "[a]s the lights behind them threw long shadows on the snow, Lyra found her heart moving out towards the deep dark of Arctic night and the clean coldness" (291). The darkness does not only turn into a refuge, to which the children flee, but also into a source of aid. Under the cover of darkness, the witches arrive to help, while "the Tartars turned their rifles up and blazed into the dark, firing at nothing, at shadows, at clouds, and more arrows rained down on them" (NL 290). The witches themselves, "clad [...] in strips of black silk" (NL 300), are described as a personification of the dark in another part of the novel, where they are likened to "flakes of black snow on the wings of a storm" (SK 48) and "scraps of darkness drifting on a secret tide" (SK 49). Darkness, an essential characteristic of the Arctic in *His Dark Materials*, thus symbolises not only Northern primitivity, but is also valued as something that can be positive. This mirrors the observation of section 4.1.3, that Pullman describes Arctic inhabitants as primitive and close to nature in a seemingly appreciative, yet also essentialising way.

Arctic darkness is driven away by several sources of light. The various types of light have a deeper significance in the narrative, as they signal civilisation and play a role in characterisation. When Lyra sees her captor, who sells her to Bolvangar's scientists, for the first time, the "broad Asiatic face, under a wolverine hood" is illuminated "by flickering lamplight" (*NL* 233). The unreliable light supports the articulation of Arctic inhabitants as primitive and close to nature. To a similar effect, the misguided bear-king Iofur Raknison uses blubber-lamps casting "flaring shadows" (*NL* 324) and birds nest in his chandeliers (*NL* 334), which show him

to be primitive and unsuccessful in his imitation of human manners. In contrast, Lyra reads the alethiometer in the light of a "resinous branch" set alight in "a cauldron of charcoal" when Iorek is in power on Svalbard (*NL* 356), which conveys how unspoiled and true to his nature Iorek is. Evidently, the "two kinds of beardom" that Iofur and Iorek represent (*NL* 347) are reflected in their choice of illumination. Notably, they both use Arctic materials to light rooms, which is indicative of their closeness to nature.

While the Northerners' sources of light make them appear simple and traditional, the sophisticated illumination of the British gives testimony to the technological progress of their country of origin. The outside of the morally corrupt facility of Bolvangar, where Lyra's captors bring her, is brightly lit with "glaring anbaric light" (*NL* 235). It shows that the British scientists at Bolvangar are technologically advanced, yet evil. In contrast, the Svalbard dwelling of cultured Lord Asriel is "a spacious building from which light spilled lavishly in all directions: not the smoky inconstant gleam of blubber-lamps, nor the harsh white of anbaric spotlights, but the warm creamy glow of naphtha." (361). The refinedness of British culture in Arctic wilderness can be found in the "warm naphtha light glowing on carpets, leather chairs, polished wood," which is "like nothing Lyra had seen since leaving Jordan College" (*NL* 362). The contrast between simple Arctic people and sophisticated British technology is thus supported by Pullman's use of light and darkness.

While, throughout *Northern Lights*, Arctic nature is dominated by darkness, and only in some places a "dim sun" (*NL* 191) or a "pallid noontide" (*NL* 221) appears, the sun makes a dramatic appearance at the end of the first installation. When Lord Asriel opens a pathway to a parallel universe at the climax of the first part of the trilogy, "a great rending, grinding, crunching, tearing sound reached from one end of the universe to the other; there was dry land in the sky-/ Sunlight!" (*NL* 391). The foreign sun serves as Lyra's focal point when she finally crosses over to the new world: "So Lyra and her dæmon turned away from the world they were born in, and looked towards the sun, and walked into the sky" (*NL* 397). With the opening of the portal, the Arctic ceases to be articulated as a dark place for the remainder of the story. This is not to be understood as a subversion of the discourse, however, but as the onset of a climate change narrative. The sun that sheds light on Iorek Byrnison's home in Svalbard, for instance, melts his livelihood and is a wrong and unsettling phenomenon (*AS* 37-38). Before this development is analysed in further detail in section 4.3., the Arctic science discourse is examined in the following section.

4.2. Science

Science plays a major role in *His Dark Materials* (see, e.g., Waller) and as the North is a further prominent theme, it is not surprising that Arctic science is a recurring motif. Three important characters are scientist-explorers involved in Arctic research, Lord Asriel, Mrs Coulter, and John Parry. Lord Asriel's Arctic expedition in *Northern Lights* is funded by Jordan College (*NL* 28). Mrs Coulter is "a member of Dame Hannah's college" and, additionally, a member of the Royal Arctic Institute (*NL* 77). As head of the General Oblation Board (*NL* 128), which set up Bolvangar (*NL* 185), the horrible experiments are conducted under her authority. Also Will's father John Parry is a scientist, amongst other things. His last known Arctic expedition on Lyra's world, which had the aim "to go as far north as the magnetic pole and make various celestial observations," was funded by the German Academy (*NL* 25). Apart from Bolvangar, also other research facilities in the Arctic exist or were planned. On his search for Asriel, Lee Scoresby passes through "an observatory belonging to the Imperial Muscovite Academy" (*SK* 120) on the Arctic island Nova Zembla, where several astronomers are employed (*SK* 122). Another institution, which was, however, never opened, is the university that Iofur Raknison planned to build on Svalbard (*NL* 329).

The discourse of the Arctic as a place to do science is already present in Lyra and the reader's very first impression of the Arctic. During Lord Asriel's presentation about his travels North, he shows a picture taken in the region:

A circular photogram in sharp black and white appeared on the screen. It had been taken at night under a full moon, and it showed a wooden hut in the middle distance, its walls dark against the snow that surrounded it and lay thickly on the roof. Beside the hut stood an array of philosophical instruments, which looked to Lyra's eye like something from the Anbaric Park on the road to Yarnton: aerials, wires, porcelain insulators, all glittering in the moonlight and thickly covered in frost. A man in furs, his face hardly visible in the deep hood of his garment, stood in the foreground, with his hand raised as if in greeting. To one side of him stood a smaller figure. The moonlight bathed everything in the same pallid gleam. (*NL* 21)

For Asriel's talk, primarily the two figures in the foreground of the scene are of relevance, since it is subsequently revealed that they attract Dust in different ways (*NL* 22). The description also includes details about the background, however, which might serve to address preconceptions the readers might have of the Arctic. For instance, as the picture has been taken at night, the North appears as a dark place. Furthermore, the deep cover of snow and the warm clothes of the adult on the photogram are indicative of a cold climate. The hut, described as "wooden" and "dark," seems primitive and stands in stark contrast to the "glittering" instruments imported to

the Arctic, which Lyra likens to similar ones she has seen in Britain. This suggests that the explorer-scientists' culture is more highly advanced than what they encounter in the Arctic. All these moments are connected to the exploration discourse as discussed in section 4.1. At the same time, the photogram also suggests that Arctic research can be taken for granted, as the "philosophical instruments" on the image are not worth mentioning in Asriel's talk. Thus, while articulating several moments of the expedition discourse, the description also establishes the Arctic as a place to conduct scientific research.

Throughout the trilogy, the Arctic science discourse is articulated through a large number of moments. For instance, a great variety of Arctic research fields is addressed, often accompanied by the employment of field jargon. During his presentation at Jordan College, Asriel explains the phenomenon of northern lights in the terminology of the natural sciences as "storms of charged particles and solar rays [...] causing [...] luminous radiation when they interact with the atmosphere" (*NL* 23). The frozen scalped head Asriel brings to the meeting, which he pretends to be Grumman's, is described with scientific detachment and from an anthropological point of view by the Sub-Rector. He explains what Asriel terms "the characteristic scalping pattern" as "a technique you find among the aboriginals of Siberia and the Tungusk. From there, of course, it spread into the lands of the Skraelings" (*NL* 26). Another example for the use of jargon is that the process of separation is achieved by scientifically sounding techniques like "the Maystadt Process" (*NL* 272). This term semantically places the activities at Bolvangar in the field of (immoral) science rather than barbary. All of these examples show how the use of jargon makes both explanation and speaker appear unquestionably scientific.

Various ways of creating scientific knowledge about the Arctic are shown in the trilogy. Especially the description of methodology makes investigations appear scientific. Measurement is one method appearing particularly often. At Bolvangar, "the Experimental Station," as Sister Clara calls it (*NL* 240), experimental research is conducted on the process of separating children from their dæmons (*NL* 271-273). After Lyra arrives, a nurse determines her temperature, height, and weight (*NL* 239). Later, she is measured again, this time by a doctor who is "weighing her and Pantalaimon separately, looking at her from behind a special screen, measuring her heartbeat, placing her under a little nozzle that hissed and gave off a smell like fresh air" (*NL* 255). The description of these measurements conforms to the methods readers might associate with medical research. The same is true for John Parry's investigation into bloodmoss. Sam Cansino tells Lee Scoresby that Parry hurt his leg in a trap and tried to cure it with bloodmoss (*SK* 116). Cansino goes on to say that "he was in some pain from that damn

trap of Yakovlev's; leg laid open, and he was writing the results of that bloodmoss, taking his temperature, watching the scar form, making notes on every damn thing" (*SK* 118). This articulates John Parry as a man of science. Further examples for the creation of knowledge about the Arctic are observations made by astronomers with telescopes (*SK* 122), the development of photographs of the Northern sky and of people in an emulsion that makes dust visible (*NL* 21-24), and the support of John Parry's theory about early Arctic settlement with "photograms of unusual rock formations" (*SK* 123). Knowledge is also shared within the scientific community, for instance when John Parry defends his thesis "in debate" (*SK* 214) or when he writes a paper to make his observations of the changing magnetic field of the earth available to other researchers (*SK* 123-124). All this creates a vivid image of researchers from many fields creating scientific knowledge in and about the Arctic.

4.2.1 Hidden motives

Presenting the Arctic as a place to carry out international scientific research makes it seem natural that outsiders travel to the region for this purpose. What stays hidden, at the same time, is that these practices have supported imperialist aspirations and served geopolitical interests. For instance, Sörlin remarks that research was a "means by which a nation and its rulers could acquire acknowledgement and glory" (68). Not only such immaterial gains were sought, but also more tangible rewards such as territory. Wråkberg shows that scientific investigations in the North were employed to give weight to claims pertaining to Northern territories ("The Politics" 183). Furthermore, Depledge notices in his analysis of Arctic discourses employed by the British government that monetary gains and a greater influence on Arctic politics are expected results of research in the Arctic ("(Re)Assembling" 187–188). Specifically, Depledge notices that the UK's permanent observer status in the Arctic Council and British cooperation with other nations is strengthened by scientific activities in the region ("(Re)Assembling" 188). He argues that "[t]his 'softer' presence in Arctic affairs is important for imparting influence in the Arctic, while being less likely to be perceived as a form of extraterritorial hostility by the Arctic states" ("(Re)Assembling" 189). Likewise, Roger Norum mentions that Arctic science is often funded by states "in order to bulk up their presence in these regions and thereby increase their influence" (Norum 44). Military purposes are a further reason for research undertaken in the North (Doel et al.). The articulation of the Arctic as a place to do science without the acknowledgement of these hidden agendas serves Arcticist interests, as it makes scientific research in the Arctic appear natural and unproblematic.

However, even if this problematic relationship between Arctic science and national interests of non-Arctic states is not explicitly addressed in *His Dark Materials*, the trilogy is still very critical of Arctic science. As Davidson points out, "[t]he scientific exploitation of the north in Pullman is malevolent" (116). The research carried out in Bolvangar and by Lord Asriel on Svalbard is ultimately immoral, as it maims and kills children (NL 213; 259), and the observations made on Nova Zembla are censored by the Church (SK 124). Furthermore, the figure of Lord Asriel exemplifies how the pretext of research aids colonial intentions. While Asriel's expedition is funded by Jordan College, presumably because of its allegedly scientific aims (NL 28), its true purpose is to access another universe (NL 375). Military interest in Arctic research becomes evident in The Subtle Knife, when John Parry mentions that one member of his expedition, physicist Nelson, is funded by the Ministry of Defence and searches for the portal to a parallel universe (SK 113). Matt Kigalik later tells Parry that also the Soviet Union was interested in the anomaly (SK 114). Thus, even though the Arctic is articulated as a natural location for scientific investigation in *His Dark Materials*, the trilogy also shows that scientists are often morally corrupt, the results of their work are censored, and their purported research aims often hide underlying motives. The hidden agenda behind two practices of Arctic science, the mapping and naming of Arctic landscape features, which are closely linked to exploration, is discussed in greater detail in the next section.

4.2.2 Mapping and naming

One common scientific and exploratory endeavour was and still is the mapping of Arctic regions. Wråkberg even regards it as the most important aim of scientific investigation of the North in the 19th century ("The Politics" 155) and links it to "Western imperialism and the international law that specified the bases for claims on new territories" ("The Politics" 156). Norum similarly argues that "[p]ractices of mapping and surveying [..] were central to the early geopolitical formation of Arctic spaces" (44). A historical example is the mapping activities of Samuel Gustaf Hermelin, who had realised that for doing business in northern regions, geographic knowledge of the territory was necessary (Eliasson 129). Even today, "[l]and, shelf, and seabed are being relentlessly surveyed and measured, with an eye to assigning future exclusive rights of access or ownership." (Bravo, "The Postcolonial Arctic" 103). Cleary, not only political but also economic interests are pursued through the making of maps.

His Dark Materials hints at such practices several times. First of all, there is "the man who mapped the ocean currents in the Great Northern Ocean," Dr Broken Arrow, whom Lyra glimpses at the Royal Arctic Institute (NL 77). This passage takes up the colonial discourse of

Arctic regions as a place to be charted and thus reinforces it. As has been mentioned in section 4.2.1. above, British maritime commerce had much to gain from detailed information on Arctic waters. A similar conclusion can be drawn from the description of John Parry's interest in geographical information. Sam Cansino tells Lee Scoresby that when he met John Parry in the North, the shaman-scientist was, amongst other information related to biology and medicine, interested in "every scrap [Sam Cansino] knew about the land thereabouts" (*SK* 118). Why Parry needs this information is not related, but the Arctic is, again, represented as a place to be surveyed.

Naming is another practice that has been used to support colonialist aims. David regards the "geographical appropriation through the naming of landscape features" as one "of the most obvious legacies of nineteenth century British, European and American power over the Arctic" (245–246). Many Arctic locations are names "given by or to the memory of the Western explorer or geographer who has been accepted as the first or proper discoverer" (Wråkberg, "The Politics" 159). John Parry's British, or, as it is called in the trilogy, Brytish, map of the circumpolar Arctic reproduces some of these geographical designations honouring explorers or chosen by them, for instance Ellesmere Island, Laptev Sea, and Franz Josef Land.

There is one incident in the trilogy where the power of naming becomes apparent. When Serafina Pekkala's dæmon Kaisa explains how to find the missing children, he says that the "Dust-hunters," who abducted them, are "at a place called Bolvangar." He points out the negative atmosphere of the place and explains that "[h]ence the name Bolvangar: the fields of evil. [The General Oblation Board] don't call it that. They call it The Station. But to everyone else it is Bolvangar" (*NL* 186). As is to be expected, when Lyra questions Sister Clara at Bolvangar on the nature of the facility, she evasively answers "It's called the Experimental Station" (*NL* 240). Bolvangar is the name Lyra employs (e.g., *NL* 195), and also the narrator makes use of the term, as the second part of *Northern Lights* is titled Bolvangar (*NL* 161). Thus, the local name, not the name the British scientists invent, becomes the generally accepted designation of the place. This stands in direct opposition to colonial practices of re-naming Arctic places.

Another feature which makes these issues of mapping and naming become apparent is the two maps provided in the appendix of *The Subtle Knife*, attributed to John Parry. One of them depicts a printed map of the circumpolar Arctic, on which a hand-drawn line marks John Parry's way through the North and over the European continent. Important stations of his journey are

indicated. The map features political and physical information, including some English names of cities and countries, as well as political boundaries. Evidently, even John Parry, who lives as a shaman in the North, accepts the Brytish names of Arctic spaces. Hence, the validity of those names is not questioned.

John Parry's second map depicts the hand-drawn contours of Scandinavia and is labelled "map of the Witch-Lands." Some regions are filled in with distinct patterns to assign certain areas to specific witch clans. This makes it immediately apparent that these regions are not empty Arctic nature, but territory inhabited and claimed by Northern people. It thus contradicts widespread notions of empty Arctic nature waiting to be claimed by adventurous explorers. This is, incidentally, in agreement with the fact that the General Oblation Board did not simply set up Bolvangar in supposedly empty wilderness, but acknowledged prior use as they "paid [the witches] to allow them set up stations in [the witches'] lands" (*NL* 185). While the idea of a terra nullius is articulated with regard to Svalbard (see section 4.1.4), it is carefully avoided when it comes to the witches' territory. All other Northern spaces on Parry's second map are left suspiciously blank, however.

4.2.3 Scientific knowledge in the Arctic

In *His Dark Materials*, scientific research in and on the Arctic is chiefly a non-Arctic cultural practice. The three main Arctic scientist-explorers, Lord Asriel, Mrs Coulter, and John Parry, are British. They are affiliated with institutions in Britain, either universities or the Church, who also finance their expeditions. The results of their research are shared with audiences back home, for instance in the course of Lord Asriel's presentation at Jordan College in Oxford or between members of the Royal Arctic Institute in London, to which Mrs Coulter is affiliated. Furthermore, the inside of the experimental facility Bolvangar is very British, with "the sort of reception desk you might see in a hospital" and "the smell of food in the air, familiar food, bacon and coffee" (*NL* 237). Even though it is served in the North, the children's dinner is British instead of regional, consisting of "stew and mashed potatoes" with a dessert of "tinned peaches and ice cream" (*NL* 241). Arctic science is thus articulated as a mainly British practice.

Not only British scholars travel to the Arctic, however. The group of astronomers in the observatory on Nova Zembla consists of a Pole, two Muscovites, and a Yoruba (*SK* 123). While Muscovy is identified as the former Soviet Union in Will's world by Sir Charles (*SK* 200), Yoruba are, at least in the readers' world, a people mainly living in Nigeria. Also the British

researcher John Parry is reported to have often visited the observatory (*SK* 120). The research community on Nova Zembla is thus quite international.

The group of scholars investigating the Arctic also includes at least one member of the Skraeling. Dr Broken Arrow, "the man who mapped the ocean currents in the Great Northern Ocean" mentioned in the previous section, is a Skraeling explorer-scientist (*NL* 77). In the readers' world, Skraeling denotes "[a]n Inuit or other indigenous inhabitant of Greenland or Vinland (on the north-eastern coast of North America) at the time of early Norse settlement" according to the entry of the online Oxford Dictionaries for Skraeling. As the traditional science discourse tends to see Northern indigenous people as objects of research rather than as researchers themselves, Pullman avoids satisfying stereotypical expectations here. Nonetheless, Dr Broken Arrow is famous in Brytain for mapping, which is a practice that has often served British interests in the North. Even though he is an Arctic scientist interested in Northern areas, his scientific and exploratory activities are discussed outside the North and support Brytish interests. The whole system of knowledge production thus seems to perpetuate North-South inequalities, regardless of the scientists' origins. It can be concluded that the trilogy does not succeed in dismantling the image of Arctic research as a principally non-Arctic preoccupation.

In this respect, it is very interesting to consider the university Iofur Raknison plans to open on Svalbard. The reader learns about it through a discussion of Jordan scholars. The Palmerian Professor mentions some of Iofur Raknison's "ludicrous affectations," amongst them "setting up what he calls a university." The other scholars find the idea ridiculous: "For whom? For the bears?' said someone else and everyone laughed" (NL 27). The enfolding story confirms their prejudices and legitimates their superior attitude. When Lyra comes to Svalbard herself, she finds out that Raknison had thrown the designated Vice-Chancellor Santelia into prison. According to Santelia's version of the story, the reason for this was that a fellow academic "spread lies and calumny about [his] qualifications" (NL 329). Either Raknison is unable to validate the scientific integrity of the future Vice-Chancellor, or he is unable to adequately deal with such allegations. Either way, he clearly does not possess the necessary insight into the workings of academia to set up a university. After Iorek Byrnison defeats him in combat and ends his rule over Svalbard, the university project is never realised. As a result, bears may continue to be spoken about by scholars, such as the Palmerian Professor Trelawney (NL 27-28) or the imprisoned Professor Santelia (327-328), but do not actively participate in the creation of scientific knowledge themselves. A certain amount of ambivalence remains, however, as there exists a university in our world's Svalbard, called the University Centre in Svalbard, whose existence invalidates the Jordan scholar's amusement.

4.2.4 Indigenous knowledge

Indigenous knowledge plays a slightly larger role in only one scene, which is connected to climate change. Umaq, Lee Scoresby's driver on Nova Zembla, is "an old Tartar from the Ob region" (*SK* 121). His description makes the character appear as a stereotypical indigenous other. Umaq engages in a "lengthy bout of haggling" (*SK* 121), which stands in contrast to the European and North American tendency of setting fixed prices. Other than Lee, he doesn't "rely on a compass" and "navigate[s] by other signs" instead (*SK* 121), which gives testimony of his connectedness to the land. His grasp on the English language proves to be poor when he starts a conversation by saying "This happen before, this thing" (*SK* 121).

The information Umaq provides is stereotypical, but also valued. The knowledge about the changing climate that Umaq shares with Lee is oral history, handed down to him by his ancestors (*SK* 121). Indigenous knowledge is thereby represented in a stereotypical way. At the same time, however, Umaq is shown to possess scarce and important information when he describes a similar catastrophe occurring once before. Lee does not only ask him for facts, but also for his opinion about the situation's likely future development. Umaq sees it in the closing of the gap in the sky after a "[s]pirit war" (*SK* 121), which turns out to be correct by the end of the trilogy (*AS* 500). His input is therefore shown to be important, accurate, and valued by Lee. Similarly, also John Parry values the knowledge of Northerners and especially also the Yenisei Pakhtars, as he states that he "learned a good deal from the peoples of the Arctic, like my good friends in the village down there" (*SK* 214). Thus, Pullman shows awareness of the existence and value of indigenous knowledges, yet is not free from the stereotypes attached to them.

4.2.5 Natural and supernatural knowledge of Arctic inhabitants

If scientific knowledge is articulated as something principally belonging to countries such as Britain, the question what knowledges the local population has presents itself. Not only the local knowledges of indigenous people are of interest here, but also the insights other Arctic peoples share. From all the fields Arctic inhabitants are knowledgeable about, three are examined in more detail, natural, supernatural, and traditional knowledge. The first to be discussed here is natural knowledge, which is applied by the panserbjørne, the shamans, and the witches. One example for knowledge of natural things is the use of bloodmoss. The bears have discovered the healing properties of this lichen (*SK* 116), which is also employed by the

shamans (SK appendix). The shaman John Parry tells Lee Scoresby that "[he] found a way of making an ointment from bloodmoss [...] that preserves all the virtues of the fresh plant" (SK 214). Interestingly, however, his handwritten recipe for "Bloodmoss Ointment" in the appendix of *The Subtle Knife* is preceded by the statement "This was taught to me by the Shaman Turukhanck." John Parry evidently writes the contribution of his indigenous teacher out of the story. He thereby reduces the role of indigenous people in the story even more than it already is. The witches also have natural knowledge. In *The Subtle Knife*, the narrator explains about Serafina Pekkala, who in this case may be regarded as representative of the witches, that "the usual sources of her knowledge were natural ones. She could track any animal, catch any fish, find the rarest berries; and she could read the signs in the pine marten's entrails, or decipher the wisdom in the scales of a perch, or interpret the warnings in the crocus-pollen; [...] these were children of nature, and they told her natural truths" (SK 41). Not only are all these insights gained from natural sources, they are even more specifically derived from living things, plants and animals. This observation that bears, shamans, and witches possess natural knowledge, agrees with the conclusions drawn in chapter 4.1.3 about the othering of Arctic inhabitants, who are represented as primitive and close to nature.

Supernatural knowledge is applied by the panserbjørne, who always see the truth, the witches, and the shamans in *His Dark Materials*. Eleanor Rosamund Barraclough, Danielle Cudmore, and Stefan Donecker link this moment in *His Dark Materials* to a longstanding conception of the North as a supernatural place (43). In the context of Norse literature, they furthermore mention that the image of a mystical North has been connected to the othering of people (31). Also Ocziewicz investigates how Pullman creates a Northern other and as one example points out that in *His Dark Materials*, "[t]he North-east is inhabited by strange peoples," among which he counts the witches (7). Undoubtedly, the supernatural knowledge of northern inhabitants contributes to the process of othering identified above. A closer look at the exact nature of shamans' and witches' powers, however, reveals that their powers are not totally other, but also available to non-Arctic people in tune with their surroundings.

The shaman whom readers of *His Dark Materials* encounter is John Parry. Due to his supernatural knowledge, John Parry is able to call Lee Scoresby to him from afar (*SK* 212), can "discover things in the spirit where [he] cannot go in the body" (*SK* 215), and has power over the weather (*SK* 284-285). Parry was taught "everything [he] know[s] about the spirit world" by the shaman Ivan Kasymovich Tyltshin in Siberia. After working as a scholar in Lyra's world for a while, he "sought other forms of knowledge; [...] was initiated into the skull-cult; [...]

became a shaman" (SK 214). This text passage represents shamanic knowledge as fundamentally different from scientific insights. Parry is later adopted by a Tartar tribe, the Yenisei Pakhtars (SK 117), and thus becomes "a Tartar, by initiation" (SK 116). A seal-hunter whom Lee meets in a bar on Nova Zembla assumes that "the tribe recognized him as a shaman before they adopted him" (SK 118) and recounts that this adoption was accompanied by the ritual of trepanning (SK 117-118). The aim of this practice is to obtain a connection to Dust, or, as Lyra interprets the alethiometer's answer when she asks it about trepanning, "to let the gods into [the] head" (SK 78). It thus seems that at least part of a shaman's knowledge derives from a special connection to Dust, which can be granted to people who are willing to undergo trepanning. As shamanism can be found in the entire Arctic region (Davidson 65), shamanic knowledge might be understood as a form of Arctic knowledge. Yet, John Parry is also able to become a shaman, which implies that this knowledge is not exclusively reserved for Arctic peoples in His Dark Materials, but is available to everyone. In this aspect, inhabitants of the Arctic are de-essentialised and de-mythologised.

The witches' supernatural knowledge is, at least partly, linked to the natural world. Their spell to heal Will's wounds, for instance, speaks of this connection. It begins with "Little knife! They tore your iron / out of our mother earth's entrails" and involves the application of a paste made of "some herbs in a pot of water over a fire" (*SK* 254; 257). The mentioning of mother earth and the employment of plants as a crucial ingredient of the spell suggests a close connection between magic and nature. Not all of the witches' powers are exclusively Northern, however. One of their powers is to pass unseen. Serafina Pekkala thinks about it as "mental magic, a kind of fiercely-held modesty that could make the spell-worker not invisible but simply unnoticed" (*SK* 33). Evidently, it is not based on magic, after all, but rather on knowledge of humans. In fact, even Will has this ability (*AS* 108). Furthermore, Lyra and Will's temporary abandonment of their dæmons in the land of the dead has granted them some of the powers of witches, which are traditionally obtained in a similar ritual. As Serafina Pekkala explains to Pantalaimon and Kirjava: "the two of them will not fly like witches, and they will not live as long as we do; but thanks to what they did, you and they are witch in all but that" (*AS* 476). It seems that like the magic of shamans, also the magic of witches is available to people from countries further south.

So far, it can be said that natural and supernatural knowledge can be understood as complementary to scientific knowledge. In *His Dark Materials*, it supports the construction of an Arctic other, who stands in clear contrast to the scientific Britons. Supernatural knowledge is not a totally alien other, however, but a kind of knowledge that is available to anyone with

an open mind. Instead of being mysterious and magic, it is often linked to knowledge of nature, of humans, or of the world in general.

As othered Arctic knowledges are available to everyone with an open mind, their representation can be seen as revealing a longing for a lost or lacking harmonious connection with ones' surroundings. Iorek Byrnison's explanation for why he always sees the truth testifies to this interpretation: "We can see in a way humans have forgotten." (NL 226) Also the witches' knowledge of the natural world and their relaxed attitude towards dust, a substance deeply feared by the Church (NL 316) because they connect it to original sin (NL 369), reveal how much closer than the British they are to nature. It might imply that Arctic inhabitants have a certain innocence that non-Arctic people miss. This can be linked to an observation made by Davidson, who raises awareness of "the complex appropriations of our [...] time, seeking both oil and shamanic enlightenment, while at the same time longing to believe that the Arctic can remain a reservoir of peoples undamaged by civilization, a natural world, unexploited, pure" (66). Also in *His Dark Materials*, Arctic inhabitants are depicted as primitive and unspoilt by civilisation. The situation differs in one aspect, however, as in the trilogy, non-Arctic societies can corrupt innocent Arctic inhabitants. The example of Iofur Raknison shows this, as he feels uneasy in his armour, symbolising his soul, after he tries to introduce foreign customs on Svalbard (NL 347). Significantly, his wish to be someone else causes him to lose the ability that innocent bears have, discerning the truth, which, in turn, leads to his downfall because he can now be tricked by Lyra. Thus, even though the representation of Northerners is favourable, it can seem paternalistic in some places. Even more important, it still involves a process of othering and thereby exercises power.

4.3. Climate change

4.3.1 Melting Arctic ice as a symbol of global warming

The key scene where climate change makes its first appearance in *His Dark Materials* is presented from Serafina Pekkala's point of view, who flies from Trollesund to Svalbard and surveys its negative effects from above: "[a]ll the Arctic peoples had been thrown into panic, and so had the animals, not only by the fog and the magnetic variations but by unseasonal crackings of ice and stirrings in the soil. It was as if the earth itself, the permafrost, were slowly awakening from a long dream of being frozen" (*SK* 43). The essential moment of Pullman's global warming narrative appears in this scene, the image of melting ice. The moment of Arctic ice, linked to permafrost, is related to the moment of warming temperatures by a causal

relationship: the warm weather causes the ice to stir and ultimately melt. Ideas connected to the moment of disappearing ice are repeatedly mentioned afterwards. For instance, Lee Scoresby hears of the unseasonal thawing of the river Yenisei (*SK* 117) and when he arrives to the waterway himself, he observes that its normally snowy surrounding landscape is "patched and streaked with brown" (*SK* 208). As the narrative progresses, Serafina Peakkala regards the "melting ice-cap" and notices that even Svalbard is not covered in snow anymore (*AS* 37). To the central relationship, rising temperatures causing Arctic ice to melt, more moments are thus added, such as rising temperatures affecting the Yenisei, the snow cover, and the ice-cap.

The depiction of rising temperatures affecting snow and ice replaces a central moment of many other Arctic discourses. Winteriness, to use a term employed by Schimanski and Spring ("A Black Rectangle" 29), is a fundamental component of many images of the North, which imagine the region as deeply frozen. The description of thawing permafrost and cracking ice, however, articulates the Arctic as formerly wintery, but now melting. In the trilogy's climate change narrative, winteriness is thus superseded by the new moment of melting Arctic snow and ice. This agrees with the more general observation of Hansson and Catherine Norberg that the perception of ice and snow is altered by the increasing portrayal of climate change in Polar regions (13).

The use of perspective in Serafina Pekkala's first impression of a thawing Arctic is a noteworthy aspect of the scene, as the witch surveys the landscape from above, when flying on her pine branch over it. Her previously mentioned examination of the state of the polar ice cap and of Svalbard's snow cover is also conducted from the air: "The mountains lay bare and black, and only a few hidden valleys facing away from the sun had retained a little snow in their shaded corners" (AS 37). This stands in stark contrast to the impression Lyra forms of the Scandinavian Arctic landscape before Asriel opens the portal and causes climate change. She admires the scenery from Lee Scoresby's balloon, to find that "[a]s far as the eye could see, to the very horizon in all directions, a tumbled sea of white extended without a break. Soft peaks and vaporous chasms rose or opened here and there, but mostly it looked like a solid mass of ice" (NL 300). The warming temperatures replace this awe-inspiring landscape of ice formations with a bleak scenery of black mountains.

This manner of visualising climate change by surveying the state of snow and ice from above, possibly even comparing images of the same landscape taken at different stages of global warming, is certainly not new. In fact, it corresponds precisely to a certain type of Arctic

representation analysed by Marthe T. Fjellestad, "depicting vast mountainous landscapes and expanses of ocean, immediately recognizable as part of the Arctic region" (229). In her study, she traces how aerial Arctic photographs have originated from a tradition of science and have also been used to give weight to claims on territory. Only much later, they became part of the "imaginary Arctic" of a larger audience. This development took place when the pictures started to be employed to visualise the effects of global warming in a convincing, because scientific, way for the general public. One of the examples Fjellestad examines is a juxtaposition of two images of the same Arctic glacier at different moments in time (235), which is reminiscent of the two aerial views of Svalbard described in the narrative. Pullman's use of perspective in his representation of ecological change of Northern landscapes therefore makes use of his readers' inventory of Arctic images, which Fjellestad has shown to include aerial visualisations of the region. As this type of image is associated with representations of global warming, it serves to enhance the moment of an Arctic that is warming up in the climate change discourse.

4.3.2 Disastrous local and global changes

The opening of a portal between worlds has destructive local and global consequences. For instance, together with climate change, natural disasters strike. In the Arctic, Lee Scoresby observes that the unusually high waters of the river Yenisei have caused destruction, flooding, and even a casualty (*SK* 207-208). In areas outside the Arctic, the harbingers of change are an earthquake in central Siberia (*AS* 99) and a storm in Cittàgazze's world (*SK* 136), each of them followed by an unnatural fog. The changes are accompanied by the sense of an impending war in the North (e.g. *SK* 42; 218) and perceived as a potential security issue in Will's world (*SK* 200). Furthermore, civilisations are endangered. On a smaller scale, *The Amber Spyglass* demonstrates this on the populations of the panserbjørne (see section 4.3.4) and the mulefa. The trees which are vital to the mulefa's civilisation are not pollinated anymore, as the current of dust particles has been altered (*AS* 275). This threatens their way of life. On a grand scale, "death will sweep through all the worlds" and everyone is doomed to end up in a universe "blind and empty of thought, feeling, life" if Lyra cannot complete her task (*NL* 308).

While none of these problems are explicitly linked to rising temperatures and rather seem to be caused by Asriel's portal between worlds, they can still be regarded as part of a climate change discourse. Several scholars seem to think so, as they read the symptoms listed in *His Dark Materials* as symbolising global warming (Barfield 64; Peters 108; Wood 212). A more detailed investigation reveals that some of the changes described in *His Dark Materials* are at the same time moments of climate change discourses outside the books. It is thus likely that they are also

articulated as part of Pullman's climate change narrative by readers familiar with general accounts of global warming. For instance, *Impacts of a Warming Arctic*, the official summary of the seminal *Arctic Climate Impact Assessment* (ACIA), describes many of the problems mentioned by Serafina Pekkala and Lee Scoresby. Global warming in the Arctic has been shown to cause floods (22), storms and unpredictable weather (96), possible "[s]ouvereignty, security, and safety issues" due to melting sea ice (11), and endangerment of animal species (45; 70; 97). These moments of climate change narratives, and many more, are mirrored in *His Dark Materials*. There, they are mentioned as arising from the door between worlds, but are still connected to existing global warming narratives by association, and thus become moments of Pullman's climate change discourse.

The consequences of Asriel's experiment are noticeable in the entire multiverse, but they are portrayed as affecting the Arctic first and most prominently of all regions. In the North, climate change initially becomes visible, when it is described from Serafina Pekkala's perspective. The problems of the region's inhabitants and visitors are portrayed in detail by Lee Scoresby on his travels to Grumman. For instance, he observes unfamiliar species of fish being caught, trappers and hunters being prevented from working, thawing permafrost impeding his mobility, and swarms of midges bothering him (*SK* 207-208). All these details are also mentioned in *Impacts of a Warming Arctic* (ACIA 62–64; 76–77; 119; 86; 95). Asriel's hole in the sky is an especially interesting further element, as it has a counterpart in the Arctic ozone hole of the reader's world. The negative effects of global warming in the Arctic are thus carefully and believably depicted. This creates the impression that climate change affects the Arctic particularly quickly and especially noticeably.

Even though the phrase climate change is never used in the trilogy, one scene comes quite close to doing so. When Will and Lyra make their way through a dry and rocky landscape in Cittàgazze's world towards the end of *The Subtle Knife*, Will tells Lyra that "the climate's been changing. The summers are hotter than they used to be. They say that people have been interfering with the atmosphere by putting chemicals in it and the weather's going out of control." Lyra agrees with him by answering, "Yeah, well they have, [...] and it is. And we're here in the middle of it" (*SK* 307). Their dialogue establishes that temperatures are not only rising in a fantasy world's Arctic, but also in Will's, and with that the reader's, world, as well as in the crossroads world where Cittàgazze is located, if Lyra's assessment can be trusted. Thereby, a message is reinforced which readers are already familiar with, namely that climate change is a global problem that affects everyone. Since this insight is presented nearly three

hundred pages after Serafina Pekkala first notices climate change in the Arctic, the North appears as the place where climate change becomes visible first. As Will provides no further information on the subject, the devastating consequences of climate change in the Arctic become symbolic for the problems that global warming might cause in other regions and worlds. Thus, in Pullman's climate change discourse, the central moment of melting Arctic ice is linked in a symbolic relationship to local and global consequences such as natural disasters, rumours of war, and endangerment of humans and animals.

All these moments of the discourse fit the pattern of the Arctic as the environmental canary in the coalmine. Global changes are first and foremost noticeable in the Arctic, before they also affect other areas. Thereby, the Arctic appears to be particularly vulnerable and its inhabitants seem to be innocent victims of a larger problem. Wood also detects this idea in Pullman's trilogy, as she points out that the author "depicts in his series the new awareness emerging in the last decades of the twentieth century that the North is endangered" (212). The problem with this idea is that it can be used to uphold power relationships, which would make it Arcticist. Arctic inhabitants are shown to be defenceless in the face of global warming and unable to stop the process on their own. They therefore require assistance to deal with the problem, which necessitates outside intervention. Thus, as Schweitzer, Saxinger, and Donecker point out, the south acquires the role of the saviour of the Arctic, which makes legacies of "koloniale[m] Paternalismus [colonial paternalism]" apparent (12).

The role of the British saviour is certainly taken up in the trilogy, as has been argued by Oziewicz. He mentions, amongst other examples, Lord Asriel and Mrs Coulter as the heads of the successful revolt against the Authority, Lyra and Will's liberation of the dead, and Mary Malone, whom he believes to "[save] the world of the Mulefa" (5). This last point is arguable, as Cantrell points out that the civilisation of the mulefa is preserved by Lyra and Will's reenactment of the Fall and their willingness to spend their futures separated ("Nothing Like Pretend" 307). The mulefa's side-story still contains a very convincing example of a discursive construction of British people as heroes. In one scene, the mulefa ask British physicist Mary Malone to solve their urgent problem of dying wheel-pod trees, without which they cannot retain self-awareness. Wise old mulefa Sattamax explains it thus to her: "[W]hile we cannot see a way to survive, we hope that you may. [...] And we hope you can do so soon, or we shall all die" (AS 234).

4.3.3 The Arctic as a cause for anxieties

Global warming does not simply become visible in the Arctic, it is, in fact, caused by a portal in the North (AS 111). The Arctic thus becomes the origin of the natural disasters afflicting other regions. This moment in Pullman's global warming discourse has its equivalent in climate change narratives that portray the changes in the Arctic as affecting other areas of the world. This notion becomes problematic when connected to fears for one's own safety and the perception of the Arctic as a security issue in a climate change crisis narrative. Steven Barfield recognises such a connection when he points out that "Pullman's trilogy mirrors current anxieties about global warming" (64). The dangerous logic connected to this is pointed out by Dittmer et al., who argue that a "state of emergency" is created by regarding the Arctic as a threat to security and consequently as "a space of exception," which finally "enable[s] geopolitical intervention" (203). Anxieties related to climate change therefore seem to warrant global interference into Arctic affairs.

Concrete examples of this mechanism can be found, for instance in the United Kingdom and in China. Depledge's study of British perceptions of the Arctic describes how apprehensions about Arctic climate change are used by government officials to legitimise their expenses for scientific research in the Arctic ("Assembling" 167–168). In another place, he adds that British climate change research may also be a way of gaining more influence over matters concerning the region ("(Re)Assembling" 189). As section 4.2 has made clear, science can be an effective tool to this end. The United Kingdom is not the only nation using the worries about melting Arctic ice to its advantage. Mia M. Bennett observes that "China leverages this state of emergency to justify its involvement" (657). To conclude, discourses that contribute to anxieties about rising temperatures in the Arctic allow non-Arctic states to exert influence over the Arctic region. They thereby reinforce their position of power, which gives the discourse an Arcticist character.

The portrayal of disaster in the terms of global warming discourses is coupled to a sense of fundamental wrongness. For instance, the initial portrayal of climate change by Serafina Pekkala is illuminated by flickering lights, as "sudden shafts of uncanny brilliance lanced down through rents in towers and fog and then vanished as quickly" (*SK* 43). This renders the scene even more foreboding than the description of chaos and thawing permafrost alone does. The eerie atmosphere is echoed in further scenes. When Lee Scoresby stays on Nova Zembla to find Grumman, the island is shrouded in fog, "occasionally drenched with the strangest imaginable

light, in which great forms could be vaguely seen, and mysterious voices heard" (*SK* 117). These descriptions can be interpreted as articulating the onset of climate change as something nefarious. The deduction is supported by the fact that the environmental changes are indeed instigated by an act of evil, as Asriel kills a child to open the portal (*NL* 391), which starts the developments. The violation of natural laws adds to this impression that something is going fundamentally wrong. The earth's magnetic field is unreliable (*SK* 43; 121; 200), a river in central Siberia runs temporarily upstream (*AS* 99), and the sun makes an unseasonal appearance on Svalbard (*AS* 37). Ultimately, the spooky atmosphere and the broken natural laws add the moments of wrongness and unnaturalness to the climate change discourse.

As the consequences of climate change are portrayed as clearly negative, the thought that melting ice can also offer advantages, such as access to resources and shipping routes, never appears. This is another frequently appearing moment in the Arctic climate change discourse, which is often accompanied by anxieties about ensuing political tensions or even war. The first aspect, advantages of global warming, is not taken up by the trilogy. Climate change and its consequences are consequently portrayed as catastrophic, destructive, and worrying. The narrative thus makes it difficult to conceive of advantages of the situation. While *His Dark Materials* cannot be seen as actually subverting the discourse in this case because it can never take up all possible moments of a discourse, it still avoids promoting what Huggan terms "getrich-quick' opportunism" ("Introduction" 7). What may be considered as taken up by the trilogy is the threat of war. Even though the war in *His Dark Materials* is not about control of natural resources or Arctic maritime borders, it is articulated in the scene immediately before the first description of melting ice and might therefore be associated with it. It thus may contribute to the impression that climate change in the Arctic is a security issue.

4.3.4 Agency of Arctic inhabitants

The stereotypical representation of Arctic inhabitants is a very common moment in climate change discourses, even though perceptions have changed with time. Marybeth Long Martello, for instance, mentions that studies in the field of climate change assessment from the 70s onwards first assumed communities to be passively affected by the changes, later changed to the view that populations could, to a certain degree, adapt, and finally recognised them as holders of valuable local knowledge ("Arctic Indigenous Peoples" 356–359). The early stereotypes have not disappeared from all areas, however. Bruce C. Forbes and Gary Kofinas mention in their chapter "Resource Governance" of the second *Arctic Human Development Report (AHDR-II)* from 2015 that a common perception of Arctic people judges them to be

"passive actors rather than agents in their own regard" (Forbes and Kofinas 258). Also other studies observe such a continuing portrayal of inhabitants of the North as "victims of climate change" (Schweitzer, Sköld, and Ulturgasheva 143). All these stages can be observed in *His Dark Materials*. While Arctic inhabitants tend to appear as passive victims in many of Lee's observations he makes on his search for Grumman, they are attributed a limited amount of agency in the side story dealing with the panserbjørne's response to climate change, which is analysed in this section. Furthermore, as section 4.2.4. shows, local knowledge about climate change is shared in one scene on Nova Zembla.

In the narrative, the negative impact of global warming is exemplified on the fate of Iorek Byrnison and the panserbjørne. Through Serafina Pekkala's eyes, the audience learns about Iorek Byrnison's problem. The witch's perspective zooms in from the "melting ice-cap" to a panorama of a thawing Svalbard and morphs into an observation of Iorek "swimming fast after a walrus" (AS 37). The reader finds out that bears depend on an ice sheet for successful hunting (AS 37-38) and later gains an insight into Iorek's thoughts, which reveal that the population of panserbjørne cannot survive under these conditions. This way of presenting information is highly reminiscent of documentaries about climate change. Similar to Serafina Pekkala's aerial view of melting Arctic ice, this portrayal of the plight of Arctic bears draws on familiar modes of representation, which enhances the articulation of polar bears as icons of climate change.

Especially the portrayal of an iconic white bear affected by global warming is fairly typical, even though Iorek Byrnison is not a polar bear but a panserbjørne in Lyra's world. Iorek is portrayed as the epitome of everything that characterises the Arctic, as has also been noted by Voogd (par. 8). Even after Iorek leaves the North in *The Amber Spyglass*, he is described to appear out of the snow (*AS* 176-177), regard Will with inhuman darkness behind his eyes (*AS* 190), roll in snow to prove his bear nature until he appears like "the personification of all the snow in the world" (*AS* 191-192), work his craft with snow (*AS* 194), and disappear back into the snow (*AS* 196-197). As the Arctic is melting, Lyra suddenly perceives him as "hungry and old and sad" (*AS* 197). A central moment of the climate change discourse in *His Dark Materials* is therefore the articulation of panserbjørne as the victims of climate change, whose plight is representative of global repercussions. What Hansson and Norberg observe regarding the changing meanings of ice and snow, they also point out with respect to polar bears. These animals are increasingly often not employed to illustrate "Arctic danger" anymore, but to "personify the threats of global warming" (12–13).

A surprising twist to the otherwise typical moment is introduced when Iorek announces that "[he] must go south" (AS 39). Contrary to expectations of the iconic polar bear narrative, he is not a poor animal that cannot adapt to a changing situation and needs help from outside to avert his tragic fate. Quite the opposite, the panserbjørne are shown to take control of their own fate and migrate to the mountains (AS 42; 111;115). The bears are furthermore portrayed as self-aware persons and as more than simply animals. Even though they cross the ocean by swimming to the mainland, they charter a ship once they are there and pay for it in gold (AS 112), which signals civilisation. They are also portrayed as "being rational" in their decision-making instead of simply following their instincts (AS 111). Thus, a typical moment of climate change discourse, articulating Arctic inhabitants as victims, is subverted. The bears' agency is limited, however, as their plan is no more than a reaction to the problem and does not fundamentally solve it. As Iorek tells his subjects, "[w]hen the time comes for us to move back to the Arctic, we shall assemble here" (AS 115). Evidently, the solution is left to others, while the panserbjørne wait.

In further contrast to stereotypical representations of climate change victims, Iorek is not voiceless. After thinking about the problem to form a plan on his own (*AS* 42), he relates his observations and solutions to several characters in the narrative. Serafina Pekkala (*AS* 39), Will (*AS* 111), and Lyra (*AS* 178) listen to his story. After his conversation with the witch, Iorek's words circulate among other creatures of the North, as foxes listen in to their conversation (*AS* 39-40) and spread the information to the cliff-ghasts (*AS* 43). It is noticeable, however, that from all the panserbjørne only Iorek has a voice in the climate change discourse. Iorek is never portrayed as discussing the issues with his fellow bears. The only time a panserbjørne asks a very fundamental question about Iorek's plan, what they will eat in the mountains, is after they have already arrived there (*AS* 114). This conveys the impression that Iorek's agency in the global warming discourse may be an exception. All other inhabitants of the Arctic, except for Umaq (see section 4.2.4.), seem to be the helpless victims that climate change narratives often make them out to be.

4.3.5 The question of responsibility

The main perpetrator of climate change in the Arctic is Lord Asriel. Serafina Pekkala regards "his mysterious activities" as the root of all the changes (*SK* 41). It is "the gap that Lord Asriel's experiment had torn in the sky" (*SK* 29) which wreaks havoc in the multiverse. The wording already foreshadows the destructive nature of Asriel's actions, as nothing good can come from a "gap" that is "torn in the sky." It stands in stark contrast to Asriel's explanation of the process

in *Northern Lights*. There, he tells Lyra that "[they] can build a bridge" (*NL* 375), which has much more positive connotations. When it briefly afterwards turns out that Asriel needs a child sacrifice to create the portal (*NL* 377-378), the euphemistic nature of his explanation is revealed. Asriel shows no remorse for his actions and takes no responsibility for the melting ice. As Cantrell phrases it, "[i]n his colonialist desire for a new world, Asriel refuses to consider the consequences of the tropical sun now streaming through the massive hole in the Arctic sky" ("Letting Specters In" 236).

The idea of Asriel as the culprit is only seemingly contradicted by Will. In a scene where "the topic of environmental responsibility is brought to the fore" (Cantrell, "Letting Specters In" 235), Will tells Lyra that climate change in his world is caused by "people [who] have been interfering with the atmosphere by putting chemicals in it" (*SK* 307). This may be interpreted as accusing consumerist society, greedy entrepreneurs, or, as Cantrell suggests, "adult mismanagement" ("Letting Specters In" 246). If Asriel is assumed to stand for this problematic conduct, the contradiction is resolved. Cantrell, for instance, understands the portrayal of Asriel's actions as a monition about the importance of accepting limits ("Letting Specters In" 236–237). The portal between worlds is created by Asriel without regard for the consequences and can be understood as standing for a transgression on the side of humanity. It is reminiscent of the careless way our world's weather is altered. The choice to portray a British aristocrat as the responsible party, who refuses to take responsibility for any negative consequences, might therefore be interpreted as a subtle criticism of greedy enrichment, be it in the form of colonial or neo-colonial aspirations. The moment of climate change is thus linked to human perpetrators.

On the whole, the message of *His Dark Materials* concerning climate change can be characterised as ambivalent. Cantrell argues that Pullman expresses a strong environmental message in his text. According to her, *His Dark Materials* appeals to the readers to care for the world by acting in response to the pressing problems of their time ("Nothing Like Pretend" 310; 318) and urges them to responsibly manage the planet's resources ("Letting Specters In"). Her analysis does not account for the absence of an explicit call to action, however. The narrative simply portrays the problems resulting from global warming and lacks role models who suggest successful ways of solving them. In laying the blame for climate change on other people, such as Asriel, or on abstract notions, such as the release of greenhouse gasses, the text certainly does not encourage readers to feel responsible.

This subtext, that the responsibility for climate change rests with other people, is closely connected to a very interesting aspect of the Pullman's climate change discourse. In the trilogy, global warming does not necessitate the intervention of the affected people. This moment of the discourse can be found in several scenes. The most obvious hint is dropped by Umaq, who recounts the previous disaster in the words "[t]he ice melt, then freeze again" (SK 121). His estimate for future development is "Same thing as before. Make all same again" (SK 121). This suggests that the Arctic will presumably freeze again without human intervention. Likewise, Iorek Byrnison simply waits for "the world to settle itself again" (AS 111). No attempts are made at dealing with the root of the problem by sealing the hole in the multiverse until the very end of the story, when the angel Xaphania promises to close all openings (AS 500). Thus, supernatural intervention re-establishes ecological equilibrium. One moment of the climate change discourse therefore articulates global warming as a problem that others solve. This creates a curious subject position in the text, as the audience is made aware of climate change, its negative consequences, and its existence in their own world, but at the same time learns that there is no need to take action against it.

This discrepancy can be resolved when differentiating between the roles different groups have in the environmental disaster narrative. Umaq and Iorek's inaction can be understood by considering their blamelessness. This is not to say that the problem of climate change does not need to be solved by the entirety of the global population, but that some people might contribute more to global warming than others. Neither the inhabitants of the Arctic nor the mulefa have caused the environmental problems described in *His Dark Materials* and may therefore not be held responsible for their solution. Umaq, Iorek, and the mulefa do not recklessly create weapons such as the bomb of the Consistorial Court of Discipline that eventually creates an abyss drawing all dust inside (*AS* 334; 356; 487) or the subtle knife that lets Spectres into the world. Quite the contrary, while the Guild of the Torre degli Angeli and Will wield the subtle knife without thought for the consequences, Iorek is extremely wary of it (*AS* 181). In scenes featuring these characters, a subject position is created which opts for waiting instead of acting.

Another group of characters, Will, Lyra, and Mary Malone, do not solve the problem, but at least contribute to its solution. They stand in the tradition of those who caused climate change. Will continues to use the knife even after Iorek cautions him, only to find out, at the very end, that he thereby contributed to the loss of dust (*AS* 488) and the creation of Spectres (*AS* 491). Ultimately, as Cantrell points out, the environmental catastrophe is also partly his fault ("Letting Specters In" 246). Lyra (*NL* 191), just like her father Asriel (*NL* 375), exhibits the

drive to enter new worlds. In the scene where Will realises what he has done, Cantrell sees a "refus[al] to absolve either [Lyra] or Will of responsibility for the ecosystems they traverse" ("Letting Specters In" 246). Furthermore, in the mulefa's world, it requires the scientific methods physicist Mary Malone has at her disposal to identify the subtle knife, designed by other scientists, as the cause for the mulefa's problems (AS 273-275). Even though they mean no harm, Will, Lyra, Mary Malone, and also many of the readers, thus stand in the tradition of the irresponsible and power-hungry people whose actions led to the disappearance of dust. Their role in alleviating the consequences, which is interpreted as British heroism in section 4.3.2, thereby obtains a second possible meaning. Their actions could be interpreted as a form of taking responsibility for something the protagonists or their ancestors did. In the trilogy, the moments of climate change and action against it seem to revolve around the question of responsibility.

The question of responsibility is also posed in current discussions, for instance in an ongoing debate that connects the effects of climate change to human rights. Two petitions have been filed at the Inter-American Commission on Human Rights. They demand that specific states take responsibility for the violation of human rights of Arctic peoples by contributing to climate change. One of these petitions was composed on behalf of a group of Inuit people in 2005 and addresses the United States of America (Watt-Cloutier). It was not successful, however (De la Rosa Jaimes 3). The other petition, against Canada, was submitted by the Arctic Athabaskan Council in 2013. International human rights law expert Verónica de la Rosa Jaimes comments on this petition in a blog post, which she opens with the statement

The indigenous peoples of the Arctic, including the Arctic Athabaskan peoples, have contributed the least to the accelerated warming and melting of the Arctic through emissions of greenhouse gases yet they are among the first to face direct environmental, social and human impacts of climate change. [...] [T]he Arctic Athabaskan Council [...] filed a petition [...] seeking relief from violations of their rights resulting from rapid Arctic warming and melting caused by emissions of black carbon for which Canada has international responsibility. (1)

These sentences about the Athabaskan petition show parallels to the discussion of responsibility above. Even though the populations affected by environmental change in *His Dark Materials* never issue such a demand, the effects of global warming on uninvolved Arctic inhabitants are addressed in the narrative and the changes are shown to have human causes. Some of those characters who stand in the tradition of people contributing to global warming take part of the responsibility for finding a solution to the problem.

5. Conclusion

In this thesis, moments of the discourses of Arctic exploration, science, and climate change in Pullman's *His Dark Materials* are analysed. Firstly, the conception of the Arctic as a destination for explorers is considered. One group of moments in Pullman's exploration discourse articulate historic narratives of Arctic exploration. The fictional search for Northern portals between worlds mirrors the historic search for the Northwest passage, fictional journeys to liberate abducted children and lost fathers reflect historic rescue missions, and characters' names and means of transportation echo the names of historic explorers and their techniques. Arctic exploration thus appears to be natural, justified, and necessary. The commercial and political reasons underlying it stay mostly hidden in the trilogy.

Pullman's exploration discourse also features stereotypical Arctic explorers, Lord Asriel and John Parry, whose masculinity, physical and mental strength, and scientific inclination are typical attributes of traditional Arctic heroes. All central Arctic explorers, Asriel, Parry, Mrs Coulter, and Lyra, are shown to dominate the local population. Arctic inhabitants are, in contrast, primitive, less technologically advanced, and in tune with nature. Even though Pullman tries to show that their digression from the British norm is an asset for them, Arctic inhabitants appear as essentially different and thus clearly other. Significantly, indigenous peoples are underrepresented and only play smaller roles. Similarly, the representation of Northern nature repeats Arcticist perceptions. Some of the moments characterising Arctic nature are emptiness, which implies parts of the Arctic to be a terra nullius, sublimity, coldness, and darkness. It is the ideal environment for Arctic heroes and heroines to prove their valour.

Even though these moments largely conform to Arcticist ideas about the region, some details of the narrative invite the readers to form their own opinion. The story alludes to some issues connected to exploration, for instance when climate change is caused by Lord Asriel, who recklessly opens a hole between the worlds so that he can cross. Furthermore, Mrs Coulter's interaction with Iofur Raknison reminds of missionary activities, and in Tony Costa's reference to a global desire for "coal-spirit and the fire-mines" (NL 108) alongside the danger of war, contemporary reactions to a perceived scramble for Arctic resources reverberate. The figure of the Arctic hero is also not solely positive. Arctic heroes Lord Asriel and John Parry are only partly suitable for the building of a positive national identity because of their faults. The figure of the Arctic hero is further questioned by introducing the female Arctic explorer Mrs Coulter, who addresses the gendering of Arctic exploration, and Lyra, who engages in typical activities

of male Arctic heroes while being an underage girl. Lastly, Arcticist representations of Northern nature are challenged. Pullman provides two different perceptions of supposedly empty Svalbard, insider Iorek's and outsider Lyra's, which might cause readers to reconsider narratives of an Arctic terra nullius. Moreover, he shows that the Arctic is not as dangerous as readers might be led to believe.

The story's use of darkness and light supports several of the moments of the exploration discourse. The different sources of light are indicative of the character of the people using them, showing Arctic inhabitants to be primitive and close to nature and the British to be technologically advanced. While Arctic darkness stands for primitivity, it also gains a positive connotation in some places, which reinforces Pullman's appreciation of Arctic difference. At the end of *Northern Lights*, darkness is replaced by sunlight illuminating the Arctic through the portal between worlds. This sets the stage for a climate change discourse, where the disappearance of characteristic attributes of the North, darkness and cold, is regarded as problematic.

The second discourse analysed in this thesis is the image of the Arctic as a place to do science and as an object of scientific investigation. In the trilogy, several researchers affiliated to different institutions conduct research in and about the Arctic. Moments articulating the discourse include field jargon and the various methods employed by the researchers. In particular, the potentially Arcticist practices of mapping and naming are represented. The narrator and the character John Parry partly even continue them. The hidden motives behind Arctic science in former and recent times, such as geopolitical advantages and commercial interests, are not addressed in the trilogy, which makes the scientific investigation of the Arctic appear natural and unproblematic.

Yet, in a few places the science discourse is tentatively questioned. Arctic scientists often act unethically, accept censorship of their work, and Lord Asriel hides the real motive for his research in the North, the wish to travel to a parallel universe. Pullman also rejects some Arcticist moments, for instance when it becomes apparent that the General Oblation Board leased the grounds on which they built Bolvangar, ostensibly not a terra nullius, or when the name the General Oblation Board assigns to the place does not become generally accepted.

Further moments relevant for the science discourse cluster around the types of knowledge the various groups of people possess. Scientific knowledge is mostly generated and distributed by British scientists, but also by some international scientists, and by at least also one Skraeling

scientist who might originate from the Arctic. Nonetheless, scientific research stays a mostly British cultural practice. The fact that the plans of Iofur Raknison to open a university on Svalbard are never taken seriously and ultimately fail corroborates this observation. Indigenous knowledge is valued, but plays a small role and is represented as oral history in a stereotypical manner. Arctic inhabitants furthermore possess natural and supernatural knowledge, which emphasises their representation as primitive and close to nature. These types of knowledge are, in addition, indicative of a connection to nature that non-Arctic people have mostly lost and that Arctic people can also lose if corrupted. This might be interpreted as revealing a longing for a lost time, a paternalistic attitude towards allegedly unspoilt inhabitants of the Arctic, and the assumption that they are somehow other.

The last discourse analysed in this thesis is the image of the Arctic as a place especially vulnerable to climate change. Melting ice is the central moment of the climate change discourse. Disastrous local and global consequences arise from Lord Asriel creating a doorway between universes, echoing real effects of our world's global warming. In the trilogy, the Arctic is represented as the region where climate change becomes visible first, thus appearing as the metaphorical canary in the coalmine. Arctic inhabitants are thereby assigned the role of defenceless victims, who are in need of outside intervention. The Arctic is furthermore shown to be a cause for anxieties, as the portal in the North has global repercussions which are articulated as fundamentally wrong. This may lead to the conclusion that the Arctic is a security issue, which, once more, justifies outside intervention.

In *His Dark Materials*, various reactions to climate change are shown, which correspond to the different stages of researchers' expectations of Arctic inhabitants' roles. Many Northern peoples seem to be victims of the warming Arctic, which conforms to early stereotypical ideas. Contrastingly, the panserbjørne emigrate to a colder region, where they plan to wait for the problem to solve itself. The bears' fate is symbolic for how a warming climate affects populations, which takes up a typical analogy made in widespread climate change narratives. Contrary to earlier stereotypical views and conforming to later expectations, Iorek Byrnison has a voice in the climate change discourse and at least limited agency to change his fate. Umaq, who decides to wait for the weather to normalise like the panserbjørne, is assigned the role of the local informant, as he imparts relevant information about the changing Arctic, showing that also Pullman recognises the value of local knowledges.

The message of the climate change sub-plot seems puzzling at first glance. The disastrous consequences of a changing climate are imparted to the readers, while at the same time inaction is shown to be a successful course of action, as an angel closes all portals at the end of the trilogy and thereby presumably stops global warming. The Arctic inhabitants' inclination to wait for the problem to solve itself can be understood when considering that they did not cause it in the first place. Those characters who stand in the tradition of Lord Asriel and his reckless interference with the laws of nature try to find solutions instead.

Generally speaking, widespread discourses of Arctic exploration, science, and climate change are frequently taken up in *His Dark Materials*. Many of the moments which typically make up these discourses are also articulated in the trilogy. The repetition of some of them clearly holds Arcticist potential. Others, however, are changed by Pullman so that they question Arcticist ideas. Indeed, the analysis corroborates what the literature review in section 2 already leads to assume, namely that Pullman both repeats stereotypes and typical narratives, as has been criticised by some researchers, and in some places subverts them, which has been pointed out by others.

It is noticeable that the three discourses of Arctic exploration, science, and climate change at times appear to be closely connected and at other times contradict each other. Several examples can be found where the images overlap. For instance, indigenous knowledge becomes relevant in the Arctic science discourse, where it complements scientific knowledge, but also in the climate change discourse, where Umaq is assigned the role of indigenous informant. Furthermore, the figure of the scientist-explorer links the science and the exploration discourse, as does the use of darkness and light to characterise Arctic inhabitants and British scientist explorers. As the boundaries between discourses are not fixed, such overlaps are hardly surprising. In some places, the discourses do share moments, but rather contradict each other. This is the case when moments acquire diverging signifieds in the different discourses. For instance, Arctic ice is a metaphor for the tough environment where Arctic heroes and heroines prove themselves in the exploration discourse, but also signals the consequences of global warming in the climate change discourse. This can be understood within the framework of Laclau and Mouffe's discourse theory used in this thesis. According to the theory, different articulations correspond to different meanings taken from the field of discursivity.

The focus of this thesis is on Pullman's *His Dark Materials*. His other works are not considered, as the analysis of this incredibly rich text alone offers more insights than can be presented here.

The analysis of a companion volume to the trilogy titled *Once Upon a Time in the North*, which includes the board game "Peril of the Pole," would certainly provide further interesting results. It would certainly be also worthwhile to compare Pullman's representation of the Arctic with images of the region in other works of Young Adult fiction, especially also with Arctic discourses in literature from countries that have a different relationship with the North.

This study is not intended as criticism of Pullman's work, but as an analysis of Arcticist moments in widespread discourses of the Arctic, which appear in all possible genres, ranging from everyday conversation to works of fiction. It makes clear how the articulation of stereotypical images renders a location immediately recognisable as Arctic, in particular for readers of non-Arctic countries, and makes its description sound true, even if it is fictional. The study analyses the exploration, science, and climate change discourses articulated in *His Dark Materials* with the aim to further the understanding of Arctic discourses in general. It provides an insight into how the moments making up these Arctic images may support inequality, but also hold the potential to change inequalities. It thus raises awareness of the significance of our stories and the power of our thoughts.

6. List of works cited

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A. Anhang

A.1. Abstract

The publication of Edward Said's monography *Orientalism* has led to intense discussion among researchers. Today, it is widely accepted knowledge that discourses pertaining to a region can have considerable influence on the region. This is also true for images of the Arctic, a region that has attracted considerable attention in recent years and is a recurring location in Philip Pullman's *His Dark Materials* trilogy. To gain a better understanding of contemporary conceptions of the Arctic and their implications, discourses of Arctic exploration, science, and climate change are analysed in Pullman's novels. The concept of Arcticism, which has been suggested in analogy to Said's Orientalism (e.g. Ryall, Schimanski, and Wærp), is used to uncover stereotypical images of the Arctic that are repeated in the trilogy. Furthermore, ideas that question Arcticist notions are located in text.

A.2. Zusammenfassung auf Deutsch

Die Publikation von Edward Saids Monographie *Orientalismus* hat in der Wissenschaft zu nachhaltigen Diskussionen geführt. Inzwischen ist es weitgehend anerkannt, dass Diskurse über eine Region mit Machtausübung über dieses Gebiet einhergehen. Das trifft auch auf die Arktis zu, eine Region, der in den letzten Jahren vermehrte Aufmerksamkeit zuteilwurde und welche ein wiederkehrender Handlungsort in Philip Pullmans *His Dark Materials* Trilogie ist. Um einen besseren Einblick in aktuelle Arktisbilder und ihre Tragweite zu erhalten, werden Diskurse zu arktischer Entdeckung, Wissenschaft und Klimawandel in Pullmans Romanen analysiert. Das Konzept des Arktizismus, welches in Analogie zu Saids Orientalismus vorgeschlagen wurde (z.B. Ryall, Schimanski und Wærp), wird angewendet, um von der Trilogie aufgegriffene Stereotype offen zu legen und Gegenentwürfe zu arktizistischen Bildern im Werk zu lokalisieren.