Saving Svalbard? Contested value, conservation practices and everyday life in the high Arctic

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Thesis Summary

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This thesis examines the relationships between human societies, the material landscape and nonhuman life in the archipelago of Svalbard. The investigation draws inspiration from posthuman, neomaterialist geographies and political ecology. Frameworks, processes and practices of value are traced through conservation initiatives and everyday actions and ideas around protecting Svalbard's environment. Practical, political and ethical questions underscore this work: what can and should be 'saved'; how and for whom are we trying to save species, landscapes, and artefacts? If saving is possible, is it the 'right' thing to do? Svalbard, as a place undergoing climatic change, economic and social transitions in a physically and politically fragile environment, provides a setting where such questions are particularly pertinent.

This thesis develops a theoretical approach to value, which demonstrates that when value is treated as contingent practice and process, as verb rather than noun, it can be a useful analytical tool for uncovering complex, multi-scalar processes, such as conservation practice. I advance this methodologically to combine a value-as-practice approach with feminist care ethics, assemblage thinking and the notion of a 'humble' research practice. This humble research practice brings together recent thinking around situated knowledges, participatory and posthuman geographies.

Through documentary research, extensive site-based interviews and ethnographic empirical material, I uncover what is valued as natural and cultural heritage in Svalbard and how value is practiced. I chart how political, economic and cultural frameworks shape, circulate and manipulate value through categorisation and legitimation processes. Everyday practices of care and the dynamic life and 'thingyness' of Svalbard challenge value frameworks which seek to measure and fix value. I contend that future ecologies and conservation strategies need to more fully take into account the value(s) of human and more-than-human life in Svalbard and beyond.

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Abbreviations and Acronyms

Term	First Language Name	English Name/ Translation
AHD		Authorised Heritage Discourse
DGES		Department of Geography and Earth Sciences (Aberystwyth University)
ESRC		Economic and Social Research Council
ICOMOS		International Council on Monuments and Sites
IUCN		International Union for Conservation of Nature
MOSJ	Miljøovervåking Svalbard og Jan Mayen	Environmental Monitoring of Svalbard and Jan Mayen
NPI	Norsk Polar Institutt	Norwegian Polar Institute
NIKU	Norsk Institutt for Kulturminneforskning	Norwegian Institute for Cultural Heritage Research
NINA	Norsk Institutt for Naturforskning	Norwegian Institute for Nature Research
RGS		Royal Geographical Society
SGSV		Svalbard Global Seed Vault
SNSK	Store Norske Spitsbergen Kullkompani	Large Norwegian Spitsbergen Coal Company, commonly known as Store Norske
STS		Science and Technology Studies
ТА	Трест Арктикуголь	Trust Arktikugol
UNESCO		United Nations Educational, Scientific and Cultural Organisation
UNIS		The University Centre in Svalbard

Helpful Norwegian Terms

Norwegian	(Approximate) English Translation
Basill	Bug
Breen	Glacier
Friluftsliv	Outdoor life/ experiencing 'nature'
Fjellkultur	Mountain / outdoor survival knowledge
Sysselmannen (på Svalbard)	The Governor (of Svalbard) and his/her office and staff

Introduction: Converging on Svalbard

Maybe I am a Svalbard Reindeer. Around 53kg in spring. Short in the leg. Roughly 160 cm in length. Changing fur/hair colour according to the season. Keeping to non-glaciated areas. Counted, monitored and hunted in specific zones, yet free to roam beyond the scope into the unknown, should energy reserves allow. I am gazed at, captured on film, eaten in the hotel restaurant if my luck runs out. I am an environmental indicator. The counters think I don't mind when they scoot past, maybe I don't. They could measure that. They choose not to. I munch my way through town and valley, scuffing the snow to reach the tundra. Summer brings the lush green grasses and warmth to store up for the coming seasons.

Maybe I am that curiously aesthetically pleasing chunky piece of chain. Poking out from the snow covered mine entrance. I am old, but not that old. Not old enough. I am not heritage. But I could be interesting? I hold stories. I used to pull coal trucks, or was it passenger trucks? Bringing the miners, money-making men, with coal-lined eyes up that steep valleyside for the daily grind. Maybe they remember me...What am I now though, without these others? I could be junk. An eyesore. A health and safety risk. Part of a rabblesome gang of things that may not be wanted, if they decide to forget.

Maybe we are glaciers. Which ones? Esmark, Nordenskiold, Longyear, Sven, Lars... Maybe names do not matter so much, we are famous world-over for being awe-inspiring, fearsome, beautiful. Maybe it does matter, you are in that zone, I am in this other one, beyond unseen boundaries. We have been here for ages, but now we are moving faster and further. We attend meetings; become stars in films, campaigns, poetry, art, cruises, and symphonies. We are the main attraction. We are falling apart. We are subject to touching concern, probing and mapping and research papers. Yet we are still here, losing weight. We are shifting very slowly towards the future, leaving tracks in the landscape. How can we think with and through things that are alien and other to ourselves? Reindeer, chain, glacier: all three are enrolled and made human in projects and discourses aiming to 'save' Svalbard. Through the environmental protection policies and debates surrounding them in Svalbard, reindeer, abandoned industrial equipment and glaciers are evaluated, ranked and included in risk assessments and future projections. They are also, all three, companions, comrades, memories, home, inspiration, along with a myriad other things and beings. They take part in practices and processes of value. Value that is contingent, shifting, that does work and has consequences. Value that is shared, uneven, geographic, contested and sometimes goes unnoticed (Hoskins 2015; Miller 2008). In thinking with other things and beings, I anthropomorphise entities that are beyond my understanding, there is a tension between working alongside and speaking with. By bringing them closer in, I can try to make them more alive, recognise commonalities, interdependencies, tensions and perhaps find some humility (Bear 2011; Bennett 2010b; Leopold 1949; Lorimer 2015). Saving Svalbard, however, is a profoundly human metaphorical (and sometimes actual) project.

I use the term 'saving Svalbard' to refer to a collection of practices that are connected to conservation in Svalbard. Conservation here is broadly defined and not limited to natural or cultural heritages, but also includes economic and political systems and conditions for example. Hence in this research I am concerned with unpacking the relationships between human societies, the material landscape, 'more-than-human' life and nonhuman things in this high-Arctic archipelago.

I was originally attracted to the research project, then entitled *Polarising nature-culture: an examination of value in Svalbard*, through the seemingly paradoxical mix of activities, discourses and imaginaries that appeared to coexist in Svalbard. How was it that settlements built for and powered by coal, the dirtiest of fossil fuels, could continue to operate alongside a rhetoric of aiming to be among the world's best managed and preserved wildernesses and a key destination for climate change science and campaigns? At its core, the thesis addresses this original curiosity. Such a paradox allows us to reconsider value and valuing processes and practices. The meta-narratives of geopolitics and the expansion of neoliberal exploitations of nature are two conventional ways to make sense of this situation. I will examine these briefly below. However, my empirical evidence suggests these rubrics would miss many nuances of everyday practice and experiences in the first case, and ignore the unique state-sponsored nature of the majority of activities in the second. My aim is to produce a form of countertopography (Katz 2001a; 2001b) of Svalbard, drawing contour lines between everyday experiences of value. I am also concerned with advancing how we might think with value and 'do' value research.

Key thinkers on nature-culture relations (Katz & Kirby 1991), political ecology (Loftus 2012), climate change (Brace & Geoghegan 2010; Head & Gibson 2012) and value, recognise "ordinary life" (Barnett 2014) and "everyday cosmologies" (Miller 2008, p.1123) as key spaces to examine processes and practices of change. For Lefebvre, the everyday is simultaneously mundane and banal, whilst holding space for all of human practice, mystery and potential for change. It is a place of contradiction where we might come to know the limits of our understanding and control of a magical world or even "genuine reality" (Lefebvre 1991, p.137). Indeed, contradictory and magical are two adjectives often associated with Svalbard.

> For magic plays an immense role in everyday life, be it in emotional identification and participation with 'other people' or in the thousand little rituals and gestures used by every person, every family, every group ... everyday life is defined by contradictions: illusions and truth, power and helplessness, the intersection of the sector man controls and the sector he does not control.

(Lefebvre 1991, p.21)

Head and Gibson's (2012) call for more work at the local, everyday scale of those living with and in landscapes of climate change is one this project was poised to answer. That the focus of the research shifted sideways to the practice of Svalbard's environmental protection, is a demonstration in itself of the local/global churn that Head and Gibson identify, whereby "in the process of everyday life, climate is enrolled necessarily and unavoidably into other concerns" (2012, p.707). Global, national and, to some degree local attention to, interest in and concern over climate change in the Arctic region, and Svalbard specifically, are entwined with the discourse and practices of environmental protection that now occupies the centre stage of this work. The conclusions I draw from this research similarly relate to this larger 'problem' and ways we might understand it.

Focussing on environmental protection, or, cultural and natural heritage conservation at the everyday, local scale, I ask: how do frameworks of value relate to environmental protection in Svalbard? What is of value, how is it valued, how is value assigned, how and why is value contested, and what consequences do these value practices have? Value is central to the concept of conservation and heritage and, as Harrison (2015) and many others have pointed out, whilst heritage might be most associated with the past, its purpose is in curating futures, value is relational. Such futures, Jamie Lorimer (2015) suggests, cannot be based on enshrining the present or revoking the past, we need to find value in new relationships and co-productions, in novel ecologies (Robbins & Moore 2013). We need to re-think value, reclaim it from 'objective', fixed and stable frameworks, markets or dismissals of overly subjective accounts. I contribute to these debates.

> Wildlife conservation after the Anthropocene demands new forms of interspecies responsibilities. It needs new types of science and relations between science and politics. It must be founded on different forms of value.

(Lorimer 2015, pp.179–180)

Thinking alongside glaciers, reindeers, ruins and civilisation on the edge, means a constant drift towards the future. What will become of these things? These are not idle thoughts. Practical, political and ethical questions underscore this work: what can and should be 'saved'? How and for whom are we trying to save species, landscapes, artefacts and more? And, if saving is possible, is it the 'right' thing to do? As Kathryn Yusoff highlights, the environmental changes that are underway force us to contemplate and make choices as to what kind of world we will leave in our wake, what losses and changes we might need to accept as well as what we wish to maintain:

> One crucial sphere in the politics of climate change is that of the decisions around what is 'protected', 'saved' or simply allowed to be in the world, and that which is laid to waste, as an unthought, unrepresented, expenditure of anthropogenicinduced climate change.

(Yusoff 2010, p.79)

Svalbard, as a place undergoing climatic change, economic and social transitions in a physically and politically fragile environment provides a setting where such questions are particularly pertinent. We might even question whether a human presence is necessary or desirable, as this undated, unattributed quote displayed prominently on the glass of the Svalbard Museum advises: "This place is abandoned by God and ought to have been abandoned a long time ago by mankind as well." Svalbard is a place where personal, cultural and political values coalesce around decisions over whether or how to let past relics rest in peace – for rotting is a very slow process in 'normal' Arctic temperatures (DeSilvey 2005) – and where, or if, the lines separating or connecting human society and protected wilderness should be drawn.

In this chapter, I set the scene for the thesis. I begin by locating Svalbard geographically. In Section 1.2 I introduce Svalbard as a site of geopolitical importance and as a place entangled in multiple human and non-human value relationships, which are of interest to human geographers and others. In doing so, I trace a brief outline of previous research in Svalbard and relate general Artic trends to my work in Svalbard. I then zoom in on the settlements in Svalbard where my research was focussed to contextualise the discussions that follow. Finally, I set out the main academic contributions of this thesis.

1.1. Locating Svalbard

Before examining the politics and practices of value and constructing countertopographies, it is helpful to first gain a clearer idea of the more conventional topographical situation. Svalbard is an archipelago within the Arctic Circle between 74 and 81 degrees north (see Figure 1 and Figure 2), approximately half way between Northern Norway and the North Pole. It has been governed by Norway under a special international treaty since 1925. Unlike many Arctic areas of human settlement, Svalbard's population is nonindigenous, cosmopolitan and transient. It is also relatively easily accessed compared to other Arctic areas at similar latitudes. The Spitsbergen Current (an extension of the Gulf Stream) that facilitates a warmer, wetter climate in the West of Svalbard means this side of Spitsbergen is usually ice free for ships passage in the summer. Svalbard is home to a collection of the world's northern most entities including (but not limited to) the Northern most civilian airport and post office, school, music festival venue, museum, higher educational facility, brewery, alternative newspaper, Lenin statue and piano. Famously, polar bears out-number the human population of the Archipelago and outside of the patrolled settlements (Longyearbyen and Barentsburg), it is advised to carry a high calibre rifle and other means of protection from polar bear attack.



Figure 1: Svalbard and Norway located within a wider global context (Wikimedia user TUBS 2011).



Figure 2: Svalbard active population centres (DGES map adapted by Antony Smith with thanks).

Telling of the geopolitical history here, Statistics Norway reports Svalbard's census data according to whether inhabitants reside in a Norwegian or Russian owned and managed settlement (Figure 3). The data shows that 2100 of the 2600 residents live in the Norwegian capital of Longyearbyen. The town is increasingly a global meeting place, not just for visiting tourists and researchers, but for those looking for a place beyond the reaches of standard visa requirements.¹ Over 20% of residents here are not Norwegian, and overall, Svalbard has residents hailing from over 40 different nations - there is a sizeable Thai and Swedish population for example (Kristiansen 2014). The Russian town of Barentsburg houses almost 500 people, most of whom are in fact Ukrainian. The scientific bases of Ny Ålesund (International, managed by a Norwegian firm) and the Polish research station (Polska Stacja) near Isbjørnhamner, Hornsund, also have a small number of resident scientists with fluctuating numbers of visiting researchers throughout the year. Pyramiden (Russian) operates largely as a tourist destination with a small seasonal work force whilst the coal mining facility at Svea Gruva (Norwegian) has now cut back its previous commuting workforce of 300 to almost zero after suspending operations at the facility in April 2016. Population turnover is high, the average length of time living on Svalbard is 7 years, around 20% of Longyearbyen residents leave and are replaced each year (Kristiansen 2014).

¹ A visa to live and work in Svalbard is not required. However, in practice, as nearly all transport to Svalbard comes through mainland Norway, a visa into and out of the Schengen Area is needed. Once in Svalbard residents are required to support themselves and can be rejected by the governor if they fail to do so.

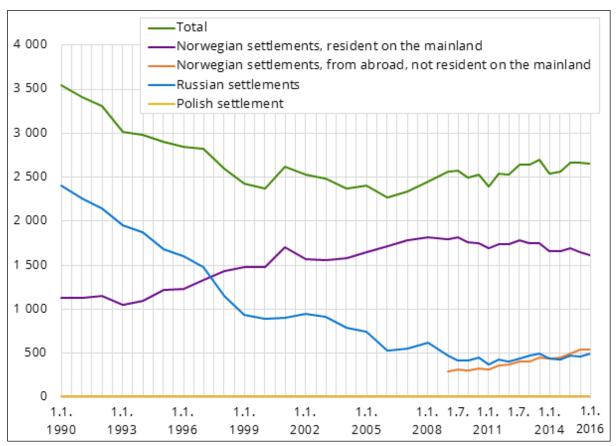


Figure 3: Population in the settlements, Svalbard (Statistics Norway 2016b)

The seasons in Svalbard are governed not only by temperature but also light – most residents perceive there are five rather than four seasons. The polar night, or dark winter November to February brings 3 months of darkness with temperatures dropping as low as -40°C, but on average -14°C in Longyearbyen. Several festivals occur at this "koselig" (cosy) time of year and northern lights tourism is becoming more popular, since, as Edensor (2015) highlights, darkness is culturally contingent. Winter climatic conditions continue through to April, but from mid-February the light begins to return. This period is the main season for snow and ice-based tourism activities such as snow-mobile tours, skiing and husky-dog trips as well as for glaciological field research. From 20th April Svalbard is under the midnight sun, with 24 hours of daylight until 23rd August. Late April to early June is spring time, an unpredictable melting transition from winter to summer, when migratory birds arrive. July and August are the summer months, temperatures are usually above freezing, an average of 6°C but reaching mid-teens on sunny days. Arctic plant species burst into life. This is the main

cruise boat tourist season as well as being popular for land-based activities such as walking. Many residents not working in the tourist industry leave Svalbard for vacations in mainland Norway at this time of year. Through autumn the daylight and tourism activity recedes and temperatures drop.

1.2. Geopolitical Svalbard

Although this thesis does not take geopolitics as its central focus, given the unique political context of Svalbard and the wider geo-political tensions in the Arctic region that it is part of, it is important to recognise the historical and current position from this angle. Political relations have shaped and continue to influence Svalbard's landscape and ideas about what should be 'saved'. Due to the nature of the Svalbard Treaty (see Figure 4), the two main state actors, Norway and Russia, are frequently connected to geopolitical issues and other actors become variously entangled. Norway places a great deal of importance on asserting, strengthening and managing its sovereignty over Svalbard. Russia seeks to protect and at times strengthen its claims and position in Svalbard and the Arctic region, which can occasionally mean contesting Norway's actions. The consequences of these political 'tussles' are not only important in conventionally political terms (for instance upholding treaty agreements) but hold the promise of gaining international political prestige, or conversely attracting unwanted scorn or negative attention (Roberts 2016). In other words, political symbolic capital is an important form of value in Svalbard that weaves through daily life as well as high-level negotiations. Therefore, it is important for this examination of value to set out the salient geopolitical landscape before tracing this value more specifically with relation to practicing environmental protection.

Svalbard is imagined and performed primarily as an Arctic space. Geopolitically, Svalbard is also an Arctic space, where much of the general discourse of the Arctic applies. As Bruun and Medby's (2014) review article documents, climatic changes have re-opened the interest and concerns surrounding the Arctic and its future development over the past two decades. Bruun and Medby's (ibid.) work serves as a useful springboard for a summary of Arctic geopolitical academic engagements.² I use a different thematic structure to discuss these: sovereignty, research and resources. These, I contend, encapsulate the main debates within the last decade of Arctic geopolitical research that are most relevant to Svalbard. In each theme, I concentrate on their relevance and relationship to Svalbard, examining how these elements interact with the issue of a changing climate.

1.2.1. Arctic governance and Svalbard's Sovereignty

The geo-metrics that now matter are volumetric ones concerning sea levels and Arctic ice, carbon dioxide concentrations and degrees of warming, not the flat two dimensional boundary demarcations of states.

(Dalby 2013, p.46)

The Arctic is where climate change is happening the fastest (Clals et al. 2013; Hassol 2004). The region is the environmental warning system for the rest of the world, the canary in the coal mine (Dalby 2003; Duyck 2012), a vulnerable landscape on the brink of potentially irreversible change, with charismatic mega-fauna such as the polar bear carrying the message of risk further south (Slocum 2004; Yusoff 2010). Political responses to climate change specific to the Arctic have not been commensurate with the levels of concern (Duyck 2012), however, with climate change the Arctic can be conceptualised as an environmental risk and securitised as a 'state of emergency' (Dittmer et al. 2011, p.203).

Despite Dalby's proclamation, the securitisation of the Arctic through climate change could lead to more nation-state style governance, rather than a further rise in political influence for intergovernmental forum organisations such as the Arctic Council (Steinberg & Dodds 2013). In recounting the 2007 event of the year, the planting of a Russian flag on the sea bed of the Arctic basin, Klaus Dodds notes that material instability lends opportunities for increased conflicts and claims:

² Given the range and depth of existing academic work relating to the politics of the Arctic, my aim here is to briefly summarise the main issues and their relation to Svalbard.

The thinning of ice has encouraged further speculative behaviour and military posturing. While climate scientists debate the instability of the Greenland ice sheet, others plot and plan further territorial consolidation at the same time as indigenous peoples campaign for greater recognition of the threat posed to their human security (not to mention other indigenous residents such as the polar bear).

(Dodds 2008, p.5)

Within this wider arena of national and international interest, Svalbard represents "a hub of ... international relations activity" according to island scholar Adam Grydehøj (2013, p.43), owing to the "unsatisfactory" nature of the Svalbard Treaty. Prior to 1920, Svalbard was recognised as a terra nullius, a no man's land, with no state having sovereignty over it (Avango et al. 2011). With the mining activity of the late 19th and early 20th century, a legal framework to centralise the claims and disputes being made looked increasingly necessary. Several states had mining claims or previous activity on Spitsbergen, as it was then known: the Netherlands, Britain, Sweden, Russia, Norway, Denmark, Finland and the U.S, but it was the young nation of Norway that suggested it should govern Svalbard. As Dag Avango et al explain (ibid.), this was not popular with other nations fearful of having taxes imposed on their activities there (such as the U.S), nor those who saw it as a matter of national prestige. Sweden was opposed to the idea that Oslo rather than Stockholm would be the centre of power and Russia claimed Russian Pomors discovered Svalbard, so also felt affronted (Avango et al. 2011).

Figure 4: Summary of the Treaty concerning the Archipelago of Spitsbergen, signed February 9, 1920 entered into force August 14 1925.

Article 1

• Grants full and absolute sovereignty of all islands in Svalbard, including Bear Island to Norway under the restrictions of the treaty.

Article 2

- Nationals of signatory states have equal rights to fishing and hunting in the territorial lands and waters unless exclusive land rights have been recognised.
- Norway may take steps to protect the flora and fauna of the territory, recognising that any measures taken shall apply equally to all signatories.

Article 3

• Signatory nations have equal access to Svalbard and to industrial and commercial activities therein, subject to Norwegian legislation.

Article 4

• Public wireless communication installations must obtain permission from the Norwegian Government, private landowners can install them at will.

Article 5

• Sets out intentions for future meteorological stations and scientific research.

Article 6

• Explains the rules and time limits for making private land ownership claims.

Article 7

• Nationals of all signatory states may acquire, enjoy, and exercise the right of ownership of property (including mineral rights) on terms of 'complete equality'.

Article 8

- Norway will provide mining regulations, which "shall guarantee to the paid staff of all categories the remuneration and protection necessary for their physical, moral and intellectual welfare."
- Explains the taxation limits, with any taxes levied only to be spent within and for the benefit of Svalbard.

Article 9

• Norway will not create or allow any naval bases or constructions that may be used for warlike purposes within the territory.

Article 10

• Provides equal access and rights to Russian citizens and companies in Svalbard whilst awaiting ratification by a recognised government (the Soviet Union ratified the treaty in 1924).

After a number of unsuccessful attempts, the Spitsbergen Treaty (now known as the Svalbard Treaty) was negotiated in Paris in 1920. However, the Treaty does not grant unlimited sovereignty for Norway. As Figure 4 summarises, Svalbard can be seen as both "an asset and a liability" for Norway (Grydehøj 2013, p.43). Norway asserts its sovereign position in Svalbard through the presence and regulations of the Governor of Svalbard – a singular role that heads the Governor of Svalbard's Office staff of around 40 people, both the role and the office are translated as Sysselmannen på Svalbard. The Sysselmannen provides policing, environmental governance and delivers Norway's policies for Svalbard. One of the main features of Norway's policies in Svalbard is "consistent and firm enforcement of Norwegian sovereignty" (Norwegian Ministry of Justice and the Police 2010).

After the Second World War, the Soviet Union briefly sought to push for an agreement for joint rule of Svalbard, a move that panicked Norway into considering an argument for bi-lateral military bases to be developed on Svalbard (Holtsmark 1993). Both suggestions were ultimately left on the backburner whilst the Soviet Union awaited improved East-West relations and Norway adopted a 'wait and see' approach (Holtsmark 1993). Holtsmark interprets Russia's actions at this time to be driven more by low to mid-level bureaucrats than a matter of high importance compared to wider political climate: "Seen from Moscow, Svalbard was a secondary issue, a matter of prestige and some potential value but devoid of emotions" (Holtsmark 1993, p.155).³ More recently, Russia has mounted the occasional challenge to Norway's interpretations of the Treaty and maritime laws, aiming to protect its privileged position as a landowner in Svalbard and its economic and strategic use of the waters surrounding it (Åtland & Pedersen 2008).

Many geopolitical events and tensions can be seen as 'hangovers' from the 'heroic age of exploration' (Weisburger 2011; Dittmer et al. 2011) or replicating strategies and relationships from the Cold War period. Åtland and Pedersen's

³ Several Russian informants have suggested that Svalbard is not well-known to most Russian's and some perceive that is more a source of embarrassment given their lack of power there compared to other Arctic islands they have sovereignty over, such as Franz Josef Land and Wrangel Island.

(2008) analysis of the development of, and subsequent reactions to, radar and satellite technologies in Svalbard is a good example here. They conclude that in this issue Russia remains, as it was in the Cold War period, deeply suspicious of Norwegian activity and Norway can be seen as interpreting the Svalbard Treaty more loosely than Russia would like (Åtland & Pedersen 2008).

Concurrent with several of my informants in this research, Grydehøj suggests that it is only a matter of time until there is a challenge to Norway's sovereignty: "Norway's jurisdiction over Svalbard is absolute only to the extent that it goes unchallenged" (Grydehøj 2013, p.51). Whether or not this actually occurs is perhaps less important than its possibility. It is within this context that the policies and symbolic gestures that Norway, Russia and other signatories make regarding Svalbard fits within a common story line.⁴

Having a "physical presence" is taken to be a key factor in asserting sovereignty in Svalbard. One of the five goals of the Norwegian Svalbard Policy is "maintaining the Norwegian settlements on the archipelago" (Norwegian Ministry of Justice and the Police 2016) and Russia is equally determined to maintain a foothold in Barentsburg and Pyramiden (Åtland & Pedersen 2008). Mining activities, despite their unprofitability, provide a hard, industrial presence and also facilitate the operations of communities in Svalbard through their provision of energy.

⁴ Some examples of such gestures are Russia sending military submarines to the Barents Sea to protect its fishing vessels who had been accused by Norwegian patrols of contravening the bilateral fishing agreements (Åtland & Pedersen 2008). More recently, disregarding Norway's sanction on Dmitry Rogozin due to his role in the Ukraine, Minister Rogozin landed in Svalbard and made provocative statements on Russia's role in the Arctic. Norway subsequently increased regulations on flights into Svalbard whilst Article 3 of the Treaty remains the legal window to further such visitations (Sabbatini 2015a). Worries over other signatory states making more use of the equal access articles in the Treaty surfaced when a Chinese investor made bids on a parcel of land. Eventually the Norwegian Government bought the claim instead (Pettersen 2014).

1.2.2. Resources

There is a wide acknowledgement (Bloom 1993; Mitchell 2003; Rosner 2009; Weisburger 2011) that historical representations of Arctic landscapes as empty and blank canvasses meant they could be seen as a resource ripe for colonising, claiming and strengthening national identities.

> The absence of land, peoples, or wildlife to conquer, gave Polar exploration an aesthetic dimension that allowed the discovery of the North Pole to appear above political and commercial concerns.

> > (Bloom 1993, p.2).

These spaces were not (and are not) devoid of all life, nor apolitical or noncommercial. There are notable absences from visual representations of Arctic landscapes: indigenous humans, and non-humans (such as whales and seals that were hunted commercially) and the relations between these missing 'others' and the explorers were rarely depicted. Resources of the Arctic: fossil fuels, metals and minerals, fish and other animal stocks have been long exploited for human use, whether through direct extraction or through tourism (Bruun & Medby 2014). Climate change offers possibilities for expansion of this exploitation through increasing access to mineral resources and increased fish stocks, as well as expanded territory and shipping access. Accordingly, "the lure of lucrative resources has been, and is, a central aspect of Arctic geopolitics" (Bruun & Medby 2014, p.921), even if the available resources may be over-estimated (Gerhardt et al. 2010). As Steinburg et al and Dalby (2003) observe, this "extraction is not just about profits but includes the myths of overcoming nature" (Steinberg et al. 2014, p.99), though it is "simultaneously endangered and a matter of national pride" (Dalby 2003, p.181).

Svalbard's history is one of resource exploitation: from 17th Century whale hunting, walrus hunting in the 18th Century, 19th Century small scale mineral and coal mining, to present day mining, fishing, whaling, scientific and touristic activities (Avango et al. 2011). Robert McGhee (2006) goes as far as referring to pre-Treaty hunting and whaling times as the "rape of Spitsbergen" owing to the decimating effect human activities had on hunted species numbers. Without taking the unique geopolitical situation into account, activities in Svalbard can be read entirely as a neo-liberal expansion from hard (coal mining) to soft (ecotourism and research) methods of exploiting nature for economic gain. As conservation and ecotourism scholars Büscher and Davidov expose expertly in their edited collection *The Ecotourism-Extraction Nexus* (2013), despite the clash of imaginaries between extraction and ecotourism, they share much in common. This is particularly evident at a local, everyday level where both offer employment opportunities and possible infrastructural improvement as well as economic gains. This reading is not without merit. Many come to Svalbard attracted by the high wages and lower taxes employment there can offer, and there are private companies that do make money there. However, the largest economic activities are state funded or state-supported, taxes raised in Svalbard stay in Svalbard, and further state funding from Norway and Russia is required to keep operations running.

Given the open access provided by the Svalbard Treaty to resources, Svalbard can be seen as a "sovereignty hole" that Arctic and non-Arctic nations can seek to fill (Steinberg et al. 2014). Tourism activities and scientific research are both ways to do this (Roberts & Paglia 2016; Timothy 2010). However, as the extract below exemplifies, industrial activity has been seen as the trump card in making a territorial claim.

Because in real politics, it's not a question of just being here and doing something. It's also what you have invested. What's *at stake*. And then having an industrial presence here in Svalbard is very important, not just lightweight science and tourism. No offense, ha ha! ... Because sovereignty in international law can be based on having a meteorological station. But when push comes to shove and people, nations, start to fight over resources, then credibility and investments, both morally and you know, materially, are very decisive factors.

(Interview 10, mining sector, 22nd May 2014)

Climate change has so far presented geopolitical problems for the continuation of coal mining in Svalbard. By chance, I happened to have an interview scheduled with a prominent Norwegian politician the day a major news story

about Svalbard was breaking.⁵ Cristina Figueres, the UN climate minister, had just been for a visit to Svalbard as part of a delegation to an invite-only climate change conference held in Ny Ålesund. Figueres issued a challenge for Norway to be a shining example by closing coal mining down in Svalbard, which she said does not fit with Norway's strong environmental reputation and climate change research in Svalbard.⁶ While most residents recognise the paradox of life in Svalbard, Figueres' statement was temporarily a big deal. The person whose office I sat in, waiting for the interview, had been consistently supportive of the mining industry. I promised to ask easy, non-provocative questions until a call came through for a radio interview. When the call came, the politician paced up and down the room, drinking coffee, smiling and gesturing as they spoke. Statistics were reeled off: the global demand for coal was mentioned, the long history of mining in Svalbard, the dependence on mining for infrastructure, the small impact it has globally. Perhaps this was about saving face more than anything else, since, as fellow Arctic scholar, Roger Norum (2016) observes, resource extraction in Svalbard is symbolically valuable.

Saving face here means walking a fine line between local, national and global politics and identities. This is a line that Norway is used to walking, given their oil exploitation activities since the 1970s alongside the continuation of a national stereotype, which focuses on being outdoorsy, connected to nature and mountain life – making Svalbard the ultimate dream destination for many Norwegians.

1.2.3. Research

As Bruun and Medby (2014) summarise, much recent work highlights the links between knowledge production, knowledge recognition in the case of traditional environmental and indigenous knowledge, climate change, scientific nationalism and political cooperation in the Arctic. Svalbard is (and has been historically) an exemplary case where the links between science and international politics run deep (Norum 2016).

⁵ Interview 15, 28th May 2014.

⁶ <u>https://www.nrk.no/klima/_steng-kullgruvene-pa-svalbard-1.11744050</u>, <u>http://www.newsinenglish.no/2014/05/28/un-close-svalbard-coal-mines/</u>

Research in Svalbard began in the form of geological exploration in the 19th Century. As Roberts and Paglia (2016) describe, this was very much tied into natural resource exploitation and the potential political power of claiming resources. Swedish research for example, followed a cyclical pattern: "science would describe the archipelago and its resources, a colony would be established to exploit them, and that colony would in turn support further scientific investigation" (Roberts & Paglia 2016, p.4). Soon after the Svalbard Treaty was in place, a Norwegian gate-keeping organisation for science on Svalbard was formed: Norges Svalbard- og Ishavsundersøkelser (Norway's Svalbard and Polar Sea Investigations)⁷ and biological and cartographic research work was employed to assert sovereignty through knowledge production (ibid.). Later, scientific activity became an important economic diversification tool away from coal production. This began in earnest with the repurposing of the coal mining settlement at Ny Ålesund after a mining explosion in 1962 (Roberts & Paglia 2016). Ny Ålesund is run by a Norwegian state owned company, Kings Bay, and hosts international research bases for 10 nations.⁸ Physical and natural science research continues to expand on Svalbard. Social science in Svalbard, as in the Arctic as a whole, has not been as pervasive.

The International Polar Year (IPY) of 2007-2008 represented a watershed in terms of adding the 'human dimension' to the physical and natural research programme and greatly accelerated the growth in social science and humanities in polar regions (Krupnik & Hovelsrud 2011). Much 'human dimension' research in the Arctic has focussed on climate change vulnerability, adaptation and traditional environmental knowledge and thus has focussed on more heavily inhabited areas and those with indigenous populations. As Hua et al (2012) note however, the Arctic is becoming a 'hot topic' that is attracting attention from an expanding range of disciplines. Social Science and Humanities research in Svalbard for the IPY concentrated on historical resource exploitation, with industrial historian Dag Avango leading the LASHIPA (Large Scale Industrial

⁷ This transformed into the Norwegian Polar Institute (NPI) after WW2

⁸ Norway, UK, Japan, China, South Korea, the Netherlands, Italy, India, Germany and France have a joint station, Sweden also operates out of Kings Bay frequently and The US National Science Foundation is a member of the Kings Bay Marine Lab consortium.

Exploitation of Polar Areas) project. This project included a number of investigations charting and analysing the motivations and methods of whaling, hunting and mining activity in the Svalbard area (see for example: Avango et al. 2006; Hacquebord & Avango 2009; Avango et al. 2011; Avango & Hogselius 2013; Avango et al. 2014).

Previous historical research has been enrolled in discussions over sovereignty and who belongs in Svalbard. For instance, long time Russian archaeologist and Svalbard specialist, Professor Vadim Starkov (e.g. Starkov 2005) claims the Russian Pomors were the first to begin hunting in the region around 1550s, whereas Norwegian historian Tora Hultgreen argues against this, citing a far later date of the early 1700s as the start of Pomor hunting activity (Hultgreen 2002). This conflict continues subtly through the discourses each side employs in accounts of Svalbard, for instance on government websites, information leaflets and in museums.

The majority of social science projects have tended to focus on one of three key areas: the political status and tensions surrounding the Svalbard Treaty (D. H. Anderson 2009; Åtland & Pedersen 2008; Holtsmark 1993; Pederson 2008; Pederson 2009), tourism and its impacts (Gyimóthy & Mykletun 2004; Roura 2009; Roura 2011; Viken & Jørgensen 1998; Viken 2006; Viken 2011), or the archaeology and history of polar exploration and resource exploitation (in addition to the LASHIPA works, see also Morton 1980; Reymert 1979)⁹. Artscience collaborative projects, research and expeditions have also been popular: the gallery at Longyearbyen and the Ny Ålesund research station run artist residencies and art-science-activist organisations, such as Cape Farewell and The Arctic Circle, have run a number of expeditions around Svalbard. Alongside the developments in Svalbard, research has gradually been expanding its remit to encompass environmental management and policies (Hagen et al. 2002; Hagen et al. 2012; Nyseth & Viken 2016), international relations and science (Grydehøj et al. 2012; Roberts & Paglia 2016), energy and sustainability (Buonsanti 2011)

⁹ Research on wilderness perceptions and place attachment from Kaltenborn (1998) being a notable exception to this.

and community life (Eliassen 2009; Grydehøj 2013; Radovanovic 2011)¹⁰ as well as new theoretical angles such as post-colonial geopolitics (Norum 2016).

Within this context, my research offers a uniquely geographic approach that, through its conceptual focus on frameworks of value, integrates analysis of tourism, environmental and cultural heritage management and scientific knowledge production. Working to understand everyday practices, I situate these discussions within the wider cultural and geopolitical forces at work in Svalbard. This work is not apolitical, however. Whilst I have not knowingly treated it as such (see Chapter 3 for a reflexive account of my research positionality), my activity as a British student funded by a UK research council could be considered a small cog within a larger national machine that seeks to assert the UK's role and position in the Arctic.ⁿ

This summary highlights the interconnected geopolitical forces at work in the region and the extent to which securing sovereignty, prestige and political (re)positioning infiltrates most aspects of life in Svalbard. Indeed, much of this is about trying to *save* Svalbard: as Norwegian territory, as a politically peaceful and stable Arctic area, as the site of past, present and future international communities, as a place to perform national Arctic identities, and as somewhere that is still relevant and worthy of state funding. Successful geopolitical moves here recognise the potential to gain political prestige, or limit losses by walking a fine line between local, national and global politics and identities. It is tempting to read all activities in Svalbard as being politically motivated to these ends (Grydehøj 2013), and we will certainly see geopolitical factors reappearing throughout the thesis (particularly in Chapter 4 and Chapter 6). However, as this thesis shows, political symbolic value is but one value trope among several

¹⁰ Currently there are approximately 50 projects (of a total of 2977) registered on the Research in Svalbard database from social science and humanities disciplines, though this almost certainly does not cover all such research conducted in Svalbard.

¹¹ The ESRC had been running a series of workshops on 'Knowledges, Resources and Legal Regimes: The New Geopolitics of the Polar Regions' (2010–13). One year after starting my PhD the UK government published its first Arctic Policy Framework (Polar Regions Department & Simmons 2013). Depledge and Dodds (2014) note that the consultation for this document brought up accusations that public money was being used to make London a hub for global expertise in the Arctic, of use to commercial operations such as oil and gas firms.

interrelated frameworks of value that thread through everyday life in Svalbard. Dittmer et al. suggest, in fact, that research rooted in local and everyday practice and materiality in the Arctic would serve as useful additions to more strategic high-level analysis in this region, a call to which I have responded in my work:

> Arctic geopolitics might be interpreted in terms of militarized political economies and ecologies. However we believe that such approaches could be complemented by a research perspective that is resolutely focused on the local and everyday, following the embodied performances and material traces of the discourse of Arctic geopolitics both within and outside the region itself.

> > (Dittmer et al. 2011, p.212)

1.3. Research settlements

My field research was based around the most accessible locations in Svalbard: the settlements of Longyearbyen, Barentsburg and Pyramiden. Together, the activities, landscapes and perspectives of those living and visiting these sites provide a good cross section for human activities and more-than-human presences in Svalbard. Research in these locations has enabled me to examine value relations from Norwegian, Russian and international viewpoints. To contextualise the discussions which follow, I briefly outline the main historical and present day features of each site.

1.3.1. Longyearbyen

Longyearbyen is Svalbard's administrative capital, the Governor's office being located here. It was named after John Longyear, one of two American businessmen that set up the Arctic Coal Company in 1906 and founded Longyear City. The company was sold to a Norwegian firm *Store Norske Spitsbergen Kullkompani* (known as Store Norske or *SNSK*) a decade later, by which point there were two mines in operation near the town. Over the decades following the world wars, coal mining expanded with a series of mines (numbered 1 to 7). Mine number 7 is at present the one remaining Norwegian coal mine in operation, producing coal for the local power plant and for export to, for example, Germany.

Since the 1970s, coal mining activities have repeatedly failed to turn a profit. Recognising the need to continue to assert a presence in Svalbard, Norway's government began to introduce a "normalisation" process to transform the company town into a family community (Grydehøj et al. 2012). Previously the coal company was the sole owner and manager of the town and paid wages in vouchers rather than Norwegian currency. Gradually SNSK shifted responsibility for running services to new companies and in 2002 the Longyearbyen Community Council was set up. Norway's central government investments and policy encouragement in tourist, research and education facilities from the late 1980s onwards have helped the town diversify its economic activities. These industries are now firmly established and the town boasts an impressive range of consumer and community facilities. The town cannot be considered a fully 'normal' Norwegian community however. The population is more highly educated, receives higher wages, is younger and more likely to be male than in an average Norwegian municipality (Statistics Norway 2016b; Kristiansen 2014). The Norwegian Social Welfare Act does not apply here, nor are residents automatically included in the national insurance scheme. Birth and retirement here are not encouraged.¹²

The University Centre in Svalbard (UNIS), opened in Longyearbyen in 1993 and continues to increase its activities. It had nearly 700 students attending and over 100 staff producing 121 published articles in 2015. The Svalbard Global Seed Vault (SGSV), located just outside of the town close to the airport and remains of mine 3, is a unique example of diversification away from coal production that also receives substantial Norwegian state funding. Tourism is now well-developed: in 2013, visitors to Svalbard spent 107,000 nights in Longyearbyen, over 35,000 cruise passengers visited (Kristiansen 2014) and industry reports suggest tourism is still growing (Statistics Norway 2016a). 2015 was the first year those employed in tourism related services (accommodation and food provision) out-numbered mining industry employees (Statistics Norway 2016a).

¹² There is a hospital with limited facilities hence residents are asked to give birth on the mainland. Burial is also outlawed as arctic conditions prevent timely decomposition.

Until recently it was assumed the phasing out or further reduction of the coal mining activity would be gradual and coal mining would remain an important employment provider for some time to come (see for example the Svalbard 'White Paper' of 2008-2009 (Norwegian Ministry of Justice and the Police 2010)). During the course of this PhD, the role of coal in Longyearbyen's future became more and more unstable¹³. SNSK suffered increased financial losses due to low world coal prices and rising costs of operations in the new Lunckefjell mine at Svea Gruva, SNSK's largest operation. In the winter of 2014-2015, Store Norske requested a government bailout to keep operations running with job losses looking inevitable. Eventually the government agreed to provide funds to facilitate ongoing mining at mine 7 and to maintain the Svea mines so that operations could restart if coal prices improved, SNSK cut its workforce to around 100 (it employed roughly 400 in 2012). By spring 2016 an 'emergency' White Paper was released from the Norwegian parliament to reflect the urgent need to further diversify away from coal production into new industries and continue to grow research, education and tourism sectors.

Around one third of scientific activity and the majority of tourist and governmental activities in Svalbard are based out of Longyearbyen. The majority of my time in Svalbard was spent here, where I was able to observe and be a part of the interactions of a multitude of value frameworks from industry, tourist, scientific, community and policy perspectives.

1.3.2. Barentsburg

Barentsburg is the main Russian settlement in Svalbard. The town and nearby mining claims are the property of Russian State owned company *Trust Arktikugol*, although Norwegian jurisdiction still applies through the Governor's Office. Originally a mining settlement started by the Dutch Nederlandsche Spitsbergen in 1921, it was bought by *Trust Arktikugol* (TA) in 1932. Mining operations ceased during World War II. Soviet citizens were evacuated by British forces in 1941 and the mines in both Barentsburg and Longyearbyen were

¹³ The majority of my field work took place before the 'crisis' properly began. My final visit in February of 2015 found the community in limbo awaiting a government decision on funding and support for the coal industry.

torched. Reconstruction began in 1946 and by 1949 the Barentsburg and Grumant¹⁴ mines were operational again (Tsivka et al. 2001).

In Soviet times, the number of workers in Barentsburg, Grumant and Pyramiden grew to outnumber those in Norwegian towns (Pederson 2009) and facilities were enviable compared to those in Longyearbyen. Barentsburg provided a culture house and sports centre with swimming pool, hospital, shop, and Russian Consulate as well as small-scale farming facilities, as a National Geographic Article from the time details:

> [Barentsburg] was a more orderly place than Longyearbyen and one with more amenities. Cattle grazed near the town square, and a large greenhouse produced tomatoes, cucumbers, green onions and flowers.

(Young 1978, p.278)

Scientific research, primarily focussed on geology, glaciology and archaeology was also important and the research centre that opened in 1984 could accommodate up to 100 scientists (Tsivka et al. 2001; Umbreit 2013). *TA* employed women in its sewing factory as well. Apart from official visits and sports functions, contact between the Norwegian and Soviet residents was strictly off-limits, the equivalent of going behind the iron curtain (Interview 70, long term resident, 19th February 2015). The end of the Soviet project brought times of hardship to Barentsburg in the 1990s, supplies and income from coal exports were unreliable and infrequent, children were evacuated from the town in 1995 and the school and kindergarten closed (Tsivka et al. 2001; Umbreit 2013). The work force reduced from previous levels of over 1000 to below 400 and those that remained suffered deteriorating conditions and wages. Scientific activity at this time was also severely cut back (Umbreit 2013). Although Russian subsidies increased in the 2000s, with children reappearing and science activity re-instigated, investment to improve living conditions, update facilities and

¹⁴ Grumant is roughly halfway between Barentsburg and Longyearbyen, coal mining there began in 1911, passing to full Russian ownership in 1932. After WW2 it operated in conjunction with the port of Coles Bay with a 6km railway connecting the two towns until 1961. At its height of operations up to 1100 people lived and worked there. There are still substantial known reserves here and until recently TA planned to re-instigate operations (Avango et al. 2006; Tsivka et al. 2001; Umbreit 2013).

diversify away from coal mining have taken until 2010s to get going. Barentsburg still held some appeal for those seeking refuge from the effects of marketisation,¹⁵ but the helicopter and mining disasters of this time were nonetheless devastating¹⁶.

The new developments have gathered pace and there are rapid changes in the built environment, with colourful insulated panel facades appearing on renovated housing, cultural centre, hotel and mining headquarters (with some controversy as discussed in Chapter 5). Tourism activities have become a focus, including the opening of a micro-brewery, and *TA* management hopes this will take over from coal as the main economic activity within the decade (Palm 2015). Unlike Longyearbyen however, the town is still very much a company operation with heavy undertones of a Soviet-style management regime (Interview 59, 1st July 2014). With the exception of the scientists based at the research centre (another area that is being expanded and invested in (Roberts & Paglia 2016)), all workers are employed by *TA* and are paid through a card system in Roubles, which is effectively only of use within the *TA* shop there. *TA* controls the transport to and from Barentsburg outside of tourist excursions. The majority of the residents work in the mine and are from the Ukraine rather than Russia.

Whilst everyday life in Barentsburg was largely veiled behind barriers of language and distrust, what I saw, heard and experienced there provided an alternative perspective of how value has and can be practiced in Svalbard. It provided insights into where and why tensions between different value systems can and do occur, and ultimately how different forms of value weave across cultural differences and over labels such as socialist, post-socialist, Norwegian, Russian.

¹⁵ Rachel Polonsky's piece reporting from Barentsburg ends with a plea from a resident: "don't judge us…we want this. We are equal in the permafrost – no money, no police – there is no equality left anywhere else" (Polonsky 2003, p.15).

¹⁶ In 1996 a chartered plane from Russia carrying new workers crashed into a mountain on its descent towards Longyearbyen, killing all 143 of its passengers (Umbreit 2013). The following year an explosion in the mine killed 20 miners and mining operations were closed a number of times in the past decade due to health and safety concerns from the Norwegian inspectorate.

1.3.3. Pyramiden

During the Cold War... this well-ordered, family-friendly society served as a politically motivated showcase that demonstrated to occasional Western visitors that a communist regime was able to provide good quarters in extreme places for its heroic Arctic workers.

(Avango et al. 2014, p.27)

Pyramiden lies at just over 78 degrees North within Billefjorden, Isfjorden in the West of Spitsbergen, 50km North of Longyearbyen and 100km from Barentsburg. Its name is inspired by the pyramid-like mountain above the town that the coal mine cuts into. Along with nearby claims and infrastructure also owned by *Trust Arktikugol*, it was, as Andreassen et al (2010) and Avango et al (2014) note, once the showcase settlement for Soviet life in the Arctic. In 2011 the National Geographic included Pyramiden as number 7 in its list of 'top 10 ghost towns' ('Intelligent Travel' 2011).

Pyramiden was initially claimed by a Swedish company, *Svenska Stenkolsaktiebolaget Spitsbergen*, at the start of the 20th century, which attempted to mine coal for producing coke. This was unsuccessful and Pyramiden was subsequently sold to the Russian company, *Severoles* in 1927 as a way to settle remaining claims on Svalbard after the Treaty was in place. *Severoles* merged with other Russian ventures in Svalbard to become part of *Trust Arkitkugol* in 1931.

The Russians did further geological research and began to build a mine and small settlement, overwintering for the first time in 1940-1941. Later in 1941, the town was evacuated during World War II. Although key resources were destroyed during the evacuation, Pyramiden was not attacked or taken during the war, unlike the other settlements in Svalbard. In 1946 the Russians returned, the town was officially founded and building began in earnest according to 5 year plans (Andreassen et al. 2010). It was originally the main Soviet town in Svalbard and the site of the first consulate. From the first coal shipment in 1956, the population built up to around 1000-1200 inhabitants and was a place that, within the mining communities in the Soviet Union, was renowned for having

good conditions and wages that were worth competing for. Facilities included a heated swimming pool, culture house, canteen, school, greenhouses and farm, workshops, port, hospital, power station and hotel (Andreassen et al. 2010; Trust Arktikugol 2013; Umbreit 2013).

However, the geology made the coal difficult to mine, there were fire problems and the reserves were not as high as previously calculated. The production levels began to fall which meant a reduction in workers and subsequently inefficient running of the 'organism' of the town that was designed to run at full capacity – meaning high costs and few profits for the now post-socialist company (Andreassen et al. 2010). In 1997 plans to decommission the mine were aired, and by 1998 the town was largely abandoned (ibid.). Since then there have been seasonal visitors in the form of *TA* workers collecting and transporting equipment, guarding the properties as well as occasional tourists and researchers. 15 years later the signs of vandalism, asset striping, re-colonisation by other species (most notably gulls) and glacial floodwaters are hard to miss. Yet the majority of the town's structures remain largely intact.

Today, tourism activity is growing, the hotel having re-opened in 2012 with staff and resident tour guides available from roughly February to October. Buildings around the central square are slowly being refurbished. In summer there is also a small Takjistani workforce employed to gather scrap metal from the mining workshops and infrastructure in preparation for shipment to Murmansk. Plans for development include further provisions for tourists as well as establishing research facilities, particularly focussed on climate change research (Governor of Svalbard 2014b; Robin et al. 2014). As in Barentsburg, Pyramiden is subject to Norwegian regulations and in both cases these are largely managed through agreed area management plans.

Pyramiden was a place where questions of value mingled freely and unavoidably with notions of memory, definitions of waste, archives, aesthetics, approaches to conservation, ideals of wilderness, multiple possible pasts and futures; and, most notably the role of material 'stuff'.

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1.4. Thesis outline

This thesis contributes to ongoing debates in geography, political ecology and sociology, firstly by developing a case for a value-based research approach: that is, value as a contingent process, practice and performance. In Chapter 2 I discuss the work of value as a concept in previous geographical and philosophical research. When attention is brought to the work and practices that value is ascribed in, I argue that as a central axis of investigation, tracing value frameworks can help to unpick complex, multi-scalar processes, such as conservation practice. Processes of categorisation and legitimation as processes of value in action and in construction become crucial access points in the tracing of value in this context (Lamont 2012).

In Chapter 3 the theoretical and practical approaches to the research project are explained. In particular, I offer a methodological discussion that furthers understandings of situated knowledges, participatory approaches and posthuman agencies by bringing them into conversation through the notion of a 'humble' research practice. Such a practice troubles the conventional authorities associated with academic knowledge.

Through the tracing of value, I demonstrate and further develop the theoretical worth of working with this approach through empirical contributions that advance and deepen our understandings of conservation practices and socionature in Svalbard. Chapter 4 analyses secondary sources alongside primary data by firstly exploring *what* is valued as natural and cultural heritage in Svalbard. I chart how political, legal, economic and cultural frameworks shape, circulate and manipulate this value through processes of categorisation. I contribute to ongoing discussions in heritage and conservation that seek to show that analysing cultural and natural heritage together offers scope for revealing common processes and practices in the assembling of future worlds (Harrison 2015). This evidence provides a sense of what is prioritised for conservation and what might fall by the wayside following the evaluative categories that are at work. Through a combination of my value-as-practice approach and 'assemblage thinking' (McFarlane & Anderson 2011), this chapter

also explores the consequences, challenges and limits of value frameworks that are structured around defined categories such as 'wilderness' and 'cultural heritage'.

Chapter 5 is an empirical venture to recognise and analyse practices and performances of value that do not conform to frameworks of value that evaluate objects, species or practices as singularly belonging to one static category. Whether cultural heritage, endangered species, objective knowledge or subjective emotions; everyday practices of care and the material, dynamic life and 'thingyness' of Svalbard complicate and challenge value frameworks which seek to delimit, measure and set in stone. Here I extend ideas from feminist scholarship on the ethics of care (Fisher & Tronto 1990; Held 2006) to analyse value practices that connect international and national policy to local and individual actions in sometimes unexpected ways. I also utilise notions of affective atmospheres (B. Anderson 2009b) and emotional geographies (Bondi 2005) to examine embodied experiences as a source of, and influence on, value in field science activities.

In Chapter 6 my attention turns from a discussion of alternative frameworks of value towards legitimation processes and their role within value frameworks. Returning to the legislative realm, through a case study of a high-tension management plan, I trace value connected with knowledge production and the different tropes of value at work that seek to justify or query the legitimacy of the management approach. I argue, through empirical material, that our relationships as embodied, affected knowledge producers of Svalbard, add further tension to policy making rooted in rigid value criteria, and hence we need to better incorporate these relationships within our decision making processes. These findings add to ongoing debates in the professional sectors of conservation and science – policy integration.

The final chapter reflects on the above work and its key contributions: an expansion of our empirical knowledge about Svalbard, and developing and demonstrating how we can put a humble research approach and a value-aspractice theory into action. I also contemplate here the implications for decision making and conservation policy making processes beyond Svalbard and point to possible future directions in applying the theoretical and methodological approaches, as well as what further research may be insightful in this area of the world. Chapter 1: Introduction

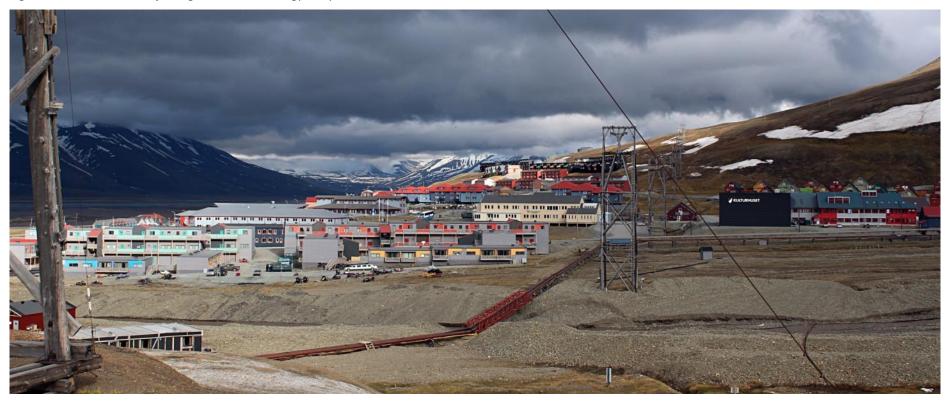


Figure 5: View East from Skjaeringa over central Longyearbyen. June 2013

Figure 6: View over Barentsburg looking South. July 2014



Chapter 1: Introduction

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Figure 7: Pyramiden City in the shade of Pyramiden mountain. June 2014

2. Saving Value: Value as practice and process

Value is the aim and centre of all human activities and [the] whole [of] human life.

(Chang 2001, p.68)

Conservation is an inherently value laden activity, for it rests upon assumptions about what nature ought to be conserved.

(Carolan 2007, p.740)

Whilst Chang's claim certainly can be, and has been refuted, in this chapter I argue that thinking with value can bring new insights and understandings to conservation and to issues of more universal interest. Despite the many uses and meanings 'value' is associated with, to generalise, at the core of value lies the notion of how important something is. Scholars of value concern themselves with how we define what that importance is (Brosch & Sander 2016). Through a consideration of a wide range of value theories and literatures, in this chapter I set the intellectual scene and develop an approach that treats value as an active process at work in the world and argue that such an approach is helpful in analysing practices of environmental management and conservation in Svalbard.

Value and values are increasingly recognised as crucial to discuss, assess, analyse and acknowledge as an important aspect of environmental decision making. Noel Castree and 21 other esteemed scholars of geography, sustainability, conservation and political ecology bring this discussion to the field of global environmental change in a recent *Nature* paper. They draw attention to the always-already political and value-laden scientific endeavours to address global environmental change and the limited inclusion of 'human dimensions' that have so far been admitted to official knowledge making channels such as the Intergovernmental Panel on Climate Change (IPCC): Interdisciplinary dialogue, we suggest, should engender plural representations of Earth's present and future that are reflective of divergent human values and aspirations.

(Castree et al. 2014, p.763)

Value has begun to be utilised in discussions of conservation activities in both the Arctic and Antarctic. The Scientific Committee of Antarctic Research (SCAR) demonstrated the challenges and the potential of using value as a point of departure in its *Exploring Antarctic Values* project (Liggett & Hemmings 2013; see also Picard 2015). Geographer Bryan Grimwood (2015) argues that reorientating Arctic tourism to become more sustainable and socially just will necessarily involve addressing the ways we value what is described as "morethan-human nature" (Whatmore 2002), and how we practice our relations with it. Conservation, environmental management, and human-more-than-human relations are the driving force behind my engagement with value theory. In taking this engagement to the case of Svalbard, I show that it offers a springboard to critical questions of how we operate in landscapes of tension and change, where wilderness, cultural history, political prestige, civil liberties, landforms and species are variously seen to be under threat and in need of 'saving'.

'Saving' is very much about the processes and practices of value: in policy and everyday decisions. Something must be deemed worth saving. Working towards a goal of 'saving' could need justification, public support, regulation, policing, investment, research and expertise, (dis)encouragement of certain behaviours and habits, the development of a strong discourse. We might wonder if our choices over what to save and how to save it/them/us, also involve sacrifices, compromises, de-valuation of what is left behind, or what is not deemed threatened or endangered enough. At each turn various tropes and forms of value(s) appear. The concept of 'saving' proliferates in conservation campaign literature, media reports and policy documents. More implicitly, but equally as prevalent, 'saving' peppers the pages of our academic scholarship through notions of biodiversity, species, geo-morphological forms such as ice or rock formations, buildings, cultures and languages. As a proxy for value, saving is a useful, and evocative, signpost towards areas ripe for investigation and where value is practiced most fervently. Moreover, it can help form the critical questions we need to ask of such value practices.

As a starting point, I discuss the use of the word value in terms of everyday discourse to signal the need for caution and care with this term. In Section 2.2, I chart how geographers have engaged with value, situating my work in relation to this disparate and relatively scant body of work. The following section examines Marxism as one area in which geographers have been active in applying and developing value theory. This leads me to consider some of the key arguments against using value as an analytical concept. I cover three key critiques: in Section 2.4, I examine claims that value is too arbitrary and relative to be of use; in Section 2.5, I discuss objective value and its problems and in Section 2.6, I deal with the notion of intrinsic value. The aim is not to get distracted by the technicalities and boundaries of linguistics, philosophy or discourse analysis of value and its associated terms. Considering twists and turns in value's conceptual history do however allow me to glean useful strands of thinking and weave them into a conceptualisation of value in the final section that focusses on the work that value *does*, and to develop this into an approach that is useful in this and, I hope, other research.

2.1. Value and everyday parlance

2.1.1. Value and values

Value is an everyday term. Much like other ubiquitous terms such as affect, place, space and nature, in certain areas of the discipline and beyond, value can take on a more nuanced, but often unexplained meaning. Elsewhere, value and value enquiry have pertained to specific theories, approaches and applications, for example in Marxist theory, ethics and philosophy (Harvey 2016; Henderson 2013). As sociologist Bev Skeggs (2014) and anthropologist Daniel Miller (2008) point out, the way we use the word value in the everyday sense of the word, can have a variety of complex meanings as well. The singular article, 'value', is often connected to, or synonymous with, a monetary equivalence, or at least taken to be something that can be measured and quantified. We might think of 'value for

money' or 'best value' and the various evaluations and quantifications involved in attributing such labels to an item or service. Conversely, the plural of value does not usually mean multiple quantities. Rather, values are more associated with 'subjective feelings', personally held principles by which to live by (Leyshon 2014), or that which is "held dear" (Latour 2013; Lee 2006). Here we are in a distinctly qualitative realm, where values are non-exchangeable and cannot be de-linked from their source, or as Miller (2008), describes through Marxist terminology: values are 'inalienable'.

In this limited view, we can perhaps think of the two distinct forms as being different: 'value' and 'values'. Yet, as Miller points out, there is in fact a wide breadth of meaning and usage of the term value(s) that fits in between these two seemingly opposite constructions. For example, the phrase 'value-judgement' usually implies a decision based on personal views or standards and not on quantifiable evidence. The distinction between value and values is broken with a simple, but common idiom.

So values are not the plurality of value, but refer to inalienable as opposed to alienable value. But most people seem blissfully unconcerned with the fact that they use a single term value which can mean both one thing and its very opposite. But what if that is the point? That what value does, is precisely to create a bridge between value as price and values as inalienable, because this bridge lies at the core of what could be called the everyday cosmologies by which people, and indeed companies and governments live?

(Miller 2008, p.1123)

Similarly, Roger Lee, by separating 'value', 'values' and 'Theories of Value', works to show how interconnected they are and brings the terms values and value closer together through examining 'social relations of value'.

> The nature and relations of value emerge from the practices of economic geographies shaped and framed by diverse social relations and values which, in turn, reflect the material circumstances of social life as well as theoretical

understandings and performances of Theories of Value ... social relations of value shape the ways in which people engage in consumption and production and condition the ways in which they come to understand their relationship to the natural and social world.

(Lee 2006, p.414 and 419)

Whilst Lee is working in the field of economic geography, there is much here that can be more widely applied and that speaks to both Miller's (2008) and Skeggs' (2014) work. Like Lee (2006) and Miller, Skeggs recognises the sometimes distinctions between value and values, but acknowledges the 'slippage' between them. Likewise, she argues that it is the relationships between, and production of, value and values we should focus upon, rather than defining exactly what they are, in order to help us move outside of capitalist relations:

> They [value and values] must be understood together and rather than assuming we know what either is we should interrogate their relationship and production.

> > (Skeggs 2014, p.4)

It will be important to be mindful of the usage of both value and values in this work along with the inevitable slippages that will occur. I also find Miller, Skeggs and Lee's work to bring the two terms in relation to be useful; hence, sometimes they will be inter-related and entangled as 'value(s)'.

2.1.2. Valuable, valuing, to value

Valuing is an act of inclusion and exclusion. I am thinking here of value as a verb more than a noun: less the idea of the worth in things and more the idea of making things worthy.

(Cresswell forthcoming)

Value, treated as a verb, is an action that humans (and perhaps other beings) can perform. We ascribe value to things, beings, services as well as non-material entities like memories and emotions. Yet, this (human) act is something fallible, something can be valued, whether or not it is actually *valuable*. In other words, we can make mistakes in what and how we value things (Hill 2006; McShane 2012). Such a position implies that there is an ultimate 'truth' to value, which is

problematic if not wanting to be held to a positivistic epistemology. Furthermore, as discussed in Section 2.6, the act of valuation is often political and entrenched in unequal power relations. However, value treated as a verb, becomes more attuned to the active configuration of value systems, the work value is enrolled in, the practices it is enmeshed within. It does, as Carolan (2013) points out, better grasp the unfixed, contingent, continual *doing* of value:

That is the tricky thing about the words we have to work with, where nouns are actually verbs, things are states and where being is ultimately a snapshot of a broader becoming. In sum: our world is one of doing, not one of death (Carolan 2009).

(Carolan 2013, p.176)

The approach developed below is far more interested in this active, practiced and in-relation state of valuing, and acting on such valuations, than in the delineation of value as a noun. Hence, although it is important to recognise, identify and trace value(s), this is necessary as a step towards analysing the movements, processes and contingencies of value. Value as it is acted upon and practiced, regardless of whether it is 'correct' in its assignment of value, can reveal much about how a system is operating (Raz 2001).

To this end, Vatin (2013) seeks to further define the act of valuation through the development of a "grammar of valuations". He draws attention to the two relevant French terms, 'evaluer' and 'valoriser', to show that we may wish to start paying more attention to how exactly value processes operate. Vatin draws the distinction between 'evaluer', to evaluate, which implies a static judgement of the value of something, whereas, 'valoriser', to valorize, is dynamic, something is increasing in worth. He goes on to suggest that these two verbs are very much linked, at least economically thinking, "there must be agreement on some common measures or evaluations... you have to evaluate in order to valorize" (Vatin 2013, p.35). This issue of measurement is an important aspect then, and I will return to discuss metrology, measurement and calculation in Section 2.5.1. The sociology of value studies tends towards a concentration on economics and markets, however, as Tarde tried to warn us, economics is not separate, but inter-subjective and thoroughly entangled ecologically (Latour and Lepinay

2009). Moreover, evaluations, calculations, value practices, occur in space and time, they are situated (Callon and Law 2003; Stark 2017) and political (Barry 2002): enter geography.

2.2. Geography and value

We are evaluative beings. We cannot get through a day without evaluating ... we live our values. We live valuing lives. We live valuable lives.

(Ginsberg 2001, p.4)

'Value' may be difficult to pin down, but the processes of evaluating; making decisions and the practice of everyday life is infiltrated by ideas of value and values. Although geographers clearly discuss these sorts of everyday relations and processes extensively, few have explicitly taken a 'value lens' for analysis, especially outside of Marxist economic geography and political ecology. Value, despite being such a central part of human experience and practice, has largely escaped scrutiny within the discipline as a whole with attention being concentrated largely in isolated silos. Clive Barnett, in his call to take normativity seriously as an everyday, geographical practice and "develop the analysis of plural geographies of worth" (2014, p.157), makes a pertinent and interesting argument that rebuffs this trend.

Barnett locates normativity as being rooted in discussions of ethics and morality, but with a much more practical application to everyday actions and reasoning:

> The general dimension of 'oughtness' that characterizes any number of actions, practices and processes is certainly not exhausted by considerations of rationality, justification and validity. It extends to include all sorts of ordinary aspects of fitness, appropriateness, value, health, and the antonyms of each of these and other normative terms.

> > (Barnett 2014, p.152)

Barnett notes how normativity has been addressed either from a moral geographies approach (Smith 2000 for example), or in a critical analysis of power relations in defining norms. Neither strand of work, according to Barnett, leave enough room for the everyday, social, evaluative practices that we are all engaged with. It would seem that Barnett makes some very astute observations that are, given the closeness of the concept of normativity and *some* meanings of the notion of value, directly relevant to this discussion. Normativity, unlike value, is not so commonly recognised as being a blend of objective and subjective elements (see discussion in Section 2.6), but is more about rationales based on socially constructed norms. However, just through this distinction, we can see similarities; indeed Barnett wishes to bring normative rationales closer to other lines of reasoning and practice:

> Rather than thinking of a dichotomy between autonomous reason and the force of conditioning, between freedom and habit, we might think of perception and action, reflecting and doing, as going on alongside each other.

(Barnett 2014, p.154)

Normativity is a slippery enough notion to deal with, the flexibility and broader scope of value does not ease this task, but it does provide a usefully diverse pool of ideas and approaches to draw from. Unlike normativity, discussions of value are also associated with socio-psychological analysis of human behaviour and behaviour change, quantification, political economy and, conversely, its everyday polysemous use. Nevertheless, Barnett's work, drawing upon some keyshared literatures (such as Dewey's (1939) pragmatism) affirms the importance of practice, evaluation, everyday decision making and justification, and supports the view that such approaches have been under-utilised so far in geographic investigations.

A quite different exception to the low profile of value in Human Geography is Burgess and Gold's (1982b) edited volume, *Valued Environments*, which could have paved the way for a more sustained disciplinary engagement. They set out ideas of value that still resonate today: that value is a dynamic concept and that we should examine: what places are valued by whom, who assesses value, and how it is assessed. In the context of ecosystem services and natural capital accounting of today, there are plenty of questions within these pages that are still very much worth asking, for example: Can the nature of a valued environment ever be fully expressed or must it always be ultimately unknowable and approachable only through painstaking attempts to build up a sympathetic understanding?

(Burgess & Gold 1982a, p.5)

Shoard's (1982) exposure of the story behind the selection of UK National Park landscapes in Burgess and Gold's volume illustrates how value can be examined within a geographical framework. However, besides re-visiting ethical questions about how we as geographers conduct ourselves, (see Curry et al. 1996 review of Anne Butimer's 1974 piece on "Values in Geography") it was another two decades before value was picked up again as a useful analytical tool. The exception being within the realms of Marxism and political ecology, and particularly the combination of the two in studies of neo-liberalisation of nature(s), which will be discussed in more detail in the following section.

That said, value is beginning to feature in contemporary geographic work, though, as I will show, there is still a need to develop this further. Schemes that attempt to value 'nature' relative to its utility to the human species are known as "ecosystem- services".¹⁷ The advent of these schemes has led to them being an important subject to examine and critique within and outside of geography (for example Robertson & Wainwright 2013; Spash 2008; Wynne-Jones 2012; Yusoff 2011). Such studies inevitably collide head-on with value and I discuss this area in Section 2.5.2, as these authors have illustrated key angles of enquiry into the processes and practices of value. Knowledge production and definitions of value, valuation's spatial consequences and ethnographic accounts of how valueframeworks are practiced and negotiated all come to the surface through discussions of ecosystems services.

¹⁷ For example, a key initiative in this work is The Economics of Ecosystems and Biodiversity (TEEB) is a group "focused on 'making nature's values visible'. Its principal objective is to mainstream the values of biodiversity and ecosystem services into decision-making at all levels. It aims to achieve this goal by following a structured approach to valuation that helps decision-makers recognize the wide range of benefits provided by ecosystems and biodiversity, demonstrate their values in economic terms and, where appropriate, capture those values in decision-making" http://www.teebweb.org/.

Geographers have also been working at the margins of consumer choice economics and behavioural psychology to investigate behavioural change policies (for example the work of Jones et al. 2011), in which, values, it is argued, can play an important role. Rachel Howell's (2013) study of motivation for low carbon lifestyles is a good example of how examining values in relation to behaviour choices can be productive when investigating pro-environmental behaviour. Indeed there is support gathering, both academically (e.g. Corner et al. 2014) and in the NGO-sector for a value-based approach to behaviour change.¹⁸ Whilst behaviour change policy is not the mainstay of the enquiry in Svalbard, the idea that personal and societal values form the basis of our world views and are important in everyday actions and policy making, is an essential point to bear in mind. Indeed, I found that simple questions about personal values during my research were accessible conversation starters that brought up a broad range of topics, views and debates at local, regional and global levels (See Chapter 3 and Appendix A). The role of values in knowledge production and environmental policy decisions is discussed in Chapters 5 and 6.

Moreover, in the realms of economic geography, there is a substantial body of work analysing the global flows of capital with points of intersection and convergence between my interests in everyday practices of value and this field. As we have seen in Section 2.1, the work of Roger Lee (2006; 2011) brings economic geography close to social and cultural approaches through his social relations of value theory. Similarly, Janelle Knox-Hayes' (2013) research on carbon markets has much to say more generally about the workings of capitalist value. She illustrates how value in-use is grounded to a specific space and time with actors and impacts, it is 'real', rather than a financialised version – carbon credits, exchanged to represent 'nature', or saved emissions – become too abstracted to be successful in increasing the value of our environment. Indeed,

¹⁸ In 2010 a NGO consortium produced *The Common Cause* report (Crompton 2010) which summarised a wealth of behavioural psychology studies. The report demonstrated the potential of a values approach to organisations campaigning for change, especially for their own communications strategies. The main finding was that taking care to engage "intrinsic values" (or self-transcendent), such as "care for others", or "self acceptance", that were compatible with the charity's goals could lead to more success in the long run. Since then the Public Interest Research Centre have championed a values approach to behaviour change, through running workshops and further research (e.g. Blackmore et al. 2013) into how such approaches can be practically taken up.

the utility of such abstractions are tested regularly in Svalbard with the ongoing influx of politicians, scientists, artists and media crews arriving by plane to draw attention to the need to reduce said emissions.

In relation to economic geography, the transformative processes involved in waste material that changes in social-spatial context can trigger from zero, negative or 'rubbish' value to positive and productive value, provide rich pickings for geographic observation and analysis (Gidwani 2013; Gregson & Crang 2015; Whitson 2011). Recent work by Gregson, Crang and colleagues (Crang 2010a; Crang et al. 2013; Gregson et al. 2010; Gregson & Crang 2015) for example, uncovers the extent of global trade networks in waste / second-use production materials, disrupting assumptions of the Global South as a dumping ground for the waste of the Global North. It also challenges assumptions of Global Value Chain and Network analysis, which has tended to ignore the value in goods and materials post-consumption.

Processes of waste and decay also interest geographers thinking about the memories, histories and stories that decaying or re-defined matter can tell (DeSilvey 2006; Hoskins 2010; Moran 2004). It is here that cultural geography more broadly has recently picked up on the potential of a value lens. Tim Cresswell's explorations of Maxwell Street are simultaneously interested in the contingency of regimes of value of waste/valuable objects and the practices and processes of valuation at work. Processes of value and valuation are at the heart of constructing archives, the re-purposing of 'junk' to make musical instruments (Cresswell 2012) and the re-valuation and de-valuation of the place itself as it becomes gentrified or erased (Cresswell, forthcoming). Here, value can be seen as being at the heart of geographic understanding of the world: "Places are also sites of value. Forms of valuing (and devaluing) help to distinguish a rich sense of place from mere location" (Cresswell forthcoming). The value of decaying and post-productive materials in Svalbard is a key area of contestation. In Chapter 4 I discuss how such material is categorised and the environmental, cultural, social and political connotations this has. In Chapter 5, I offer some alternative

conceptions of value and challenges to categorisation that the material itself brings to the categories of 'cultural heritage' in use in Svalbard.

Geographers are also beginning to investigate decision making processes and their spatial consequences from a value(s) perspective, which find (co)productions of knowledge significant for upholding or challenging value regimes (Endres 2012; Hoskins 2015; Qvenild 2014; Qvenild et al. 2014). Such work is likely to become more important within the current political climate of austerity whereby a wide range of sectors are under threat and increasingly need to prove the worth of their services. This has led to quite an explosion in valueresearch attempting to measure various types of value, for example the Art and Humanities Research Council's Cultural Value Project, or the Natural Environment Research Council's Valuing Nature project. Academic institutions are also carving out intellectual space for studying value more closely, for example, the establishment of the Leverhulme Centre for the Study of Value and the launch of the journal Valuation Studies (Muniesa & Helgesson 2013). As sociologist Michele Lamont writes "understanding the dynamics that work in favour of, and against, the existence of multiple hierarchies of worth or systems of evaluation ... is more urgent than ever" (2012, p.202).

Although Svalbard's geopolitical significance offers a degree of protection from funding cuts, it is not immune to the wider frameworks of neo-liberalisation; indeed neo-liberal discourse is rife within planning strategies for Svalbard. Despite the political value perceived in retaining a strong mining presence in Svalbard, the future of coal mining is still subject to economic rationalisation with mining operations in Svea Gruva on hold, awaiting increased coal prices and consequent ability to turn a profit.

As I discuss further in Section 2.6, a strand of geographic interest in value comes in the (potential) meeting grounds between geographers and political ecologists who have been advocating taking the interconnectedness of humans and other natures including nonhuman agency, seriously (Latour 2004b; Haraway 2007; Whatmore 2002). 'New materialist' writers such as Jane Bennett assert the importance of 'things' in our lives (Bennett 2004; Bennett 2010b; Coole & Frost 2010a), and environmental ethicists and deep ecologists wish to consider the possibilities of conceptions of value that are other than human (Rolston 2005).

I have perhaps made value all too human, and all non-humans that count only those made by humans, when we know that labor and Earth are together on the scene of value and a human being is a 'microbiome'.

(Henderson in Clarke et al. 2013, p.853)

As the above quote from Henderson suggests, this work has not fully begun. However, Yusoff makes a promising start by asking how we can relate to and value things and species we know we do not know about yet, and whether thinking along these lines might help us "get over ourselves" (Yusoff 2013, p.225). It is here that my work can contribute especially, alongside bringing value more firmly into the geographical realm. As Herrstein-Smith (1988) observes, context is essential in the practices and processes of value. She is referring to historical context, but as the work of the authors reviewed above has shown, space, place and time are also important contextual markers for value at work.

2.3. Value and Marxism

Although there is evidence that value is becoming of interest for geographers, it is in Marxist approaches where we can see its influence most firmly in geographical debate. Value theory is at the centre of Marxist thought. David Harvey's development of Marxist thought is indicative: according to Doel, "everything hinges on value" (2006, p.55), yet value in Marx is an obscure and complex concept (Harvey 2016; Henderson 2013). Marxist geographers in particular have made great head way in interrogating the effects capitalist relations have on the environment we are a part of. Neil Smith and Noel Castree's work stands out here as making significant contributions to this (see Smith's production of nature thesis (Smith 2009) and Castree's ongoing work on "Social nature" (Castree & Braun 2001)). Indeed Castree has periodically explored the progress and trends of examining nature within neo-liberalism (Castree 2003; 2008b; 2008a; 2011). Much has been achieved empirically in political ecology, human geography, environmental politics and cognate fields using such insights, though at times, as Castree (2008a; 2008b; 2011) and Bakker (2010) note, without specific mind to precisely identify the varied value processes at work, or to make recommendations for policy change or other action (though Apostolopoulou & Adams 2015 work on land-grabbing has started to address this).

As Loftus (2012) acknowledges, nature, whilst at the heart of Marx's conceptualisation, was something of a stumbling block to Marx and continues as such a block to "radical political change". Haraway (2007) and Gibson (Clarke et al. 2013) ultimately point towards the need to go beyond the human exceptionalism Marx could not escape, towards a more inclusive relational ontology, which I aim to take up. As Gibson explains in reviewing Henderson's *Value in Marx*:

Of course there are questions I have for Karl and George: ... Where do the gifts of nature, of biota, of minerals fit into this schema of potentiating life? These are questions that Marx was not ready to answer, and that George need not have answered in this book, but that we as a collective must, I think, face up to if our species is to go onwards in a 'different mode of humanity' (to quote Plumwood, 2007: 1), or towards an 'alternative mode of existence' (to quote Marx and George) (p. 120).

(Gibson in Clarke et al. 2013, p.847)

Henderson (2013) points out that value in Marx's writings was never a clearly defined concept and there is potential to take insights from Marxist thought outside the economic realm. Whilst Marxism is "indispensable" to political economy in enabling generalisations about capitalism (Christophers 2014), the focus has been on value production and commodities, with value defined quite specifically in relation to such a focus. This concentration on production often limits the perspective to this economic arena (Springer 2014; MacCannell 1999) and closes down possibilities to extend useful lines of thought which arise from this work. In defining value in this limited way, linked to the exchangeable commodity, Miller suggests that a Marxist perspective could make us blind to the very relations and problems we might wish to expose:

In stark contrast to Marx, under the doctrine of advanced capitalism, while values include more qualitative and often moral or embedded aspects, value does not. For example a concern for labour and welfare are values, which have no place as value.

(Miller 2008, p.1124)

Christophers (2014) argues that bringing the performativity of the market into contact with Marxist theory of value could recoup Marxism's explanatory power by including those missing elements of what happens when value is exchanged, consumed and distributed through markets. Yet even this does not go far enough for we cannot assume that non-capitalist and non-market relations, processes, or circulations of value do not occur, for indeed they do (Skeggs 2014; Gibson-Graham 2008). Importantly, as I demonstrate through the empirical material of the thesis, there are many value processes and frameworks operating in Svalbard that fall outside capitalist market relations. Moreover, we should remember that capitalism is not a power unto itself, our everyday actions uphold (or resist) such relations (Braun 2006; Loftus 2012).

Bruce Braun (2006; 2013) and Brian Gareau (2005) have put forward sensible suggestions. Whilst examining capitalism in relation to socionatures through a Marxist perspective is often revealing, engaging a strictly Marxist theory of value in exploring our socio-natural world overly narrows the analysis. We can retain a critical and empirical approach whilst working with other theoretical angles such as vital materialism (Braun 2013) and actor-network-theory (Gareau 2005), if we loosen the ties of value theory from the use-exchange economic value paradigm. One of the fundamental principles of a Marxist theory of value is that value is a social relation (Harvey 2016; Skeggs 2014), rather than a thing, making it all the more difficult to track down, as it 'stalks around' (Marx 2010). Whilst, as discussed in Chapter 1, I do not engage directly with the neo-liberalisation of nature debate regarding Svalbard, this relational sense of value is a key element of Marxist theory I wish to take forward.

Thinking more generally about Marxist approaches, Death (2014) observes that at the heart of Marx's work was a commitment to ruthless criticism of the existing order. Such criticism "will shrink neither from its own discoveries, nor from conflict with the powers that be" (Death 2014, p.3). Whilst my own approach is somewhat gentler, following my 'humble research' methodology (see Chapter 3), and my conceptualisation of value more flexible, I retain a commitment to critically question and be open with answers. In this spirit, I move now to look at the critiques of value as a useful concept. Not all engagements with the concept of value have been positive ones, considering the challenges to its use enables a nuanced understanding going forwards.

2.4. Value as arbitrary

Sticking with a class analysis of the workings of exchange-value for a little longer, Pierre Bourdieu is particularly credited with exposing the processes of assigning cultural value. He demonstrates that value as cultural capital is legitimised through higher and middle class citizens having the 'appropriate' education, taste, social power and standing to assign such value for their own (bourgeoisie) purposes. Rather than artefacts having an inherent value in themselves, they are assigned value for the purposes of legitimising culture (Bourdieu 1986; Bourdieu 1993 see also; Bennett 2005; Cresswell 2012; Skeggs 2004). As Skeggs summarises:

Bourdieu clearly notes the inequality and injustice involved in ... the misrecognition of value, what he identifies as the arbitrary nature of value that is attributed to persons and objects: ... 'to reinforce the well-grounded illusion that the value of symbolic goods is inscribed in the nature of things' (Bourdieu 1977, p.183)

(Skeggs 2004, p.86)

Bringing consciousness to the oft taken-for-grantedness of value is an important development in value theory. Lamont (2012) raises questions for Bourdieu as to what happens at the boundaries of social groups, and Skeggs (2004) notes that although Bourdieu's observations hold for the (French) middle classes, they are perhaps less relevant in other contexts. Here she arrives at the position that how value is *practiced*, outside of exchange-value relations, is crucial to a more inclusive examination.

Post-structuralist takes on value have also offered some important insights to understanding value. Some of these accounts threaten to undermine the use of value entirely, given its thoroughly constructed nature. De Saussure's semiotic theory posits that the value of a word is entirely relational to its context and what it is opposed to, with the word designation itself being more or less arbitrary (Chandler 1994). This allows a word to be exchanged and related to things outside of the word's framework: an idea, a representation or an object such as a tree, all become equivalent under the rubric of the word 'tree' (Clarke 2009). Whilst this is the case, such abstract theoretical observations do not pay due heed, Qvenhild et al. (2014) argue, to the ways in which we live, practice and embody meanings through our actions in the world. Such meanings can seep back, forth and between policy, practice, material and other species. Hence Ovenhild et al. argue that "a more-than-human geography opens up for considering language not as an arbitrary system of signs (e.g. Saussure 1983) but as a skill of dwelling in the world" (2014, p.5). Additionally, using language elicits emotions and affect: "only when words are felt, with their embodied presence can we understand how our concepts and language can influence, change and transform our sensual world" (ibid. p28).

Baudrillard's theory of value takes the linguistic analysis a step further than Saussure to posit that values, rather than the values of words, are thoroughly relational as they rely on opposing terms, for example, beauty and ugliness, to define themselves. Such systems and moral judgements that come with them, favour the positive side of the opposing pair, i.e. beauty in this case (Clarke 2010). Therefore, David Clarke argues, there is much which value excludes, and the concept cannot be relied upon:

Insofar as it is premised on the resolution of opposed terms, value can only ever feign its status as a self- sufficient principle.

(Clarke 2010, p.235)

For Clarke (2009), this means that the "conceptual virus" of value needs to be abandoned or at least reigned in, if we are to escape from individualist, capitalist ways of being which view desire and individual judgement as the origin of value. Doel is similarly concerned that Marxist critique that relies on value is doomed to operate on shaky ground given that, in his view, "value is destined to dissipate" (2006, p.76). These critical takes on value are very specific to a Marxist version of value, theorised economically as a use-exchange relation. What they expose is the violence that a capitalist system imposes, through exchange-value, on the world where market price renders almost the whole of life comparable or equivalent given the right quantity, ambivalent to any other property. As Doel explains, A=B, but A is not B, "the ambivalence of equivalence goes all the way down, and cannot be resolved by an appeal to the substance of labour" (Doel 2006, p.63).

Clarke (2009) and Doel's (2006) critiques raise questions as to whether there can be limitless value expansion, which would render the concept redundant, or whether we are dealing with a 'zero sum game', with only so much value to go around. We could imagine this through a spatial metaphor: an empty room in which everything 'of value' is to be safely housed. At some point, the room will become full and we will have to judge whether some items are worth saving compared to others. We could devise all manner of criteria based on a large range of categories that will see items ranked against each other, rather than merely given a rating, for as Lamont (2012) points out, this is an important facet to the zero sum scenario, where creating 'winners' inevitably means simultaneously creating 'losers'. We might also hold off on advertising the room and therefore the possibility of more 'valuable items' showing up needing to be judged worthy of storage or not. We might even investigate alternative technologies of saving, such as digital archives and substitute the material object for some form of representation. In any case, this metaphorical room¹⁹ can only hold so much value: 'a zero sum game'. Likely during its lifetime there will be much protest and grievance over the many 'things' that have been excluded, the criteria for inclusion, or indeed against those with the power to influence the way the room operates.

¹⁹ Although such practices may not be too far from the truth when it comes to museums or similar collections.

Our storage room throws light on the darker consequences of value in that if not everything can be highly valued all the time (for not everything can fit), this leaves much by the way-side, perhaps undeservedly so. Clarke and Doel may argue that actually the problem in such a situation is that everything has value, and if that is the case, then what does value come to mean? It becomes a worthless concept. It also touches on the troubles with comparison and equivalence that Doel (2006) alerts us to, the inevitability of things which defy categorisation and the ruthlessness of such decisions over what matters most. I am not arguing here that value is universally practiced in this way. Staying with the metaphor a little while longer, we could build a bigger space to house our treasures. More importantly, when thinking of value tropes such as 'scientific value', or 'sentimental value', 'aesthetic value' and so forth (both Kellert 1996 and; Takacs 1996 provide a multitude of classifications as to how we practice value of the 'natural world' for example), then the idea of value as a 'zero sum game' is severely weakened. This is not the only way of perceiving value and excludes much of our embodied everyday lives and socionatural relations that occur outside of capitalism (Qvenild et al. 2014). Could we, say, imagine the room to be ourselves, capable of only holding a fixed number of experiences, memories?

However, in a world so 'full', yet finite, can we imagine that taking decisions over priorities, what matters more or less, would not be necessary? Is this the kind of world Clarke suggests when he invites us to imagine a world without value? Perhaps this is possible and desirable, more equitable and just. Taking a step back though, whilst such decisions and zero-sum games are being played, it is useful to examine the practices and politics of such valuation processes as analysis like Hoskin's (2015), Robertson and Wainwright (2013) and Cresswell (forthcoming) demonstrate.

From these discussions, we can take forward the idea that value cannot be assumed; it is thoroughly constructed and completely reliant on what is being judged, by whom, and for what purpose. Though we might have trouble observing value at all (Doel 2006), we *can* trace its impact. As a tool for

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investigation, and a temporary resting point for purpose, motivation and stories, value holds promise yet. As Hennion (2015) concludes from her dissection of value processes and constructions within wine tasting, whilst it is important that seemingly arbitrary valuations receive critical attention, value as totally constructed risks missing both the 'something real' that value practices seek to express, and the opportunity to engage with how that expression comes into being:

Tools and procedures, even if fragile, imperfect means, do express something real - the quality of things, however defined, and they grant the competences to make evaluations by confronting and discussing this uneasy, controversial quality.

(Hennion 2015, p.53)

2.5. Objective value

To measure the immeasurable is absurd ... what is worse, and destructive of civilisation, is the pretence that everything has a price, or in other words, that money is the highest of all values.

(Schumacher 1975, pp.41–42; quoted in Wynne-Jones 2010, p.1)

Objectivism destroys the specificity of all practices.

(Bourdieu 1977, p.171)

When value theory is applied, measuring value becomes both problematic and important (Hirose & Olson 2015). Whereas many social theorists have now arrived at an agreement of value as a contingent construction, highly dependent on what is being evaluated, by whom and for what purpose; there are still numerous disciplines and areas of policy that rely upon an objective measure of value being possible and useful tools in decision making. As sociologist Michael Carolan (2013) observes, the relational, contingent, context and practicedependant nature of value, value creation and transformation seems a given in academic circles. Conversely, for politicians, policy makers and practitioners, "value is viewed as stable and objectively given" (Carolan 2013, p.177). Landscape assessments (Gobster 2014), economics and marketing are prime examples where this is the case, even though multiple values and measures may be accommodated.²⁰ In the following section I consider how value can be stabilised through measurement and calculation, and what effects this has.

2.5.1. Calculation and Metrology

Metrology creates new objects that make a difference in the world. When presented as information, measurements do not merely inform – they make demands on those who should be informed (Strathern 1999, 2000). In so far as it is treated as the source of information, metrology has performative and regulative consequences.

(Barry 2002, p.277)

Writing over a century ago, Gabriel Tarde recognised the way in which quantification (of a sort) is part of human experience and essential to the practice of value. He understood value as a quantifiable, but not necessarily measurable, quality (Latour & Lepinay 2009). It is worth quoting him in full as he explains that his version of value is multi-faceted, and rooted in how he perceives everyday practice and discourse:

> This abstract quality is divided into three main categories which are the original and essential notion of shared living: truth as a value, utility as a value and beauty as a value.

The quantitative nature of the terms I just listed is just as real as it is scarcely apparent; it is involved in all human judgements. No man, no people has ever failed to seek, as a price for relentless efforts, a certain growth either of wealth or glory, or truth or power, or artistic perfection; nor has he failed to fight against the danger of a decrease in all of these assets. We all speak and write as though there existed a scale of these different orders of magnitude, on which we can place different peoples and different individuals higher or lower and make them rise or fall continuously. Everyone is thus implicitly and intimately convinced that all these things, and not only the first, are in fact, real quantities. Not to recognise this truly quantitative - if not measurable de jure and de facto - aspect of power, of glory, or truth, or beauty, is thus to go against the constant of mankind...

(Tarde 1902, p.67; quoted in Latour & Lepinay 2009, pp.10-11)

²⁰ It would, as discussed in Chapter 7, be difficult to imagine value as having no stability in these decision making arenas.

One of the main facets of Tarde's argument that Latour and Lepinay pick up on is that Tarde believed economics was lacking as a discipline due to its focus on measuring wealth and utility, but not attempting to include other kinds of value. Thus, human behaviour becomes "mutilated" beyond all recognition. So Tarde was pushing for further quantification of value, outside of the price mechanism, despite the recognised difficulties in devising "valuemeters", which were to be "all of the devices which make visible and readable the value judgements" (Latour & Lepinay 2009, p.16). As Latour and Lepinay detail, the tools for measuring the range of things Tarde wished to were not yet developed when he was writing. He would perhaps have less of a struggle now, with the availability of online rankings and ratings, web-traffic data, social media tracking and the like.

Tarde's conceptualisation of value as a quality hints at the need to reassess the idea of quantification, and include judgement as part of the calculative necessity. Callon and Law (2003) adopt Cochoy's (2008) term 'qualculation' to resolve this distinction between quantitative and qualitative calculation. Qualculation, they contend, encompasses practices and processes related to measurement and resulting in a judgement, result, ranking, rating, or calculative outcome of some kind. In dissolving the distinction between quantitative and qualitative measurement and calculation, Callon and Law (ibid.) are then able to focus on the processes of qualculation. This brings attention to the tools, metrologies, institutions and work involved in qualculations. Such attention has a direct implication for value and valuation studies – we clearly need to give due consideration to how value is measured/ judged/ qualculated and what roles material and human 'calculative agencies' (Callon 1998) play in this work.

In his analysis of markets, Callon (1998) notes a key step towards developing a metrology is to delimit what is to be taken into account, a 'frame' and what is to be left outside of the measurement, which he calls 'overflow'. Part of this process requires a categorisation, decisions and judgements as to what kind of things are relevant, possible or strategically important to account for (or to leave out). This is a key part of value practice that will be discussed throughout the thesis, and in

detail in Section 2.7.1. Importantly, the practice of both developing a metrology and putting it to use in qualculative actions have real effects.

Andrew Barry's (2002) work is useful here – he highlights the political effects in particular of measurement. Barry notes that measurement can allow decisions to be made more easily, but can also divert attention away from the issue at hand and onto the controversies of developing an agreed frame and metrological methodology. For instance, discussions over climate change mitigation can be hampered by attention being directed towards climate models, modellers and their methods. Measurement becomes an important force that can intensify reflexivity and knowledge in certain directions, and muddy distinctions between science, politics and economics (Barry 2002).

From these ideas, we can take forward measurement and calculation as key practices contributing to value practices. We can also consider that calculation may not always be quantitative, and certainly not always about price. Paying attention to how metrologies are constructed and used, what is taken into account is a key aspect to the analysis that follows.

2.5.2. Ecosystems Services

Whilst the above discussion sheds some positive light on the notion of measurement and calculation, and by association, the idea of objective value, there are dangers in this approach. Since Tarde's ideas were never popularised, the tendency remains to resort to a price-based measurement for economic considerations. Here, I wish to return to the example of ecosystems services. This approach towards conservation and human-environmental management is now so prevalent as to be deemed a 'turn' (Jackson & Palmer 2015). It is also a good representation of the epitome of a value system resting on 'objective' knowledge of nature and the utilitarian, anthropocentric conceptualisation of the value of that nature (Jackson & Palmer 2015). Although ecological economics has been engaging with such concepts for some time, its rise to prominence began with the work of Constanza and colleagues (1997) and subsequently the production of the Millennium Ecosystem Assessment (2005).

A favoured descriptor – especially for environmental ethicists – for such attempts to objectively measure the value of an ecosystem has been "absurd". A number of points are raised to support such an accusation. Firstly, the methods of measurement are profoundly difficult and certainly not value-free nor reliable (Spash 2008). By advocates' own admissions (Goulder & Kennedy 1997), even if they could include all the aspects of an ecosystem of value to humanity, which is highly doubtful, they fail to capture *how* the ecosystem is valued and what this means. Hence environmental philosopher Katie MacShane deems such attempts as "inevitably absurd" and posits that they cause "bad reasoning about environmental policy" (2012, p.51).

> This approach, in trying to quantify how much things matter to us, fails to pay due attention to the way in which they matter to us. And to do right by the world we live in, we need to know not just how much a thing matters to us, but the way in which it matters to us.

> > (McShane 2012, pp.51–52)

The ways in which things matter to us, as Schumacher (1975) argued, simply cannot be conflated to a price or number. The act of quantification does not do justice to our value practices. It would seem immoral to ask how much a friendship is worth in monetary terms (McShane 2011) and many take offense when it comes to valuing ecosystems services in this way (Satterfield 2002). Henderson, after all describes money as the "most potent bearer of value", and yet price can easily bear very little relation to the value it supposedly represents (Henderson 2013, pp.19–21; Patel 2011).

Regardless of the failures of the market, the objective measure of nature through a quantification of ecosystem services works to uphold and reinforce the separation of nature and culture: Formally admitting within its domain only that which is codifiable, the shift to ecosystem services comprises a cosmology and modality ostensibly dependent on the development of a 'depoliticizing', 'de-historicizing', even 'deecologizing' global technology (Ernston and Sorlin, 2013: 274; Norgaard, 2010).

(Jackson & Palmer 2015, p.124)

In other words, the measurement of ecosystem services simplifies extremely complex systems and our relations to them, and the specificity of particular sites, relations and practices are lost to objectivism as Bourdieu (1977) foretold. Humans are constructed as customers of nonhuman natures' services, which are a mere backdrop to our activities (Sullivan 2009). Here it is worth revisiting Clarke (2009) and Doel's (2006) warnings: what is left by the wayside in these approaches is what science has yet to penetrate, in which there is surely value(s) to be found, as Yusoff (2013) also urges us to consider.

Some cultural geographers and environmental sociologists are working to reform and adapt the ecosystems services approach to more plural standards of measurement that better account for the cultural values of ecosystems, despite the almost complete dominance of the natural sciences and a positivistic epistemology at odds with most cultural theorists (Leyshon 2014). Whilst we do perhaps need tools to help us reflect on the costs and benefits of particular actions with regard to their environmental impact or conservation goals, reflection is not always best achieved through calculation (Schmidtz 2015). Speaking the same language as economists does not ensure success at protecting and conserving that which we value, but gives us a potentially false sense that we know what the costs of not doing so would be, which can, in turn, be weighed against other options easily and at an abstracted level (Arler 2003).²¹ Furthermore, ecosystem services needs to be recognised as entirely anthropocentric as an approach in intent and perspective. Even if we were to devise a methodology to incorporate and adequately price the work of 'nature' in

²¹ There can be ways to obtain positive outcomes from this approach, even if it is in discord with the way natureculture is comprehended, as Jackson and Palmer (2015) report in the case of indigenous Australians being employed in countryside management to uphold traditional practices.

ecosystems, "nature, of course, has no use for money" (Hornborg 2016, p.no pagination). Although, as Sian Sullivan points out, there are plenty of savvy financiers waiting to "capture" any such payments for nature's services (2013, p.205).

Assessments of cultural heritage have traditionally followed similar lines of assuming a fixed and measurable (via expert knowledge) value to sites and artefacts (Mason 2002). However, this is now being challenged and re-visited both academically and, to an extent, in practice (Parsons 2010), by a recognition that cultural heritage value is also contingent, plural and co-produced (Mason 2002; Gibson & Pendlebury 2009b; Harrison 2015). Walter exposes value's complicit role in maintaining a version of heritage that resists change, a discussion that will be furthered in Chapter 4:

The urge is to keep things the same, and the values system is used as a scaffold, a barricade even, on which to erect whatever arguments are necessary to resist that change. A second approach is that consideration of values is simply delayed – here, the tendency is to postpone commitment to specific values until it is clear which way the professional wishes to argue, and then use them to adorn one's conclusions...values are anything but neutral, let alone benign. Rather, they are implicated in a quasi-scientific classificatory system which, a priori, renders the material world static.

(Walter 2014, p.635)

Meanwhile, what this extrapolation and the debates surrounding ecosystem services highlight is that value is enrolled strategically through objective measurement in both natural and cultural heritage conservation discourses. Objective, measurable and economistic versions of value are deployed under guises of environmental conservation and protection, which raises alarm bells for many geographers and environmental ethicists where this kind of valuation is all too narrow, impossible and inappropriate (McShane 2012; Spash 2008; Yusoff 2011). The terms and systems of, and contributors to, value frameworks matter. Moreover, such value calculations have spatial consequences where biodiversity and habitat for instance, are rendered as "mobile and tradable commodities/services that are divorced from the specific material conditions of their co-emergence" (Yusoff 2011, pp.3–4). This occurs unevenly, depending on where nonhuman nature is threatened (Carver Forthcoming).

2.5.3. Dissolving dichotomy?

Attempts to objectively measure value could be said to stem from the longstanding split between objective and subjective knowledge, or, a fact-value dichotomy. Dissolving this boundary has long been the aim of social theorists (see Dewey 1939; and Raz 2001 for a more recent attempt). Latour's (2004b) thoughts on the matter of value are instructive. Facts have value in them and vice versa, there is little purity to be found:

> If we concede too much to facts, the human element in its entirety tilts into objectivity, becomes a countable and calculable thing, a bottom line in terms of energy, one species among others. If we concede to values, all of nature tilts into the uncertainty of myth, into poetry or romantiscm; everything becomes soul and spirit. If we mix facts and values, we go from bad to worse, for we are depriving ourselves of both autonomous knowledge and independent morality.

> > (Latour 2004b, p.4)

This leads Latour to reject both facts and values in favour of a mixed set of powers to 'take into account' and to 'arrange in rank order'. Again, perhaps Callon and Law's (2003) dialogue around qualculation can help here. By treating both quantitative and qualitative measures and judgements as equally calculative, some of the tension between objective and subjective knowledge is relieved. The binary for Callon and Law, albeit a porous, interdependent and correlational one, is located between "qualculation and non-qualculation" (2003, p.4). They suggest there are two processes that make qualculation difficult or impossible. The first is 'rarefaction' – where something is very slippery/ non-linear and hard to bound within a metrology (and here we might link this discussion to those surrounding intrinsic value, affect and emotion). The second is 'proliferation' – where measurements, judgements and information are so abundant it is hard to make any sense of the matter or final outcome (Callon and Law 2003). It would seem qualculation covers both of Latour's (2004b) 'powers': the powers of taking into account, through the framing of a metrology,

and the ability to arrange in rank order, through the outcome of a calculation. Hence, value is opened up to be a complex set of multiple practices, materialities and agencies.

More recently Latour has relaxed his rejection of value in *An Inquiry Into Modes* of *Existence* (Latour 2013), which recognises value's limitations but still uses it as a central tool; it is a place holder for telling stories about the way the world works and defined simply as 'that which we hold dear'. Perhaps in much the same way as he finds claims to scientific fact a useful event to follow and analyse, despite their revealed 'made-up-ness', he considers that value can be worth investigating.

In this section then, we have scrutinised the uses of and ways of thinking about objective value. In conclusion, it is problematic, yet nevertheless prevalent in some practice arenas. Claims to objective value are powerful and can have farreaching consequences, as we can see from the ubiquitous tick-box criterion that are enlisted in evaluating everything from the success of a workshop, the level of state support a disabled person is entitled to, or how much land is required to 'offset' the destruction of a biodiverse habitat. Hence it is necessary to be aware of and interrogate such practices, which are in operation in Svalbard too, as will be traced in Chapters 4-6.

2.6. Intrinsic value

All value is contingent, and to behave as if it were not so is to exercise over others a power unjustly derived from privilege or status.

(Kermode 1996, p.550)

The idea that value can exist outside of human experience, as somehow inherent to the person/object/ being, can equally put us in the territory of a realist form of value: that which exists outside of human social constructions, even if we cannot accurately measure it. Dewey (1939) refers to such theory as "absurd" and abstract since we cannot observe it. As well as the ongoing discussions within philosophy over the possibility of intrinsic value (see for example RønnowRasmussen 2015; Olson 2015), many other thinkers across several disciplines and decades have identified numerous problems with the concept of intrinsic value (Bourdieu 1986; Svoboda 2011; Cresswell 2012). The largest and simplest of these problems is that if value is intrinsic in the sense that it is a quality of the thing and is inside it, we lack a suitable method to detect and analyse such a value since we cannot escape our human existence. Hence, the idea of value outside of a human framework is extremely difficult epistemologically (although see Rolston (2005) for arguments for extending the ability to value to nonhuman species). It is generally accepted that recognising value in the natural (and cultural) world in non-human objects and processes is a human virtue, an 'appreciation of the good' (Hill 2006). Yet, an ability to appreciate value in other things does not prove in any way that value exists inherently in an object, given we cannot practically escape our human perspective to find out (Svoboda 2011).

In the realms of nature conservation and cultural heritage, the intrinsic value of a species or artefact is often appealed to, either directly, or implicitly. It is hard to imagine arguing to protect something without an appeal to its value in some way (de la Torre 2002; Myers & Reichert 1997; Takacs 1996). Yet there are problems here, both logically and politically. Although the value of the object or 'nature' is recognised, it is necessarily perceived from a human viewpoint. Whilst this is a type of value that is set apart from direct use and exchange value, it can be argued that humans still derive satisfaction from the species or artefact, it can still be instrumental value of some kind. This could be in the form of "existence value" (Goulder & Kennedy 1997), or "just knowing" (Parsons 2015) – knowing that something exists, even if you do not have access or experience of it, or even "testament value" (Kaltenborn 1998) – knowing something will exist for future generations to enjoy, though how we will value things in the future is unknown (Arler 2003). Figure 8 is an example of this kind of value being appealed to in order to muster support to 'save' wildlife. Figure 8: Existence value at work. Zoological Society of London Advertisement, Easy Jet in-flight magazine, August 2016



Politically speaking, to make judgements over what is worth protecting or what is not, is to hold the power to decide, a power that is often not democratic, as Kermode's point above alludes to and Cresswell expands upon:

Value emerges contextually and relates to the interests of those doing the valuing (Bourdieu 1984). Indeed, seeing value as intrinsic to an object only hides the interests of those doing the valuing and the closer we get to the top of social hierarchies the more likely it is that valuation includes some notion of pure and unpolluted value in an object (Connor 1993).

(Cresswell 2012, p.167)

These logical and political problems are reason enough to dismiss the notion of intrinsic value and Takacs' "intermediate position" holds considerable merit:

We can be realists, believing that we can discover facts about the natural world or values that inhere in the natural world. On the other hand, we may be constructivists, propounding that facts and values are elaborate social constructions that acquire reality when we all agree they are real. Or, as I do, we can take some intermediate position, believing that both facts and values are woven by human desires from heterogeneous strands drawn from rich fabrics afforded us by both nature and culture.

(Takacs 1996, p.339)

As Takacs implies, if we are to take seriously the call from deep ecologists such as Aldo Leopold, Arne Naess and more recently, Holmes Rolston (2005), socionature theorists (Haraway 2007; Latour 2004b; Whatmore 2002) and scholars of vital material (Bennett 2010b; Coole & Frost 2010b) to take other-thanhuman actors into account, we need to consider the possibility of value outside of human experience. Jane Bennett aims to "distribute value more generously, to bodies as such" (2010b, p.13) and Yusoff speaks of "heterogenous valorisation processes" (Yusoff 2013, p.211). This is new, uncertain ground for most of Western thought, but worth exploring. At the personal level of practice, treating something as having value in its own right need not be a politically dubious move, but an act of care or academic, ethically engaged curiosity²².

Philosopher of environmental ethics, Katie McShane (2007) explains we *do* hold beliefs that fit within a framework of value that resides with nonhuman beings and objects and act accordingly. For McShane, the fact that one of the ways we value is to do so *as if* something *does* have value in its own right, makes the concept of intrinsic value worth investigating. As she points out, without this it would seem that many of the things we display intrinsic valuing attitudes towards would look like mistakes: the object of value is not actually valuable at all, since it is not valued in relation to human utility.

Developing this further, McShane (2011) makes a case for a 'neosentimentalist' account of intrinsic value. This version of intrinsic value is defined by,

²² See Phillips (2010) for a discussion of the many different forms curiosity could take.

reference to the kinds of responses that would be appropriate from valuers, rather than by reference to the kinds of responses that are typically given by valuers ...This approach opens up the possibility that we don't in fact do what we ought to do, e.g., that we value things instrumentally even though their value is intrinsic.

(McShane 2011, p.17)

This approach is attractive in a number of ways: firstly, the sentimentalist ideas it brings with it mean that it takes seriously the plural ways in which our emotions have the potential to motivate our decisions and actions. Here, it meets with the recognition of the importance of emotions in human geography (Bondi 2005) and in behavioural sciences, psychology and through behaviour change policies (Whitehead et al. 2011). Though this might not seem rational, given how 'irrational' intrinsic value appears to be, we often operate after all on a "more-than-rational" basis (Whitehead et al. 2011). In addition, though historically such valuations have resided with humans, McShane sees no need to limit a concept of value and valuing to humans alone.

> There is something philosophically naive, and even hazardous in a time of ecological crisis, about living in a reference frame where one species takes itself as central and values everything else in nature relative to its potential to produce value for itself. One might think that embodied human valuers, with such smart minds, would be quick to see that other embodied beings, nonhumans, have their values too.

(Rolston 2005, p.167)

Whilst "value is not the property of an object or of a subject, but rather, the product of the dynamics of a system" (Herrstein Smith 1988, p.15), I wish to recognise that part of the system, the object or subject, may well have an active role in the valuation process and indeed be engaging in its own value practices. Intrinsic value may not make logical sense and can often be politically suspect, but we can work with the concept in order to better understand a fuller range of value frameworks and processes. To this end, it is useful to be able to identify this particular way of valuing and explore the consequences it leads to, rather than automatically dismissing it out of hand as 'absurd'.

2.7. Value as practice

A static value, however serious and important, becomes unendurable by its appalling monotony of endurance. The soul cries aloud for release into change.

(Whitehead 1985, p.251)

Part of the difficulty with a value approach is very much of the ilk that David Graeber (2001) describes: previous value theorists have been faced with the choice between starting from meta-theory and (abstract) generalisations, or working from individual motivations and actions upwards, with the risk that these are not more widely applicable. However, as discussed in Section 2.1, these two positions have been drawn closer together by theorists such as Lee (2006), Miller (2008) and Skeggs (2014). Given that a grand theory of value is not the aim of this work, I have, aided by such thinkers, held and worked with both ends simultaneously through a notion of value at work, in practice. As the above discussion has shown, at each theoretical turn and angle of critique, a focus on how value is *practiced* appears to console or at least quieten the voices of critique. By concentrating on the processes, circulations, measurements, transformations and representations of value (rather than worry overly about its definition), we can gain an insight into the work that value does in everyday life and decision making. In other words, my interest lies in how value is practiced and what consequences this might have, materially and ethically. There will be many different types or conceptions of value at work in any particular context. For example, we might think of them in terms of 'cultural value, 'environmental value, 'economic value', 'sentimental value(s)' and so on (Dewey 1939; Raz 2001). As Lee notes, what value does is key, even if it cannot be pinned down to something definitive:

> Several conceptions of value may be simultaneously at work and mutually formative at any one time and they may change in the course of a circuit of value.

> > (Lee 2006, p.428)

A concentration on value practices and processes can be traced back almost a century to pragmatist thinker John Dewey and has been continued in the

pragmatist tradition by those such as Richard Rorty. For Dewey it was important to leave the differences between objective and subjective value aside and focus instead on what could be empirically observed, the process of valuation itself, the moment of action. He saw this as an ongoing stream of events, "valuations are constant phenomena of human behaviour, personal and associated, and are capable of rectification and development" (Dewey 1939, p.57). Therefore, value would be relational and contingent on the circumstances and intent on which the act of judgement takes place. Rorty explains that criteria, a key tool for many valuation practices, are to a pragmatist nothing more than "temporary restingplaces constructed for specific utilitarian ends" (Rorty 1982, no pagination). Unpicking what exactly the ends and means are in such contexts, how they are framed, what they effect, how they are negotiated and how they relate to other value resting-places is no small part of what investigating value practices involves.

This is a highly political matter. Deciding what we place value on and developing systems of valuation are powerful acts (Henderson 2013). Likewise, investigating these processes is equally political and holds potential for change, as Robertson and Wainwright explain well:

> In contesting measure, we challenge the logic by which something becomes a bearer of value in capitalist society; that is, becomes capable of circulating as a means to an end. If we move downstream of this moment and only track the circulations and chart the injustices and absurdities that result, we have missed the headwaters of analysis and political change.

> > (Robertson & Wainwright 2013, p.900)

Although it is not only measured, 'qualculative' value we may be investigating, by analysing and uncovering the processes of valuation and moments of decision-making, we can gain new perspectives and grasp problems at their source, rather than focussing on the effects in a more isolated way.

An engagement with process and practice through pragmatism, as Fredriksen et al (2014) point out, has strong links to assemblage theory and vital materialism, both of which I find helpful throughout the thesis (and particularly in Chapter 4) in considering "value as a field of emerging practices, relationships and morethan-representational knowledges" (Carolan 2013, p.177). Fredriksen (2014) identifies the more general positions of "after-Actor Network Theory" and nondualism that also encompass theories of hybridity and the importance of material capacities and their entanglements. These approaches are also relevant and ones I identify with.²³

I am engaging a broad notion of practice, which is mindful of the more specific connotations of a 'geography of practice'. There is a large body of work that explores individual embodied practices, inspired by phenomenology and the works of Merleau Ponty and Heidegger (see Simonsen 2007 for a review). The embodied, emotional and affectual experiences are indeed important in everyday practices of value, and will be discussed in Chapter 5 from a different theoretical angle. I am also interested in the relationships between different scales of practice: personal and social everyday practice and how it relates to 'more powerful' decision, knowledge and policy-making practice. In this sense, though this work goes beyond economic practices and relations, the focus on relations of scale, the interest in performativity and the everyday doing of life, is more akin to a geography of practice as described by Reece Jones (2014) within the sub-discipline of economic geography.²⁴

There are resonances here with Michel de Certeau's (1984) project in *The Practice of Everyday Life.* De Certeau was interested in how tactics of 'consumers' could resist and transform the strategies of powerful institutions and structures through everyday practices such as cooking, walking etc. This approach, whilst providing a useful intervention in bringing everyday practice to light, instils an unnecessary dualism between disparate 'consumers' and 'producers' of power that can be separated from their environments. Qvenhild et al's work on native and invasive species provides an apt example of the kind of

²³ Matters of ontology are discussed further in Chapter 3.

²⁴ Jones (2014) summarises trends towards relational economics as a corrective to traditional approaches that neglect the agency of individuals as economic actors and to fully account for factors which contribute to their economic strategies, including emotions.

hybrid approach I am taking towards value practices and of the useful insights that can come out of such work:

The written vocabularies used by natural scientists and environmental management bodies, as well as domestic gardeners everyday engagements with plants, are socially situated practices that involve ascribing particular values to plants. Consequently plants reside in a policy arena as much as in a garden... alienness and nativeness as defined in environmental politics do not refer to actual qualities in plants, but are scientifically defined and context-dependent characteristics (Warren 2007; Preston 2009).

(Qvenild et al. 2014, p.23)

Here, language, knowledge production, policy making, everyday engagements and relations with plants are all entangled in the practice and production of value. Value is in flux and has plural meanings depending on the context and relations involved, rather than being static with a fixed definition.

In his review of the "Sociology of Valuation and Evaluation" field, Michele Lamont (2012) highlights two sub-processes essential to value practices and valuation activities: categorisation and legitimation. I lay the theoretical foundations out here for both of these processes, which are integral to the practices of conservation of natural and cultural heritage in Svalbard. Categorisation will be discussed in detail in Chapter 4 and legitimation in Chapter 6. However, the presentation of categorisation and legitimation as 'subprocesses' is worth interrogating first. 'Sub-process', implies that value is already decided upon and then put to work within categorisation and legitimation. However, both of these processes relate and are incorporated into processes and practices of qualculation and indeed non-qualculation (Callon and Law 2003, see Section 2.5.1). They are a part of value practice, they shape value(s). Acknowledging the material and social agencies involved in categorisation and legitimation also necessitates a recognition that they cannot be linear or static, but subject to change and re-negotiation. Whilst categorisation may be part of initial steps to constructing a metrology for instance, and legitimation be a keystone to its widespread use, the resulting metrologies and qualculations

could be challenged, changed, interrupted or re-interpreted, by circumstances of place, time, material, political, cultural or social agencies.

Judgement is often distributed across time and geographical space. It flows, unfolds, and reflects local specificities. It cannot be drawn together at a single commonsense space and time.

(Callon and Law 2003, p.4)

Zooming in on categorisation and legitimation as part of value in action is not to suggest that these are linear processes, nor all-encompassing, but analysing them as some of many has been revealing.

2.7.1. Categorisation and value

Homo sapiens, then, is neither a clearly defined species nor a substance; it is, rather, a machine or device for producing the recognition of the human.

(Agamben 2004, p.26)

As cognitive beings, we rely on categories to adapt to our environment (Lamont & Molnár 2002) and construct our conceptual systems (Lakoff & Johnson 1999; cited by Jones 2009). Indeed, Agamben's (2004) and more recently, Harari's (2014) explorations of taxonomy and the fragility of the boundaries between "man and animal", serve to illustrate the highly constructed nature of such categories and the political and ethical connotations they can have as they weave through lists, criteria, ranking systems, definitions and more. As Raz (2001) notes, defining genres means we can know what evaluative practice to perform, we evaluate on the basis of what we have categorised something as or for (see also Herrstein Smith 1988). Assigning or joining the most appropriate category for the purpose can be imperative to success for individual professionals or organisations (Negro et al. 2010). The process of becoming a legitimate member of a category and the shifting meanings of that category are also important for building collective identities (Negro et al. 2010). Conversely, categorisation inevitably does violence to the world and how we are affected by and relate with it (for example, Adams 2006 links racial categorisation with genocide). The categories we assign ourselves and others to may well be at cross-purposes and will involve a reductionist generalisation or simplification.

Certainly the process of categorisation is not neutral or objective but fully political (Kappeler 1995).

As Bauman (1991) captures in his writings, modernity is about ordering, classifying and categorising: segregation, exclusion and inclusion. This task will forever be unsatisfactory, given the unordered nature of the world. Over the last decades, sociologists, geographers and STS scholars have problematised categories and the boundaries between them (see Jones 2009 and; Lamont & Molnár 2002 for reviews). As Jones (2009) points out however, revealing the social construction of categories does not necessarily enable us to move beyond them. There is an acknowledgement that categories and the boundaries that are constructed around them are to a degree inevitable: "the problematisation of boundedness does not mean the end of boundaries", (Mol & Law 2005, p.641). Yet our inability to be rid of categories makes it all the more important to continue problematising and analysing the processes of categorisation, the value ascribed, the power and material relations involved in constructing, changing and/or upholding them, as well as their consequent effects.

Jones makes an argument for geographers to re-conceptualise categories as inchoate, as having porous borders and boundaries in the making, never fully formed, rather than being distinct 'containers'. Although we know fluid boundaries and constructed categories are at work, the operationalisation of the container metaphor works against us:

> The boundaries of all categories provide a paradox because they are never fully formed although they cognitively operate as if they are. Even if it is widely acknowledged that a particular category is only an approximation, when it is used, the boundaries of the category are reified like the walls of a container.

(Jones 2009, p.184)

In this vein, I seek to trouble and analyse categorisation activity as a value practice on the nature-culture or human-more-than-human borders. Latour (1993) demonstrates that *We have never been modern* (and are not on course to become so) and therefore cannot become fully separated, purified, from the

Nature we are a part of. We remain however, entrenched in political economic structures that have not yet been able to account for more than human participants sufficiently (Latour 2004b). Some of our species now recognise our influence and impact on more than human nature, and are beginning to acknowledge our dependence and vulnerability to the beyond-human aspects of our environment (Clark 2010). However, when it comes to conservation, borders and categories; physical and cognitive, can be very much practiced in a container-like fashion.²⁵ This can manifest for example in taxonomy and the concentration on particular species or geographical areas such as biodiversity 'hotspots'.

It is in the struggle with our own experiences of, with and in 'nature', or amongst fragments of times past, and our concerns with protecting and conserving that which we value, that we meet a crucial challenge in heritage management. This challenge comes in the form of ambivalence, as defined by Bauman:

Ambivalence [is] the possibility of assigning an object or an event to more than one category, [it] is a language-specific disorder: a failure of the naming (segregating) function that language is meant to perform.

(Bauman 1991, p.1)

Where do we categorise ourselves: inside or outside of nature? If we are part of nature, can we also be considered cultural beings? Rather than just a (significant) language problem, which terms like 'socionatures' and 'hybrids' and 'cyborgs' can only go so far in solving, such dilemmas are made material, spatial, political, social, moral and emotional through the practice of natural and cultural heritage management, as we will see in Chapters 4, 5 and 6.

2.7.2. Legitimation and value

Just as categorisation is essential to practicing value, legitimacy is essential in all but the most personal of value practices. As Skeggs (2015) points out during a

²⁵ An example of new directions in conservation, away from notions of 'saving nature' is Conservation International's 'Nature is Speaking' campaign that focusses on human reliance on nature and nature's indifference to humans. Yet, in doing so it also falls back on a 'nature' that is other to humans, which reinforces the boundaries between human and nonhuman nature. <u>http://www.conservation.org/nature-is-speaking/Pages/about.aspx</u>

discussion of class, it is only if people engage with and use forms of classification and value criteria that they can hold power and relevance. In other words, categorisation and legitimation processes often travel hand-in-hand down the road of value-in-practice (whilst keeping in mind that neither linearity nor stability can be assumed). Bourdieu is often the go-to theorist in dissecting legitimacy; his account frames the issue of who has the power to make evaluative judgements in society as being one of competing definitions between different fields, for example market value and artistic value, judged by experts (Fredriksen et al. 2014). The querying of power-relations and their importance in assigning value remains relevant (see Section 2.6) and Bourdieu's works are a pertinent reminder to critically assess processes of legitimacy in conservation practices. In this brief review however, I look to expand the theoretical tool box as the focus on social, symbolic capital and competition that Bourdieu's approach takes is limiting.

Lamont defines legitimation simply as the "recognition by oneself and others of the value of an entity" (2012, p.206). However, political philosopher Uriel Abulof warns that legitimation – the process of legitimacy-making – can be "sociologically elusive" (2016, p.374), it is, as he notes, nevertheless a process we can attempt to trace through discourse. Abulof posits that there are two key academic approaches to legitimacy: "political philosophy regards legitimacy as principled justification, [whereas] sociology regards legitimacy as public support" (2016, p.371). He works to bridge this gap by proposing "public political thought" (PPT), which is the "public's principled moral reasoning of politics ... a sociological-philosophical viaduct [that taps] ... into the public deliberation over the legitimating principles of politics" (ibid. p.372).

For environmental controversies in particular, it is often public support that is taken to be the measure of legitimacy. We might think of the ubiquitous polls charting the social acceptance of energy technologies, for example, and the resulting studies that analyse how state and corporate actors seek to gain such legitimacy (a recent example: Chen & Gunster 2016). Indeed, as I will examine in more detail in Chapter 6, there is much work in theorising legitimation at the science-policy interface that brings nuance to Abulof's (2016) conceptualisation.

An alternative, or additional, framework is provided by French theorists Boltanski and Thévenot (2006) who, in a vein not dissimilar from Tarde (1902), develop a conceptualisation of legitimation as an ongoing process that involves multiple "orders of worth", or tropes of value, that are at work simultaneously: market, industrial, civic, loyalty, inspiration and renown/ fame. Economic sociologist David Stark (2009) adopts Boltanski and Thévenot's notion of multiple orders of value at work through ongoing processes as a starting point. Stark does not limit his analysis to the six "orders of worth" they prescribe, but prefers to be more open to the unique situations studied, questioning categories.

In Chapter 6, I seek to blend these ideas surrounding legitimation together, endeavouring to trace value practices and processes of legitimation as we explore a controversial consultation and its resulting environmental regulation. This analysis reveals how legitimation is entangled within value systems. We see how it affects how smoothly qualculations, decisions on value, can be practiced. Here I aim to tease apart how scientific knowledge, legitimacy and environmental policy making in Svalbard are connected through multiple and dissonant valuations of environmental heritage.

Returning to Stark (2009) again, as it allows for a brief summary of some key points of the chapter, he also points out the usefulness of conceptualising value as worth, which for him incorporates both value and values, the economy and its social relations, its moral as well as economic connotations. We have come full circle in that this pragmatic position is similar to those of Miller (2008), Lee (2006) and Skeggs (2014) as discussed in Section 2.1.1. In addition, Stark (2017) flags the importance of analysing the assemblage of things and beings that allow for valuations to occur at a particular time and place, as discussed in Section 2.5.1. He is particularly interested in 'critical moments', key points where value practice is contestable and in-the-making, an interest that I share through my approach to telling value-stories I describe in the following chapter.

At the end of this chapter having, for now at least, 'saved value' from the throws of critique, we are ready to go on with the story, armed with a theoretical conceptualisation of value-as-practice. We hold an awareness that value, even as practice, may need partnerships with other theoretical frameworks. In the following chapter, I explain how I approached the doing of research with valueas-practice as my thinking companion, how I used it to frame my research questions and how it intersected with other facets of my research approach. Although presented here as a linear journey, this is, as I discuss in Chapter 3, not the way this theoretical or methodological approach was practiced. As I endeavoured to trace value through practices of conservation in Svalbard, my engagements with Svalbard infiltrated my methodological and theoretical approach.

3. Towards a humble research practice

Evaluation practices often involve accounting and cataloguing people, species and artefacts. I argue that value and values need to be taken seriously and in addition to the production of such value logs, we need to be talking through that which drives and inspires us. Multiple knowledges are valid in this undertaking. In this chapter I argue that one way to take account of these concerns methodologically is through what I am calling a 'humble' approach to research. What I present here is inspired by John Law's open acknowledgement of the messiness of research. To develop this humble methodology I connect with three themes from his book *After Method: Mess in social-science research* (2004): 1) method assemblages; 2) bringing the back story, or "hinterland" of the data collection out into the open; and 3) writing the researcher into the research.

From an ethical perspective, the research process is laden with normative decisions and in this sense the value-centred enquiry discussed in Chapter 2 is woven through the research project in its entirety – from research questions and design, "generating materials" (Whatmore 2003), interpretation, the writing process and everything in between. I seek to bring these decisions to the fore. Firstly, I introduce my overarching approach to the research as that of a 'humble geography' and flesh out what exactly that has meant, practically and theoretically and what it has the potential to mean. This acts as a backdrop to the methods assemblage and data gathering I describe in Section 3.2. I then consider my role in this assemblage and my relationship with Svalbard and the research conducted (Section 3.3). In Section 3.4 I discuss my path through the gathered material in terms of how I set about my analysis and interpretation. This brings the writing process and role of story-telling into focus and provides space to reflect on its power and potential limitations. I have necessarily imposed artificial boundaries around these research issues. Nevertheless, I very much see the research process as non-linear, continual (Pryke et al. 2003) and

not so neatly categorised into divided time periods and places of "abstract thinking and concrete doing" (Nagar 2014, p.2) or "read –then- do- then-write" (Crang & Cook 2007, p.2) models.

3.1. Humble Beginnings

The first few months of this project were not particularly humble. I had, like most people starting a new project, lofty goals and high hopes.²⁶ These were bolstered by assumptions that, given the department's strong links to Svalbard through glaciology and geology work there, I would find arranging fieldwork there reasonably unproblematic – I imagined collaborations with scientists both here (in Aberystwyth) and there (in Svalbard). I did indeed find plenty of goodwill and useful advice, but this was not enough to break through institutional boundaries and space restraints: The University Centre in Svalbard (UNIS) does not 'do' social science or humanities and was finding it tricky to accommodate the increased number of natural scientists and students coming its way. I was left with the dawning realisation that the costs involved in going to Svalbard, even as a budget tourist, were going to be severely limiting. I do not recount these details to garner sympathy; they were driving factors in my reaching out to other Arctic social scientists, funders and potential employers.²⁷ They also help to outline a wider political, economic and institutional context that the research took place within, which goes beyond individual researcher reflexivity (Nagar 2014; Routledge & Derickson 2015 see also the next section). I needed to come to terms with asking for help, advice and resources very early on in the research and accept that I had no experience in working in the Arctic, Svalbard, Norway or Russia. The relationships I developed from making connections have been pivotal to this work and set the tone of my approach, which has developed into what I conceive of as a humble research practice.

²⁶ I do not wish to suggest this is necessarily a 'bad thing', there is a politics here that intersects with discussions on the impact agenda of research and the role of curiosity and self-fulfilment in research practices, which there is not space to discuss here (see for example Pain et al. 2011; Phillips 2010; Rogers et al. 2014).

²⁷ The advice and connections made through the International Arctic Social Sciences Association (IASSA) were essential, as was additional funding from DGES and the ESRC. I also applied to the RGS and attempted an 'adoption' into a Norwegian research institution to be eligible to apply for the Svalbard Science Forum's Arctic Field Grant.

I recognise that research is not innocent and that the ways in which knowledge is produced can be just as important as the knowledge itself (Fisher et al. 2015; Haraway 1997; Law & Urry 2004). This message has been re-iterated many times during the course of this research. For example, my prior experience, reading and theoretical exposure had some influence; however, I owe the wording and inspiration for a humble approach more to a series of research encounters. At the end of an interview, a participant suggested I speak to one of his friends next. I happen to have been trying (without success) to enlist this friend. After this interview, the participant recommended that his friend speak to me as he thought I was a nice, "humble" person. In turn, his friend agreed with this assessment and proceeded to recommend one of his friends for interview. From the hours of interview recordings I have listened to, I am aware this label does not always apply to my conduct, but the term appealed.²⁸

The Oxford English Dictionary (2016) defines the adjective of humble as "having or showing a modest or low estimate of one's importance" and having a low social rank. The Cambridge Dictionary (2016) adds a slightly different take as "not proud or not believing that you are important" and "ordinary". Already we can see that a humble practice is exactly the opposite of how researchers are encouraged to present themselves in a competitive, increasingly neo-liberal academic environment that rewards innovation and self-aggrandisement rather than modesty or ordinariness (see for example Crang 2007; Peters & Turner 2014). I wish to argue here that, despite this, we can nevertheless move towards being humble while conducting our research and that this goal holds ethical, theoretical and practical potential. Below I develop a humble approach along a number of lines: from an ontological and epistemological theoretical view point; through the challenges of applying philosophical concepts, in this case value; and, more practically – how physical, human and nonhuman facets of place can force us to become more humble in our research practices. I also consider the researcher as a human individual, each with their own idiosyncrasies to be a part of this humble project, as discussed in Section 3.3.

²⁸ I discuss personality in more detail in Section 3.3.

Theoretically, a humble research approach draws on recent forays into more than human, open, participative, vulnerable approaches to research and experimental methodologies. It meets with epistemologies that take place, other species and material things seriously (Anderson et al. 2010; Anderson & Wylie 2009; Bennett 2004; Latour 2004b; Whatmore 2002). It also assumes a broad scope for human knowledge whereby emotions, non-representational, embodied experiences and affects are seen as important facets of knowledge that can contribute to our understandings of the processes and practices around us (B. Anderson 2009b; Barnes 2012; Bondi 2005; Jones 2005). Through advocating a humble geographical approach, I make no claims to an inherently more ethical research practice, but suggest it is a potential positive way forward that combines pushes in these directions.

This humble approach is informed by a commitment to go beyond language and representation, to accept, embrace and make use of my position as a researcher thoroughly *within* the world I am seeking to co-produce knowledge with and about.

The world is less something of our construction and more something that draws us out of ourselves, not only to surprise but also to answer back. ... the world intervenes in our knowledge; it exceeds our descriptions of it by confronting us with the sheer messy, slippy, surprising business of living in it.

(Pryke et al. 2003, p.65)

I ground this in an ontological blend that gives currency to both the insights from social constructivism and (neo) materialism. That we can and do construct our reality means, methodologically, that we should pay attention to the way in which these constructions are produced, the politics and power behind them, and the processes and value practices that are involved in these constructions (Gergen 1999; Hacking 2000; Latour & Woolgar 1986). Yet this acknowledgement of the power of the social does not make its constructions and productions any less real or material (Latour 2004b; Law 2004). Nor does it mean that more than human 'stuff' and other life does not take part in these processes or have agency in the world we share. To paraphrase Latour (2004b), it is not the case that nature is on one side of a nature-society divide and human representations of nature on the other; we should work to undo these category distinctions wherever possible. Bennett's (2010b) development of a "distributed agency" within her vital materialist framework is inspirational in that it focusses on the processes that result from a "confederation" of things, whether human or nonhuman. Similarly, for Law and Urry, "reality is a relational effect. It is produced and stabilized in interaction that is simultaneously material and social" (2004, p.395). We can become entangled in things and relations rather than focussing solely on working out their symbolic meanings (Vannini 2015).

Taken alongside critiques of positivist scientific knowledge that seeks to uncover the truth of the world out there, these theoretical insights throw the notion of research as discovery into question (Massey 2003). For if we are thoroughly a part of the world, rather than separate from it as principal powerful agents, then we must concede that any claims to knowledge we make will be relational, contingent and form one of many possible perspectives. This, as Bennett illustrates, has a humbling effect that has potential to re-work humanity's relationship with the rest of the world – and certainly re-work the way a researcher might approach a research project.

> I believe that encounters with lively matter can chasten my fantasies of human mastery, highlight the common materiality of all that is, expose a wider distribution of agency, and reshape the self and its interests.

(Bennett 2010b, p.122)

Ethically, this posthuman project can be viewed as an essential corrective to a species that has over-stepped the mark and now threatens its own existence, as well as many others: we still have much to learn and much that we may never be able to know (Yusoff 2013). Moreover, we are utterly dependant on nonhuman nature to survive and thrive on this planet (Clark 2010). Here, Thrift's framework of a posthuman geographical research ethics is helpful. In particular, Thrift points to the need to retain the messiness and wonder of the world – allowing it to test us, rather than having the aim to 'conquer' it through our expanding knowledge and power over it:

The world should be kept untidy. ... or as Keats put it 'a man [must be] capable of being in uncertainties, mysteries, doubts without any irritable reaching after fact and reason' (cited in Wagner 2001, 254)... The world should be free to teach us. ... mistakes are a part of the lesson, proof that the problem can still grip us.

(Thrift 2005, p.474)

The common idiom 'to eat humble pie', is generally a phrase used as an admission to making a mistake, that this has been recognised and, potentially, a lesson has been learnt. In light of Thrift's suggestions, humble pie can be reclaimed as a positive endorsement: having an active research problem that is being tackled with respect to the vibrancy of an unpredictable and shifting world that we are part of and are learning from. Hence humbleness resists assumptions that we can know the world. As we have seen from Chapter 2, value theory can have a similarly humbling effect, by virtue of the difficulty in coming to definitive conclusions.

3.1.1. Value, Svalbard and I

Value inquiry has loose ends. It is untidy, restless, imperfect, doubt-filled. ...value inquiry offers a model for philosophy as conduct, drawing upon our intellectual impulse to continue, and cautioning against our intellectual impulse to conclude.

(Ginsberg 2001, p.4)

The literary scholar Barbara Herrstein Smith describes value and value systems in her book *The Contingencies of Value* as "scrappy", "discordant and conflictual" (1988, p.148). George Henderson writes, "value is very difficult to think" (Henderson 2013, p.4). More generously, Michael Carolan (2013) prefers to think of value as "wild" and not easily fitting into disciplinary structures. This has certainly been my experience (see for example the Value mind map, Appendix B). I have questioned several times whether value as a concept, vague idea or amorphous construct is helpful in analysing the geographies of Svalbard. I was tempted by other bodies of more defined, more familiar or even more fashionable literatures. To focus through a narrower angled-lens could make a more coherent project (for instance, a mobilities or landscape approach would have been very workable). At the end of the project, I find I have not cast aside value; rather, I have carried it around with me the whole time, willingly or not. Working with value, struggling with it philosophically at the same time as trying to interpret what I have experienced, read and heard in and about Svalbard, has made me continue to ask different questions in different ways than I would have otherwise. When theory is 'wild' and tricky, little is certain enough to be cast out as irrelevant. This can work to urge us to continue searching for meaning: questions multiplying and new relations forming (Thrift 2004b).

However, it is at times paralysing to sustain a focused study when the matter of interest threatens to spiral out to be impossibly all-inclusive. I needed to distil a concentrate, a travel-sized, flexible way through the literature that took the most resonant of what I had read about value and allowed me to think in-situ – formulate appropriate questions to the people, places, objects and other species I was encountering. I needed to formulate a value epistemology, the summary in Figure 9 was the resulting outline that I used to think with through researching value.

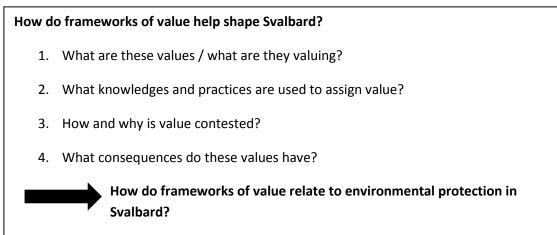
Figure 9: My epistemology of value

In this thesis I take value practices to be:

- Contingent: always reliant on the context within which they occur, place, space, time, participating actors (material, and animate).
- In process: in relation to their contingent nature, value practices are necessarily subject to continual change.
- Material: The biophysical world is embroiled in, and is affected by value practices.
- Constructed: Social norms and societal systems have a large influence on what we assume to be of value.
- Political: Value (s) of various tropes are employed within the political sphere and to political ends with attendant power relations.
- Part of everyday life: evident at all scales from personal to political and beyond human.
- Embodied: value practices encompass embodied, emotional and affective experiences.

This framework sits comfortably alongside those of hybrid, multiple, more-thanhuman and vitally material, yet simultaneously constructed ontologies discussed above. It has allowed me to develop an appropriate 'methods assemblage' that can work to investigate such value practices in Svalbard. Given the participative, open and co-productive nature of the approach I wished to follow, the research questions I used to guide the work (see Figure 10), were exactly that – a guide to prompt explorations and direct the work. I do not seek to answer these questions directly in the following chapters, but they have influenced the research throughout, with the final question being the one the thesis responds to. This narrowing of focus was not in the direction I had anticipated for the research, as discussed in Chapter I, but a result of "mediating the messiness" (Billo & Hiemstra 2013) of the field and allowing the project design and aims to be 'at risk' (see Section 3.1.3).

Figure 10: Guiding research questions



The 'outputs' from this work, the stories I generate from the materials, events and embodied encounters, I take as partial, "fragmented truth claims" in which theory, method, politics, power relations, affects and emotions are interwoven and entangled (Nagar 2014, p.11). They are grounded in a thorough empirical engagement of research practice, they can claim authenticity but certainly not reproducibility, they are one collection of many possible versions I could tell. Hence, my approach to the knowledge I have collaboratively produced can be viewed as humble, as having modest claims. My initial and ongoing engagements with resonating theoretical approaches combined with practical considerations pushed me towards a humble approach that highlighted the agency of the assembled social, political, economic and more-than-human elements I was getting myself entangled in.

3.1.2. Research practice as if place matters

Jon Anderson, Pete Adey and Paul Bevan (Anderson et al. 2010) make a strong argument for more fully considering the geography of our research practice and research methods. Place does indeed matter, and to ignore the agency it can have on our research is to perform an overly partial reflection and representation of how we practice as researchers (see also Nagar 2014 and; Noy 2011 on the importance of geographical and historical context of research praxis). Taking Anderson et al.'s summary of place that is inclusive of "unique arrangements of people, landscape, weather, buildings, animals, economies, politics, cultures and more" (2010, pp.598–599), Svalbard as the "place of interest" throughout this project has been central in the research praxis. When I imagined this field (as Massey 2003 advises), my thoughts did not turn to heroic depictions of brave, male, British polar explorers of the past, but rather to the 'exotic' natures and landscapes and how my own body might cope with them:

> I sit at my desk [in Aberystwyth], wearing my extra jumper, listening to the wind blowing around and through the building, to the dark rain, and try to convince myself I am not cold. It will get much colder in Svalbard. Trawling through images of ice, snow, glaciers and polar bears, a now-familiar chill descends. A chill that comes from imagining those icy landscapes, and a chill induced by all the doubts these landscapes spark: will I be able to cope with the cold? Will I get eaten by a polar bear? Will I be able to function as a 'good researcher' in these conditions? I turn to re-reading the safety guidelines and equipment lists, consider buying more thermals and bolster my nerves with thoughts of the women who precede me.

(Research journal, January 2013).

Svalbard has been humbling and challenging as research site. I did not have the opportunity, prior experience, position or funds to present myself as particularly important, proud or exceptional even if I had wanted to. Rather, I needed to manage my fears and funds and accept that I could have little control over the

research environment. The potential presence of polar bears and Arctic temperatures haunted me long before I arrived. The weather and seasons were a key consideration for me in timing my fieldwork, which became more complicated than deciding whether or not I wanted to challenge myself with the coldest, darkest time of year. Different people would be available according to the time of year and conditions and each season offered different restraints on mobility. On my first trip to Svalbard, I found myself at odds with the social rhythms of Longyearbyen: many residents spend most of July and August on mainland Norway, and were therefore not there. Glaciologists are very busy in their peak field season of March-May, also the peak season for snow-based tourism activities. When ice conditions are good, one can reach the Russian settlements by snowmobile in the winter and spring, but without my own snowmobile, this required taking expensive tourist excursions. Whereas in the summer, provided the ice has melted and seas are not too rough, one can take a far cheaper boat trip to Barentsburg and Pyramiden. There was therefore much anxiety in planning my fieldwork to try to maximise access to people and places whilst balancing a tight budget.

Although polar bears are exciting and charismatic novelties associated with Svalbard, the threat they pose to human life is very real. The protection measures against this threat are also drastic: carrying a high-calibre rifle and flare gun. Largely this threat was mitigated through staying within the confines of the populated settlements of Longyearbyen and Barentsburg or joining a suitably equipped and experienced group. The need to take the polar bear seriously came with a belittlement of human arrogance I was not aware I carried. To realise the ability of another species to take your life, for me caused a number of internal reconfigurations. If I was to leave town, I might need to use a weapon of violence, shoot to kill if necessary, and be able to prove that it *was* necessary to avoid being prosecuted for killing a protected species. I could accept not exploring beyond the town boundaries for the most part, yet to be so constrained grated at my spirit and restricted the potential of the research. Leading up to my second trip to Svalbard, I learned to shoot a rifle. Though carrying a gun might imply a degree of control over nature, there are no guarantees here. Moreover, for me it represented letting go of long-held principles, a reframing of priorities and a recognition that I was willing to move my own boundaries was a humbling experience. The constant awareness of constraint on mobility, the occasional check over the shoulder, wearing glasses as a safety precaution instead of an occasional visual aid and the weight of the hired rifle, were everyday reminders that our species is not fully in control. Whilst the polar bear receives disproportionate attention as a flagship for conservation and environmental change (Slocum 2004; Yusoff 2010), I take to heart the suggestion from the artwork below (Figure 11): the polar bear has power, its knowledge is valuable and on both counts, the species and an individual bear deserves respect. This sentiment struck a chord with my tentative approach and indeed the way I approached research, as an uninvited and inexperienced guest asking for guidance.

My initial attempts to "access the field" (Blix & Wettergren 2015) in Svalbard were not entirely successful. I read this now as being due to my failure to account for the particular contextual factors of Svalbard in my approach. I began preparing for fieldwork by sending emails to potential contacts I wanted to meet and possibly interview, with an aim of taking a wholly participative and coproductive approach. During my first forays, I openly invited potential participants to help shape the direction of research:

> The aim of my PhD is to explore the value systems which inform everyday life here in Svalbard. I am at the start of the project and am interested to hear about what questions you think are important for a social scientist to be asking.

> > (Extract of email sent to the Sysselmannen, June 2013)

Figure 11: 'Vis meg landet, eg fekk låna' [Show me the country I was allowed to borrow], Lithographic print by artist Olaf Storø, 6th June 2014, photograph by the author, used with permission



Some time spent in Longyearbyen library, and the response to this email alerted me to the fact that whilst UNIS did not have a social science or humanities wing, plenty of Norwegian institutions do visit and Master's level social science related research is quite common in Svalbard.²⁹ Indeed, on a number of occasions I was stymied by the volume of student requests preventing mine from getting past 'gate keepers'. One informant who *was* willing to talk to me on my first visit

²⁹ I found 22 such masters theses submitted to the University of Oslo between 1990 and 2015 for instance https://www.duo.uio.no/discover. It might be a push to say that communities in Svalbard feel "studied to death" (Routledge & Derickson 2015, p.401), but taking a long-term more holistic view inclusive of scientific research as well, there is certainly not a perceived lack of research about Svalbard in general.

caused a penny to drop, as I was struggling to explain what the project was about. He bemoaned that there was a constant trickle of journalists coming to town, all asking roughly the same questions about what it was like to live in Svalbard. He wondered how I would avoid covering the same old stories. In other words, I was far from alone in finding the combination of the Arctic wilderness and political, social and economic processes in Svalbard intriguing, and I would need to reconsider my approach to succeed in convincing people to speak to me. I also felt that given the high volume of scientific work in the area and the nature of past projects that my open, collaborative, participative invitations were quite an alien concept that was going to fall flat without a longer fieldwork period to enact. Hence, social and cultural facets of place also led me to become more humble in my conception of what could work.

In this case the 'humbling effect' resulted, ironically, in me trying to appear outwardly less so in some respects – I became more definite in my tone, bringing the most relevant and interesting elements of the research to the participant's attention and highlighting their importance to the project. I described my research more confidently.³⁰ On the whole, this self-assured style was far more successful, and I was able to maintain an openness and more participative approach during the interviews themselves (see Section 3.2). A humble geographic practice recognises the power of the researched as well as the researcher, who, especially when 'in the field' is not always the "authoritative knower" (Routledge & Derickson 2015, p.392).

The assumptions and norms of working as a scholar-activist that Routledge and Derickson advise us to challenge can equally apply more widely. Certainly I was "frequently dependent upon information, research contacts, advice, and the good graces of [my/] their collaborators, and can be positioned within [my/] their collaborators' broader strategies and agendas" (Routledge & Derickson 2015, p.401). However, after a while, I came to realise that I did not need to see myself only as a supplicant, asking for help and co-operation. I could also offer

³⁰ In both approaches participant information was sent along with the initial contact (see Appendix G).

something to participants, whether that be opportunities to share stories (sometimes providing therapy, see Bondi 2014), or opportunities for impact or engagement with an international research organisation (Aberystwyth University). Being humble does not preclude being strategic and adapting to the research context in order to be productive as a researcher.

3.1.3. Vulnerable solidarity and humble research practice? Situated solidarity appears to be a good fit with both the posthuman and place-sensitive approaches explored above. Coming from a feminist, post-colonial perspective, Richa Nagar (2014; 2016) has built on the concept of situated knowledge (Rose 1997) and worked towards encouraging "situated solidarities" to inform academics of the global North that collaborate with those less resourced in the global South. This work advocates for a "radical vulnerability" that recognises we all have relative privileges, strengths and weaknesses and we should be open to the possibility of things not going well, to failure (Nagar 2016). Many of Nagar's ideas, and Routledge and Derickson's (2015) further developments of them, can apply more generally for those seeking to produce knowledge *with* rather than *about*. This acceptance, that the researcher's perspective and knowledge is not superior or complete, adds further nuance to the idea of a humble research practice.

To these ends, I strove for empathy³¹ and openness: endeavouring to embrace embodied encounters with the material and more than human aspects of research events, being open to being affected (Bennett 2004; Latour 2004a; Lorimer 2015). I looked for opportunities to give as well as take, to develop an understanding through listening and discussion and by letting what I heard and observed effect my ongoing research. In Stengers' terminology, I aimed to be "at risk" – to let the 'researched' have opportunities to talk back to the researcher (Whatmore 2003). I aimed to develop trust in the communities through not

³¹ Although empathy has recently come under scrutiny, my intention here was not to erase difference but work with it through listening and exploring views new or opposed to my own. I found empathy, rather than "prematurely closing down research" (Watson 2009, p.114), opened it up, or at least helped to keep my own mind open.

making "too much of the structural distances" (Routledge & Derickson 2015, p.392), or indeed differences of opinion, between myself and those I was working with.³²

If successful in listening to view points from as broad a range of the Svalbard community as I could, then I assumed I was unlikely to agree with everyone: I found the continuation of coal mining and the high environmental regulation on leisure activities in the 'wilderness' areas to be irreconcilably hypocritical at the start of the project for instance. In order to reduce the bias I brought to the research, and to be open to learning about the full range of value processes occurring in Svalbard, I suppressed my environmentalist identities at certain points. An inclination to avoid arguments helped when interviewing those in the mining sector for instance, in keeping potential environmentalist outbursts in check and allowing me to explore participant views with further questions.

Through an empathetic engagement I found that a kind of solidarity developed alongside an affinity for Svalbard and its communities, I had learnt, informally, how to "be affected" (Lorimer 2015) by this place and had developed my own strain of the 'Svalbard Bug' (see Chapter 5). This solidarity also perhaps resulted in a collectively shared dream (Nagar 2016) – to 'save Svalbard'. We might not agree what exactly that means, how it should be done, what version should be saved, or for what reasons. Yet, where present, this shared understanding and trust enabled me, as Nagar (2016) suggests, to cross ideological and political borders and to ask, politely and gently, the harder questions. Here a humble approach meant swallowing my own perspectives and being open to and aware of my ignorance and unimportance. It should be noted that this was also a somewhat strategic move in order to facilitate what I judged to be successful interviews.³³

³²I could find myself just as often on more vulnerable ground than in a more powerful position relative to participants.

³³ This was not part of some devious plan to extract information, more a combination of my own personality traits and experience in having controversial opinions.

A part of being at risk also takes on board the opportunities that researching through and with our bodies opens up the potential for "being moved" (Routledge & Derickson 2015); and the potential political effects this has in how we might "configure different worlds" (Dewsbury 2010, p.324). Being vulnerable to the world brings into conversation perspectives from participatory, feminist and nonrepresentational, performative research. For example, Vannini's (2015) review of nonrepresentational ethnography highlights experimental, creative and personal approaches taken to reporting experiences. Similarly, Mason (2015) points out a feminist ethics of care has the potential to be methodologically inspirational and ties into geographic directions that are concerned with the embodied, emotional and affectual elements of doing research. The ambitions of co-production not only speak to ethical concerns and advocate participatory approaches, but also offer an alternative to "realist ideology that persistently separates the domains of nature, facts, objectivity, reason and policy from those of culture, values, subjectivity, emotion and politics" (Jasanoff 2004, p.3).

Vulnerability cannot be willed, chosen, cultivated, or honed and neither, therefore, does it necessarily or even primarily denote a weakness or a misfortune; rather, it describes the inherent and continuous susceptibility of corporeal life to the unchosen and the unforeseen – its inherent openness to what exceeds its abilities to contain and absorb.

(Harrison 2008, p.427)

Being vulnerable, as Paul Harrison points out, is in general seen as a weakness, a lack of capacity, an "unpower" (Harrison 2008, p.427), it is a humbling of the self, which, like being humble, can be an asset to explorative work. In does however come with plenty of negative connotations. Certainly, a conventional academic institutional approach is to minimise potential risks to the researcher, and despite the above discussion, I also took this seriously with a view to self-preservation through engaging with risk assessments and associated action plans.³⁴

³⁴ See Appendix H for an example risk assessment form.

Surprises were inevitable. Though I was committed to open, radically vulnerable and humble research, I do not wish to overly romanticise this approach; to do so would be antithetical and push under the carpet the realities of doing such research. I share here one experience as an example of how vulnerability and risk can be challenging:

> SS: How long have you been working in Svalbard? Interpreter: He says you have very beautiful eyes. [laughs] (Interview 35, 15th June 2014)

My friend and interpreter quickly put us back on track and (I think) explained I am married. However, it was a jolting reminder as to my potentially vulnerable position as a lone, female researcher (although my rifle was in the corner, such a device is practically impotent in such a situation). Moreover, that humble, ordinary and unimportant is not always equated with low-risk. At this point I recalled a suggestion that sitting in bars and cafes might expose me to a good deal of research encounters and contacts. I quickly decided that was not the route for me, being quite shy at starting up conversations with strangers, as well as worrying about unwelcome advances. I actively planned out some elements of vulnerability from my research. However, it was not only an issue of gender or shyness that held me back from this approach. I preferred a more purposive and strategic recruitment on the whole and to limit ethical dilemmas that could arise from more casual research encounters.

3.2. Messy Methods Assemble

Though perhaps this [John Law's messy 'methods assemblage'] was becoming a convenient excuse for messy thinking, I was perplexed that all the complicated thoughts and 'head mess', when straightened out and tidied up, boiled down to a simple list of the normal [methods].

(Author's blog post, 11th June 2014³⁵)

³⁵ '11th June: Messy Methodologies', Cold Edged Geography <u>http://samsaville.weebly.com/blog/11th-june-messy-methodologies</u>

A neat version of my research encounters for this project can indeed be reduced to a list of mostly standard qualitative methods in social science research: focus groups (2), semi-structured interviews (71), questionnaires (55), participant observation, field and research diaries³⁶, photographs (~5000) and documentary evidence collected between September 2012 and June 2016. More detail is provided through a time-line as shown in Table 1.

This list and timeline are accurate, but, as I noted in my blog, much is left out of such an account. In this section I am concerned not solely with a discussion and justification of the specific methods I employed, though this does follow as an imperative part of reflexive and thorough research practice. More specifically, I provide insights into the ways these methods were put to work, and the processes, decisions and practices I was entangled in whilst generating and gathering materials. In doing so I attempt to open out the 'hinterland' of these methods, whilst recognising this can only be a partial and incomplete project:

Hinterland ramifies out forever... Going beyond laboratory benches, reagents and experimental animals, or questionnaire, interview design protocols, and statistical or qualitative dataanalysis packages it extends into tacit knowledge, computer software, language skills, management capacities, transport and communication systems, salary scales, flows of finance, the priorities of funding bodies, and overtly political and economic agendas.

(Law 2004, pp.40-41)

I associate my approach with Law's concept of a method assemblage in that it brings to attention the complex weaving, evolving, relations and practices that make up a collection of techniques, encounters and events of 'method' (Law 2004; Pryke et al. 2003). A method assemblage also fits well with the ontological and epistemological approach outlined above both through its inclusion of presences and absences, the production of representations and more-than-representational knowledges.

³⁶ I have kept an ongoing general research diary from the outset of the project and 'field diaries' which are more specifically about research events and generating materials.

Table 1: Fieldwork - summary timeline

Date (s)	Research activity	Notes
24 th April & 30 th April 2013	Focus Groups – Memories of Svalbard	See section 3.2
21 st June – 11 th July 2013	Pilot Field Trip to Svalbard	Included tourist day trip to Barentsburg, pilot interviews in Longyearbyen
2 – 9 th July 2013	Field Camp in Petuniabukta with students of KTH (Stockholm Royal Institute of Technology)/ Illinois University field course: Environment and Society in a changing Arctic	Participant observation, auto-ethnography, visit, guided tours and group interview in Pyramiden, memory bag ³⁷
October 2013 – May 2014	Beginners Russian Classes	Levels 1 and 2 of Aberystwyth Lifelong Learning courses.
October 2013 – May 2014	Temporary membership and attendance of Aberystwyth Rifle and Pistol Club	Learning to load, aim and fire rifles.
January – May 2014	Conversation 1-1s and individual study of Norwegian	
4 th March 2014	Field Trip to Ffos-y-Fran	Open cast coal mine in South Wales
10 th May – 8 th July 2014	Main field trip to Svalbard	
	Interviews 1-63	See section 3.2.3
18 th May 2014	Tourist trip – dog-sledding	Part of a guided trip
22 nd – 23 rd May 2014	Visit to Mine 5 and rifle range	Personal trips with hired rifle
24 th May 2014	Tourist trip – glacier walk and ice caving	Part of a guided trip
1 st June 2014 – March 2015	Qualitative tourist survey	See section 3.2.5
6 th June 2014	Participant observation of snow sampling	See Chapter 5 for an account of this.
12 th June 2014	Tour of Svalbard Global Seed Vault	Joining a tour for plant breeding and seed companies

³⁷ I asked the students to leave anonymous reflections about their experiences in a 'memory bag' during the trip. I collected reflections from the Pyramiden Photography Group in a similar manner.

14 th – 16 th June 2014	Pyramiden visit	The transport there and first day and a half were spent as part of a fieldtrip for Longyearbyen Fotoklub. Participant observation, photography, interviews.
20 th – 21 st June 2014	Working (paid) as assistant tourist guide for cruise tourists	Walking and fossil hunting tour on Longyearbreen glacier
29 th June – 2 nd July 2014	Barentsburg visit	Half day spent observing and participating in geo-fluvial research on Grønfjorden, interviews, participant observation, photography
7 th – 8 th October 2014	Tour of Kirkenes Iron Ore mine (Northern Norway) and associated talks	As part of Barents Institute (University of the Arctic) 2014 Thorvald Stoltenberg Conference, Mining the Arctic: sustainable communities, economies, and governance?
11 th – 25 th February 2015	Follow-up trip to Svalbard	
,	Interviews 64-71	See section 3.2.3
18 th February 2015	Tourist trip – snow mobile tour to Elveneset	Part of a guided trip
24 th February 2015	Snowmobile trip to Colesbukta	Privately arranged guided trip
5-18 th June 2015	Institutional Visit to Norwegian University of Science and Technology (NTNU)	Including attendance and participant in the Nordic Environmental Social Science Conference
19 th – 20 th June 2015	Field trip to Oslo	Including visit to the Fram Museum

Law challenges social scientists to "live more in and through slow method, or vulnerable method, or quiet method. Multiple method. Modest method. Uncertain method. Diverse method" (Law 2004, p.11). This clearly fits well with my ideas on a humble research practice. It also explains my mild perplexity at the largely standard set of social science tools I employed in this practice, for all the influence and excitement of calls to diversify and experiment (Buller 2015a; Crang 2003; Latham 2003; Vannini 2015). However, within 'standard' methods there is scope for innovation in how they are used, with what intention for 'interference', within what ontological and epistemological frameworks they are interpreted and how this is then presented (Davies & Dwyer 2007; Dewsbury 2010; Dowling et al. 2015; Vannini 2015). Moreover, there are good reasons that some methods endure, for instance interviews, which remain a "vital and vibrant research method" for generating rich and politically important material (DeLyser & Sui 2014, p.295 see also; Merriman 2014 for further arguments in support of critical methods assessments and the value of 'conventional' methods). Below, I discuss in more detail the main research encounters and methods I employed in gathering my materials, starting with my overall approach.

3.2.1. Hanging Around and Tagging Along

My broad ethnographic intent was to experience and understand 'life in Svalbard' from different perspectives alongside the research questions of what and how value was at work.³⁸ Beyond the interviews, specific tourist trips and outings with scientists (as recorded in Table 1), there were many informal conversations, and much time spent with acquaintances and friends at student gatherings, social and public events. All of these have contributed to my overall impressions, added to the voices of other participants and affected the subsequent analysis and writing of the research. In this, my humble and vulnerable research practice led me to be open to, and pro-active in creating as many opportunities to gain different perspectives as I could practically fit in to

³⁸ Here I identify with the loose definitions of ethnographic work that abound in geography (for example, Crang & Cook 2007), rather than the more closely defined versions found in social science and anthropological texts.

my field visits to Svalbard and beyond.³⁹ I do not make claims to have performed a 'proper' ethnography. As Wogan (2004) warns: it is difficult to get past one's own perspective when one has not had the time or resources for a "deephanging out".⁴⁰ However, whilst a deeper, longer engagement with Svalbard would no doubt have provided more nuanced and different insights, the knowledge produced would always be intersubjective – a relationship between the researcher, place, participants and the wider global relationships we are all tangled up in (Crang & Cook 2007).

Throughout the research trips I kept field diaries, written at the earliest possible point after the event, a mixture of descriptive and reflective comments on my experiences. I also wrote blog posts, which served as a half-way house between the 'raw material' and more processed, polished reflections. Although this was not a straight forward, linear process, the blog posts provided extra incentive and impetus to reflect and work through my experiences and then select material that would be appropriate to make public.

3.2.2. Focus groups

As it became clear field visits were going to be trickier than anticipated (see Section 3.1), I decided that I should make the most of research opportunities in Aberystwyth. A sizeable number of people in the area have been to Svalbard for research, study or as tourists. For example, each year a small number of glaciology and physics students spend up to 6 months in Svalbard as part of their course.

Focus groups could provide a research event that enabled a sharing of knowledge between participants and myself – allowing both their relative expertise and my curiosity to guide questions to each other (Bryman 2012). I focussed the discussion around memories of Svalbard and paid particular attention to how Svalbard was represented in these group contexts. In other

³⁹ Limitations were not only time, but also funds, equipment, access to and knowledge of opportunities. There are very few insights from people who work as coal miners, or from the significant Thai population in Longyearbyen.

⁴⁰ My field visits to Svalbard, as shown in Table 1, comprised of a 3 week trip in the summer of 2013, a two month trip in summer 2014 and a 2 week trip in the winter of 2015.

words, I tried to access "the multiple meanings that people attribute to relationships and places" (Bosco & Herman 2010, p.193). In the focus groups, I explored how personal experiences, emotions, identity, landscape and memories are interwoven and related (Jones & Garde-Hansen 2012). By doing so, I hoped to gain some insights into how Svalbard is valued by such visitors and how this is reproduced across time and space.

People who had been to Svalbard were invited via the university-wide weekly email to focus groups to share their experiences. This resulted in 2 focus groups of 5 and 4 participants. Each group included students who had been to Svalbard for a number of months and people who had been to Svalbard as a tourist, some very recently, some 10 years ago. Participants were encouraged to bring along souvenirs, photographs and other objects to help them talk about and remember their experiences. We also explored focus group themes through drawing sketches contrasting public perceptions and personal experiences of Svalbard (see the focus group guide in Appendix D).

This was inspired by Ricouer's description of reminiscing: "making the past live again by evoking it together with others, each helping the other to remember shared events or knowledge, the memories of one person serving as a reminder for the memories of another" (Ricoeur 2004, p.38). Ricoeur goes on to say that "external points of reference, material items, things" (ibid. p38), can aid this reminiscing. I was also encouraged to experiment by developments in creative methods in geography and other social sciences (Gauntlett & Holzwarth 2006; Hawkins 2015).⁴¹ The materials generated from the focus groups do not make many overt appearances in the thesis as the focus closed in on heritage and protection. However, the insights gained played a significant role in bringing my awareness to the importance of identity, emotional and affectual experiences and the power of material things in relation to these experiences (see Chapter 5

⁴¹ I also attended the following workshop which further encouraged me to experiment: Geographic visualisation: photography, graphics and comic books for learning and teaching. Northumbria University, UK, 21st March 2013, Higher Education Academy Geography, Environment and Earth Sciences Workshop.

and Section 3.3). This awareness was reflected in subsequent research events and practices through interview questions and ethnographic practice.

3.2.3. Interviews

Interviews can produce insights through after-the-event reflections and prove to be very adept at meeting research objectives through their findings (Hitchings 2012). In my case, they were an efficient way of gaining understanding of not just everyday value practices but the wider personal, political, economic, social, cultural and environmental context in which they are set and operate within. As an 'outsider' with a commitment to participative work, it seemed a given that my research would involve talking with and listening to people. Given the practical time and place restraints discussed in the previous section, interviews offered a relatively easy-to-organise, flexible research event that could be attractive to participants and was easy to explain (Bryman 2012).

As simple and common place as interviews can sound within social research, there is infinite variety within an interview experience which is largely kept out of sight and mind once the work is done. The basic format of the interviews are easily described: they were between 15 minutes and 3 hours long, in person, recorded as audio files with my phone⁴² and conducted in English, with an interpreter when needed⁴³. Interviews took place in pubs and parties, studios, offices, cafes, libraries, shopping centres and on my sofa. The setting, atmosphere, proximate people and possible performances can make significant differences in what is said and how people talk to a researcher (Anderson et al. 2010). Yet, this aspect was governed by my acute awareness that in research that promises little in return for participants, the researcher can at least offer a comfortable place to meet. Each interview followed an initial structure of

⁴² Excluding interview 41– in this case the participant was not happy with a recording being taken and responses were typed in situ during the interview. Interview 17 was via Skype video call after having previously met in person.

⁴³ Four interviews (35, 55, 58 and 60) were conducted with the help of English-Russian-English interpretation. This was through informal interpreters who I enlisted whilst in Barentsburg or Pyramiden, having been unable to recruit professional or official services. There is no doubt that the use of an interpreter changed the research encounter significantly and that the interpreters played an important, non-passive role that should be acknowledged and further-examined (Temple & Edwards 2002; Williamson et al. 2011), however given their minimal use, I have not dedicated space to this issue.

questions that were designed to create a measure of trust by establishing a shared contextual back story through 'easy openers' that could illicit narrative responses (see Appendix A for an example interview guide). These were usually followed by questions tailored to and prepared in advance for the specific interview. A conversational, semi-structured approach was taken throughout allowing for tangents, follow-ups and improvisation as needed.

The recruitment strategy was a mixture of purposive and snowballing. I tended to make initial contact via email or telephone following prior research or tip-offs suggesting someone could offer interesting and relevant perspectives. In most cases I asked interviewees who they recommended I spoke to next and also made a note of interesting 'leads' during the conversations, hence research encounters 'snowballed'. This was supplemented by open calls on social media, with the aid of my blog, which could provide a deeper picture of what the research was about. Overall this 'worked' and interviews were mostly an enjoyable process. However, there are a small number of interviews I would categorise as relative 'failures'⁴⁴, largely as a result of a lack of connection between myself and the interviewee, an example of which is reflected on below.

Thankfully the interview did not last long – just over 20 minutes. We covered all my planned questions and it seemed cruel to try and stretch it out. He seemed incredibly nervous and used snus⁴⁵ or smoked the whole way through as well as having a smoking break outside halfway (which in turn put me on edge). His responses were mainly short, but portrayed a fresh perspective: he doesn't seem that keen on Svalbard life, 'the nature' despite having lived here more than 15 years. It was a shame he found it so taxing to speak to me and that I failed to put him at ease (even in his own home). Maybe he wasn't confident with his English, and was worried about the recording. One of the more substantial points he made was after I turned the recording app off.

(Research diary, 17th June 2014)

⁴⁴ Nairn et al (2005) work to trouble the notion of failure in this context and argue for the need to reflect on and analyse such situations fully to learn from them as part of "uncomfortable reflexivity" (Pillow 2003). Rose (1997) also reflects on the limits of and importance of such reflections prompted by a 'failure'.

⁴⁵ Snus is a form of tobacco product popular in Norway and Sweden – small pouches or rolled cylinders are placed under the upper lip.

The example brings some limitations to the fore. Firstly, conducting interviews in a second language is certainly not ideal. Secondly, this situation could have arisen due to the nature of this interviewee's recruitment to the project: through a personal recommendation from a friend. He may have agreed to the interview out of obligation to his friend rather than being interested in talking with me. Whilst I sought to engage with those in positions of power and responsibility relevant to evaluative practices, I also sought to contextualise this through engaging with people and places that might have seemed less 'relevant'. I was reliant on who was willing to work with me, who I could contact and where I could safely access. This resulted in a mixture of chance meetings and carefully reasoned decisions.

> I am feeling the benefits of interviewing people in relevant sounding jobs in combination with more 'random' people. Everyone is quite connected and has some sort of take on the issues going on. Some are involved in boards, committees, associations etc outside of their jobs. Those in 'relevant' jobs sometimes hold things back, so talking to those with less to lose from telling me stuff helps fill in the gaps or gives insights as to what kind of questions to ask next time.

> > (Research Diary, 1st June 2014)

The above diary extract touches on a number of potential limitations and further considerations to interviews as a research method in this context, my approach and the performativity involved in such research encounters. Throughout my analysis, interpretation and writing the issue of categorisation has been an ongoing ethical consideration. It is usual and useful to the reader to have an idea of the role or context of the interviewee whose speech is represented, without this context, participants can become detached from their historical and geographical identities (Tilley & Woodthorpe 2011). However, the idea of categorising participants by job role is questionable, for this fails to acknowledge the wider knowledges, experiences and identities that participants have. For example, as discussed in Section 3.3, how long someone has been in Svalbard can have a significant effect on their perspective.

Participants drew on a mixture of personal, professional, historical and present situations in our conversations. Moreover, there were very real concerns voiced regarding anonymity. Many participants were sure to check that their identity would be kept confidential. Anonymity was important ethically – to reduce the risk of harm; and also to provide possibilities for more empowering and "truthful" conversations (Vainio 2013). When it came to re-presenting the gathered materials I needed to give this further thought. In small communities such as in Svalbard, divulging even a vague job title would be enough to identify a participant to those within or familiar with the communities.

Ethics stretch beyond doing the research to writing it up. I have ensured there is a context to situate the material I have used from interviews whilst being careful to uphold anonymity as best I can. The descriptors have been assigned to be appropriate to the context within the thesis and the original interviews. Hence, one participant's words may appear at different points in the thesis under different descriptors – as an example of a particular economic sector, as a participant in a particular process or in a more personal capacity as a resident or visitor. A list of interviews can be found in Appendix C, with identifying information kept to a minimum.⁴⁶

Returning to the diary extract above, taking what people tell you in an interview at face value can be problematic. There are multiple possible meanings and interpretations possible (Rose 1997) and meaning in what is left unsaid, speech is multi-layered (Bryman 2012; Nairn et al. 2005; Wiles et al. 2005). Liz Bondi brings out these issues in reflecting on the emotional and embodied experiences of interviews, observing that "we always say more than we (consciously) mean, or that there is always an "excess", which is often affectively freighted. ... the unconscious communication of more-than-conscious meanings" (Bondi 2014, p.47). Hence, it was important to be attentive to and keep notes on the wider experience of the interview to incorporate when analysing interview research events (as I did within my research diaries).

⁴⁶ Further details can be requested from the author. Requests will be assessed in relation to risks to participants.

My diary extract also reveals my desire as a researcher to try to get to the bottom of things, and to succeed in asking the right questions. Had I failed at a humble geographic practice then? Possibly. Yet, I did not develop a sense that there were essential truths to discover. I had grown fascinated with the multiple unravelling of stories and collecting of fragments as well as the micro-geo and personal politics of who would talk to me and what they were willing to say.

3.2.4. Photography

What's the point of going to the ends of the earth if you don't have the pictures to prove it?

(Polar Cruises 2016)

Photography is a practice caught up in value in Svalbard. It is a popular hobby with residents.⁴⁷ Many tourists are on photography-centred holidays, and 'regular' tourists also engage with photography. Whilst I failed to follow the ubiquitous advice on camera purchasing and practicing, having borrowed department equipment, photography nevertheless became somewhat of a Svalbard hobby and research practice for me too. The photographs I produced whilst in Svalbard and Norway have several roles and were taken with multiple intentions. The focus group discussions suggested that visual imagery could be particularly helpful in a place frequently referred to as "hard to describe". Hence, one function of the photographs was as documentation – to record and act as aide memoires, or mnemotechnical devices to hang stories from (Crang 1997). This supplemented my field notes, and helped represent the places I was studying in academic and public presentations (Banks 2001; Hall 2009; Pink 2007). Some images are included in the thesis for these purposes.

Many images were taken through a 'value lens', they capture moments in my thought processes and working ideas on visual cues and traces of value practices and frameworks. Figure 12 is one example. I have several shots of this juxtaposition between the smoke stack of the power station and the elephant mural. It seemed a visual gift that illustrated the reticence of many people to

⁴⁷ There are over 70 members of the local photography group who run regular trips, workshops, exhibitions and produce an annual calendar for sale.

talk of a future beyond coal, it was the "elephant in the room", as one participant agreed (Interview 15, 28th May 2014), the rosy picture of community life which ignored the environmental disaster of the coal industry. It was not until my final trip that I realised the elephant mural was actually painted onto the side of a Kindergarten building (nursery), somewhere I really should not have been taking photographs if I did not want to be caught up in local concerns over inappropriate touristic practices.

Figure 12: Visual value tensions, Longyearbyen June 2013



The practice of producing near-daily blog posts from 'the field' was centred on images from the beginning.⁴⁸ This meant I was evaluating my collections of images on a regular basis, thinking about what research audiences might want to see, as well as what I could and wanted to show them. This was not always a one-way process – audiences (mainly friends or colleagues) would sometimes interact with them via social media. It was another factor that shaped my photographic practices, which shifted between being speculative, impulsive, whimsical, and strategic or focussed on accumulation and documentation.

As Crang notes, "academia and photography do not walk innocently in the world" (1997, p.368). The powerful potential of photographic representation in the Arctic has been an important consideration throughout. As discussed in Chapter 1, Arctic landscapes have frequently been represented as empty, blank canvasses, feminised and seen as sublime landscapes requiring a masculine, adventurous hero to conquer, colonise and consume them (Bloom 1993; Dittmer et al. 2011; Fielding 1998; Lien 2011; Mitchell 2003; Rosner 2009; Weisburger 2011). More recently, images of the Arctic that portray a pristine wilderness are frequently enlisted in environmental campaign material. I aimed to challenge these typical representations through an everyday engagement, a focus on the more mundane urban areas and by thinking with value. I have not entirely avoided producing inevitably 'traditional' representations as well, but pay attention to the experience of making them through my notes and subsequent reflections. As Wells observes, popular notions of the picturesque and sublime remain popular if

Blue skies and bright snow *do* render mountains picturesque, whiteouts *actually* suggest a painterly sublime. Ideological discourses selectively crystallise certain imagery, but such images can only capture popular imagination if there is some basis in reality.

(Wells 2011, p.216, original emphasis)

⁴⁸ The first of such posts is available here, the not-quite-daily collection runs from 12th May to 8th July 2014. <u>http://samsaville.weebly.com/blog/svalbard-jeg-er-her-igjen</u>

Focus group participants discussed how photographs helped recall not only what was visually present in the photograph, but the context, emotions, experiences of what was happening outside the frame and behind the lens when it was taken, "moments of imaginative contact" (Crang 2010b, p.220). Vision and photography is performative, something we do that interacts with our other senses and can invoke conversations (Crang 2010b; Hunt 2014; Pink 2007). As Mike Crang (2010b) and Mia Hunt (2014) discuss, we can go far beyond the traditional, and heavily critiqued notion of visual material as objective, realist representations that neglect to critically assess the context in which photographs are produced and consumed (See Banks 2001; Crang & Cook 2007; G. Rose 2016; Pink 2007; Wylie 2007 for other examples of such critiques). Hunt conceptualises photographic practice as a meld of working with the technologies of photographic equipment "in a spirit of collaboration with place", which can "capture the more intangible aspects of urban space" (2014, p.152). Some images perform this role in the following chapters, contributing to the communication of the wider performative, affectual and emotional experiences of the research events.

In contrast to many assumptions in visual anthropology and other social sciences, I avoided photographing people. Given the above concerns about anonymity, identifiable images would pose too many ethical problems.⁴⁹ Instead, I focussed on the material landscape of Svalbard: things, processes and more than human life and used photography as a way to heighten my attention to not only the visual but developing "sensory attentiveness to nonhuman forces operating outside and inside the human body" (Bennett 2010b, p.xiv). As Hunt (2014) suggests, the practice of producing images can bring to the fore the agency of matter and place, to re-assess the value of mundane spaces and things through the body. As a novice photographer, experiencing place with and through this technology was at times strange and all-consuming when it became

⁴⁹ I do nonetheless have photographs that include people, taken when the observed cultural interactions suggested this would be appropriate – either if photographs were requested, being part of a photography group, on a tourist or student trip where photography was ubiquitous and in public places were subjects would not be easily identified. These limitations do jar with my aim to disrupt traditional, unpeopled notions of the Arctic however.

a central focus.⁵⁰ At others times it inspired me to take more notice of sensations I was not able to capture in this way, either through my field notes or through occasional audio or video recordings.

> I have felt more and more weird walking round with a camera given the increased number of tourists around, and my emerging identity as some sort of 'non-tourist'... I went out especially for you this cloudy evening and tried to look as casual and local as possible with my camera (probably a fail on that count!).

> > (Author's blog post, 5th July 2014⁵¹)

The role of photography shifted with my identity and the seasons during the course of my fieldwork research. At times the camera was an expected accessory for a researcher to carry and make use of, at others it marked me as a non-local (although photography is popular in Svalbard). It could provide a way-in to research encounters such as the Photography Club trip, or seem inappropriate, when guiding tourists for example. I paid far less attention to these issues on my shorter trips where I was more accepting of my touristic identity and more concerned with trying to operate borrowed equipment in unfamiliar light conditions.

3.2.5. Questionnaire

To expand my understandings of tourist and visitor experiences of Svalbard from informal conversations, I ran a short, qualitative questionnaire (See Appendix E). The aim was to investigate value from tourists view points by focussing on motivations for visiting Svalbard and impressions. I also wanted to offer something back to the tourist board that had been helpful in my work: the questionnaire was designed in collaboration with Visit Svalbard⁵²and we shared the results of our respective tourist surveys. The survey was available in hard

⁵⁰ I discuss this in reflections on a trip with the Longyearbyen Fotoklubb, '14th -16th June – Photography in Pyramiden, Cold Edged Geography <u>http://samsaville.weebly.com/blog/14-16th-june-photography-in-pyramiden</u>

⁵¹ '5th July – The hills are alive', Cold Edged Geography: <u>http://samsaville.weebly.com/blog/5th-july-the-hills-are-alive</u>

⁵² Visit Svalbard requested the inclusion of question 7, "To what extent do you consider Longyearbyen and Svalbard as eco-friendly, sustainable destinations?" This was a welcome and interesting addition.

copy at collaborating tourist venues (mainly hotels and hostels) for one month during my 2014 trip and online until February 2015. In addition, I advertised the survey on social media and notice boards with a QR code to connect with the online version. This data has been useful for corroborating and comparing (Bryman 2006) previous research into tourism in Svalbard and informing discussions on wilderness and cultural heritage in Chapter 4. It was also another channel for recruiting people interested in being interviewed.

3.2.6. Coding

Having gathered and reflected on a large set of materials, these were then interpreted and analysed in the following ways. Interviews and focus groups were logged in a spreadsheet and initially coded as an entire source according to the themes and issues that were most prevalent. Interviews were fully transcribed and subsequently coded using the Computer Assisted Qualitative Data Analysis Software, Nvivo, to assign themes. Largely a thematic approach was taken, but I also incorporated descriptive, values, and invivo coding, where phrases coded appear in the transcripts (Saldana 2009). This was an iterative process informed by the guiding research questions, research notes, my theoretical, personal interests as well as the emotional and visceral affect the audio and then textual material had as I was working with it. The coding framework expanded and evolved as the transcription proceeded and each transcript was worked through at least twice to reflect new coding categories. The spreadsheet of questionnaire results was also coded according to the same themes.

The final coding schedule is shown in Appendix F, along with a brief description of the code. It reflects periods of intense immersion in the gathered materials through which the stand-out 'moments' (see Section 3.4), themes and stories emerged. During writing, I used the query and search functions of Nvivo on the full 'dataset' to test my ongoing assumptions and directions of interpretation. I collated all coded materials related to the key themes and systematically sifted through their entire range. Here I aimed to give a level playing field to the different perspectives and voices I had collected and ensure it was not only the more memorable characters and phrases that were selected for inclusion. I then 'shuttled' back and forth from extracts to the full transcripts to check for consistency with the wider context of the quote and sometimes re-listening to the audio files to pay more attention to the narrative elements of the conversation checking for tone and emphasis.

3.3. Multiple and shifting identities: tourist, researcher, visitor

Making sense of the data also meant taking stock of my multiple and shifting identities before, during and after the research. Discussing my role and position within the research is not merely an exercise in reflexivity for the sake of it (Lynch 2000), nor does it offer a way to solve the 'problem' of representing others through being honest or transparent about the ways in which the research was done (Nagar 2014; Probst 2015). As Rose (1997) argues, such a transparency, if it were possible, goes against the intentions of acknowledging the complex, shifting and relational nature of knowledge production where, "researcher, researched and research make each other" (Rose 1997, p.316). Rather, I seek to situate the knowledge produced in this thesis, the power relations, ethical considerations and agencies of others entangled within it, to "enhance the research endeavour" (Probst 2015, p.46), to further illuminate the hinterland of the research and to disrupt the notion of the researcher as fixed or infallible. This further elucidates the idea of a humble research practice that is willing to concede to being human. Following Moser, I take on board the suggestion that personality can have just as much effect on the research process as social categories such as class, gender, nationality and so on:

> Just as scholars have argued against the researcher as a neutral, detached observer in favour of a situated person who brings his or her own individual biographies, so too do we bring different internal qualities and various emotional abilities to our fieldwork that have an impact on the knowledges we create. While our understanding of our personality will always be partial, our personalities and emotional abilities need not be viewed as unknowable, infinitely relativistic terrain.

> > (Moser 2008, p.390)

Section 3.3.1 starts with a discussion around the differences and similarities between tourists and researchers in Svalbard related to my multiple senses of identity on my first trip to Svalbard. I reflect on the value of the different knowledges associated with these two roles, the value frameworks associated and the differences created by embedded institutional categories of identity. I then proceed by journeying along the timeline presented in Table 1 noting poignant 'moments' of the research that highlight notable junctures where identities, positions and personalities came to the fore.

3.3.1. Beginning

It is a not uninformative conceit to play with the scandalous suggestion that ethnographer and tourist are, if not the same creature then the same species and are part of the same continuum – that homo academicus might be uncomfortably closely related to that embarrassing relative turistas vulgaris.

(Crang 2011, 207)

Here I explore Crang's suggestion by examining my experiences, as tourist and researcher, finding both traction with, and resistance to, the notion of common ground between tourist and researcher. Reflecting further on my initial anxieties about the cold, polar bears and my abilities as a researcher (see Section 3.1.2), to some extent I was enacting my perceived role as a dutiful researcher. However, I was also excited. Scared yes, but also thrilled at the prospect of the 'adventure' that lay ahead. The films, photographs, novels, academic descriptions, enthusiastic colleagues and analysis I was engaging with all fed this growing enchantment. For me, this is a guilty confession. I was at risk of being carried along with the historic tide of the discipline, getting caught up in the role of geographic explorer and British amateur polar hero (Baigent 2010). That this project would involve *flying* to Svalbard was also serious consideration; I did not take the decision to make this journey lightly. I had left a job working for an environmental education charity and had boycotted flying for the past seven years as one way to reduce my carbon footprint. Climate change has formed a key part of an intellectual journey which filters my relationship with my environment. A field trip to the Arctic, where climate change is happening most

conspicuously (Hassol 2004) meant both engaging with and avoiding academic and public debates linked to this region. A humbling of my own moral practice.

In this reflection already there is some common ground: for unless a hardened, repeat visitor, researchers and tourists alike are likely to share this anticipatory excitement and perhaps, anxiety. There has also been some evidence to support the idea of tourists visiting the Arctic before climate change renders it too late to witness glaciers and polar bears for example – "last chance tourism" (Lemelin et al. 2010). Conversely, speaking with tourists and tourist operators, my own tourist survey and previous research (Johnston et al. 2012; Kelman et al. 2012) indicates that this is not a key driver in Svalbard.⁵³

There is, however, a clear identity hierarchy in Svalbard. Natural scientists operate with high budgets, enjoy a relatively prestigious position in the public consciousness and have social power. Examples of the separation of and inequalities between the practices of science and tourism abound. These differences manifest politically and geographically within discussion over the management zones, regulations and their exceptions (as discussed in Chapter 6). In general, scientific knowledge is seen as valuable and researchers can access a larger area of Svalbard than is available to tourists. Tourists are often seen as a nuisance by residents, yet are acknowledged as a source of important revenue and employment. As a social scientist, ethnographer, anthropologist or human geographer ⁵⁴, I often found myself in the middle of this hierarchy, sometimes granted elevation to speak and work with researchers and scientists, sometimes happy to be a tourist, and other times frustrated with the limits this could impose.

As participants in my focus groups described, and I subsequently experienced, tourists are generally more restricted in terms of movement outside of Longyearbyen or Barentsburg: the majority will (quite sensibly) rely on

⁵³ The small number of people I met in Svalbard with concerns and values similar to my own were outside the social norms of researcher, resident or tourist identities.

⁵⁴ It became clear early on that human geography did not translate well, as is not unheard of in Anglophone public discussions. Hence, I mainly described what I was doing as "like anthropology", which was well understood, as opposed to 'social science', which was sometimes equated with psychology.

organized tours for polar bear protection and essential local knowledge of the terrain.

I think if you're a tourist you're quite restricted. You can't get out of the town by yourself, you have to go with someone with a gun, you have to pay someone for this that and the other. If you live here, you've got your own rifle and you know how to use it, it's a lot of freedom; you can do whatever you like.

(Focus Group 1, 24th April 2013)

For residents and visitors alike, how long you have been in Svalbard is often the ultimate expression of social capital, closely followed perhaps by the extent of your adventures (Eliassen 2009). From this perspective, it is easy to relate my initial struggles to garner participants and interest in my project on my first visit. Therefore joining the study group in Petuniabukta (see Table 1) was not only a fantastic ethnographic opportunity and a way to get around the logistics of transport and polar bear protection. It was also a relief to find myself within the student group who, like myself, saw themselves as part tourist, part researcher, part student, with the activities and practices they engaged with fitting all of those 'categories', often simultaneously.

Despite the hierarchy described above, shared experiences between the tourist and research visitor to Svalbard are possible. Arvid Viken, a long term researcher and consultant on tourism in Svalbard outlines how these groups share similar transport, logistics and services in Svalbard (Viken 2011). Our large educational group certainly made use of tourist transport infrastructure and research institution equipment – demonstrating the kind of symbiotic relationships between sectors Viken describes.

There are also similarities in tourist and researcher *motivations* in coming to Svalbard. All share, to some degree, a romantic affinity with the character of the modern explorer, seeking to satisfy curiosity, exchange the routines of everyday life for risky adventures, and in the process test their character (Driver 2010). The touristic and scientific 'gazes' overlap and fall on similar features and objects: glaciers, cultural heritage, the Aurora and midnight sun, the (changing) Arctic climate, ecosystems and wildlife: Canada geese, polar bears, walrus, reindeer. Not everyone is interested in the same things, but the attractions of Svalbard can appeal equally to tourists and researchers.

Thinking about the kind of things tourists and researchers *do*, we can find more common ground, especially when the researcher is a human geographer. Whilst you do not generally see tourists operating ice core drills or taking water samples, these scientific endeavours are nevertheless a (high-tech) method of collecting and documenting, which, as Noy points out, is common to ethnography and tourism activities too:

Unlike tourists and visitors I (tell myself that I) did not travel to the site for pleasure and sightseeing ... Instead (so I continue) I went there to research, which is to say to collect data that would be relevant for my study and that is available only there (researchers collect data) ... But tourists, too, are great at collecting, as practices of both collecting and documenting (accessing, obtaining, photographing, transporting, etc.) are constitutive to the role of the tourist.

(Noy 2011, p.923).

In collecting and documenting, I attempted to authenticate my research. Going to Svalbard amplified the necessity of being there, in 'the field', doing research/ tourism/ exploration. Many conscious and unconsciously held assumptions were blown away, replaced with descriptions not up to the task. This enlarged the quandary over the environmental impact of travelling there, and created an uncomfortable expectation to feel moved and affected by the Arctic in pre-approved ways. With the exception of the strange surrounding landscape, Longyearbyen did not fit such expectations: life could be the essence of everyday banality: going to the café, supermarket, and library. Having left town to camp a few kilometres from Pyramiden, we spent many a moment staring out at the snow-peaked mountains, glacier carved fjord and glacier itself trying to drink in this atmosphere, to find a meaningful way to relate to where we were. Svalbard offers up resistance to being entirely known and humbles the would-be knower through its not-quite-comprehensible awesomeness and uncanny ordinariness.

3.3.2. Becoming a visitor

Learning languages and how to shoot a rifle were distant prospects of excitement/dread. Now they have become part of my weekly routine... genuinely useful skills to help my research along. I am beginning to grasp the meaning of some of the things I was taking pictures of in Svalbard last year now I can read Russian script ... The shooting has been an interesting tale of challenged stereotypes ... the last thing people expect me (member of a peace choir, self-confessed hippy) to admit to filling a Thursday evening with. ... I didn't expect to be so warmly welcomed... or to, dare I say it, find shooting paper targets to be actually quite fun.

(Author's blog, 2nd February 2014⁵⁵)

During the winter of my second year, I was faced with a realisation that the PhD had (inevitably) taken over my life. The above extract gives a sense of how the process of the research was shaping the researcher: identities are of course not static. It also provides examples of how the relationships made, changed and entangled in the research are not limited to the periods of fieldwork in Svalbard, or to the PhD itself (Fois 2017).

As well as such preparation for my second, longer trip to Svalbard being important, I also perceive its success being reliant on my walking a fine line of trying things out, being slightly audacious (a don't ask, don't get kind of attitude) whilst maintaining an overarching humble approach, one which did not assume entitlement. I was very aware of being the 'outsider' in Svalbard's small, close-knit towns. In a highly political environment where, "everything everyone does on Svalbard, including the janitors, is part of a geopolitical framework" (Interview 12, 27th May 2014), how I was perceived by the communities I was researching was important. My status as an in-betweener (see Section 3.3.1) may have felt awkward to begin with, but became an asset that provided me with a somewhat flexible and liminal position. As a relative 'nobody', access to higher profile informants was sometimes denied. On other occasions I felt that being an outsider and a PhD student meant that I was not perceived as a threat and was relatively 'safe' to talk to, especially as I was from Wales, rather than Norway or Russia for example.

⁵⁵ 'PhD life', Cold Edged Geography: <u>http://samsaville.weebly.com/blog/phd-life</u>

The worst we know about is tourists. The best is people living here. In between you have visitors. And you are becoming a visitor – because you have been here several times and you stayed for a while, and you get some connections and get some friends and someone invites you for something and then you become something else.

(Interview 24, long term resident, 4th June 2014)

The above interview extract is a rather blunt example of the social hierarchy and importance of time spent in Svalbard to one's place in Longyearbyen and Svalbard. It also felt like a significant turning point, I left the interview pleased to have potentially moved up a rung in local estimations. It turned out to be remarkably prophetic too. Not long afterwards I was invited to several 'things': the snow sampling, tour of the seed vault, and the following day I bumped into someone I had interviewed a few weeks ago who invited me to go out with her dogs⁵⁶. During the trip she went into some detail about how annoying tourists could be hanging around the dog kennels and not getting out of the way in town, so again I felt I had graduated to non-tourist status. This did not always mean feeling comfortable with or sure of my identity, but it was different, and, like Wiederhold's (2014) analysis, troubles the binary between 'insider' and 'outsider'.

3.3.3. Keeping Connected

No sooner had I developed this new 'status', was it time to leave. Reading the local newspapers and social media posts from Svalbard back home in Wales felt at once inadequate, but also far more meaningful now I had characters, places and nuances to connect with the reports and stories. I attempted to find new ways of being affected that relied on less direct contact. This reinforced the fact that the materials I had produced and gathered were very much a snap shot in (space)-time, things were moving on without me. My practice of listening and transcribing the interviews was a powerful way to reconnect to these conversations and contexts, but power had shifted back in my direction, my

⁵⁶ In summer time, to get their exercise, husky dog teams pull quad bikes on the roads rather than sleds over snow and ice.

interpretations, what I found interesting, shocking, funny, confusing was what I had to work with.

After some initial analysis, I attempted to alleviate this shift in power by sharing a draft of a paper with two participants who had been particularly engaged and whose viewpoints I had discussed at length. Their responses were positive and they provided further insight and confirmation of the direction of my analysis. My third and final trip to Svalbard served not only to widen my experience in Svalbard to a different season and include additional perspectives from new participants, but also to reconnect with previous participants. Four were able to meet with me again. In these instances, we had more informal, unrecorded discussions in which we discussed the direction of my analysis so far, the developments in Svalbard since my previous visit⁵⁷ and their personal positions. These meetings helped me to keep my analysis open and remain humble in my own interpretation skills, and, following Baxter and Eyles (1997), lends further credibility to the research. Presenting my research at conferences and during my institutional visit in Norway also provided feedback from audiences that could connect with political and cultural aspects that I was in danger of missing.

3.4. Telling Stories

Listen. In the shadows of the story stirs the storyteller.

(Daniels & Lorimer 2012, p.5)

The words of the interviews ... convey their point so well, I feel I can't live up to them ... I get lost in all their worlds and perspectives – I sort of fall in love with the data a little bit and am losing my own point of view.

(PhD Journal, 15th October 2015)

Ethnographic analysis and writing-up often occur simultaneously, during and after data 'collection' (Augustine 2014; Crang & Cook 2007). Interpreting research is a craft that requires imagination, reading beyond the text and

⁵⁷ During the autumn and winter of 2014–2015, the Norwegian coal firm Store Norske was in financial crisis, coal prices were low, job losses and a request for a government bail out were in process, a new government white paper was awaited. All of this meant Longyearbyen's community faced an uncertain future (see for example Staalesen 2015).

immersion in the data (James 2013). In this section I aim to give an insight into how these processes occurred within this project.

Throughout the research I envisaged the challenge of presenting my 'findings' as identifying the most important stories to tell and deciding how I could most effectively and affectively tell them. Maintaining a humble approach in identifying with storytelling I make no claim to poetic or creative writing talent, rather thinking through the idea of story-telling has been helpful in the writing process. Whilst I take responsibility for what I have written, as Mitch Rose (2016) pushes us to consider, I also acknowledge my vulnerability: without the people or animals, places and things I have encountered, there would be no story at all. Storytelling also aligns with some ways of thinking about value. As McShane (2012) explains, narrative accounts of value can tell us *how* things matter to us as well as *what* matters. Humans are story-telling creatures, our stories are imbued with values therefore to understand value(s) we need stories (McShane 2012).

Cameron's (2012) examination of the recent developments in geographic uses of stories is useful in picking apart my way through story-telling. The three strands she describes: small stories, stories for change and telling stories all resonate with my aims. My approach does not neatly align with any of these categories, but is rather a weaving together of elements from all three. Mostly, the 'stories' are told, as empirics, a correlation between word and world. Some have more in common with Rose's (2016) conception of stories as thinking devices. Cameron (2012) describes small stories as the push to bring local, particular voices, practices and places to our attention, without the analytical drive to seek general, 'scaled-up' applications and wider conclusions. In my almost singular focus on practices of value in Svalbard, many of the story lines that unfold subsequently are indeed specific and rooted in place and time to Svalbard. I have consciously included many voices, sometimes discordant and conflicting, in an effort to tell the particular stories surrounding value and conservation in Svalbard. However, some of these stories are told with a more explicit aim of inciting change and change at a larger scale.

"Storying (for) change", Cameron summarises as telling stories with intention that they can, or have potential to change the world. This could take the form of constructing stories that *make* us care, as in William Cronan's goal of effecting positive environmental attitudes and actions through moral and emotional connections to environmental narratives (Cameron 2012). Or, as with Gibson-Graham's project to tell stories of alternative systems and economies of difference that directs "toward the emergent, the not-yet-here, and participates in the materialization of new realities" (Cameron 2012, p.580). Geraldine Pratt's approach is to tell stories which challenge convention not through community as with Gibson-Graham's work, but through their capacity "to produce ethical relations between otherwise distant and unequally positioned subjects" (Cameron 2012, p.583). I have attempted these strategies within the following chapters. In storying acts of care and embodied connection in scientific practice (Chapter 5), I have consciously highlighted alternative ways of knowing that will resonate within and beyond Svalbard.

Cameron's third story-telling trend, "Telling Stories" centres on the rise of autoethnographic work that prioritises personal experience, that attempts to represent the more than representational and create affect through story (Cameron 2012, p.583). The inclusion of my experiences in and connected to research in Svalbard also form the basis of several stories told throughout the thesis. Yet, contrary to accusations that such personal stories can ignore the political consequences of their telling, I recount my experiences as ways in to the politics and value practices at work, in which my own affected body picked up on. These stories, whether auto-ethnographic or the stories others have told me, are now woven together in ways I hope give insight to value practices in Svalbard that are at once social, political, material and emotional. To this end, I am inspired by notions of situated stories in which their partial, constructed nature is acknowledged alongside the empirical validity they hold (Crang & Cook 2007; Fisher et al. 2015; Latour 2005; Nagar 2016 also discussed this in very similar terms). In deciding which stories to tell, I have paid attention to those conversations, experiences, texts, photographs and feelings that have caused me to pause and reconsider. Lamont describes contests of differing value systems as one way to bring evaluative criteria out into the open through "hot moments" (Lamont 2012, p.213), similarly, Stark refers to "critical moments" (2017, p390). Whatmore describes such events as "moments of ontological disturbance" which, as she details, have been assigned various names:

Michel Callon's 'hot situations' (1998), Bruno Latour's (2005) 'matters of concern' and Isabelle Stengers' (2005a) 'things that force thought', for example, all provide vocabularies for addressing those moments of ontological disturbance in which the things on which we rely as unexamined parts of the material fabric of our everyday lives become molten.

(Whatmore 2013, p.39)

The following three chapters are the results of these 'story-tellings'. In Chapter 4 I begin by developing the characters of 'Wilderness' and Cultural Heritage', which serves to set the scene for a more complex plot in Chapters 5 and 6.

Having developed the outline of a 'humble' geography and research practice, there are exciting possibilities in bringing this into conversation with other researchers and cognate ideas already beginning to surface. For example, the emerging notions surrounding "gentle geographies" (see for example the session abstract from the RGS 2015 conference⁵⁸) hold the promise of collaboration.

⁵⁸ 'Gentle Geographies', convenors Matt Finn and Jayne Jeffries, chair Kye Askins, RGS Annual conference, University of Exeter, 2-4th September 2015 <u>http://conference.rgs.org/AC2015/229</u>

4. Categories of Conservation

Figure 13: First trip

I'm in Oslo airport trying to work out whether I need to collect my luggage and transfer it to the next flight. One airline treats Svalbard as an international destination, the other an internal Norwegian one, making for a confusing transfer.

Coming in to land, the novelty of where we are arriving seems to hit home. Almost everyone aboard this flight seems excited to be here, peering eagerly out of the plane windows during our descent. As we get closer all we can see are snow topped peaks (and possibly glaciers), until the very last minute. Perhaps I have overdone it on the winter gear? The temperature is a mild and damp 7 degrees above zero. We are greeted by a stuffed polar bear on the luggage reclaim parasol. A bus drives us on a grimy road into town past dumper trucks shifting coal around near the dock. The contrast between the views from the two vehicles exceeds my expectations.



Field diary extract, 21st June 2013

Categories matter. As fictional and constructed as they may be, they filter our experiences. As Figure I3 demonstrates, Svalbard does not always provide clear category boundaries and borders either politically or physically. It is at once Norwegian and not, 'wilderness' and the very opposite, an industrial extraction site, it is a nexus (Büscher & Davidov 2013). Categorisation, as discussed in

Chapter 2, is a key process in creating frameworks of value. In this chapter categorisation is also identified as a key force within conservation. This chapter identifies the value frameworks: legal, local, national, international, cultural and political, that work to construct the categories of wilderness and cultural heritage conservation in Svalbard. In asking what should be 'saved' of Svalbard's environment, why and how it should be saved, and what this means in terms of practices of value, I first examine conservation practice at a theoretical level, in Section 4.1. I make a case here for bringing the literatures on wilderness protection and cultural heritage conservation together. In the following section I describe and analyse the legislative framework that is the backdrop to conservation aspirations and practices in Svalbard. It is this framework that is crucial in devising, supporting and enforcing processes of categorisation. I can then examine the two key categories that are at work in this legislation: 'wilderness' and 'cultural heritage'. What a 'well-managed wilderness area' or 'cultural heritage protection' means, in practice, is ultimately wrapped up in the very values and notions of what wilderness, nature and cultural heritage mean. In Sections 4.3 and 4.4, I discuss the conceptual debates surrounding the idea of 'wilderness' and how this applies to Svalbard, moving from theoretical to empirical examples. Taking a parallel approach, Sections 4.5 and 4.6 deal with the category of cultural heritage. I reflect on the links between the two categories and the utility of using categorisation as a frame for analysis within value enquiry, before moving finally to consider the challenges of categorisation in Section 4.8, where the lively fluidity and mixtures of the 'real world' push at the boundaries of both wilderness and cultural heritage as categories.

4.1. Conservation and Categorisation

Contemporary conservation practice includes two important strategies: trying to separate people and nature in space (in order to protect nature), and trying to reconnect people with nature (to promote human wellbeing and support for conservation).

(Sandbrook & Adams 2015, p.no pagination)

In some sense, I believe, the whole nature conservation endeavour has been a category mistake, born of a false separation between what it is to be human and what it is to be natural.

(Taylor 2005, p.2)

Many conservation approaches involve limiting and controlling access to an area, species or object that the conservation effort is seeking to protect, we moderate ourselves to save what we value.⁵⁹ Yet, we simultaneously need to know and appreciate what it is we are trying to protect. Conservation text books (e.g. Goulder & Kennedy 1997), cultural heritage best practice guides (Mason 2002), and research participants alike agree that "you protect what you know, and you protect what you can see, you protect what you love" (Interview 8, 21st May 2014). The core paradox of conservation that Sandbrook and Adams (2015) and Taylor (2005) refer to is the human capacity for protection and threat to what we value collectively. Even the most general campaign messages and slogans such as 'Save the world' separate human and nonhuman nature in order to define what is to be saved: we become not part of the world, or ecosystem in which we live. By implication, it is often humans, or further categorised groups of humans (e.g. 'tourists', 'farmers') that are the threat to what is categorised as 'at risk', as well as having the responsibility for doing the 'saving' or deciding whether something should be saved, or even brought back from the dead through de-extinction (see Adams 2016).

Even within some of the most cutting edge of conservation practices, the strategy of treating 'nature' as separate from human in order to 'save it' is ubiquitous. New technologies of conservation at the molecular and genetic level extend the possibilities of knowledge and management of 'nature': genotypes provide a further way to categorise and consequently protect or manage species (Hennessy 2015). These technologies are able to re-create "the nature that is the object of conservation" (Hennessy 2015, p.96) and "both spatially and temporally reconfigure imaginations of pristine nature and management strategies for how best to save it" (ibid. p. 88).

⁵⁹ This approach is questionable. As Cindi Katz points out, aiming for spatial and temporal 'fixes' of nature through preservation is rather un-ecological (Katz 1998).

Whereas Sandbrook and Adams (2015) and Taylor (2005) are describing nature conservation, biodiversity preservation and protected area management, their observations can be extended to cultural heritage conservation. Rodney Harrison makes steps to reconceptualise heritage as a domain that is both natural and cultural, with dissolved boundaries between the two. Coming from a cultural heritage perspective, he proposes a

> Blending of categories further to suggest that all domains which are informed by notions of endangerment (c.f. Vidal and Dias 2015; see also Rico 2014), care for the future (c.f. Holtorf and Hogberg 2013), or the presencing of the past (c.f. Macdonald 2013) might be considered forms of heritagemaking.

> > (Harrison 2015, p.14)

This chapter takes Harrison's suggestion forward by bringing together the discourses, policy frameworks and value practices involved in conservation in Svalbard. 'Saving' that which we value, whether that be icecaps or 1950s architecture, has arguably been the primary driver for conservation in environmental and cultural heritage fields. The 'new heritage paradigm' recognises the co-produced, fluid nature of heritage that "emerges in dialogue among individuals, communities, practices, places and things" (Harrison 2015, p.13). Political ecologists, deep ecologists and eco/neomarxists have long advocated non-dualist, hybrid ways of thinking through relations between living, material and emotional phenomena, which is continued in the work of those such as Latour (2004b), Haraway (1985; 2007), Whatmore (2002; 2013), Hinchliffe (2008), and Clark (2010). Whereas others have previously noted the connections and crossovers between natural and cultural heritage conservation (Holtorf & Ortman 2008; Lowenthal 2006), Harrison wishes to become more proactive in addressing their seeming convergence towards a point where treating them together would be productive.

Categorisation has been identified as one potential route for bringing 'nature' into, or deeper into, the folds of neo-liberal capitalism (whether through payment for ecosystem services or other means). As Castree (2003) sums up, abstraction, bringing things of similar qualities together in a category, regardless of their unique or distinct differences, makes them more sellable and easier to extract surplus value from. We find another parallel debate in the continued critique of 'instrumental' value in cultural heritage literatures.⁶⁰ In this sector, the justification of value in heritage and cultural facilities and/ or funding, has, for many decades, been couched in terms of wider value to society and economy (Gibson & Pendlebury 2009a). By means of criteria and tick-boxes, this can render unique places, buildings, resources comparable and equivalent. More specifically, depending on the criteria and valuation methods, such exercises in both ecological and cultural arenas can create a competitive situation if ranking within categories occurs. Which in turn, where resources are limited, can lead to a situation where only top-ranked species, habitats, sites or objects will be selected for 'saviour', while others will be left out (Lamont 2012).

Categorisation that enables commodification is evident through the numerous ways in which Svalbard is exploited as an economic resource (see Chapter 1, Section 1.2.2): Norway and Russia are evidently eager to support economic growth in Svalbard, particularly to strengthen sovereignty claims and resistance to them. However, the protective environmental policies enlisted in Svalbard, which are the focus of this chapter, cannot be wholly explained through a Marxist analysis of neo-liberalisation (see discussions in Chapters 1 and 2). Rather, the categorisation of Svalbard's nature and culture within the environmental protection processes serve to further territorialise Svalbard geopolitically as well as create symbolic capital through the application and extension of national cultural identities to ways of valuing heritage.

Harrison (2015) conceptualises conservation as a regime of care infused with processes of value. Harrison highlights four processes that he sees as common to approaches in both natural and cultural heritage conservation:

⁶⁰ The grounds for debate are also contested here: Gibson (2008) states "that instrumentalism has always been integral to cultural policy" and is not a new phenomena to arrive with the Thatcher or New Labour administrations in the UK.

- Categorizing (identifying, documenting, nominating, listing, recovering, enumerating);
- Curating (collecting, selecting, attributing value);
- Conserving (caring, preserving, storing, archiving, managing);
- Communicating (using, interpreting, exhibiting).

(2015, p.15)

Categorisation is Harrison's first point in the regime of care, that is, to identify what is to be conserved: by recognising the genre of value appropriate to evaluate the process, thing or space. This is where the processes of knowledge production and policy meet. It is the categorisation of Svalbard that natural scientists and cultural heritage experts work on, which are taken forward in various guises and enlisted in practices and policies of conservation. However, this process is not a simple, apolitical or 'value-free' one. In this chapter I concentrate on identifying categories in use and the cultural values enshrined within them. In Chapter 6, I look in more detail at how categories can become, or fail to become, legitimised. I also return to the regime of care (Harrison 2015) framework in Chapter 5 as it offers one way of analysing the value practices at work beyond categorisation in conserving Svalbard. For now, I focus on categorisation as a fundamental process in which practices of 'saving' manifest.

Harrison's larger message of bringing natural and cultural heritage scholarship together is also helpful in thinking through borders of the 'natural' and 'cultural' categories. As David Lowenthal (2006) notes, natural and cultural heritage share the same appeal in the human wish to protect, and face the same risks of "development; unfettered private and corporate avarice; insistent productivity; rampant innovation; heedless technical advance" (Lowenthal 2006, p.84). Conservation biology, Robinson (2011) summarises, has historically been a force for limiting human activity in and access to wilderness/ nature through protected areas. Similarly, cultural heritage conservation is traditionally conservative and positioned to push back at the modern impulse for progress. Modernity's contradictory forces (see Chapter 2, Section 7) are revealed through the categorisation processes inherent to cultural heritage practices: Heritage professionals are people of the modern age. Their concepts of history and cultural value and their methods of pursuing their goals are as intrinsically modern as those of the promoters of change. For example, from an early period they have relied on ideas of selection and classification, eventually expressed in state-defined and controlled lists, and on principles of conservation, which though morally based, can be rationally applied by a skilled elite.

(Gibson & Pendlebury 2009a, pp.6-7)

Hence, whether embracing or resisting the forces of neo-liberalisation, both natural and cultural heritage practices of conservation have shared a tendency for upholding and demarking categories in order to save their prized "relics" (Lowenthal 2006, p.80).⁶¹ For the case of heritage protection, both 'natural' and 'cultural', in Svalbard the tensions of ambivalence, or the conservation paradox, run throughout value practices. Environmental legislation and legislators work to maintain the category of wilderness as excluding as much evidence of human influence as possible. Yet other actors and stakeholders with different values seek to provide opportunities to learn from, profit from and play in this 'wilderness'. Despite cultural heritage being the fundamental marker of human influence on the environment, its protection runs up against similar categorisation problems. To take an example, it would be rare for tourists in Svalbard to be attracted to, or know about, a specific wildlife or cultural hot spot before arrival. More likely is a general interest in 'the Arctic nature' and 'history of Svalbard'. This is linked to the kind of ways in which Svalbard is marketed as a category unto itself, as a wilderness, in the singular sense. As such, categorisation and the values involved in its processes can work across natureculture boundaries, but more frequently conservation practices reify distinctions, despite the attendant paradoxical problems of ambivalence this raises. Indeed, this is evident in the writing of this chapter. Whilst attempting to bring together the categories of natural and cultural heritage, for clarity, they are first of all discussed separately, albeit whilst acknowledging the ongoing connections between the two. I next introduce the mechanisms which support

⁶¹ This is not to say conservation practitioners share the same tactics, ideologies and values, Sandbrook et al's (2011; 2013) analysis of conservation biology practice for example, shows a great deal of plurality.

conservation in Svalbard, considering how categorisations of 'nature' and 'cultural heritage' are woven into policy debates and policy itself will help in the endeavour to understand the practices of value and categorisation processes at work here.

4.2. Laws of the land

The Svalbard Treaty outlined in Chapter 1 is a fundamental starting point for tracing value in the regulatory realms of Svalbard. Articles 2 and 3 set out the general principle of equality to all Treaty signatories to gain access and exploit the territory's natural resources. In a progressive move for 1920, provision is also made for Norway to preserve and restore the natural environment of the Archipelago:

Norway shall be free to maintain, take or decree suitable measures to ensure the preservation and, if necessary, the reconstitution of the fauna and flora of the said regions, and their territorial waters; it being clearly understood that these measures shall always be applicable equally to the nationals of all the High Contracting Parties without any exemption, privilege or favour whatsoever, direct or indirect to the advantage of any one of them.

(Treaty concerning the Archipelago of Spitsbergen, signed February 9, 1920 entered into force August 14 1925, Article 2).

The Svalbard Act of 1925, which laid out the basic laws of the territory, includes a mining code. This makes specific reference to avoiding the destruction of "geological and mineralogical formations or any other natural curiosities or places which may be supposed to be of scientific or historical importance" (The mining code for Spitsbergen 1925, Paragraph 24). However, more specific environmental protection measures were not put into place until after WW2 and the re-establishment of settlements in Svalbard. Pederson's reading of this lack of activity in making use of the above clause is that Norway lacked the jurisdiction and means to do so, "the first governor of Svalbard did not even have his own means to travel around the islands" (Pederson 2009, p.147). By the 1970s however, Norway took increasing interest in asserting power, for at this time Soviet citizens out-numbered Norwegians in Svalbard (Young 1978). The Svalbard Budget increased and measures were taken to "strengthen Norwegian rule", including "new and far reaching environmental legislation", (Pederson 2009, p.148). In 1973 a number of national parks, nature and bird reserves were established, which have since been added to in 2002, 2003 and 2005. To date over 65% of the land mass and around 87% of the territorial waters are included in a protected area (see Figure 14).

These protection zones are now a part of the larger legal and regulatory structure which is based around the Svalbard Environmental Protection Act of 2001, amended in 2012 (Ministry of Environment 2001; Ministry of Climate and Environment 2014). Cultural Heritage protection is also part of this legislation. These acts, alongside the land use plans for the settled areas of Longyearbyen (Norwegian), Barentsburg (Russian), Pyramiden (Russian), Svea (Norwegian) and Ny Ålesund (Norwegian), are the legal mechanisms with which the Norwegian government seeks to manage and protect Svalbard.

In the context of equal access to resource exploitation for treaty signatories, the protected area legislation effectively limits the ability of any nation to assert rights in Svalbard, yet Norway can argue it does so equally, so is in line with the Svalbard Treaty's intent and purpose. These actions, particularly the environmental protection act of 2001, were not undisputed by some Russian political actors, who believed there was a hidden political agenda behind the environmental policies that aimed to force Russia off Svalbard (Åtland & Pederson 2009, p.10). Concern over this matter was not demonstrated strongly in the upper echelons of power by President Putin (Åtland & Pederson 2009). Trust Arktikugol also thought this view exaggerated. However, the objections raised to certain protection measures that would affect Russian mining activity did result in the Governor's Office initiating a 'toning down' of the new regulations (Åtland & Pederson 2009).

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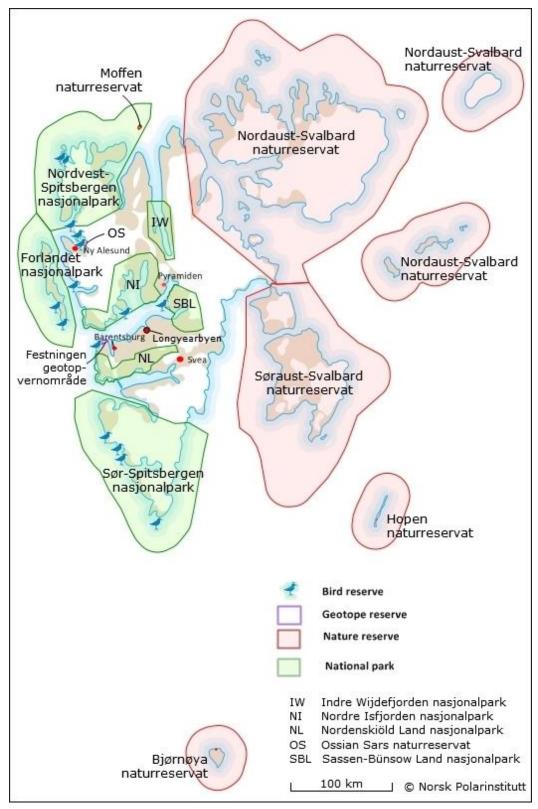


Figure 14: Svalbard's Protected Areas and main settlements (Norwegian Polar Institute 2010, author's adaptation)

If one assumes no hidden agenda (though this appears politically naïve to some degree), then the introduction of restrictions on activities on environmental grounds could be conceived of, as Åtland and Pederson suggest, as a conflict of values and which kind of security held most value at the time:

Norway's main objective at the time was to protect Svalbard's fragile arctic environment (environmental security), whereas Russia was mainly concerned about how the Act would affect ongoing and future Russian mining activities on the archipelago (economic security), and ultimately the future of the Russian settlement in Barentsburg (societal security).

(Åtland & Pederson 2009, p.12)

In addition to the Svalbard Treaty, Svalbard Act and the Svalbard Environmental Protection Act, the Svalbard White Paper – a strategy document revised approximately once every ten years – sets the direction and priorities for Norway's governance of Svalbard. The current White Paper issued in 2016 is consistent with previous versions that advocate reinforcing Norwegian sovereignty through maintenance of the main community of Longyearbyen and strengthening economic security. This is now focussed on developing tourism, research and higher education and new businesses, given the coal industry's recent contraction (Norwegian Ministry of Justice and the Police 2016).

The "preservation of the area's distinctive natural wilderness" (Norwegian Ministry of Justice and the Police 2016, p.5) remains one of the Svalbard White Paper's headline objectives, with cultural heritage included in the discussion of environmental protection. Wilderness protection is given priority when interests conflict and the aspiration for Svalbard to be "one of the world's best-managed wilderness areas" is declared (Norwegian Ministry of Justice and the Police 2010, p.55). Norway has in fact nominated Svalbard for listing as a World Heritage Site in the 'mixed' natural and cultural heritage category⁶², so cultural heritage is considered to be valuable here as well.

Looking more closely at the terminology and language used in these documents, although wilderness is not formally defined anywhere in the Norwegian legislation for Svalbard, it is clear within the White papers and the Environment Act that this is taken to mean "untouched nature", "pristine, or essentially pristine", "largely undisturbed" areas (Norwegian Ministry of Justice and the Police 2010; Ministry of Environment 2001). The national 'State of the Environment' target for the Polar Regions, for which the Norwegian Polar Institute (NPI) is responsible, makes this intent more specific:

> The current extent of wilderness-like areas in Svalbard will be retained, biological and landscape diversity will be maintained virtually untouched by local human activity, and the value of protected areas for research will be safeguarded. It will be possible to enjoy the natural environment undisturbed by motor traffic and noise even in areas that are easily accessible from the settlements.

> > (NPI 2015a)

This statement holds some obvious tensions between use now and potential use later when it comes to research in protected areas (as will be discussed in Chapter 6). For now the style of categorisation is noteworthy. The approach in these documents treats wilderness in a similar manner to the International Union for Conservation of Nature (IUCN)'s Ib category, defined as:

> Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition.

> > (Dudley 2008, p.2)

⁶² This was submitted in 2007 and, according to UNESCO, its status is still pending (UNESCO 2015). It appears that this will eventually progress, though the precise delimitation and approach is not decided upon (Hartnell 2012; Sandodden et al. 2013). The Norwegian Institute for Cultural Heritage Research (NIKU) is currently investigating the likely impacts of increased tourism that World Heritage Status could bring (NIKU 2015).

The hierarchical structure of the protected areas in Svalbard also follows an IUCN-like approach in its designation of Nature Reserves (category Ia), National Parks (category II) as well as species management areas (category IV) – in this case bird reserves and other managed areas. Areas of Svalbard containing settlements and current industrial activities form Area 10 (see Figure 15), which is managed as the main zone for recreation and tourism (Hagen et al. 2012). Providing notification to visit Area 10 is unnecessary and access and regulations are the least stringent here. More recent National Parks closer to Area 10 allow for less activity, but are less prohibitive than the original 1973 National Parks.

Figure 15: Management Area 10 - Includes major settlements and mining operations as well as two national parks in the Isfjorden area, central Spitsbergen and the area surrounding Ny-Ålesund in North West Spitsbergen. The Area 10 zone around Ny Ålesund has apparently been expanded (Stange 2014), but details and maps are not yet available according to the Governor's Office (email correspondence M.N.S. Keyser 29th May 2015, map provided by the same).



Forvaltningsområde 10 [Administrative Area 10]

The Nature Reserves are offered the highest degree of protection with access only by permission from the Governor and for research purposes. In other words, Svalbard's 'nature' has been categorised and ranked as part of the process of designating and upholding protected areas. The prioritisation of nature conservation above other interests also fits with the IUCN's definition of protected areas.

Cultural heritage and cultural environments are quite precisely demarcated in Svalbard: there are over 2000 listed and mapped in the Norwegian Cultural Heritage database, Kulturminnesøk. The cultural heritage section of the Svalbard Environment Act states that any human artefacts dating back to 1946 or earlier are automatically given cultural heritage status, as are any human remains (such as bones or graves). Artefacts that were introduced after this time may be designated cultural heritage if deemed of particular value by the Directorate of Cultural Heritage (Ministry of Environment 2001). As per mainland Norway, environmental protection and cultural heritage are both under the jurisdiction of the Ministry of Climate and the Environment, though in Svalbard this operates through the Governor's Office. This arrangement means that cultural heritage protection and enforcement, as incorporated into The Svalbard Environmental Act (2001), becomes a further means for Norway to govern its Svalbard territory. Although the Svalbard Treaty made provision for protecting flora and fauna, Norway has chosen to move towards a more holistic interpretation:⁶³

Structures and sites and movable historical objects in Svalbard shall be protected and safeguarded as a part of Svalbard's cultural heritage and identity and *as an element of a coherent system of environmental management*.

(Svalbard Environmental Protection Act 2001, Chapter 5, Section 38, emphasis added)

⁶³ The addition of a geotope reserve, Festgingen (see Figure 14) to the protected areas legislation in 2003, could also be seen as an expansion of the Treaty's original scope. This has not so far been an issue, and given its high interest appeal for geologists and public alike – the site of several dinosaur fossil discoveries (Hurum et al. 2006; Rincon 2006) – this seems likely to continue.

This development therefore enfolds cultural heritage into wider debates around 'saving' Svalbard's heritage and brings cultural and natural heritage within the same legislative and discursive realms. According to the latest management plan for cultural heritage in Svalbard (Sandodden et al. 2013), like the provisions for wilderness protection, the management of cultural heritage also follows a hierarchical process of categorisation and subsequent care. The cultural sites deemed most important and significant are prioritised for protection, whereas the large number of other 'lesser' sites may only be monitored (Sandodden et al. 2013):

It is neither possible nor desirable to take care of all the sites. The plan has a list of the 100 most important historical sites in Svalbard, where 50 of them have an extra high priority.

(Sandodden et al. 2013, p.6)

According to local heritage experts, this process of deciding which sites and objects are classified as needing protection is not undertaken lightly. Taking the obligation to protect Svalbard's cultural heritage seriously, the extent to how far and wide this protection can go is limited. It is possible that protecting more sites and objects could be detrimental by over-stretching capacity for practical implementation of this protection. The quantity and quality of care afforded needs to be balanced:

> Only the Governor or directorate can decide which objects can be taken in, these objects if they come in to the museum, then we *have* to take care of it, it *is* a valuable object. ... When we put an object in the collection, whether it is protected or not, when you put it there, it is 'holy' as you say. It is difficult to take it out. It has been a decision to take care of it ... we are very strict today on what we collect and what we are taking in. 'Cos it's very expensive to take care of objects, and we are well aware that if we are taking in too much, it will deteriorate in the store room. We can't take care of all things.

> > (Interview ll, heritage sector, 22nd May 2014)

In a sense, this is the zero-sum value scenario described in Chapter 2 (Section 2.5). Whilst there is a recognition of the value of all cultural heritage, there is also a need to prioritise and decide what is most valuable and worthy of saving

for the future. This is a process of sub-categorisation that Sections 4.5 and 4.6 begin to explore by outlining the intellectual trends and cultural discourses that influence how the value of Svalbard's cultural heritage is constructed.

In tracing this development of the legal and political provision for Svalbard's environmental protection, a transformation is revealed. The scope of what environmental protection could mean has been stretched, along with a spatial expansion of such protection and the attendant geopolitical tensions discussed above. The *provision* to make such regulation in the Svalbard Treaty has also become a *moral obligation*:

In the opinion of the Government, Svalbard has an internationally important and valuable natural and cultural heritage, which Norway has a *special responsibility* to preserve. This was also emphasised in the previous Report to the Storting on Svalbard, where it was stated that *Norway has a moral responsibility* for preserving some of the last wilderness areas in Europe.

(Norwegian Ministry of Justice and the Police 2010, p.53 my emphasis)

I turn towards examples of how this moral obligation becomes manifest in Chapters 5 through individual practice and Chapter 6 where the pressures to push through such an agenda come to the surface. In the following sections, however, I seek to unpick what it is these regulations are attempting to 'save' by examining the two key categories and concepts around which value practices of conservation operate in Svalbard: Wilderness and Cultural Heritage.

4.3. Wild ideas: Conceptualising wilderness

If wildness can stop being (just) out there and start being (also) in here, if it can start being as humane as it is natural, then perhaps we can get on with the unending task of struggling to live rightly in the world - not just in the garden, not just in the wilderness, but in the home that encompasses them both.

(Cronon 1995)

Alongside the strong presence of the pristine nature/wilderness narrative in policy documents and also tourist brochures, previous research conducted in Longyearbyen (see Hagen et al. 2002; Kaltenborn 1998; Radovanovic 2011) indicates that the discourse of Svalbard as pristine Wilderness resonates strongly in Svalbard residents' perception and experiences of the place. My research reinforces these findings and extends them to some of those living in Barentsburg and Pyramiden. Whereas the demographic and economic trends in the area have changed, appreciation of Svalbard's 'nature' has remained a common reason for people to move to Svalbard and one of the most oft-cited core values of life in Svalbard.⁶⁴ Likewise, in my small scale survey of visitors to Svalbard, the 'wilderness experience, or 'Arctic nature' in general was a key pull factor in the decision to visit Svalbard, with 49% of the 55 respondents directly referencing features and terms related to this in an open question. My results correlate more broadly with previous visitor surveys (Enger & Jervan 2010; Enger 2011)⁶⁵ and more in-depth work such as that of Viken (2006). This is entwined with an imaginary of the north and exploration, as well as part of wider trends of growth in adventure and extreme tourism pursuits (Gyimóthy & Mykletun 2004; Hall & Saarinen 2010).

⁶⁴ See Appendix A, one of the core questions I asked interview participants was 'what do you value about living in Svalbard'?.

⁶⁵ The Svalbard Tourist Organisation (Svalbard Reiselev, now Visit Svalbard) survey for Summer 2010 reported that 74% of visitors surveyed (N=936) thought that 'Arctic nature' was an important factor in their decision to come to Svalbard, and 65% reported that 'untouched nature' was important (Enger & Jervan 2010). In the corresponding year for the Winter season, the percentages are lower, though nature-related choices are still the most important: experiencing the polar night (57%), pristine Arctic nature (52%) (Enger 2011).

Despite academic moves away from conceptualising 'nature' as a separate realm, to nature-culture as some form of assemblage, hybrid, network or cyborg entity of which we humans are inextricably a part of, the category of nature or wilderness is still very much active here:

> Although the dragon of reified categories of `natural' and `social' has largely been slain in the academic circles of political ecology (Castree & Braun 2001), the categories still have a tenacious grip on the minds of many actors who actively shape places. So, as is not uncommon, there is a large gap between academic conceptualizations of the world and the conceptualizations held by the actors most involved in making places and fighting the battles of resource control.

(Davis 2007, p.232)

The aim of this section is not to position academic thought in opposition to 'real world', 'authentic Svalbard' experiences. There is however, as Davis' (2007) analysis of the pristine wilderness/nuclear ruin of Bikini Atoll shows us, often a sizeable gap in these different conceptualisations on how the language and category of nature still has purchase (see also Hennessy 2015; Keeling 2008; Pollini 2013). Given the above discussion regarding the difficulty of overcoming such categories, this is to be expected, even if it is not desirable. Instead, my aim by tracing the value and values associated with multiple ideas of wilderness and nature circulating in and about Svalbard is to understand what is at stake for whom, where the tensions lie and what, following the pragmatist line of enquiry, use do such valuations and values have, what practices are they enmeshed within and how do they relate to our encounters with the material world of Svalbard? This enquiry and approach is equally applicable to the following section when the discussion is enlarged to cultural heritage remains, though there are both key differences and tensions between the two as well as overlapping theoretical and empirical grounds.

There are several troubles with wilderness, as Cronon's incisive analysis explains. Empirically and ontologically, a pristine, untouched wilderness that excludes humans is no longer possible, if it ever was. Bill McKibben (1989) has declared the 'end of nature' due to the unstoppable reach of anthropomorphic climate change and other boundless pollution. This means for some, wilderness and indeed nature becomes a futile, if not dangerous term to environmentalism, encouraging us to view humans as the enemy in our quest to return to a 'pure', abstract nature, and distracting us from developing better relationships and politics (Latour 2004b; Loftus 2012). Another perspective is that it puts nature and culture firmly in the same boat rather than reifying the dualism between the two concepts and leaving us, as humans, no place to go in terms of a relationship in and with nature. As Cronon explains:

> If nature dies because we enter it, then the only way to save nature is to kill ourselves. The absurdity of this proposition flows from the underlying dualism it expresses. Not only does it ascribe greater power to humanity than we in fact possess ... but in the end it offers us little more than a self-defeating counsel of despair.

(Cronon 1995)

A wilderness, defined or imagined as untouched and pristine cannot be more than a human construct, an ideal, which is in fact not workable. The danger Cronon alerts us to is not recognising the impossibility of a pristine wilderness. Cronon does not give up on a use for the idea of 'wildness', however, which Keeling (2008) develops. Keeling argues that we could consider wilderness as a normative ideal that can only be partial and contingent, likening wilderness to concepts such as justice and freedom, which we can move towards and away from. Keeling asks us to recognise that a normative form of wilderness is not at odds with the thesis that we are part of nature and partly produce and construct nature, but that there are differences and otherness within the ecological whole.

> The wilderness idea is simply an affirmation of the value of nature in its contrastive aspect. It expresses the fact that nonhuman agency is a value-adding property of the natural world, that nature is valuable in virtue of its 'otherness' to humans ... is independent, autonomous nature – wild nature, valuable or not? ... The answer to that question does not require a debate about whether humans are a part of nature or whether human artefacts are natural.

> > (Keeling 2008, p.516)

This perspective offers one way to come to a compromise between the everyday vocabulary and 'grammar' of the ideas of nature, natural and wilderness and the insights gained from social constructionism and the production of nature thesis. However, in skirting around the category/ambivalence problem identified in Chapter 2 (Section 2.7), narrowing the question down to "is wild nature valuable or not", risks over-simplifying the issue at hand. Ignoring the problem, for now, of where the more or less porous category boundaries of 'wildness' are located, surely the answer will be "yes", wild nature is valuable. Rather, more pertinent questions are, in what ways is it valuable, to whom, why and what consequences and practices does that value have? What and whose version of wild nature are we trying to save?

In his book *Inhuman Nature*, Nigel Clark (2010) pushes us to consider the kind of relationships we have with our environment. Whereas relational ontologies and networks reveal how we are connected to other species, matter, life, they say less about the power relations and unequal dependencies between participating entities (Clark 2010). Human dominance and power is not everywhere alwaysalready equal or all-consuming. Kimberley Peter's (e.g. 2012) work to extend relational more-than-human thinking to the realms of the seas provides ample opportunities to reveal the sometimes unreciprocal nature of agency between humans and non-human materiality, where the best humans can hope for is to "lessen the capacities of the hydroworld" (Peters 2012, p.1252). As Clark stresses:

This is the bottom line of human being: we are utterly dependant on an earth and a cosmos that is, to a large degree, indifferent to us.

(Clark 2010, p.50)

The deconstruction of the category of wilderness as a pristine, untouched nature is certainly worthwhile for bringing to the surface the history, politics and connections with other places and species that are otherwise left out of the wilderness picture (sometimes quite literally, see Wylie 2007). As Cronon alerts us, the dominant discourse of US wilderness areas erases the history of human conflict and activity that constructed them (Cronon 1995). Svalbard's nonsettlement areas, constructed as pristine wilderness, similarly erase the history of natural resource exploitation on and around the archipelago (Avango et al. 2011; Avango et al. 2014). In addition, there are many present activities in Svalbard that jar with ideals of pristine wilderness: tourism, industrial fishing operations, fossil fuel resource exploitation and exploration, local car use and waste problems:

> Longyearbyen looks like it belongs to a suburb of Neath, 'nough said! Considering the city is essentially the hub for Arctic research, sustainability and conservation studies, it is dirty, unkempt and outright ugly, with only the immediate nature and view across Adventfjord substituting for how shit the town is. Even the nature of Longyeardalen⁶⁶ itself is marred by the remnants of past mining industry, protected by law but not maintained and left to rot like much of the rest of the town.

> > (Svalbard Visitor survey comment from participant 48, research sector, June 8th 2014)

As discussed in Chapter I (Section 1.2), historically, the partial representation of the Arctic landscape as a wilderness had a specific purpose: ideas of the Arctic as a blank canvass ripe for colonisation and civilisation were central to gaining support for early Arctic exploration (Bloom 1993; Dittmer et al. 2011; Robinson 2006). Weisburger (2011) notes this narrative continues alongside the counternarrative of the blank canvass as vulnerable wilderness in need of protection. Whilst the pristine, untouched wilderness is a prevalent discourse of Svalbard, there is a counter discourse which recognises previous human activity in the landscape as part of life in Svalbard. Humans, or more specifically cultural heritage of an appropriate time and type, find an acceptable way into the category of wilderness through the idea of being on the frontier of existence and exploration. As previous research by Hagen et al. found, this was evident in a wide range (but small sample) of stakeholders:

⁶⁶ The valley in which Longyearbyen is situated.

The presence of human activity was described as an essential part of the nature experience. Old traces of human activity in the wilderness...were generally regarded as positive ... All participants claimed that many of their expectations of the arctic wilderness were based on the historic view of Svalbard as a symbol of frontier life.

(Hagen et al. 2002, p.368)

Interestingly, Svalbard as a tourist destination becomes a singular category of its own, an 'extreme wilderness' where individual sites and heterogeneous landscapes are conflated to 'the Arctic nature' and the 'history of Svalbard'. This category of 'Svalbard' refers, in practice, to anywhere outside of the main settlements, or, simply excludes Longyearbyen.

In the same vein as Davis' (2007) argument, the obfuscations of invoking the term wilderness does not necessarily make it incorrect, or morally bad, but it certainly does work and holds power. In Bikini Atoll, Davis observes the political consequences of conceptualising the Atoll as pristine wilderness and how this shifts the scale of ownership and stakeholders from local to more global and national frames. Wilderness is not only to be admired, but enforced. The same and more might be said of Svalbard. These "trouble[s] with wilderness" (Cronon 1995) are precisely why it is important to examine the value(s) of wilderness connected with Svalbard, given the strong pull and affinity to 'the nature' here, and its substantial presence in the region's politics, policies and controversies.

4.4. Identity, wilderness and identifying value

We need to acknowledge that there is no such thing as the one, true wilderness (Arts et al 2012)... As the meaning of wilderness per se implies a counter-world to human culture, these types of perceptions of wilderness are necessarily constructed by reference to different views of what culture or our selfinterpretation as a human being and an individual social being consists in.

(Kirchhoff & Vicenzotti 2014, pp.444-5)

The spaces of culture-nature are different in the North and this difference has repercussions on geography practices...we cannot stay indifferent to the differences of the North.

(Lehtinen 2003, p.247)

There are many different ideas of what is meant by wilderness across and within different cultures and geographical areas. Despite the international environment described in Chapter 1, Norway governs Svalbard in accordance with a Norwegian approach and is therefore the dominating influence in shaping environmental protection policy and creating a discourse of wilderness against which to judge practices and activities. As Lehtinen (2003) asserts, we should not ignore the potential geographical differences at work here. This is compared with Russian conceptions of nature and wilderness as a competing and secondary influence in Svalbard. It is of course troublesome to generalise ideas of nature and wilderness as contained according to state boundaries, policies and goals, solidifying yet more constructed categories.⁶⁷ However, the national narratives in circulation will no doubt have influence on their citizens, whether via policies and regulations or through broader social and cultural norms. Therefore, I consider the cultural constructions of wilderness in operation here as these contribute in turn to the ways in which the category of wilderness is constructed and practiced within the environmental governance regime in Svalbard.

> For Norwegian identity, the idea that a Norwegian has the ability to survive in harsh conditions is central ... The ideal Norwegian has the ability to create a safe passage through dangerous territory using specific experience-based knowledge, widely recognised rules and common sense, which together comprise 'fjellvett' or mountain wisdom.

> > (Ween & Abram 2012, p.165)

Norwegian wilderness and recreation in wild areas is heavily caught up in the production of Norwegian nationalism and Nordic nationalism more generally:

⁶⁷ In areas on the edge, Kirkenes – a mainland Norwegian town close to the Russian border – for example, co-operation, local agreements for easy border crossings, bi-lingual services and signs demonstrate a certain amount of porosity. Moreover the categories of 'Russian' and 'Norwegian' are multiple, contested and fluid.

"nature with a capital N" became an "object of a national rhetoric and a sublime iconography" (Sörlin 1998, p.271). The mountain in particular "came to stand as an icon of independence for Norwegian nationalist movements at the end of the 19th century" along with fjords (Wells 2011, p.213). It becomes even more important to consider national identity given the significance of polar exploration within the Norwegian national narrative, particularly the roles of Fridjof Nansen and Roald Amundsen (Flemsæter et al. 2015).⁶⁸

As Ween and Abram (2012) explain, the unique culture of Norway was located in rural life and later (shaped in part by the Norwegian Trekking Association -DNT) in wild and mountainous areas. Whilst the term wilderness is not legally or formally defined, the Norwegian natural habitat, outdoor life and recreation, collated in the not-quite-translatable term '*friluftsliv*', is central to Norwegian national identity. This is combined with tacit knowledge of survival skills, or mountain wisdom (*fjellvett*) and an ethic of hard toil in such landscapes (Norgaard 2011; Vistad & Vorkinn 2012; Ween & Abram 2012; Flemsæter et al. 2015). Open access for outdoor recreation on all uncultivated land is provided through the *Friluftsloven* (Outdoor Recreation Act) of 1957, a central principle to *friluftsliv* on the mainland (Aasetre & Gundersen 2012).

Traces of modern human activity in the landscapes of national parks and wilderness areas are considered undesirable, yet access to the areas for recreation is highly important. This tension between the appearance of pristine wilderness and recreational use lead Vistad and Vorkinn to conclude that "conflict (actual or potential) between protecting the ecosystem and developing or maintaining recreation and tourism" (2012, p.42) is a typical feature in Norwegian National park management. The traditional notions of *Friluftsliv* – which are based around simple, unmotorised activities in nature, such as skiing, hiking and simple cabin living – are increasingly being challenged by more modern modes and motivations for recreation in wild areas: snowmobiles and adrenaline sports like mountain biking (Aasetre & Gundersen 2012; Flemsæter

⁶⁸ This is still very much at work: 2011 was declared The Nansen-Amundsen Year in Norway, which 'highlighted the roles these men played as nation-builders and polar heroes, their contributions to science and literature...' <u>http://www.nansenamundsen.no/en/</u>

et al. 2015). 'Nature' is an important category and influence on Norwegian national identity and environmental management, but this influence is not singular, uncontested or unmoving. The Norwegian version of 'Nature' described here is also entwined with the cultural history of Norway as a Polar nation, as will be discussed in Section 4.6.

Russian and Soviet protection of wilderness areas has – though initiated out of concern for encroaching development and exploitation – historically concentrated far more on scientific research and excluding human activity, creating scientific reference areas, known as *Zapoveniks* (Ostergren 2001; Ostergren & Hollenhorst 1999). More recently, policy aims have expanded to include environmental education and ecotourism. Davidov's (2013) anthropological work gives a more everyday angle to this understanding. Davidov claims that wilderness is not understood as rare, or in short supply in the same way as a western idea of pristine nature. The Soviet regime of uneven, but intense, development left large areas 'untouched' with other parts of the Russian landscape described as a "victim of violent rape" (Polonsky 2003). Hence, Davidov argues that in order for wilderness to be attractive to Russians as an ecotourism destination, a place must be able to offer 'added value'. That wilderness is not taken as valuable per se is perhaps a reflection of human exclusion from protected areas, and for those in undeveloped areas, its everyday availability. Davidov's case study of Karelia suggests a utilitarian notion of value is at work here: Karelia's environment is known for qualities associated with good health and healing, and therefore valued as a destination of interest to Russian tourists; it offers something over and above an experience of wild nature.

Over the past few years, efforts to develop Svalbard as a tourism destination for the Russian market have increased, which can be seen as an extension from the broader desire to develop tourism and environmental protection in Russia's wider Arctic territories (Pashkevich & Stjernström 2014). So far, as well as the possibilities for adventure tourism and drawing on a more general narrative of polar exploration, *Trust Arktikugol* (TA) has chosen to highlight the historical interest of Svalbard. In particular it is keen to emphasise the Pomor hunters' relationship with the archipelago.⁶⁹ This can also be read as bringing 'added value' to the tourist experience, beyond a trip into nature aimed at the Russian tourist market and increasing the length of stay for other tourists visiting from Longyearbyen:

It's cultural objects, some kind of events, live music, traditional workshops, exhibitions, entertainment, those things people can come for and stay... [Barentsburg is] a settlement town of traditions, traditions of Pomors, Russian, Dutch, Swedish traditions that were formed during all 400 years since the first people came here....

(Interview 58, tourism sector, 30th June 2014)

Comparing the two perspectives on wilderness, following a visit to Barentsburg, Russian historian Rachel Polonsky writes, "It is not the Russians, however, but the Norwegians who portray wilderness and its creatures as the true worth of the archipelago" (Polonsky 2003). Indeed, Roger Norum points out Russia's reputation as a "dirty industrial extractor with little concern for nature" (2016, p.53). There is certainly a narrative within Longyearbyen that characterises Soviet and post-Soviet industrial activities as being dirty and less environmentally aware in their approach to activities in Svalbard. For example, the failure of *TA* to produce a 'sensible' environmental impact assessment for proposed new coal mining activities in the early 2000s has generated wellremembered anecdotes:

> They [TA] wanted to start just building the road. But then they found this very special flower, the Norwegian authorities. (laughs). And they needed to do a consequence analysis and that's where it stopped. [TA said] there is no consequence of this road!

(Interview 20, planning and architecture sector, 2nd June 2014)

⁶⁹ See for example the Trust's tourism company Grumant <u>http://www.goarctica.ru/</u> and <u>http://www.rcinet.ca/eye-on-the-arctic/2015/03/03/russia-boosts-tourism-on-svalbard-norway/</u> for a summary in English.

Last time for example they [TA] produced such an [environmental impact] assessment, that was frankly rubbish. They talked about animals that don't live here, the polar rabbit and such, ha ha.

(Interview 10, coal mining sector, 22nd May 2014)

Certainly producing environmental impact assessments that do not identify impacts for significant building activity such as road building in an environmentally sensitive area is cause for concern. However, there is also perhaps some indication of these views, and Russian practices shifting, whether that be through scientific collaborations or conceding that the Norwegian environmental laws need to be adhered to in order to protect their chances of developing a fully-fledged tourist industry in Svalbard, as with these participants:

If this law of sovereignty hadn't existed [for] more than 100 years, tourism could not be developed here, there could be a military base here for example, ... the waste of chemicals, or exploring of oil. Norway reserved this place for tourists from all over the world.

(Interview 58, tourism sector, 30th June 2014)

It's not problems, it's just regulations and they are necessary, they are very important. ... they are really smart, so it's better for everyone to make as it's said there.

(Interview 59, tourism sector, 1st July 2014)

The Russian state launched initiatives beginning in 2012 to clean up after previous industrial activities within the Russian Arctic National Park, starting in Franz Josef Land (Pashkevich & Stjernström 2014; Salo 2013). Moreover, though my informants were largely restricted to those within the tourist industry or living in Longyearbyen, there were no huge differences in the plural ways the nature, landscape and wilderness of Svalbard were appreciated (or not so) by Russian or Ukrainian nationals compared to Norwegians: the Svalbard bug (see Chapter 5) does not recognise nationalities when it strikes. Value in nature is identified, however, how protecting that value is practiced and conceptualised is perhaps where differences become more noticeable, as some residents in Longyearbyen have observed: If you're like in Russia in a wilderness area and you see a wild animal, the Russian way of thinking is that if you don't feed it, you're not protecting it. Whereas in the Scandinavian way, which is like the British way, you should not affect the wilderness at all and let it go its own course. The Asian way maybe, if you don't look after little baby polar bear in a zoo, then it would die and that would not be good, so it's better that it's in a zoo. So every culture has extremely different ways ... the way the Norwegians look at Svalbard, they enforce what we call 'fjellkultur', which is mountain culture in Norway.

(Interview 2, long-term resident, 14th May 2014)

Aspects of Norwegian notions of nature, wilderness and management approaches are apparent in Svalbard: sometimes through ways of describing an affinity with being 'out in the nature', and sometimes more obviously through concerns over certain practices, for example motorised transport in national park areas of Svalbard. Despite the potential dangers of using non-motorised transportation methods due to the risk of polar bear attacks, snow scooters can be unpopular as they are outside the framework of 'pristine nature'.⁷⁰ Skis, walking, boats, and sometimes dog sleds, combined with a rifle and flare gun, are perceived as more acceptable means of being mobile that are compatible with a 'genuine Norwegian wilderness experience' (Interview 2, 14th May 2014). Yet, this is not necessarily the best strategy for safety of humans or polar bears:

> Every single year, on average, there's normally a ski expedition that shoots a polar bear, or a non-motorised travel that has to shoot a polar bear for safety. Yet at the same time, in the history of 40 years of polar bear protection, no one using a motorised vehicle has ever shot a polar bear in self protection ... in Canada ... we're not allowed to carry a rifle, or gun, but we have to use a motorised vehicle so we can just drive away. Yet on Svalbard it's the complete opposite. You have to carry a gun and ski, then it's a naughty bear if you shoot the bear because you were being environmentally friendly skiing and the bear didn't behave itself.

> > (Interview 2, long-term resident, 14th May 2014)

⁷⁰ There are currently consultations and debates as to whether further leisure trails for snow scooters should be opened up in Norwegian National parks and wilderness areas (see Tveitereid 2014 for example).

Given the experience and practice in other Arctic regions where polar bears are a threat, this particular example shows the potential strength of a conviction to a specifically Norwegian ideal of nature and natural experience. For some, the less regulated and more risky nature of Svalbard compared to the mainland is clearly attractive, not only for the different landscape and experiences it offers, but an escape from the marked trails and ways of engaging with Norwegian wilderness that is offered by the standardised DNT approach. Several participants described Svalbard's wilderness as their playground. Whilst there is concern over motorised traffic from both inside and outside of the Governor's environmental department, snow mobiles offer an accessible way to travel much longer distances for a few months in the year. From the number of snow mobiles registered, 2,130 in 2014 (Statens Vegvesen [NPRA] 2014) it would seem this is too good to resist for residents, tourists and tourist companies alike.

[SS] If you had a choice, how do you think tourism should be managed here?

[pause]. I don't know, because in one way, I would like to answer, to cut away all motorised traffic. At the same time, I understand, I know how you can have motorised traffic in a soft way, because I am not feeling that I am producing so much pollution with the trip actually. I do of course, but I am doing more pollution from driving my diesel car everyday in town, than scooter 4 stroke, very quiet, just a little bit around.

(Interview 69, tourism sector, 16th February 2015)

Some residents (including Norwegian nationals) question the preference for using dog sleds rather than snow scooters on environmental grounds, drawing attention to the resources needed to feed and house the dogs and the waste they leave behind. This is contrasted to the reduced noise and air pollution from snowmobiles sporting the latest efficient 4-stroke engines. Counter to this is the narrative of dog-sledding being a more traditional mode of transport which allows for a more direct and 'natural' wilderness experience. Once the dogs are running, they are quieter and results in less impact to soil and vegetation, as well as air and snow pollution and are therefore 'greener'⁷¹ than snow mobile use, though they impose limits to distances and terrains that can be covered.

Attitudes to snow mobiles and dog mushing also indicate where narratives, discourses and values in Norwegian Svalbard depart from those on the mainland. The short history of the Longyearbyen community, particularly beyond that of a mining settlement, along with the different climate, landscape and possible land uses, means that although environmental issues are discussed, they do not come up against the same 'rural traditionalist' discourse Benjaminesen and Svarstad (2008) describe. In a Southern wilderness area on the mainland that is farmed in summer and 'left untouched' in winter, bar moose hunting, winter dog-sledding by new-comers is seen as a threat by more elderly farmers. The farmers feel that traditional practices and values are more environmentally friendly than dog-sledding (Benjaminsen & Svarstad 2008). Central to these disputes are the issues of who holds power locally to make decisions and what these decisions are based upon. Many of the tensions regarding wilderness management in Svalbard also revolve around these issues, as I will discuss in Chapter 6.

The above example of snowmobiles and non-motorised transport in Svalbard is illustrative: ideas of what 'belongs' in Svalbard's landscape are contingent, but are driven by understandings and practices related to categorising Svalbard as a 'wilderness'. Such ideas draw upon contested knowledges and connect with different, wider discourses of environmental impact; access to, and conservation of, wilderness areas. There is an ambition from some Norwegian authorities to take environmental protection to a higher level in Svalbard, to make it the most well-managed wilderness area in the world. Svalbard's vast wilderness, small population and minimal settled areas combined with the "strong moral position" environmentalism holds in Norway (Benjaminsen & Svarstad 2008, p.57) and the Svalbard Treaty interpretation (see Section 4.2), all contribute to this ambition. Many residents and visitors interpret such goals as symbolic and

⁷¹ (Reimann et al. 2009) though there is a lack of any comparisons or studies on the impact of dogsledding beyond disturbance to wildlife, which is also linked to snowmobile use.

politically motivated (see Chapter 6). I now turn to identify and unpick another important category enlisted in Svalbard's environmental protection regimes, cultural heritage. Cultural heritage and its protection in Svalbard, as already indicated, can be part of a political value assemblage. It can both enhance the resident and tourist experience of Svalbard, or challenge the ideal of a pristine wilderness.

4.5. Cultural heritage: Conceptualising the category

Cultural heritage, as delineated in the Svalbard Environmental Act and described in Section 4.2, is inscribed as a sub-category of Svalbard's environment. As such, it does not enjoy the same, almost unerring positive value beyond the pages of legislation and academic interest that Svalbard's wilderness does. For example, none of the 55 tourists responding to my visitor survey reported cultural heritage aspects as being important drivers or experiences of their Svalbard visit. The larger Visit Svalbard commissioned surveys recorded 24% and 14% of visitors who considered visiting historical sites and/or the museum as important motivations for their stay (Enger & Jervan 2010; Enger 2011), trailing far behind factors associated with Arctic nature and wilderness (see Section 4.3).

There is an evident tension between cultural and natural heritage protection and how their categories operate and inter-relate in Svalbard. Although residents are likely to accept the integrated cultural and natural histories, at least regarding the settled areas (Hagen et al. 2002), there is a range of opinions as to whether all the remains of human activity are worthy of inclusion in the cultural heritage category and the protection that comes with that. Certainly for some, the image of a well-protected Arctic wilderness is marred by industrial 'junk' both past and present: I like the mixture between the nature that's so wild and the urban life. And also that's back in history, so you always see the signs of cultural activity on Svalbard long before we came. So there's always been people exploring this area, and I'm just one of them.

(Interview 19, architecture and planning, 2nd June 2014)

The law for protecting stuff in Svalbard like the cultural heritage. ...it's ridiculous, absolute crap, just get rid of it! ... you see a piece of stuff lying around - it's junk, but you can't touch it, you have to stay 50 metres away...

(Interview 48, research student, 27th June 2014)

Our polar historian was pointing out some 'interesting' cultural artefacts The geologist couldn't help but exclaim that this was 'rusty junk'. Later we chatted about how this was an interesting moment, her first reaction was "why would you come to the Arctic to look at rusty rubbish? I'd want to turn away from that".

(Author's field diary, 3rd July 2013, Petuniabukta Camp)

Cultural heritage in Svalbard can be thought of as separate or as being an added bonus to natural heritage. In these next two sections I examine how the category of cultural heritage is conceptualised, moving from a general perspective to a focus on the wider context of Norwegian and Russian approaches and how this relates to practices in Svalbard in Section 4.6. Traditionally, cultural heritage has been dealt with separately from natural heritage, both academically and in practice (Harrison 2015; Lowenthal 2006; Speed et al. 2012). Yet, these two areas have common goals of 'saving' and conservation/preservation of 'that which is valued' and there are common academic trends between natural and cultural heritage conservation (see Section 4.1). There are also differences, which are worth bearing in mind as we examine how the boundaries and categories of cultural heritage are constituted.

As Lowenthal (2006) and Speed et al (2012) point out, a key divergence is our attitudes to the temporality of nature and culture: we conceptualise (more than human) nature as being pre-time, pre-history and also present, whereas cultural heritage is firmly placed in the past on a timeline of human-history. Another is the motivation behind the valuation and subsequent conservation – Lowenthal

(2006) suggests that the stakes are higher, or at least can appear that way, for conserving natural heritage: survival of the species as a connected node in an interdependent ecosystem, whereas cultural heritage is an aesthetic preference. Whether we could do without 'saving' any cultural heritage, given its importance to our identity and meaning making, is another discussion, as Arler warns: "we begin to realize that there are values we cannot sell without suffering an identity crisis, where we no longer seem to know who we really are and what is truly important to us" (2003, p.176). Indeed, arguments to save cultural heritage often note its importance in upholding cultural identities and the non-reversibility of its destruction by labelling cultural heritage as a 'non-renewable resource' (e.g. Cameron 1994).

Lowenthal (2006) discusses a comprehensive list of other differences between these two 'categories': mobility; and attitudes to death, mixing and interference. The factor most pertinent to this consideration is the ways we measure and account for value in natural and cultural heritage (Speed et al. 2012). Speed et al (ibid), whilst conceding that 'value judgements' are at work in all cases, note that natural heritage is often evaluated via an 'objective valuation' or measurement, through indices and species counts, for instance, whereas cultural heritage valuation is more often seen as subjective. This, they argue, puts cultural heritage at risk if the two are competing or, more generally, when 'objective value' is frequently prioritised. This threat can be seen just below the surface, within the pages of cultural heritage literatures, such as reports from the Getty Conservation Institute:

> While the subjectivity and contingency of heritage values make it difficult to establish a clear framework or even a nomenclature of values (akin to a chemist's elements and compounds), this is precisely what is needed to facilitate the assessment and integration of different heritage values in conservation planning and management.

(Mason 2002, p.9)

Given the above stance, it is unsurprising that cultural heritage methodologies have long been based around the identification and assessment of 'values', which, when aggregated, indicate how 'culturally significant' a cultural heritage object or site is (de la Torre 2002; Walter 2014). Values in this context are taken to mean "the qualities and characteristics seen in things, in particular the positive characteristics (actual and potential)" (Mason 2002, p.7), and can be counted and assessed. The process of assigning value to cultural heritage, whilst traditionally the province of heritage experts, has more recently included views from a wider spectrum of stakeholders and the inclusion of 'social' and 'economic' values in such assessments. It is increasingly recognised that through this methodology, cultural heritage value will be plural and contingent upon spatial, social, historical and personal factors surrounding the values assessment. Yet, there is still a reluctance to give up on the more traditional, professional notion that some heritage values are universal and intrinsic to the object/site, or are at least collectively thought of in this way (Mason 2002).

As with the wilderness 'category', academics and practitioners have troubled, challenged and de-constructed cultural heritage as a 'thing' with inherent value. Following Bourdieu's calling-out of cultural elites (1984; 1993), value is no longer only seen as intrinsic to cultural objects, which, if one has the correct sensibilities, taste or expertise, one can recognise. Laurajane Smith's work (2006; 2012) has been seminal to this challenge of cultural heritage. Smith identifies an "Authorized Heritage Discourse" (AHD) that dominates the practice of cultural heritage management, archaeology and architectural preservation. The AHD locates heritage within objects, sites and events as a static, non-renewable and fragile resource, which is in need of protection from heritage experts. Such protection should aim to maintain the heritage in its found state (Smith 2012). The AHD stems from European and Western notions, the intrinsic value of heritage conceptualised in this way therefore "privileges the material heritage over the intangible, and emphasises monumentality, the grand, the old and the aesthetically pleasing" (Smith 2012, p.3). As Walter (2014) describes, the methodology of assessing cultural heritage using values criteria works to uphold the AHD through a process of "postrationalisation". Instead of the universalising identities, values and de-politicised histories the AHD supports, Smith argues that heritage is thoroughly socially constructed, it is a process, a verb rather than a noun:

Heritage can be usefully understood as a subjective political negotiation of identity, place and memory; that it is a process or a 'moment' of re/constructing and negotiating social and cultural values and meanings.

(Smith 2012, p.2)

Heritage in this view, is a process of deciding what kinds of stories and material histories we wish to pass on: "the present selects an inheritance from an imagined past for current use and decides what should be passed on to an imagined future" (Tunbridge & Ashworth 1996, p.77 cited in Grydehøj 2010, p.6). Smith argues that by taking the emphasis away from the material aspects of heritage; we can then become more focused on the negotiations, politics and processes of how heritage is produced, what this means and what consequences this entails. This is an important trajectory of thought, which is especially relevant when examining the roles, processes and negotiations of heritage management that take place within 'the system' of cultural heritage professionals and policy. However, Pendlebury (2013) notes that taking into account other factors that influence heritage 'assemblages' is key to a wider understanding of heritage processes. Discussions in critical heritage are beginning to incorporate the critique of AHD that Smith deploys, and consider heritage processes as those which involve both contingent human 'frameworks of value'(Gibson & Pendlebury 2009a) and the objects and sites which relate to them. In other words, a concept of heritage that is theoretically opposed to the idea that heritage value is inherent in the site, object or event does not necessarily need to be a de-materialised heritage, nor does it need to neglect 'intangible' aspects of heritage. These developments mirror the debates around socially constructed nature and more recent post-humanist ideas of imminent and emergent natures discussed in Section 4.3.

There is a further challenge to the dominant discourses in understandings of heritage exemplified by the processes of decay and ruination. As Caitlin DeSilvey's work explores (2005; 2006; 2017; DeSilvey & Edensor 2013), when left to its own devices, cultural heritage does not stay the same, but transforms over time. The role of conventional conservation and assessments of value is challenged by the idea of artefacts in process, and these challenges are very evident in discussions over cultural heritage in Svalbard. Harrison suggests that there is now in fact a 'New Heritage Paradigm' that takes cultural heritage to be a fluid assemblage that "emerges in dialogue among individuals, communities, practices, places and things" (Harrison 2015, p.14). This new paradigm is reflected to a degree in the latest high-level international institutions and arbiters of heritage. The Universal Declaration of Human Rights recognises the important role cultural heritage has in cultural life and The Council of Europe's Convention on the Value of Cultural Heritage for Society (the Faro Convention) defines cultural heritage thus:

Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes *all aspects of the environment resulting* from *the interaction between people and places through time*.

(Council of Europe 2014, p.no pagination, my emphasis)

This definition appears to be an example of how the deconstruction of the notion of heritage has influenced thinking in this arena. Here cultural heritage is no longer fixed, but context and time dependent and always in motion. It is also all-inclusive, implying that anything with human involvement can be cultural heritage. Similarly, UNESCOs World Heritage Convention is cited as being more and more attuned to intangible notions of flexible heritage (Harvey 2015; Lowenthal 2006). However, if there is a 'New Heritage Paradigm', it does not necessarily deal with the problems that a values-based methodology brings with it, namely, depending upon the judgement calls of those doing the evaluation (Walter 2014). Walter (2014) argues that cultural heritage conservation that is open to change, interaction and communal ownership would be better served by a narrative approach. This has yet to be taken up in practice, though, and the values approach remains dominant.

4.6. Cultural heritage in context

On Svalbard the Government will continue a restrictive practice with regard to activities and encroachments which can damage or reduce the value of cultural monuments on the archipelago.

(Ministry of Climate and Environment 2004, p.no pagination) Both Norway and Russia have ratified the European Convention on the Protection of the Archaeological Heritage, or Valetta Convention (Council of Europe 2015). Norway is one of just 17 nations (the Valetta Convention has been ratified by 44 to date) to ratify the Faro Convention (Council of Europe 2014). Norway has been paying increasing attention to cultural heritage, and 2009 was ear-marked as the 'The Norwegian Year of Cultural Heritage'⁷². In addition, Norway's most recent relevant White Paper, *Living with our Cultural Heritage* (Ministry of Climate and Environment 2004), in line with the Faro Convention, emphasises social, educational and community involvement in cultural heritage, as well as access to monuments and sites. In this White Paper, cited above, cultural heritage in Polar Regions are treated separately, with the aims in this region placed firmly on preservation and restricting visitor access.

This is an important anomaly to return to. However, contextualising the Norwegian national context remains the imperative given this is the context with which most residents and visitors to Svalbard will be familiar. Research into how cultural heritage is practiced in Norway reveals that whilst social and community aspects are part of the legislation and criteria in use, these are very much secondary to more traditional notions of authenticity (Mydland & Grahn 2012). In their investigations of how funding for cultural heritage projects is awarded, Mydland and Grahn (2012) find there to be a considerable gap between the rhetoric of community inclusion and democracy of the conventions Norway has signed and the practice of heritage conservation. The Authorised Heritage Discourse (AHD) is still very much centred on the materials of the past

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http://www.kulturminneaaret2009.no/english/index.html
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⁷² The year focused on cultural heritage in everyday life and aimed to be all inclusive, socially and academically: "This theme is all-embracing, both socially and time-wise, and comprises both tangible and intangible cultural heritage..."

which are seen to carry intrinsic value, especially if in their 'original state' and can be detected and defined by experts:

> The Norwegian authorized heritage discourse seems above all to be concentrated on the material aspects of heritage. Sites and monuments are privileged in the discourse. *Inherent values are emphasized* like representativeness, authenticity, continuity, physical condition and economic value. *...The Directorate constructs itself as the exclusive active expert body and steward of Norwegian heritage*, while the public in general is constructed as passive recipients of Norway's heritage.

> > (Mydland & Grahn 2012, p.573 my emphasis).

The AHD, whilst powerful, does not necessarily match up with public attitudes to cultural heritage (Mydland & Grahn 2012), nor with how notions of 'authenticity' is practiced outside of this discourse (Guttormsen & Fageraas 2011). Guttormsen and Fageraas (2011) use an example of Røros – a small mountain town in mid-Norway where copper was mined until 1977 – to show how authenticity is also practiced as a balancing act. Preserving the cultural identity of Røros is a concern that is juggled with the need to provide acceptable and convenient living conditions for residents. A practical and planning-based knowledge of cultural heritage is developed that sits alongside authenticity that is used to brand and promote the town to tourists. Conservation practices include altering the town's fabric to increase its attractiveness, whilst also making the most of educational and scientific assets as a historical resource for learning, an approach more aligned with the AHD. There are signs that attitudes within the Norwegian Directorate and heritage professionals are beginning to change. That said, as Guttormsen and Fageraas (2011) discuss, these alternative discourses and practices of heritage do not necessarily mean democratisation or increased community engagement.

Polar cultural heritage, as discussed in Chapter 6, plays an important geopolitical role. Like the Norwegian version of wilderness and *friluftsliv*, polar cultural heritage is also very much part of the national narrative of modern Norway. For example, heritage and museum scholar Anders Houltz (2010) analyses the Fram Museum as a self-perpetuating success story of the heroic Fridtjof Nansen, his crew and his ship, the Fram, in the Arctic and Antarctic. Nansen's North pole mission in the 1890s encapsulated the epitome of Norwegian traditions: using a ship (in reference to their Viking past) and skis, the fast-becoming national sport of the time (Houltz 2010). The Fram, Houltz argues, has become a 'national treasure' whose narrative is so powerfully entangled with Norwegian nationalism that it is almost unthinkable to challenge or rewrite these histories.

> The rest of the world – be it other countries as polar nations or the Arctic and Antarctic as physical environments – were reduced to background roles and stage settings … the Fram Museum was, and remains, a national shrine, a place narrating a condensed story of Norway and Norwegianism to school classes and foreign visitors.

> > (Houltz 2010, p.730 and 735)

The Fram, housed in a Viking-inspired Museum, is located in a museum-laden district of Oslo. Across the bay lies the modern Oslo Opera House (opened 2008), which is a grandiose cultural investment with a bold design that strongly references ice flows and glaciers (Figure 16). That these links to Norway's polar history and related physical forms can be found at the heart of the capital city is not insignificant.

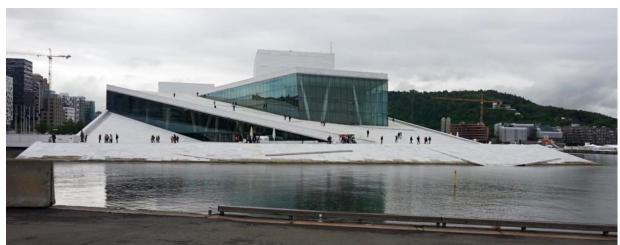


Figure 16: Oslo opera House, home of the Norwegian National Opera and Ballet. June 2015

Honing in on Svalbard, the seemingly arbitrary temporal basis for cultural heritage designation of 1946 (see Section 4.2) is certainly strategic. As the heritage sector worker explains below, using this date of 1946, rather than the earlier date of 1900, a greater number of Norwegian objects and sites can be included in the category of cultural heritage:

Before, it was 1900 and you have the activity of the mining and the early Russian hunting. But ... you have a lot of the Norwegian hunting from 1900-1946, so I think that was an important reason, that you then get the older Norwegian hunting cabin. And also, the latest part of the mining, like in Pyramiden and Barentsburg, and in Ny Ålesund, you have a lot of activity from 1900 to the war, so you also get the late part of the mining history.

(Interview 5, heritage sector, 20th May 2014)

Casting back to the Faro Convention's cultural heritage definition, perhaps something has been taken on board here: the potential inclusion of everything that signifies an environment-human interaction, so long as that interaction was *before* 1946. Time is crucial here in the categorisation of what is and is not cultural heritage. As with ideas of nature and wilderness, Norwegian identity and the wider cultural and socio-political context of cultural heritage protection in Norway influences cultural heritage protection in Svalbard. Again, comparing the Norwegian situation with Russia, according to the limited research on Russian cultural heritage practices available (Plets 2015), it would seem that there are some shared experiences.

Like Norway, Russia has also attached increasing importance, attention and funding to cultural heritage protection, and there has also been some tension between governing bodies and public ideas of cultural heritage. There is, of course, a turbulent back story regarding attitudes of the state towards cultural heritage, in particular religious sites, from Soviet times, that should not be forgotten, but will not be dealt with here (for example see Thomson 1978). Although Russia had 19 UNESCO listed sites in 2007, Breidenbach and Nyíri's (2007) research suggests that the status of such sites was not fully utilised, and attitudes towards tourism were ambivalent at best. However in recent years, Russia has, according to Plets (2015), increasingly come to recognise the role cultural heritage can play in economic development. This can be through tourism, and as a tool to leverage political power, feeding into (complex and varied) nationalisms and prestige. As in the examples from Norway, Trumball (2012) sheds light on the different viewpoints of federal government towards cultural heritage protection, compared to public concerns and campaigns in St Petersburg. This example also brings up some of the key differences between the two nations.

St Petersburg, despite being a UNESCO World Heritage Site since 1990, does not have a good track record of protecting its revered architecture and skyline, having lost over 100 buildings to new developments and sky-scrapers (Trumbull 2012). After fervent campaigning from grass roots NGOs, the city authorities, as encouraged by UNESCO, now appear to be taking protection more seriously (ibid.). Similarly, concerns have been raised over the lack of protection of modernist buildings in Moscow (Dushkina 2008). Plets' (2015) research on the other hand, shows that at sites where World Heritage Status has been actively pursued, alongside tourism development and concerns over protection, that the concept of authenticity is one very different to a western conception, and to UNESCO and ICOMOS officials. A 15 year-long battle to inscribe Bolgor, Tartarstan as a UNESCO world heritage site ran parallel with extensive restoration, building and re-building of the site, adding new structures and enhancing old ones, even though concerns were raised over authenticity from ICOMOS during the officials' first visit. In 2014, after becoming more active in having Russians on UNESCO panels and making allies with politically friendly parties, Bolgar was indeed inscribed, despite the heritage experts' concerns over authenticity, exposing just how political such processes can be. At the same time, that such tactics were needed to circumvent the dominant ideas of authenticity that the AHD contains demonstrates how influential traditional notions of cultural heritage still are:

Across the Russian Federation, authenticity is evoked in radically different ways than in the West ...Taste is socially conditioned; whether or not to reconstruct archaeological ruins in an effort to catch the gaze of a variety of publics is too.

(Plets 2015, p.81)

Given these examples, we should not be surprised when considering the changes afoot in Barentsburg and the rising tensions over the future of Pyramiden. As with the category of wilderness in Svalbard, cultural heritage not only contributes to cultural identity and national narratives, but does economic work. Roura (2009) notes the importance of historic sites in polar tourism: they are more predictable than wildlife in terms of being in the same place all the time regardless of weather and animal behaviours (although polar bears might get in the way and weather conditions can prevent access). There is usually good access as people have been there before to create the 'cultural remains' in the first place. There is something to show and a story to tell (Roura 2009).

Both Russian and Norwegian tourism management teams have expressed interest in developing cultural heritage attractions as a way to 'add value' to tourist experiences. Residents and other visitors tend to agree this is an underutilised aspect, even if they may not agree with current approaches to cultural heritage protection:

> I would like to see them taking one of these old mine shafts and making [it] into an attraction, I would like to see them build like a mining experience centre – seeing how it was done.⁷³

> > (Interview 46, tourism sector, 26th June 2014)

With the mines as well, if you're gonna leave them there, at least maintain them, turn it into a tourist attraction, make it something good to look at instead of just, leaving [it] to fall down or fall apart.

(Interview 48, research student, 27th June 2014)

⁷³ Previously, there was a 'mine experience' tour available in mine 7, this was not available for some years. Since my fieldwork however, long-held plans to re-open mine 3 for tours have come into fruition.

These perspectives refer to the largely hands-off approach to managing Svalbard's cultural heritage under Norwegian control. In contrast, recent developments in Barentsburg are a good example of tensions of a different kind, where *Trust Arktikugol* (TA) is being very active in developing a new image for Barentsburg:

> Barentburg's image is quite clear: it's a good infrastructure, very high level, it's a settlement town of traditions, traditions of Pomors, Russian, Dutch, Swedish traditions that were formed during all 400 years since the first people came here.

> > (Interview 58, tourism sector, June 30th 2014)

As a tourist/ Western visitor/researcher, I was shocked and quite sad to see the changes in Barentsburg between my first and second visits to the town, just one year apart from one another. More buildings had been given the coloured panel treatment and the old Soviet artwork was disappearing fast. I was, on the one hand, frustrated that the cultural heritage laws that protect scraps of industrial junk littered across the landscape cannot also offer protection to artefacts which seem rare and open up a world of stories of another time and place. On the other hand, I could sense the defiant air of self-determination about these new facades. They seemed to me to be broadcasting "this is Russian territory; we will mould it to our own tastes and cater for the needs of *our* residents and tourists here. This place is not a relic, we are here and we need no reminder of Soviet times. Things have changed, more changes will come". As a participant articulated:

The point of all this is to make this place the same as Northern cities of Russia, if you have been for example to Chukotka? ... So people who came there were wondering how it was possible to make such a colourful northern city, so that is why we can see different facades. In this meaning, Barentsburg is not that different from Northern cities in Russia that got big investments. ... but with it, it is losing a part of its identity.

(Interview 56, tourism sector, 30th June 2014)

As the above extract implies, things are not clear cut. A small handful of *TA* personnel are deciding which buildings get what treatment, which tourist markets will want what products and what image should be created for them,

how residents should live. This may be an alternative heritage discourse to what we might normally expect, but it is not the 'people's heritage' that the 'New Heritage Paradigm' promises. In fact, the concentration of plans to showcase older heritage mesh nicely with cultural heritage as defined in the Svalbard Environmental Act and with the narrative of Russia having a strong polar history.

There are many factors at work here, including a desire to encourage specifically Russian tourists, to keep Norwegian authorities happy, and to portray Russian activity in the Arctic as historically based, yet modern and of a high standard. Hence, it is not quite as unfathomable as it may first seem to see the restoration of the old Russian consulate building, widely held to be "the most beautiful building in Barentsburg" (Interview 59, 1st July 2014), being undertaken, whilst metres away other buildings are flattened or their original, Soviet facades replaced with brightly coloured structurally insulated panels (see Figure 17, Figure 18 and Figure 19). Such changes viewed from a Western, and Norwegian perspective may well appear to indicate a flagrant disregard for cultural heritage. This is not necessarily the case:

> They [Russians in Svalbard] have another point of view. We say they don't understand tourism. But we don't understand them, we haven't a clue! [laughter], so we are not better, but different. What are they thinking...?

> > (Interview II, heritage sector, 22nd May 2014)

Figure 17: Barentsburg Sports and cultural centre, July 2014





Figure 18: Barentsburg Sports and Cultural Centre (montage), June 2013



Figure 19: Half-demolished building previously housing the museum, Barentsburg June 2014

Figure 20: Replica Pomor house, Barentsburg July 2014



Locally, the tourist sector and small number of cultural heritage experts interested in this area take cultural heritage matters in the Russian towns to be of high importance. There has also been some concern from Longyearbyen residents (Bjørke 2014). However, on a national scale, efforts towards cultural heritage protection and connected tourism by Russian authorities and organisations are concentrated in the Russian Arctic territories such as Frans Josef Land, Wrangel Island and Novaya Zemlya (see for example reports from Sazhenova 2011; Shalyov 2013; Nilsen 2014). Reasons for this are both practical, given Norway's jurisdiction in Svalbard, but also indicate a strategic focus on Russia's more successful claims to territory in the Arctic.⁷⁴

What is included as cultural heritage in Svalbard is, like the conception of Svalbard's wilderness, specific to its unique historical, socio-political and environmental context. In the protection of cultural heritage in Svalbard, it is necessary to accept the human connection to the landscape. However, with the principal criteria for categorisation of cultural heritage being age, present or more recent human activities can be seen as a threat to cultural remains. Cultural heritage takes on a static, intrinsic value that humans should not interfere with. What counts as cultural heritage in Svalbard is relatively strictly defined, using a mixture of a temporal baseline (1946) and value-based criteria. In the context of the wider heritage debate, the communities of Svalbard have little input into these decisions in which a strong authorised heritage discourse is at work. The special clause for polar regions (Ministry of Climate and Environment 2004) also makes access to, and social involvement with, cultural heritage in Svalbard much more limited than on mainland Norway. However, as with elsewhere in Norway and Russia, the AHD is not universally accepted.

4.7. Categorical confluences

Bringing cultural and natural heritage together under the common theme of analysing categorisation and its attendant value practices has highlighted a great deal of common ground. The theoretical tendencies towards conceptualising nature and cultural heritage as in-flux, fluid assemblages of material-humannon-human-intangible processes were recognised in the academic literature. Moreover, in both cases we saw how these theoretical trends have so far had limited influence on the legislative and political approaches to conservation in Svalbard. Instead, categorisation processes create a hierarchy of legislation and protective regimes for natural and cultural heritage that underpin Norwegian control and the tension that creates locally. These legislative and protective

⁷⁴ Anecdotally, several sources have indicated that Svalbard is not widely known in Russia, outside of the small number of people with direct connections to it. In contrast, nearly all Norwegian's know about Svalbard, Norway's most northerly outpost.

regimes also rely on defining categories in ways that sit in contrast to the academic literature – where firm notions of what 'wilderness' and what 'cultural heritage' is – and can be – define the practices of evaluation relating to those regimes. Categories can thus be seen as a tool to legitimate this control.

Cultural identities are deeply woven into the approaches to natural and cultural heritage and the real and potential economic and geopolitical gains that can be made as part of heritage practices do not go unnoticed. Svalbard's heritage is identified as an extremely valuable entity. Much is at stake for national prestige, both for Norway in its maintenance and extensions to restrictive management policies, and for other actors who would benefit from less restrictions or alternative approaches to such management, for example, *Trust Arktikugol, Store Norske*, Svalbard tourist operators or foreign investors. Within this restrictive policy regime, humans are conceptualised as a threat to wilderness and to cultural heritage deemed old or valuable enough to belong to that category. This will be explored further in Chapters 5 and 6 as we delve into *how* cultural and natural heritage protection is practiced.

Although bringing cultural and natural heritage together has shown that their cross-overs go beyond similar theoretical trajectories, they do not stand on equal footing. The differences that Lowenthal (2006) and Speed et al (2012) identified do still have bearing, contrary to the efforts of the cultural heritage profession in creating criteria and measurements of cultural heritage value, natural heritage tends to get priority over cultural:

Even scientific experts continue to view nature as superior to culture, the alterations of humanity as inferior to the previous untouched fundament. In the very book that launched and lauded UNESCO's cultural landscapes programme, essay after essay implies that nature is perfect and culture a nuisance, and rates 'anthropogenic' areas below pristine ones - even when they admit that none *are* pristine.

(Lowenthal 2006, p.87)

In Svalbard, this becomes evident within local legislation and policy. Cultural heritage, whilst very much a part of the environmental protection framework, is

not seen as the trump card in the way that the natural heritage category of wilderness is:

Of course it's an interesting discussion, because all traces after human activity is cultural heritage, but not all of it is protected. Here, there is a decision that the wilderness has priority.

(Interview 66, environment sector, 16th February 2015)

Yet, what unites cultural and natural heritage is the sense of wonder and intrigue that they can invoke; the craving for understanding and the duty of care we can feel to protect what we value for future generations. Categorisation has provided a useful tool for analysis in showing how frameworks for value have been constructed and how value is attributed through these categories. Using categorisation in this explorative manner has also shown that in such 'boundary work', the boundaries of wilderness and cultural heritage categories are porous, fluid, contested, political, and, certainly not all-powerful. The following section provides some examples of the challenges that the vital material of life can bring to a strictly regimented categorisation process, revealing where, how and why practicing value of natural/cultural heritage forces a degree of flexibility into the policy approach.

4.8. Ambivalent material

We are in a way pissed that Sysselmannen [Governor's Office] sets the restrictions. But ... people are doing what they want anyway. I've been sitting there watching a group of 200 people go out on the icebergs. It's illegal, but they do it. Nobody cares.

(Interview 24, long term resident, 4th June 2014)

Nature is not lined up, first you see polar bears and then you see walruses and then you see whales, ... it doesn't work like that. As a tourist going out on a boat or whatever, you can end up seeing nothing.

(Interview 63, long term resident, 7th July 2014)

One of the issues for these mining structures [in Pyramiden] is the water coming down the mountain and it changes its way every spring and takes away some infrastructure. And it's been like that all the time, when they were doing mining as well.

(Interview 19, architecture and planning sector, 2nd June 2014)

In this section I seek to make a simple point: although categories are useful for making sense of the world and are extremely prevalent within our value practices – especially in the policy arena, the 'vital materialism of life' (Bennett 2010a; 2010b) can and does trouble these categories. As the above quotes reveal, it is recognised that residents, both humans and more-than-human, and visitors defy our expectations associated with such categories as wilderness, wildlife or nature. In the first quote, defiance comes in the form of resistance to protective regulations that do not reflect the same values of heritage as the actors who they seek to regulate.⁷⁵ In the second quote, we have a reflection that nature does not always bow to the constructs of time schedules and locations for commodification, whether or not such consumption could aid in 'saving' habitats or species. Moreover, as the third quote suggests, regardless of area plans and heritage value assessments, human and more-than-human nature is dynamic. Life, material objects, physical processes do not necessarily fit neatly into 'boxes' – 'heritage' can turn up unexpectedly, or not at all; decay more quickly/slowly; melt, freeze, mix, move.

Categories, of wilderness and cultural heritage are nevertheless used in attempts to protect and save heritage in Svalbard. Recalling Bauman's (1991) specific treatment of ambivalence to mean that which can fall into several categories, I explore some encounters, objects and scenes, that involve ambivalent "confederations" of actants (Bennett 2010b). These assemblages serve to expose the material challenges to these heritage policies and remind us of the porosity of the boundaries and borders of such categories (Jones 2009) and indeed challenge whether the categories of wilderness and cultural heritage are appropriate at all. Firstly, I consider some specifically spatial aspects and

⁷⁵ This resistance is not unaccounted for by the regulatory bodies who attempt to police humans and other species. Polar bears straying into settled areas, for example, are scared off or transported away, and the Governor's Office now have a detailed environmental management plan for dealing with 'alien species' (Governor of Svalbard 2014a)

consequences of ambivalence and agency through an encounter with an Arctic fox and a gosling, and an evolving story of ice freeze-thaw patterns and tourist movement regulations. Secondly, to push at the boundaries of the categorisation processes a little harder, I conceptualise Pyramiden as an industrial ruin: ruins being characteristically difficult to categorise.

Taking inspiration from Jane Bennett's (2010b) explorations into vital materialism and mindful of Anderson and Wylie's (2009) warning of a tooconcrete and grounded form of materialism -I utilise 'assemblage thinking' (Anderson et al. 2012; Anderson & McFarlane 2011; McFarlane & Anderson 2011) in this section to enable a close attention to process, distributed agency and nonlinear, emergent causality (Bennett 2010b). For, as Carolan (2013), Bennett (2010b) and Whatmore (2006) among others have indicated, assemblage thinking leads to a consideration of practices, of what value/things/actants do, rather than what they mean, hence given the focus on value in action developed in Chapter 2, it is worth exploring how these ideas can work together here. Having identified the values coalescing around categories of natural and cultural heritage in the previous sections, whilst acknowledging how they are indeed politically and socially contingent, for the most part, state governance of these categories appears to uphold these categories as static. This section challenges such a static view by considering what natural heritage and cultural heritage categories do and how they are practiced and performed in Svalbard by humans and more-than-humans.

4.8.1. Gosling, lichen, students, fox, Area-10

Nature takes its course. Fox eating chicken. RAIN. Embrace the environment no matter what.

(4th July 2013, memory bag entry⁷⁶)

Reflecting on my trip with the U.S-Swedish student group in Petunia bay, one stand-out memory, which some of the students also recorded, was an encounter with some Arctic wildlife. We had stopped to survey lichens, and we became

⁷⁶ A collection of short memories collected from the students during the Petuniabukta camp (see Table 1, Chapter 3).

aware of a gosling amongst the rocks nearby. Our excitement at watching this cute, fluffy, photogenic chick turned to concern when it began to follow us. Were we disturbing 'nature'? Were we leading it too far away from its mother? The group decided to move on in an attempt to lose our intrepid follower and settled on a survey and lunch spot further away. A few minutes later we saw a polar fox carrying a gosling away. While munching through our own lunch, we soberly contemplated whether we had facilitated the fox's catch somehow. Did our presence make a difference? Some of the group had developed a fast-formed affinity with our fluffy follower leading to exclamations of "That's nature for you, harsh". Whilst others could appreciate the importance of getting a good meal, "At least Mr Fox got some lunch".

This encounter is helpful to thinking through the consequences of the hierarchical and spatially enclosed categories that wilderness protection in Svalbard is based around. The encounter happened within the boundaries of Area 10, where the national parks, nature reserves or area management plans did not prevent our access. Were that gosling and fox a few miles away, over the invisible boundary line, would the outcome have been the same? Does it matter less that we potentially disturbed gosling-fox relations than if we had been elsewhere in Svalbard? Are fox and goose less worthy of protection in this area, an area defined by the high concentration of past and present human activities? What exactly would that protection offer? The fox and gosling story emphasises the spatial consequences of the value practices that are produced. By creating a form of 'sacrifice zone', in Area 10, where natural and cultural heritage mingles with human activities, we allow the possibility of gosling-lichen-student-fox encounters here and prevent them elsewhere. Categories used for heritage conservation are still at work, but through moral codes with legal backing, rather than through the more direct approach of creating protected areas. The Governor's visitor booklet Animal safety is your responsibility states:

> Visitors are obligated by law to respect nature and not disturb the animals. Disturbance means that the animals change their behaviour due to your presence.

> > (Governor of Svalbard 2013, p.2)

At the bottom of the environmental protection hierarchy, despite efforts to infuse a more general environmental care and attitude, as well as, for example, snow mobile free zones, Area 10 is still characterised by some as "a little bit of a lost cause" (Interview 68, 17th February 2015). Cindi Katz's analysis of protected area conservation brings attention to how preservation zones can justify exploitation elsewhere (Katz 1998; Katz & Kirby 1991). Area 10 can be seen as a good example of this notion of equivalence at work. Still, we are left with a conundrum here, an ambivalent, ambiguous event. Did we force a change in animal behaviour? What moral action could we or should we have taken in this case, or was our concern taking this 'common sense rule' beyond its intent, were we displaying symptoms of 'urban thinking'? Perhaps at least some of us were hoping for an outcome more akin to the Brother's Grimm version of fox meets geese, where the geese cleverly outwit the hungry fox through initiating a neverending last prayer.⁷⁷

Jane Bennett's (2010b) account of an electricity grid failure in Northern America, causing a black out in August 2003, is instructive in thinking through questions of responsibility and agency from an assemblage perspective. Bennett, through recognising the capacities of the multiple things, systems and forces which come together in tension to form the grid, understands the blackout as a complex assemblage in which many of the grids components could no longer cooperate. Thus, there is no one cause or person to pin responsibility to. Examining our fox-gosling scenario through a vital materialist perspective allows us to develop a more distributed account of agency and responsibility. We can say we were (emotionally) affected by the encounter as a whole, by the landscape in general, by the actions of each species and our own companions, by the moral ideas and stances we had more-or-less become aware of through our preparation to spend time in this particular space. More broadly, the Norwegian Government, the Governor of Svalbard's Office and the Svalbard Treaty all assert their presence through the construction, management and enforcement of Area 10 and the Svalbard Environmental Act. Wider still, we might trace the

⁷⁷ The Fox and the Geese is tale number 86 in the 1884 edition of the Household Tales collection (Grimm & Grimm 1884).

geopolitical relations and the attention of the world media that Svalbard often attracts to our own sensibilities and to those acting to influence environmental management in Svalbard. Yet we can no longer ignore the agencies of the gosling, the fox, their family and neighbours, possible past experiences with the other species involved (human and nonhuman) and the rocky, lichenous landscape where this took place. All of these (and no doubt more) affects and relations came together in this encounter, which emerged as one possible scenario of many.

In comparison to the 2003 black out affecting 50 million people (Bennett 2010b), a fox eating a goose (at least we presume it did) in Svalbard might seem to be taking things a little out of proportion. However, this example illustrates that spatial boundaries; as well as the 'vitality' of the gosling, fox, students, lichen and glacial debris we were there to study; partake in events, in assemblages and therefore have effects on the ways in which value is performed and practiced. In this example, according to the environmental management regime, value is different on either side of the Area 10 boundary - through the lesser protection offered to Area 10, the recreation and education value, the encounter experience of accessing 'wilderness' is realised, whereas within the national parks, the wildlife and wilderness is given priority. However, imagining this encounter taking place on the other side of the boundary, it is difficult to think of our human part in it as being much-altered. When I first told this story, a colleague jokingly asked me why I did not try to do something to prevent the fox eating the gosling, "aren't you a vegetarian?!" Thinking through assemblages and vital materialism goes beyond a desire to point the finger at the fox for eating the gosling, the mother goose, or our student group for allowing this version of the encounter to unfold. It does however, in combination with examining practices of value, reveal that the value of wilderness upheld in the Svalbard Environmental Act, when applied through a hierarchical spatial zoning system can result in incongruous and ambivalent events and practices. However, the "deadening grip abstract categories hold over our sense of political possibility" (Anderson et al. 2012, p.186), does not and cannot operate all the time. Sometimes the weather intervenes.

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4.8.2. Tempelfjorden-tourism-North Isfjorden National Park boundary-temperature

This story is one where icy water, Norwegian-Russian relations and tourism activity worries the seemingly-solid park boundaries and restrictions. The winter/spring season of 2014 was not a 'good' winter in Svalbard. In relation to UK weather conditions and coping strategies, this will no doubt sound bizarre, but this particular season there was not enough snow or ice. It was too warm and this was a problem.

Cold temperatures that facilitate ice and snow are essential for winter mobility in Svalbard and elsewhere in the Arctic (see for example Ford et al. 2013). Though not a matter of survival through traditional practices, people in Svalbard rely on fjords to freeze over, solid, safe ice in order to use snow mobiles and, to a lesser extent, dog sleds, to move around outside of the town areas. For many, late February to early May are the best months of year, when the range of leisure activities are at their greatest: there is daylight and, normally, snow and ice. Conversely, when the snow and ice recede, unlike in more temperate zones that happily anticipate the renewal of (non-icy) spring, the melting ice is associated with loss:

> When it's frozen, it's like the way it's supposed to be, it's life. Life here is made for the ice. I get sad now when it starts melting. It's the end now, the end of the season, everybody gets a little bit upset. Snow scooters are the only transport we have with ice, the sports, everything we have is around the ice. So, for me it changes totally. I wait for this 6 months of ice, so bad!

> > (Interview 4, photographer/film producer, 17th May 2014)

Well it's just great in the spring time, 'cos you just feel like you're freed. You've been trapped in the town for all that dark time and then when the ice and snow are here and you can get out on the snow mobile, it's the best time of year. You can get out and just go and see it. So, it's like the access to everywhere.

(Interview 23, photographer, 3rd June 2014)

Some tourist companies rely very heavily on good ice conditions for their activities, for example, the 'ship in the ice' experience. Each year the tourist company Base Camp has frozen the ship Noorderlicht in the sea ice at Tempelfjorden, where it acts as a novel 'Arctic experience' and 'hotel' for guests.⁷⁸ 2014 was the only winter in 12 years that the tourist company was unable to offer this product, Templefjorden did not sufficiently freeze over. Pyramiden, which, the previous year had welcomed over 600 tourists, arriving by snow mobile excursion, to the hotel and town during the winter/spring tourist season, was off the tourist menu. As Figure 21: Permitted area for tourist excursions, Area 10, shaded in pale yellow (Governor of Svalbard n.d.).

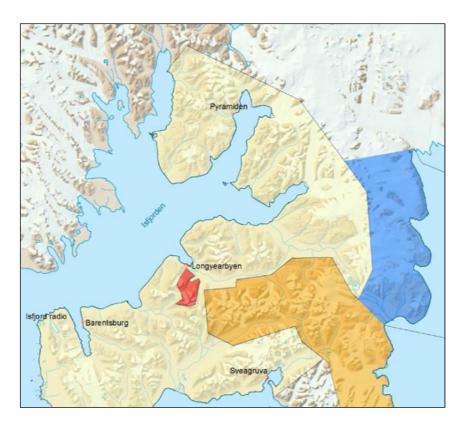


Figure 22, Figure 23 and Figure 21 help illustrate, this is far more a case of "emergent causality" (Bennett 2010b) than a simple linear relationship where warmer temperatures cause less tourism in Pyramiden. Due to the restrictions on tourist movements outside of Area 10, although it is possible to get to Pyramiden via alternative routes, by driving around the fjords and crossing more glaciers, these routes were not permitted for non-residents in 2014. Visit Svalbard, the umbrella organisation for tourist information and operators, applied for a dispensation for this specific route, but the risk of environmental damage was considered too high. The following year, after further consideration,

⁷⁸ See <u>http://svalbardposten.no/index.php?page=vis_nyhet&NyhetID=5977&sok=1</u>

the Governor's Office re-evaluated and decided to allow the route, although this was not necessary as ice conditions were much improved. At the same time, restrictions on travel elsewhere were tightened to lessen the traffic in polar bear breeding areas in East Svalbard.

Suddenly, we have a situation where the line on the map, the zones and categories defined in the Svalbard Environmental Law and subsequent management plans have become more flexible, responsive and porous. Where the physical properties of water/ice are not something that can be ignored or metaphorical (Steinberg 2013; Steinberg & Peters 2015) but are integral to the assemblage. Where winter temperatures interact with the need for continued tourist development for both *TA* and Longyearbyen firms, the control of environmental damage and policing access to wilderness work to produce new snow mobile routes and close off others.

Figure 21: Permitted area for tourist excursions, Area 10, shaded in pale yellow (Governor of Svalbard n.d.).

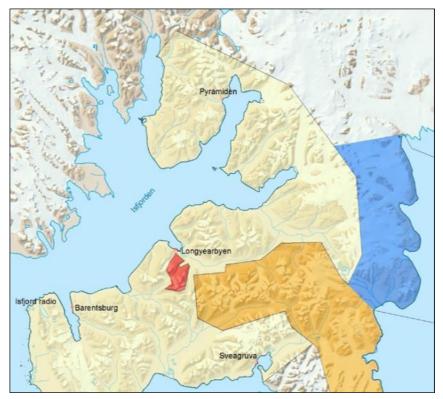




Figure 22: Approximate snow-mobile route to Pyramiden via Tempelfjorden (Adapted from Norwegian Polar Institute's TopoSvalbard)

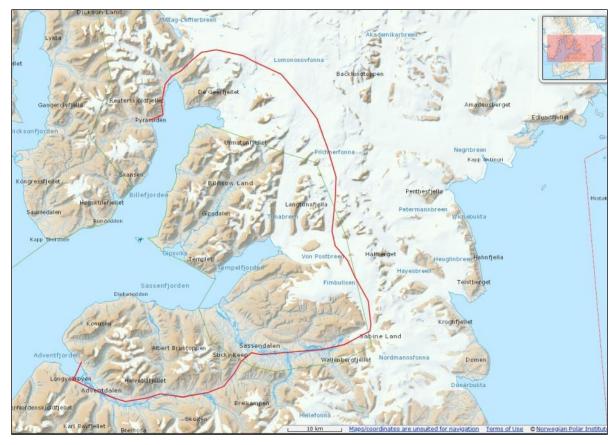


Figure 23: Approximate route to Pyramiden avoiding Tempelfjorden and Billefjorden (Adapted from NPI TopoSvalbard)

Thinking more broadly of climate change and its potential effects on tourism in Svalbard, there are undoubtedly some concerns. That they are not seen as urgent or serious as one might expect, can perhaps be attributed to an innate recognition that climate change is but one actant in a complex assemblage and set of confederations that enable various tourism activities to proceed. Climate change did not appear to be a source of great worry and fear to those involved in the Svalbard tourist industry, which echoes findings from previous research in Svalbard (Johnston et al. 2012; Kelman et al. 2012). However, there is a growing recognition and concern with climate change-related trends such as the decrease in winter ice, which affect the spring snow mobile season. The attitude towards such changes is quite practical, and an extension to the always-present threat of bad weather (and indeed the unreliability of wildlife to present itself) to tourist activities (Kelman et al. 2012). Experiencing the weather in Svalbard might not be "at the root of our moods and motivations" (Ingold 2010, p.122) the whole time, it is also not something often ignored. Possibilities of adaptation to adjust the activities and products on offer if and when climate change becomes an issue are often similar to options to adapt to variable weather conditions. Indeed, whilst many do not recognise 'last chance tourism' as a dominant driving tourism trend (Johnston et al. 2012), it may be that 'first chance tourism' holds more promise as new areas and routes open up more reliably through reductions in sea ice. The following interview extract, which focuses on sea cruise tourism, is a good illustration of the mixed feelings and sense of optimism.

> We see already vessels need to go further north to find the ice edge and that can influence on the future product ... But tourism is always developing. Where some stop, others will find other opportunities. ... That there is so little ice, that they are not finding what they used to find. That worries them a bit, since for decades they have been marketing and selling certain products and this is happening fast, they might need to adapt to the new situation faster than normal processes. So some concerns. But not very much, because there's so many other things to see as well. Especially in Svalbard there is so much wildlife, birds. ... that we have enormous resources in regards to nature and experiences, that's good.

> > (Interview 26, tourism sector, 5th June 2014)

What the reduced tourism in Pyramiden's 2014 spring season and the extended discussion on climate and change and tourism in Svalbard brings into question, via assemblage and vital materialist ways of thinking, is the solidity of things. It queries the solidity of ice, the rigidity of the environmental management strategies in Svalbard, firm beliefs that climate change will spell the end to Arctic tourism, and logical chains of causality. In doing so it also challenges the spatial sub-categories of the protected area zones. Tourism activities such as a snow mobile excursion to Pyramiden involve cooperation between a confederation of things: ice, snow, snow-mobile, government permissive practices and routes, tourist guides, GPS, airlines, hotels, Trust Arktikugol, Longyearbyen tour operators. These things all have the capacity to act otherwise. In the season of 2014, neither ice nor the Governor's Office could offer cooperation in passage to Pyramiden for tourists, yet this may in the long

run have led to a stronger confederation, a more durable, adapted assemblage in the long term, with a new found flexibility emerging from the environmental management tools of the Governor's Office.

4.8.3. Pyramiden as ruin and ghost town.

Ruins are difficult to categorise, yet mount the challenge of such categorisation none then less:

This ambivalence intrinsic to the modern status of ruins occurs in part, I would argue, because ruins challenge us to make sense of them, as they frame emptiness and dramatize the evanescence of meaning ... we need to make them speak and militate for our theories.

(Schönle 2006, p.652)

To conceive of Pyramiden as a ruin (Andreassen et al. 2010) or ghost town is neither a large stretch of the imagination nor novel. Nor is it a neutral label to assign. Ruins are made and experiences of them are embodied (Edensor 2005; MacDonald 2013): by historical, socio-economic processes, the action of other species and physical forces and through our conceptualisation of them as ruins. Indeed, there are arguments to steer clear of this ruinous path, lest we be seduced by the aesthetic lure of endlessly photographable objects and scenes of an exotic-seeming past. For, as Clemens (2011) and, more sympathetically, DeSilvey and Edensor (2013), Harrison (2011) and Pusca (2010) make clear, succumbing to 'ruinen lust' or 'ruin porn' runs the risk of trivialising industrial work and life by treating it as a playground and art production venue, erasing place, history and politics from the workplace with the focus on the visual aesthetic. Strangleman summarises the arguments neatly: "In essence, what is problematic is the radical disinterest in what these places used to be and the people who once populated them" (2013, p.25). Further, in this case we also need to be aware of its popularity as part of a larger socialist nostalgia (Lahusen 2006). As Harrison (2011, pp.151–152) points out, the romanticisation of ruins through visual imagery can make ruins seem "uncomplicated", "inevitable", "benign" and distant from the present day. In the context of the Soviet industrial ruin such an impression also serves a western, capitalist ideology which confirms the 'inevitable' failure of socialism.

Indeed, one could argue that given there is in fact quite a lot of activity in Pyramiden these days, Pyramiden no longer meets the pre-requisites of Edensor's ruin, for, "*ruins are not maintained, renovated, or otherwise subject to spatial ordering* for things are always under threat; like memory, they are in a condition of perpetual change" (Edensor 2005, p.847 my emphasis). Tourism, modest renovations, area management plans, clear-ups, material relocations, metal asset-stripping, vandalism, all sit uncomfortably with an idyllic ghost town impression described as somewhere where "the buildings… have been left as they were when the town was abandoned in 1998" ('Intelligent Travel' 2011). Pyramiden, like anywhere else, is in a state of perpetual change. Despite these concerns and limitations, problems of *classifying* Pyramiden no less, the descriptors 'Soviet industrial ruin' are still what most accurately represent Pyramiden.

In Chapter 5 I explore some of the ways in which the ruins of Pyramiden stretch beyond a visual aesthetic fascination to practices of 'saving' through discussions of memory, nostalgia, care and emotional embodiment. As Strangleman (2013) and DeSilvey and Edensor (2013) discuss, ruins and attitudes to ruins shed light on social and cultural value(s) across temporalities. Hence, for our examination of value practices, Pyramiden is compelling. I invoke the ruin of Pyramiden here for its "ambiguous character of wildness combined with the relics of culture that accounts for its appeal" (Kirchhoff & Vicenzotti 2014, p.456) and for its potential to be "good for stories" (MacDonald 2013, p.4).

It is also the materiality of Pyramiden, its very saturation of things and little else, which offers up insights into the former life of the town's inhabitants. Not that the objects and remains in Pyramiden are static, they decay and are not left to do so wholly of their own accord. Between my 2013 and 2014 summer visits some of the objects I remembered and recorded in photographs were roughly still in place. They were still successfully performing as ghost town residents, conveying the sentiment of abandonment and simultaneous echoes of the lives that were lived there. Other objects were gone, out of favour, lost, stolen, or maybe squirrelled safely away. Different objects or blank spaces now ask for attention. Whilst, perhaps not so 'pure' or unmediated an experience as it once was, there is yet much truth in Andreasson et al's observations:

> Pyramiden takes us beyond consumption; the material is allowed to be itself. Things appear neither as frames nor background, but as centre stage. The forms of things are foregrounded: their textures, smells, their utter silence. In Pyramiden the being of things is hard to ignore. It is present, pestering – providing the visitors with an affluence of uncanny affordances.

> > (Andreassen et al. 2010, p.142)

Finally, ruins provide us with opportunities for new meaning making and critical perspectives of current and recent social processes: "It is primarily their potential to offer a critical perspective on the contemporary production of space, we contend, that explains why ruins of the recent past have become such attractive objects of scholarship and contemplation" (DeSilvey & Edensor 2013, p.479). All of these factors: the ambivalent and ambiguous character of the ruin, the materially rich setting, the questions of value and critical space production are of interest here as I consider two particularly ambivalent assemblages within the larger site of Pyramiden. Both assemblages present challenges to the valuation of Pyramiden through the 'normal', standardised, biological and cultural assessments, due to the difficulties the categorisation process entails here.

4.8.3.1. Gulls – Guano - Concrete-Tourists-Area plan

A number of buildings around the town have become, in the absence of human inhabitants, home to sizeable colonies of gulls (see Figure 24, Figure 25, Figure 26 and Figure 27). Ruins are after all places where 'nature' can come back in, recolonise, make new confederations: "Ruination presents the possibility of renegotiating the porous border between social and ecological ontological orderings" (DeSilvey & Edensor 2013, p.477). Part of the ambiguity of ruins is precisely this uncontrolled mixing between the categories of 'nature' and 'culture' in a 'human' built environment (Pálsson 2013). In developing the recent Pyramiden Area Plan (Governor of Svalbard 2014b), biological and cultural heritage was evaluated with a view to determining what environmental protection measures should be included in the plan. This process brought the mixed and ambiguous nature of the ruins into sharp relief as this mixing creates the need for choices and compromise between natural and cultural heritage conservation priorities.

> Some buildings that are inhabited by erm, birds, in the summer time, and ... for the buildings it's not a good thing. All the shit from the birds is just eating up the whole building. But the biological assessment says that the plants underneath the building where the birds are living are interesting. So they wanted to like keep that as a habitat.

[SS]: Is that going to happen?

I think that... if the building is important to take care of then I think that they could put up something so the birds can't stay there, while the birds are not there. And then of course the colony would disappear, because it's just a substitute for other places for the birds. So in those cases I think the cultural heritage is more important.

(Interview 19, 2nd June 2014)

These particular ruins can, in the long term, either be 'saved' as habitats for the birds, or as 'cultural heritage' of historical value. The birds were "gently asked to leave"⁷⁹ (Interview E, 7th July 2013) during the renovation of the Hotel, before the assessments took place. Further 'polite requests' might ensue in the future for the nearby derelict apartment block. Yet, as Figure 27 suggests, the situation may be more complex than this. The bird colonies near the hotel are quite an attraction to tourists and are easily accessible for taking photographs and videos. In fact, the vegetation survey connected to the Pyramiden Area Plan recommends that "This area can be included into a tourist route in the Pyramiden settlement as a place to observe the behaviour of birds and their nesting activity (bird-watching)" (Zhirov 2013, p.32). In areas more peripheral to *TA*'s future plans, the birds are likely to be left alone and the processes of slow decay and further natural appropriation will continue. The colonies near the

⁷⁹ Through unknown means!

water works and mining transport station for example (Figure 24, Figure 25 and Figure 26), are too far from the main town square to be included in a short walking tour. For now, some birds have secured a place as residents of the town, despite their threat to the building structures, through creating added tourist value and biological value through "orthonogenic meadows" (Zhirov 2013, p.29).

This example highlights where the categories of 'cultural heritage' and biologically valuable 'nature' in some ways limit the possible futures for the management of the town, an active conservation option must be chosen, 'saving' these aspects of Pyramiden does not give much purchase to ideas of "entropic heritage" where things can "rot in peace" (DeSilvey 2005; 2006; DeSilvey & Edensor 2013). However, in other ways, economic value, or the perceived lack thereof facilitates this kind of non-management in parts of the town not deemed suitable for future use as tourist attractions or for housing other infrastructures. In others areas like the mining transport station, it is their assessed biological value that facilitates the continuation of slow decay and gull-colonisation.

Figure 24: Birds nesting in and around the mining transport station and walkway. The bright green moss beneath injects a rare blast of vibrant life and colour, July 2013.



Figure 25: A thick layer of guano, feathers and nesting material covers the steps beneath the water works, June 2014.



Figure 26: Birds nesting inside and outside the water works buildings, June 2014



Figure 27: Photography club members capturing the bird life outside central apartment block, June 2014.



4.8.3.2. The green, green grass of home

A second Pyramiden assemblage similarly confounds the categories of value assessments in Pyramiden. The lawn of the town square, as shown in Figure 28, is the central organising element for the distinctive spatial layout of a typical Soviet style town (Andreassen et al. 2010; Avango et al. 2014). The common story behind this lawn is that the soil was shipped in from the Ukraine or Russia in the early 1980s and the lawn that subsequently developed is primarily made up of varieties of grass not native to Svalbard (Andreassen et al. 2010; Avango et al. 2014; Coulson et al. 2015). The motivation for the lawn as a "beautification project" (Coulson et al. 2015) was likely two-fold. One probable aim was to create a familiar setting for Soviet workers, even in the remote Arctic North where they would be cut off for months at a time. The symbolic effect of being able to impose this Soviet vision of an ideal society even in Pyramiden was also important (Avango et al. 2014): What could have been more powerful, more reconfirming of Soviet vitality and success than such a well-designed, manmade spot, with red flags and green grass in the midst of one of the world's most hostile environments?

(Andreassen et al. 2010, p.67)

Figure 28: The central square – Lenin's bust looks across the green lawn towards the Nordenskiold glacier, July 2013.



With the passage of time, the lawn is now viewed as cultural heritage, an integral part of the valued historical built environment of the town square. However, Norwegian biological expertise, views the lawn as an 'alien species', and alien species are a key management priority for the Governor of Svalbard. At the moment the cultural heritage value of the lawn overrides the potential risk of an invasive species taking hold:

> In the plan it [the lawn] is actually protected as cultural heritage, but of course as a biological thing, it's actually something we don't want in Svalbard – to introduce new species. So as long as it's keeping inside that area and doesn't start spreading and as long as it's not on a red list of species that should be taken away, then I think it's ok.

> > (Interview 19, architecture and planning, 2nd June 2014)

This categorisation is reinforced by a scientific assessment of the area's vegetation also recognising the "Anthropogenic *Poa-alpigena* dominated lawns" as having "high historical and recreational value" (Zhirov 2013, p.29) and classifying the alien species content as low risk:

These plant communities (lawns) were created as part of the living environment in the Arctic and are an example of the successful restoration of disturbed territory ... There were found several populations of alien grasses, which are not reproducing generatively, and not increas[ing] their abundance and coverage. We consider [it] to be important to protect and maintain the artificial anthropogenic grasslands (lawns) on the Pyramiden settlement territory, as they represent an example of good practice of vegetation recovery on destroyed habitats and are of high historical and recreational value.

(Zhirov 2013, p.29)

The assessment was conducted by a Russian group of PhD students, commissioned by the Norwegian company working with *TA* to produce the area plan, so it would seem the main parties agree that the lawn is to be protected as cultural heritage. However, as Qvenild's (2014) work elsewhere in Norway shows, whether or not a species belongs in an environment is subject to an ongoing re-evaluation in which political, commercial and environmental interests meet with the agency of the plants, soil, human and non-human residents. In time, it could be that this grass species becomes a plant to fervently hunt down and remove⁸⁰, but for now, only long-term monitoring for risk of escalated invasive species activities is recommended (Coulson et al. 2015).

To take a more DeLandian analysis briefly (Delanda 2006), in both of these cases, the ambivalence as to which category of protection policy will be prioritised works as a 'deterritorialising' force in the assemblages of 'wilderness' and 'cultural heritage'. By the inclusion of the lawn as cultural heritage, and heritage that does not meet the usual 1946 restriction date, the boundaries of what is normally included as cultural heritage in Svalbard environmental regulations are stretched, the category becomes more heterogeneous. Similarly,

⁸⁰ For the last three years the Governor's Office has conducted an annual Cow Parsley hunt and removal in Barentsburg, where it is an alien species that threatens to displace native plants. <u>http://www.sysselmannen.no/Nyheter/To-hundekjeks-planter-fjernet-i-Barentsburg/</u>

by allowing the gulls to continue nesting on Pyramiden's buildings, rather than enforcing protection, the category of cultural heritage is further weakened. Conversely, given that the biological value of the nesting habitats and resulting sub-ecology is premised on past human-activities by providing the buildings, the category of 'wilderness' is also somewhat diluted. Moreover, that the potential risks of invasive species from Pyramiden's lawns are for now taking a back seat to cultural heritage protection also serves to deterritorialise the ideals of strict wilderness protection regimes. In other words, the ambivalent actors of Svalbard push at the margins of the environmental protection legislation and regulations. Efforts to maintain the regime such as management plans and value assessments serve to re-code, classify and reaffirm the category distinctions and what this should mean. These processes can be related to Harrison's 'regime of care' discussed in Section 4.1 as being in part to do with categorising, through cultural heritage and biological assessments that identify, document and list; and partly through curating, in developing policies that attribute value and selecting what is to be 'saved'.

These two examples, like the fox-gosling encounter and the tourist routes to Pyramiden, reveal that the formal processes of valuation and environmental management in Svalbard, whilst powerful, give only a partial view to the extent of the value practices at work here. The vitalities of the material world are not so easily categorised and when it comes to having to make a judgement call, there are likely several forces, things and parties involved and more than one possible outcome. These stories have also shown the utility of combining value enquiry with assemblage thinking, where assemblage is not only an adjective to describe a group of things and forces working together, but a process of this coming together which is continually shifting and where value is in action.

Overall this chapter has traced value through the categorisation processes at work in constructing and putting to use Svalbard's environmental protection legislation and regulations, the mechanisms by which Svalbard can be 'saved'. We have seen how symbolic value is woven through Treaty interpretations and negotiations over environmental regulations – Svalbard's 'environment becomes caught up in geopolitical relationships between Norway, Russia and the 'outside' world. The different socio-cultural values and understandings of 'wilderness' and 'cultural heritage' also contribute to the construction of these categories and their inscription within the environmental legislation and its subsequent effects. The spatial and temporal hierarchies created by the categories constructed to evaluate and protect Svalbard's heritage have spatial and material effects, but, as the stories from Section 4.8 have shown, these effects are not as rigid and predictable as the legislation might imply at first glance. Chapter 5 offers a series of perspectives on saving, or not saving, different artefacts and beings in Svalbard that take us beyond practices of value that are connected with the environmental protection legislation and the categorisation processes that are entrenched within them.

Chapter 4: Categories of Conservation

5. Caring Relations

One part of my work is to save guests from polar bears. I have a gun. But in winter time when my guests have a snow mobile, my first wish is to save polar bear from guests! I am talking with them like a little child, please don't disturb them. Oh we want to make a photograph ... ahhh, it's a tough job!

(Interview 57, tourism sector, 30th June 2014)

As we have seen, there are assemblages and practises that go against the grain of categorisation and therefore trouble the environmental laws and regimes in Svalbard. As Chapter 4 uncovered, wilderness and to a lesser extent, cultural heritage is valued by those living and visiting Svalbard, out of this value comes a collective desire and attendant practices which seek to protect Svalbard's heritage. These drives for protection and conservation of Svalbard are sometimes incorporated into, and happily co-exist with, the legislative regime, such as in the example from Interview 57 above, at other times they operate in addition to, or in opposition to, the environmental laws and regulations. Moreover, motivations to 'save' Svalbard's heritage are often entangled with embodied experiences of Svalbard and its 'affective atmosphere' (B. Anderson 2009b).

In this Chapter, I introduce ideas from feminist philosophers and sociologists working on the concept of an 'ethics of care' (for example: Engster & Harrington 2015; Fisher & Tronto 1990; Held 2006). Feminist care ethics offer potential ways of thinking through some of these value practices. I start by introducing the 'ethics of care' and how it relates to geographic thinking. I then seek to apply these insights in looking at some examples of how this comes to light in Svalbard and the limitations of its application. I trace everyday, small scale relations with animals, landscape and non-living materials through Sections 5.2 to 5.4 in to order bring care ethics into conversation with the processes of conservation within Harrison's 'regime of care' (Harrison 2015, p.15). In Sections 5.5 to 5.8, I explore the embodied, emotional, affectual and caring relations that can develop in relation to place, focussing on field science in Svalbard. Such embodied, personal level value is conspicuously absent from 'objective' accounts of value in policy and conventional scientific approaches to representing Svalbard. Although these 'smaller' value practices are not generally accounted for in the evaluative frameworks of conservation in Svalbard, I argue they are nevertheless significant for the ways in which Svalbard is valued. They therefore connect with legislative regimes in more or less congruous terms. In the final Section, I examine the links between value, emotion and environmental policymaking, a discussion which leads us into consideration of legitimation in Chapter 6.

5.1. Careful thinking

Care ethics, or the 'ethics of care' is a moral theory that started with the work of Carol Gillighan (1982) and Nel Noddings (1984). They argued, drawing on observations of maternal care and moral development in children, that a rights and justice based morality is a masculine perspective that emphasises rationality, universal rules for humanity and the autonomy of (self-interested) individuals. In contrast, a (feminist) ethics of care focusses on the space in between the extremes of universal and individual and is more concerned with relationships, the contingencies of each different situation and is attentive to emotions and values (Held 2006; Engster & Harrington 2015 provide a good summary). Virginia Held's work broadens this understanding to a more global and political context. In her book, *The Ethics of Care*, Held (2006) posits that care is relational and involves practice, values and evaluation according to the values within the conception of care.

> 'The ethics of care' implies that there is moral significance in the fundamental elements of relationships and dependencies in human life. Most often defined as a practice or virtue rather than a theory as such, 'care' involves maintaining the world of, and meeting the needs of, ourself and others.

> > (Sander-Staudt no date, no pagination)

The way care is conceptualised within care ethics as a relational practice has found traction with science and technology scholars (Bellacasa 2011; Kerr & Garforth 2016), one of whom provides us with some guidance in identifying care:

> We can think on the difference between affirming: 'I am concerned' and 'I care'. The first denotes worry and thoughtfulness about an issue as well as the fact of belonging to those 'affected' by it; the second adds a strong sense of attachment and commitment to something. Moreover, the quality of care is more easily turned into a verb: to care. One can make oneself concerned, but 'to care' more strongly directs us to a notion of material doing. Understanding caring as something we do extends a vision of care as an ethically and politically charged practice.

> > (Bellacasa 2011, pp.89–90)

Another helpful observation comes from geographer Karen Till (2012), within her argument for a place-based ethics of care, she notes that relationality demands an openness and responsiveness to others. These others whom we can care for and about, are not necessarily limited to humans. In their edited collection *The Feminist Care Tradition in Animal Ethics,* Donovan and Adams (2007a) demonstrate that the ethics of care can be applied to human-morethan-human ethical relationships. Donovan and Adams (2007b) take issue with animal rights theories for being overly abstract and rationalist; relying on proving similarity to humans, and certainly not taking individual animals into account (Bear 2011). They argue for an ethics of care for animals on their own terms, that recognises the often unequal relations and interdependencies humans have with other species, and valorises the role of emotions. Their approach is to not only pay attention to what animals are communicating and feeling, with special attention to suffering, but also pay attention to, and aim to change, the political and economic systems that cause animal suffering.

It is not so much ... a matter of caring for animals as mothers (human and nonhuman) care for their infants, but of listening to animals, paying attention, taking seriously – *caring about* – what they are telling us.

(Donovan 2006, p.360)

Geographers have picked up on this theory of care, mainly in the field of geographies of health and care work (Milligan & Wiles 2010). However, as geographic reviews show, this has been touched upon in other areas such as human-animal care relations (Milligan & Wiles 2010), considerations of environmental sustainability (McEwan & Goodman 2010) and the social practice of ethics more generally (Popke 2006). Hence, Donovan and Adams' position shares some common ground with work in animal geographies and posthumanist positions. As Buller points out, the visibility and consideration of specific animal geographies is always-already an ethical position:

> There is no animal geography without ethics. The very coupling of the words gives rise to an ethical endeavour; an acceptance that animals have a geography, a making visible of animals within our human geography and scholarship, an acknowledgement that our relationship with animals has consequences.

> > (Buller 2015b, p.1)

Geographers and post-humanist philosophers have done much to consider human-animal relations in space and challenge our conceptions of nature and more-than-human agencies (Buller 2015b; Haraway 2007; Latour 2004b; Whatmore 2002). These works attempt to bring more-than-human natures more solidly into our epistemologies and dissolve the boundaries between nature and culture. Geographers such as Chris Bear (2011) have begun to examine individual animals (in this case an Octopus called Angelica) and their specific context. This recognition of the importance of specific context, individuality and aiming to be attentive through 'learning to be affected' (Lorimer 2015) fits with, but does not engage with the ethics of care approach. Similarly, in her consideration of strategies to improve the welfare of animals used in medical research, Gail Davies (2012) argues that improving and expanding universal principles is an approach that is likely to remain ineffectual. Rather, Davies advocates "speculative bioethical formations that emerge from considering inconsistency, exceptions and the irreducible multiplicity of the multitude" (Davies 2012, p.628). This emphasis away from universal principles also resonates with, but does not apply, an ethics of care approach. Hence, I seek to bring the ethics of care into conversation with some of this geographic work, combined with investigation of value practices through my empirical examples in the following section.

Milligan and Wiles (2010) introduce a geographic conception of the ethics of care, 'care-ful geographies', as a potential to carry such work beyond its normal realms, as "a framework not just for understanding who gives care, where and why ... but also for understanding how an approach informed by care might enlighten our entire way of collective and individual being" (Milligan & Wiles 2010, p.743). Moral geographies (Smith 2000) can be seen therefore to intersect and overlap with the ethics of care approach. Setten and co-authors have explored how landscapes and human practices are mutually co-constituted through processes imbued with moral decisions both personal and political (Setten & Brown 2009; Flemsæter et al. 2015). This approach, like the ethics of care, seeks to highlight the contingent nature of these decisions and the relationships between human and more than human natures through their practices:

People's relationship to their physical surroundings is expressed through practice, and moral judgments about such practices in particular landscapes help shape landscapes themselves. Ideas of appropriate and inappropriate practice are thus moulded into the physical landscape, making landscapes and human practices a co-constituted morally charged process ... Works on landscape, practice, and morality have demonstrated the need to raise questions related to whose morals, whose ideas of good or appropriate behavior, are allowed to dominate landscape discourse.

(Setten & Brown 2009, p.193)

These questions of whose morals and values affect the landscape, the processes through which this occurs and the value-practices they lead to, are at the heart of this research as a whole.

Jackson and Palmer (2015) also arrive at an ethics of care position as a possible corrective to the rationalist ecosystems services approach to valuing 'nature'. Inspired by Australian indigenous ontologies that view the land or 'country'

itself as instilled with agency and feelings, they note how such a position brings attention to human relationships with our environment and one which extends the sentiments of Donovan and Adams (2007b) to the environment as a whole:

> If ... the environment is a space of care (cf. Popke, 2006) ... and is considered sentient, then 'country' is treated as a moral agent ... Caring for 'country' then becomes a complicated, uncertain and always under negotiation matter wherein affective relationships with so called 'nature' are held in the foreground of people's actions and decisions.

> > (Jackson & Palmer 2015, p.135)

Jackson and Palmer argue that an ethics of care position or attitude which attends to the relations between different practices and the environment and decentres humans, could usefully be combined with ecosystems services valuations so that they are no longer focussed on economistic relations of producer-consumers: "we can [then] both challenge the commodification of nature and mitigate its worse effects" (Jackson & Palmer 2015, p.136). Indeed this brings us back to Held's work as she also seeks to prise care work away from the grasps of the market:

> In practices such as those involved in education, childcare, health care, culture and protecting the environment, market norms limited only by rights should not prevail, even if the market is fair and efficient, because markets are unable to express and promote many values important to these practices, such as mutually shared caring concerns.

> > (Held 2006, p.120)

Hence, the ethics of care can be expanded from a focus on motherly care to a far wider realm. In what follows I relate some experiences of value practices in Svalbard that carry with them the same aim to 'save' the heritage of Svalbard as the regulations outlined in Chapter 4, yet do so at a smaller scale. I relate these practices to an ethics of care approach, the notion of intrinsic value as conceived by McShane (2011, see Chapter 2) and ideas of 'wilderness' and 'cultural heritage' in order to trace value practices of conservation beyond the reaches of the categorisation processes discussed in Chapter 4, care, afterall, "eschews easy categorization" (Bellacasa 2011, p.100). I also use the lens of caring relations

alongside geographic literatures on affect, emotions and atmosphere to examine experiences in Svalbard that may contribute to the development of caring practices, through embodied experiences and knowledge production.

5.2. A wild ethics of care

'Wilderness' in Svalbard (and beyond), as discussed in Chapter 3, demands a humble approach. Although Cronan's critique of the notion of wilderness destabilises the idea of a pristine nature set apart from human activity, he still finds value in thinking with the idea:

> The autonomy of nonhuman nature seems to me an indispensable corrective to human arrogance ... In the broadest sense, wilderness teaches us to ask whether the Other must always bend to our will, and, if not, under what circumstances it should be allowed to flourish without our intervention.

> > (Cronon 1995, pp.17-18 my emphasis)

This 'flourishing without intervention' is in one sense central to the environmental protection legislation that seeks to keep human impact on Svalbard to an absolute minimum. However, in its implementation, intervention is needed: drawing the lines on the map, creating land-use zones, limiting access. Much of this can seem anything but humble, as discussed in Chapter 6. However, some of the relationships with the wildness of Svalbard participants shared with me do indeed resonate with a sense of humbleness and active participation with the environment that seems to be shot through with the kind of practices and attitudes that care, as conceptualised above, could produce. These practices and moral sensibilities do not come from a sense of obligation to follow the environmental protection rules - sticking to the permitted areas, avoiding disturbances to wildlife - but more from a respect for the recognised human limitations that the harsh Svalbard environment and life-threatening species like the polar bear brings into focus. The physical reality of 'the nature' here has the ability to 'push back' and re-instil human vulnerability and humility through sublime experience (Hoskins 2011). It must be listened to, related with, for both survival and full appreciation.

The picture behind you ... This is a tree that has been bent by the wind. Why fight? Be a part of it. Try to teach people that nature is not dangerous, people are dangerous. ... Nature is just protecting himself ... I think it slowly sinks into the head of the people that the polar bear is the leader of this town. It should be the nature who decides not the people...

(Interview 24, artist, 4th June 2014)

Friendship is a commitment, and my biggest goal is to create new friends of the Arctic nature, that is a commitment ... I just want them to take the time to really feel the place, this is a totally different place. I want them to have enough time to sit down and breath and just take it all in with more than their camera, ... I want it to mean something.

(Interview 46, tourist guide, 26th June 2014)

The lines above were delivered with a passion that clearly translated to the ways in which these people practiced their professions. The art and tourist experiences they produce are made not to only to represent Svalbard's wilderness, but to encourage a thinking, self-reflexive relationship with it, to *care* about Svalbard. Relationships with and attitudes towards polar bears in particular made for often very telling conversations⁸¹ in regards to how personal, political, legal, moral more-than-human nature relationships were configured, to the ways in which 'other' nature is valued, in practice. My own experience of seeing a family of polar bears was a poignant one that marked a small shift in the ways I thought about human-wildlife encounters and therefore my own value practices.

The logistics and experience of the trip to Petunia Bay with the student group were very much infused by the possible presence of polar bears. Food storage regimes; rifle training, distribution and responsibilities among course leaders; the two husky dogs and night watchman that guarded camp; the rota for staying up on night watch; and, most of all the constant vigilance of being observant of surroundings with the polar bear in mind. On our second day of camp, just after dinner, a polar bear mum and two cubs were spotted in the distance coming along the beach towards us. All the 'gun people' got to the front of the gathered

⁸¹ Polar bear stories are also popular ways to show one has local knowledge and experience, an important part of gaining respect beyond a tourist identity – see Chapter 3, Section 3.3.

group with the dogs and flares ready. It was hard to believe this was happening. The parallels between this, and watching *The Polar Bear Family and Me*⁸² were uncanny, the bears were skirting the beach, just like I had seen them do on the computer screen at home. The pounding in my chest and hushed excitement of the group sets this experience apart though. We were IN the scene, we watched them, but they watched us back, sniffing the air, an unspoken conversation with potentially fatal conclusions on either side. Three days later, we found the huge footprints of the polar bear when it was heading our way, in the mud track to Pyramiden. They served to re-start adrenaline rushes, remind us of the risks and at the same time, re-ignite the sense of wonder and awe of having shared the area with these creatures.

Polar bears, perhaps because of their charisma, perhaps due to the necessary caution needed when dealing with them, provoke a deep attention to something more-than-human. We are invited to think *with* a polar bear as an animal that exerts power and mystery, which perhaps scientific observation alone is inadequate to uncover:

It was 10 years before I made a polar bear ... I called her the call of the Arctic, the silent call of the Arctic. You understand? The silent call. She's sitting there, watching. She had her own thoughts, it's up to you to find out what she's thinking ... why do we need to learn everything, couldn't the polar bear be allowed to have some secrets?

(Interview 24, artist, 4th June 2014)

This joy of being close to animals...If you start to push a polar bear you will always see it running away, you will never see it walking towards you.... The same with reindeer, the same with all animals, if you break this invisible line you know? So this is very important, to have respect for the animals.

(Interview 63, writer, 7th July 2014)

 ⁸² A TV documentary series which followed a polar bear and her two cubs, filmed in Svalbard.
 Wilkinson, S. (2013) 'The Polar Bear Family & Me': http://www.bbc.co.uk/programmes/b01py74c#programme-broadcasts .

We are pushed towards a more critical thinking and listening to this species, as Donovan (2006) advocates. The practice of paying attention to more-thanhuman natures and acting accordingly resonates here. We need to sense where the invisible lines are. Yet we also recognise that we may not understand what we are hearing, which is not something the ethics of care has engaged with fully to date. What would it mean to not be able to identify an appropriate caring response, or comprehend what another entity's needs are, or perhaps acknowledge that they/it does not need any human caring relations and in most cases will not reciprocate such care?

Kathryn Yusoff (2013) begins to deal with this area by questioning the tendencies for post human theory and ethics to be relational by considering how we can relate to species we do not even know exist yet. Indeed she and Nigel Clark (2010) seek to encourage ventures into such strange realms and "get over ourselves" (Yusoff 2013, p.225) in so doing. "That which is strange, nonintuitive, insensible—that which is remote from human comprehension or intelligibility—like phytoplankton, seeds, fungi, geological epochs, or multicelled organisms at the beginnings of time" (ibid., p225) pose interesting challenges to the ethics of care as a moral theory. A number of responses could be possible, such as applying the precautionary principle, or long term observations of 'paying attention' to increase our understanding. It is important therefore to recognise there are limitations to the ethics of care as a moral theory, as there are to human action and knowledge itself: it cannot be all encompassing.

In spite of this, geographers have been keen to take on board Fisher and Tronto's almost all-encompassing definition of care (Popke 2006; Till 2012):

> Taking care of [includes] everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life sustaining web.

> > (Fisher & Tronto 1990, p.40)

However, Held (2006, p.32) perceives this as going too far, and being too focussed on labour to the exclusion of other activities, such as play and creative

activity (which Fisher and Tronto specifically exclude). She argues that activities such as commercial cleaning or retail sales could be included in Fisher and Tronto's definition. On the one hand, these things do not seem to fit into traditional perceptions of what care would mean, on the other however, it is not impossible to imagine, for example, a cleaner developing a caring relationship with a building that they work in. Hence, rather than attempting a definition of a practice and value that can manifest and be embodied in many situations and activities, I find it more useful to focus on the characteristics of caring *practice*, a practice that, like the notion of 'saving', is infused with value. Nevertheless, it is important to recognise that the ethics of care is still developing and may not be easy to extend beyond our 'sensible', comprehendible worlds.

As far as we can understand what a polar bear's world would be like, we assume they prefer limited contact with our own. I listened to several accounts of Svalbard residents witnessing other residents or tourists disturbing polar bears, going up close with snow mobiles, others who have been offered a lot of money to 'force an encounter' along with their disdain for such practices and refusal to take part in such ventures. Some expressed sadness that tourists are disappointed with the 'non BBC' versions of wilderness they experience, which offered unpredictable and distant views of the wildlife (Interview 63, 7th July 2014). Whilst avoiding disturbances to polar bears and other wildlife is stipulated within the Svalbard Environmental Act (Ministry of Environment 2001), these stories are imbued far more with a moral sensitivity, or, in Cronan's words, a sense of what it might be to "live rightly in the world" (1995, p.20), than a desire to follow the letter of the law. In terms of moral landscapes then, it is a rather more personal and emotional engagement as part of the landscape that appears to guide some actions. These value practices may coincide and indeed be influenced by the environmental protection legislation, but they are not motivated by it. From an ethics of care perspective, this motivation matters, as Held explains, "care must concern itself with the effectiveness of its efforts to meet ends, but also with the motives with which care is provided" (2006, p.36).

You step outside your house and it's like you're *inside* the wilderness and as a nature photographer, you can't really ask for something more than that. It's just perfect. I don't know if it really matters if it's untouched or not. To me, if it's really impressive, then I just have to take a picture of it. ... I would definitely respect the nature a lot, ... I just don't think it's right, especially if you wanna show something that's really beautiful, you're just being a dick if you're gonna destroy something in order to capture it, it's like you're just doing it all for you, and it's like a really egomania type thing.

(Interview 23, photographer, 3rd June 2014)

They wanna pay a lot of money and they want to get close to [a] polar bear. And that's bad for the animal. It's not a zoo ... So you're kind of selling something that's not yours. That's bad. Selling filming and photographs is different, when you do that in a good way. When you have big long range lens' ... you can see a kilometre away. You can really catch the moment while stuff is happening without them [polar bears and other animals] knowing.

(Interview 4, photographer and film producer, 17th May 2014)

These stances and value systems meet with the ability of the polar bear and other wildlife to not perform or conform; to rebuff the encroaching sanitised and packaged wilderness that otherwise would be for sale. Not only do they go beyond our ability to raise an exchange value in all cases, they also speak to an ethics which recognises value in more than human nature that stands on its own and potentially exceeds our utilisation. As discussed in Chapter 2, philosopher Katie McShane explains (2007), we hold beliefs that fit within a framework of value that resides with nonhuman beings and objects and act accordingly. The evidence above shows that some do value polar bears, as well as the wider wilderness, in such a way that is not exclusive to human utility. Exploring this through McShane's conceptualisation of neo-sentimentalist intrinsic value (2011), we would ask then, what valuers ought to do, how should they respond to other species and objects such as the Svalbard wilderness or polar bear?

If we take it that the polar bear's impressive size, speed and its ability to threaten human survival, inspires sentiments of awe, fear and fascination and is valued in these ways, we can ask, what then is an appropriate response by those that value the species in this way? The respect, concern and happy recognition of a limitation to human dominance over polar bears shown by the above participants would suggest, in the specific sense that McShane outlines, that polar bears (and by extension, Svalbard's 'wilderness') *do* have intrinsic value, at least to these 'valuers' who are acting beyond a motivation to gain a direct utility from this form of nature. Recognising this kind of valuation and the practices connected with it was an important first step in this analysis. However, the ethics of care perspective can then help take this recognition further, to delve deeper into the relationships between valuer – photographer, artist, writer etc – and what they are ascribing value to – polar bear (s), the Svalbard landscape.

As glimpsed above, this way of valuing nature whilst recognising its 'otherness' also brings an understanding of 'with-ness' and co-production that not only instils a moral imperative to "live rightly" by nature, but also that such an imperative has practical consequences. Photographers, film makers, writers, artists and no doubt others besides, have a sense of an ethics of care in their practice which inevitably spills over to their work. An ethics of care *for*, but more crucially, *about* nature⁸³ in Svalbard can result in support for extended implementation and/or scope for environmental protection measures that are considered to be compatible, such as reporting disturbances to polar bears, or supervising those less familiar with the environment and its accompanying moral landscape. On the other hand, such ethics are sometimes incompatible with regulations, which can lead to campaigning for change directly, or subverting such regulations:

I always say to people ... locals, when you are going on tour with a boat, don't care too much about the regulations and restrictions, because actually, you can just go ashore. You are not able to destroy this piece of land. But don't cry when you are caught by the Sysselmann, just pay and smile.

(Interview 63, writer, 7th July 2014)

⁸³Milligan and Wiles make the distinction that caring *for* is the personal performance of giving care to someone or something else. Caring *about* "refers to the emotional aspects of care; this might also include the generalized relational and affective elements of being caring" (Milligan & Wiles 2010, p.741). They do however point out that both caring for and about can happen at a distance as well as when proximate, and both are embodied practices.

The relational, responsive and emergent sense of how their value of nature is practiced also produces a varied moral geography: spatially and socially. Some residents make up their own minds which areas and sites are sensitive and in need of protection and who can know about places deemed robust enough to visit without due harm. Questions of detail become important in these approaches to this form of an ethics of care: how many, what kinds of people, what kinds of practices, what sort of situations are acceptable? One of the Governor's advice booklets urges us to "experience Svalbard on Nature's own terms" (Governor of Svalbard 2010). Taking inspiration from the practices explored above, perhaps we could look towards an interpretation of this advice that envisions such terms as open, listening, responsive and caring relationships between the human and more-than-human natures of Svalbard. Terms that can inform regulation regimes, everyday practice, and more fleeting engagements with 'Nature'.⁸⁴ This would not necessarily be an easy undertaking, Svalbardians do not share a common 'ethics of care', and as the next section details, some ethics will jar with those explored above.

5.2.1. Alternative interpretations of care

I ventured into the fur shop today. It made me feel a bit ill. I don't know what happened to the whole 'fur is not cool to wear' thing, but it certainly hasn't had an effect here. Quite a few polar bear skins – which aren't as big as you might expect, they were $80,000 - 100,000 \text{ NOK}^{85}$, which seemed cheap to me for what they are. Some of the skins etc were from animals that are not even from Svalbard.

(Field diary, 24th June 2013)

These rather naive 'Svalbard –rooky' impressions above serve to remind us that versions of an ethics of care are not universal. Firstly, not everyone *does* practise relations to Svalbard's wilderness in such way as those participants discussed above, or at least they do not describe them thus. Secondly, in some respects there are values and attendant practices which are carefully thought out considerations as to "living rightly" with nature that arrive at a version of care

 $^{^{84}}$ As opposed to the tone of the leaflet that presents human presence in the wilderness as a threat.

⁸⁵ Around £8,000 - £10,000

that is compatible with the Norwegian concept of *Friluftsliv* ('outdoor living', see Chapter 4), but are deeply problematic to an ethics of care perspective on animal relations as put forward by Donovan and Adams (2007a). Below I unpack the notion of "living rightly" in this context.

The following conversations about hunting serve to complicate a translation of a theory of ethics of care into practice.⁸⁶ The unyielding commitment to ending animal suffering that the core principles of an ethics of care in this context uphold necessarily lead to a vegetarian position at the very least (Curtin 2007; Donovan & Adams 2007b). We can assume without too much 'attention' that sentient beings would not want to be killed or hurt. When Held tells us that "care as relevant to an ethics of care incorporates the values we decide to find acceptable in it" (Held 2006, p.39) the possibilities for a more open ethics of care become visible. However, that these values should reject practices of patriarchal care and be evaluated from a perspective of what things ought to be morally like still jars with some of these positions reflected below:

[SS] What would it be like if the government decided to decrease the number of animals you could shoot on the quotas?

They do that all the time.

[SS]... do you feel like that's justified?

No, I've made some arguments now, about the puffin ... There are also some geese we are talking about, because it doesn't make any sense, there are too many of them. The thing is that they already killed them in Europe, that's why they're protected by the European Union, but it doesn't apply here. It doesn't make any sense. If the government say alright you can't shoot reindeer today because there are too few of them. Alright, that's fine, because I understand that. We want to preserve them. But it doesn't make any sense if they're not on a red list, or not even close to a red list, if they are sort of actually getting too many.

(Interview 47, hunting and fishing society member, 27th June 2014)

⁸⁶ These conversations were interesting and at times, difficult to have as someone who very much agrees with a 'prevention of suffering' position on an ethics of care with animals. No doubt my own position here has influenced the selection of these particular 'hot moments', nevertheless the discussion contributes to exploring how working with care and value together can be useful.

[SS] How would nature be best managed?

Stop[ping] hunting animals obviously can help. They stopped hunting the walrus in the 50s and there are so many walrus now. They are growing pretty much at the maximum theoretical rate a population can grow! ... 10 years ago a walrus in Isfjord was like wow. 2 weeks ago we had them in town and it's no biggie to see one ... So it does work.

[SS] Will there be a time when they stop hunting the reindeer, fox-hunting?

Doesn't matter. Even the researchers that study reindeer say that. I mean you kill 200-300 a year out of a population of 12 000 that live to maybe 3,4,5,6 years maximum. Even the researchers say you could kill twice as many and it would not matter. And the same with the foxes and the seals, you take out so low numbers that it doesn't matter to the population.

(Interview 8, research sector, 21st May 2014)

The above positions rely upon a rational approach to species population health, rather than considering the welfare and life of the animal itself, precisely the opposite to an animal-human ethics of care situation, where it would be unthinkable for an animal not to 'matter'. Further, the categorisation of endangerment is through systems which are based upon fixed notions of nature that baseline ecology methodologies support (Lorimer & Driessen 2014; Qvenild 2014). Such a system is then used to justify whether 'preserving' animals includes shooting them in order to control population. What is the value of a species, an individual animal, to whom? The need to discuss on what terms, what moral grounds and what motivations, we operate on within a regime of care becomes apparent. For here, a care for a species or ecosystem health in general is based upon 'responsible use' and ultimately arbitrary, value-laden assessments of risk that are made to appear objective and rational. These criteria and lists are applied unevenly. Some species are monitored closely and publically through tracking devices or regular population counts (for example polar bears and Svalbard reindeer) whilst knowledge of other species categorised as critically endangered is patchy (Birkeland 2012).⁸⁷ As Jamie Lorimer (2015)

⁸⁷ The polar bear population is classed as 'vulnerable' on the ICUN red list and is tracked by WWF and the Norwegian Polar Institute http://wwf.panda.org/what we do/where we work/arctic/wildlife/polar bear/tracker/

discusses in detail, charisma is an important factor in determining the level of scientific and public attention a species receives.⁸⁸

Below, I refer to a participant who was deeply involved in protecting the ideal of a 'wilderness paradigm' in Svalbard, one which is stronger than on mainland Norway. Yet they are able to square the intervention of hunting with an aspect of environmental behaviour, local food production, through placing themselves within the ecosystem as a sustainable consumer of its resources.

I have been able to hunt and fish all [the] meat and fish that I need to eat. So I actually hunt all I need all the year round and I think that's really a fantastic opportunity...we do not exploit here as much as we do on the mainland ... the regulations are different. The goal here is to take out as little as possible so to speak. Because all the species here should develop as natural[ly]as possible with as little effect from humans as possible.

(Interview 66, environmental management sector, 16th February 2015)

As will be discussed further in Chapter 6, the levels of environmental protection and practices that are acceptable within the environmental management regime are based are directly compared to mainland Norway. The more strident aim towards non-intervention and lower quotas mean that the regulations in Svalbard appear appropriately strict, yet do not present too much of a challenge to traditional Norwegian ideals of *Friluftsliv* and meat-eating.

> I have experienced it [hunting]. It's not very exciting because the reindeers are just standing there and the Ptarmigan. They just sit around. I don't feel like killing them.

[SS] Not a challenge?

No, not a challenge at all, but they are very good to eat. But goose hunting, that's very exciting up here.

(Interview 38, environmental management sector, 19th June 2014)

⁸⁸ Lorimer identifies three sub-categories of charisma: 1) Ecological – how easy a species is to document and identify; 2) Aesthetic – visual cultural associations of characteristics of the species;
3) Corporeal – embodied experiences with the species in the field. All three work together in having an effect on conservation practice, he argues.

In the quote above, there is a certain sense of an ethics and 'listening to' at work here: particular species and characteristics are observed and affect the decisions of which animals are hunted. Geese are seen to be 'fair game' literally, as they are deemed to be more aware and able to respond to the possibility of being killed. Extending Flemsæter et al's (2015) discussion from mobility to other practices, the fact that geese are not easy to kill also makes this participant a good *Norwegian* hunter, able to practice their *Fjellvett* (survival skills) and work, even struggle, for their food. Combined with the narrative of Norway as a tough polar nation, an anti-hunting stance is rare to come across and is perceived as "urban thinking" where people do not have a relationship with the food they eat, especially meat (Interview 44, 26th June 2014). The local school perhaps aims to prevent such thinking and starts the year by taking the children up to the top of a local mountain to witness reindeer being shot, which then becomes their pre-Christmas dinner (Interview 16, education, 30th May 2014).

The ease of hunting ptarmigan (see Figure 29) does not put everyone off. Their relative large numbers and favourable legislation means that around 1000 birds are shot each year (NPI 2015b). The number shot being more reliant on hunting conditions (weather, availability of ptarmigan in the Longyearbyen area) than on the quota, as it is rare for a hunter to exceed their 10 Ptarmigan per day restriction⁸⁹ (NPI 2015).

As Maria Puig de la Bellacasa remarks: "sometimes the question of caring might engage with thorny questions concerning *how* to kill and for what ... It is thus important not to reduce caring to an ideal relationship" (2010, p.166 original emphasis).

⁸⁹ Subject to purchasing the correct licenses, non-professional hunters resident on Svalbard can hunt up to 10 Ptarmigan per day within the hunting season (September – December). Visitors can hunt up to 5 per day. <u>http://sysselmannen.no/en/Residents/Hunting-and-Fishing/</u>

Figure 29: Lagopus muta hyperborea – The Svalbard Ptarmigan (June 2014, near Pyramiden). "A sub-species of rock ptarmigan (*Lagopus muta*), is the only herbivore land-inhabiting bird which resides in the archipelago throughout the year. From a research and management point of view, it is an interesting species with a special ecological and physiological adaptation" (NPI 2015b). The 'bag' (number of animals reported shot) is monitored, but the species is otherwise under-researched. In our ignorance, after our first encounter with them, my partner and I nick-named these intriguing creatures as 'the chicken birds' on account of their endearing calls.



You can shoot ptarmigan without any extra training. But if you're shooting like seals or geese, or reindeer, you have to be trained and this training has to be documented. ... they have to do that every year, because the worst thing that happens is if you shoot an animal and you don't kill it right away. You don't want that. So if that happens, you are obligated to follow them by law, you have to take it down. So that's why we have this shooting [training], to show that the hunter is capable. If you are just a little bit uncertain that you are gonna hit, then, don't do it. You have to be absolutely sure, it has to be quick.

(Interview 47, 27th June 2014)

Even within this, in some views cruel 'sport' or 'harvesting' of foodstuffs, there is an ethical code, a moral responsibility, to limit suffering through training and self-reflective skills assessment when 'face-to-face' with the targeted animal. The reindeer, goose or seal becomes, for a brief moment, an individual with the ability to feel pain rather than one of many in an abundant population. This aspect of care may be less likely to extend to ptarmigans, who are too easy to shoot and possibly too numerous (total population numbers are not known according to MOSJ).

The ethics of care, whether or not it's strict application is applicable to practices in Svalbard concerning human-animal relations, necessitates a deep questioning of what heritage we 'save' and care for. In its focus on values and practices, it forces a consideration of *how* we care *about* Svalbard's heritage and where the motivation for our practices comes from. Beyond the directives of the environmental regulations and categories of 'vulnerable', 'protected' species, or out of bounds areas, the definitions of which may or may not be agreed with, there is common moral ground. Stalwart hunters with little tolerance for "urban thinking" meet with considerate artists and filmmakers in their respect and care, however fleeting, for individual animals and motivated to practice their professions or hobbies in such a way as to prevent suffering. To explore how the ethics of care can be pushed further into the more-than-human realms, I now turn to the more material, less alive, arena of cultural heritage.

5.3. Care among the ruins

Ruins ... are storehouses of memory; they are brought into being by the range of our responses to them – at turns affecting, curious, melancholic, nostalgic, regretful and unsettling. They can offer comforts too.

(MacDonald 2013, p.3)

Discrepancies bring things to your attention. You may not understand all you see – but at least you notice.

(Andreassen et al. 2010, p.90)

We visit, we imagine pasts and futures ... Present processes of decay and attempts at preservation give us glimpses into other times. I appreciate the mute walls and structures while simultaneously feeling like an intruder into memories. If they could speak, I would surely listen.

(Author's blog post after a visit to Coles Bay⁹⁰, 24th February 2015)

Reflecting on the above blog post, what perhaps I failed to realise at the time was that those walls, that the ruin of Coles Bay was 'speaking' and speaks to all visitors, or at least provides an echo chamber for the impressions and imaginings that it invokes, if we pay attention to them. Returning to Pyramiden, a 'ruin', may seem an unlikely place to explore the ethics of care. However, behind the decisions of a Soviet-like industrial behemoth trying to keep its head above the water whilst retaining political dignity through a mixture of cooperation and the occasional challenge, are a small number of people tasked with facilitating an infant tourist industry. Behind them are those working with *Trust Arktikugol* (TA) to devise a plan for the future of Pyramiden, not forgetting the now thousands of tourists who have grasped a fleeting impression of the place.

Down this line of connections, an ethics of care can be glimpsed as a relation between those encountering Pyramiden; its material remains and the stories they have the potential to tell. Here, then, is an opportunity to further broaden

⁹⁰ Coles Bay is another previous Soviet coal-mining settlement situated on the coast 20km South from Longyearbyen <u>http://samsaville.weebly.com/blog/windows-to-the-past-and-future</u>

the theoretical extent of the ethics of care beyond the living – to material objects and a living landscape of memories. This is not to say that such caring relations for things do not occur elsewhere in Svalbard, but that these are particularly striking examples I encountered in a place where things are still "centre stage" (Andreassen et al. 2010, p.142).

Pyramiden's ruins are part of ongoing geopolitical, economic and social transformations (see Chapter 1). Amidst the political and connected economic value of the site through tourism and scrap metal retrieval, the ways 'cultural heritage' holds value can go beyond an objectively measurable or assessable framework. Like the kind of care shown for the wildlife of Svalbard by participants in Section 5.2, for some, the material remains of Pyramiden also seem to have a neo-sentimentalist intrinsic value (McShane 2011). Taking the lessons from critical cultural heritage discussed in Chapter 4, we can identify this more accurately as relationships between material, memory and the sociopolitical environment. We have been warned of the dangers of being carried away on a tide of 'ruin lust' (DeSilvey & Edensor 2013 see also Section 4.8.3), I aim to demonstrate that although there is undoubtedly an aesthetic fascination with these materials, the ethics of care can also be recognised here. In discussing the value practices of some of those 'closest' to the town - temporary workers, repeat visitors - the ethics of care and moral geographies can be of theoretical use in describing the relationships and practices evident here. This is aided by Kitson and McHugh's (2015) conceptualisation of nostalgia.

Kitson and McHugh's work in the historic district of Coronado, Arizona lead them to a version of nostalgia where those experiencing it do not necessarily have personal memories and connections, or even know or accept 'official histories' to the objects and houses that are the subject of their attention. As the authors write, Moving beyond nostalgia as a representation of, or personal longing for, the past or home, we engage nostalgia as transpersonal, affective currents coursing through bodies, objects, and things. Nostalgia, we assert, is less about time (a specific history) and more about diffuse longing – less about home (a specific geography) and more about cultivating sensual environs (pastness).

(Kitson & McHugh 2015, p.488)

This kind of nostalgia seems to 'fit' with an ethics of care framework, where objects and their potential for holding past lives, memories and stories are related with and responded to, and these relations beget practice. Despite the strict but distant regulations of the firm, and potentially the Syssleman's office, or inklings, questions or whispers from heritage experts of a certain disposition, small acts of care persist, like the lure of nostalgia and the ruin itself (DeSilvey & Edensor 2013; Kitson & McHugh 2015; MacDonald 2013). I found in myself, and could see in others, the enchantment of the near but unreachable past, "encounters of affective distance engender attentiveness to what is near, to sensing closely" (Kitson & McHugh 2015, p.488). The photography we (as members of the photography club in Longyearbyen) were there to practice and the awareness of previous photographic work here served to heighten our attentiveness, to try to sense our way through. We tried to balance keeping up with our guide, Nikolai⁹¹, and his stories, whilst giving the spaces and objects the time they deserved in front of our lenses. For us, this attentiveness was practiced by trying to 'capture' something of what we felt whilst being as respectful as we could, taking care not to trample or damage anything.

For some temporary residents though, care *about* Pyramiden's material remains and what they are entangled with, chapters in thousands of different life stories from another time and imaginings of pasts and futures, resulted in caring *for* particular spaces or objects through small acts of 'saving'. Whilst earlier the participant I refer to below joked that he liked Western tourists to see what a mess their predecessors have made through looting and vandalism, there is also

⁹¹ Pseudonym

a more serious affinity with the remains of Pyramiden that became evident

through a series of interactions and conversations.

[SS] In the buildings where there are papers everywhere, do you think it would be good to tidy it up, or is it good to have it as it is naturally?

Oh it definitely should be cleaned, because there is a lot of archives, even the old Soviet newspapers, it's so interesting to read them now. I think they should definitely do cleaning there and make sort or order.

[SS] Maybe in some places a few of the books have been put up, made neater. Is that you?

Hmmm, sometimes I do. I try to put, to do cleaning in the school. If drawings are on the floor, I put them on the table ... I just like the people who like this place. I like that people treat it with respect.

(Interview 34, 15th June 2014)

Figure 30: Books propped up for display in the mining office, Pyramiden, June 2014 (including a collection of Mikail Gorbachev books, and guide books – for labour leaders in senior positions, company directors, and for safety rules in coal and slate mines).

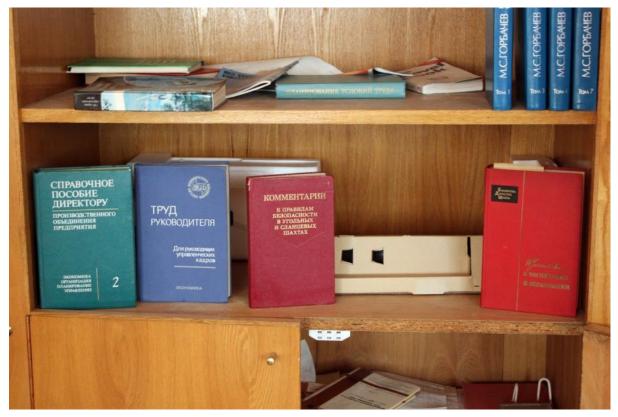
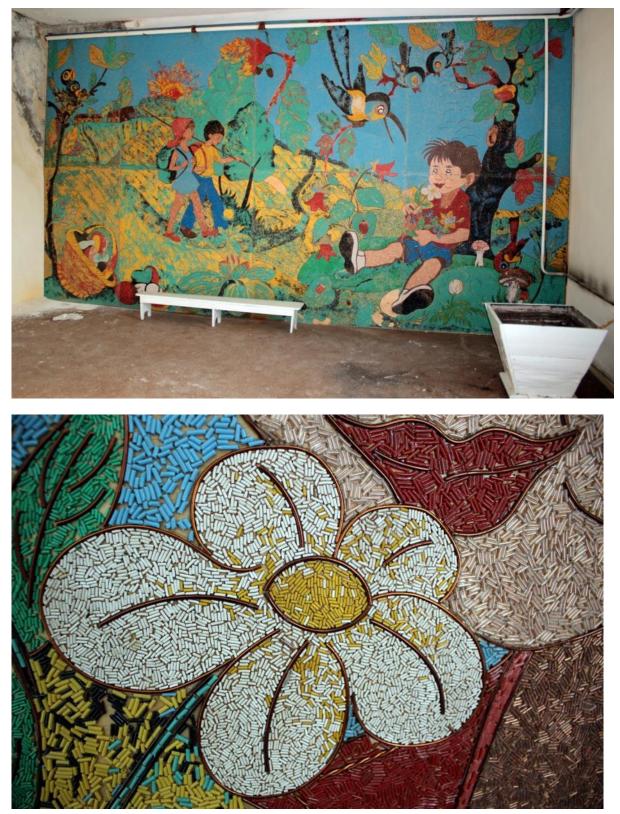


Figure 31: Landscape of care? (Milligan and Wiles 2010) Despite the lack of teachers and children, and the encroachment of mould, it is still evident that much care and effort went into the school. Mural made from electrical wiring, school, Pyramiden, June 2014.



While touring the town during its evacuation, Bjerk takes in "places with [a] low misery factor" (Andreassen et al. 2010, p.85) – the swimming pool, the old canteen and the cultural centre perhaps, as these are the focus of current tours. Once the day-trippers have left town, more miserable places are opened up – Nikolai took our group to several different buildings off the normal tour route. He was particularly attentive in the school (Figure 31 and Figure 32) becoming very animated showing us the different rooms, objects, books, children's work, toys and so on. He was excited to share the school environment and also found the destruction here most sad, as did fellow photography club companions. We have all been to school; there is something we can all connect with. There it seemed more 'wrong' than elsewhere for things to be uncared for and discarded. Nikolai acts on this when he can, or when he is moved to by creating pockets of more orderly places. This then is perhaps exactly what Kitson and McHugh refer to, things have sensual directives and bodies can attend to them – the drawing should be picked up.

Figure 32: In the school, Pyramiden, June 2014. Evidence of inattentive/ caring visitors. The child's work is now weighted down on the window sill, having picked up some footprints.



Ethical comportment, not a written code of conduct, is the basis for ethical subjectivities. Through recovery, refurbishing, and re-imaginings, an ethical disposition toward matter emerges.

(Kitson & McHugh 2015, p.503).

This personal ethics of care for Pyramiden extends to create a multi-layered moral geography of who can go where. Those who show respect and appreciate the town – the memories, the previous occupants, the material remains, its impressive surrounding area – might see a little more of it. Buildings locked and unlocked, protecting secrets, stories shared with new friends: these are weighed with the risks or opportunities for improving or otherwise personal reputation, job security and unencumbered salaries. The gaze of the Soviet-style firm is distant, but threatening to those who don't follow the formula.⁹² Time available, size of the group, their interests and an assessment of their likely behaviour affects who can be 'safely' shown which parts of the town. Such an inchoate moral landscape exceeds rational, rule-based codes that might be attempting to preside over this space. One evening I am taken on a surprise detour, seemingly on Nikolai's whim and enthusiasm to show me something extra (see Figure 33).

Not all practices of care are on display, rather some are tucked away in lonely corners where care can resuscitate, enliven and give meaning to past remains.

What does the remainder of an original oak wood floor or a burned, discarded old dresser decree? Save me. The practices arising from nostalgia and historic preservation are a symbiotic dance of search and rescue, lost and found. The remnant body (wood floor, old dresser) is resuscitated and rescued, and the human body experiences lost, longed for sensations.

(Kitson & McHugh 2015, p.502)

⁹² There appears to be a strong culture of fear and many circulating stories of TA workers being docked pay for various behaviours not approved of by the management. The Soviet disciplinary gaze of the past (Andreassen et al. 2010) still casts a glance over its workers in Svalbard.

Figure 33: Storage shed containing hundreds of film canisters, Pyramiden 2014. Nikolai and I pontificate as to whether they would still work, if they will be retrieved and archived at some point. It's interesting they are here, not near the Culture house where the cinema is. Was this collection point a previous act of rescue?



Figure 34: The projector room at the Culture House, Pyramiden, 2013. This is a popular spot for iconic photographs of ruination and abandonment.



My experiences in Pyramiden speak directly to the imperative to 'save' that Kitson and McHugh describe. One evening Nikolai takes me to call on Sergei, who, he explains as we approach, doesn't get to see people very often. Sergei's small apartment is as warm as his wide smile. Excited introductions and several layers of clothing were deposited by the door. Sergei hastens us through to the tiny combined living and bedroom area. He conducts a tour, directing our gaze to a number of 'special' objects as we slowly shuffle around the room. I pick up what I can from his words and body language as he tells us a little about each thing, and Nikolai translates some of the rest (I understand enough Russian to know he is being somewhat selective). All these things have been found and 'rescued' from around the town. An Orthodox Icon constructed from pieces of electrical wire – like the mural in the school; a Soviet World Map, a replica painting that took a lot of cleaning and fixing and a communist work slogan. Sergei insists that I photograph him and Nikolai with the slogan. Where these things were found or how they were acquired is not fully clear. I don't push for details, I have a feeling this might get them both on edge. There are just enough 'artefacts', mixed in with his laptop, family photographs and work gear, to fill the small apartment, make it feel homely but still functional. On leaving, Sergei wants to take us out the back way, probably to show us the gym he has created: a collection of barbells, dumbbells and benches. Puffing up slightly, still beaming, he waved us goodbye.

One aspect of the ethics of care that is often discussed in the more anthropocentric formulations of care between people, is its reciprocal nature. An argument perhaps for not applying such a theory beyond human relations. Yet, as I think these micro-practices of care for 'cultural heritage' demonstrate, those caring for material objects also receive something back from them, it *is* a relationship. Kitson and McHugh describe "longed for sensations", whilst others recognise a 'human need' to care for others, be they other people, species or things (Engster 2015; Holtorf & Ortman 2008). Care ethic theorist Daniel Engster notes the capacity for human caring, but that this is generally limited to those we can perceive a closeness to: The main challenge of morality and politics is not so much as to generate moral concern and political order out of chaos, as to expand our natural but parochial dispositions of care to encompass strangers and distant others. Care ethics offers essential insights for achieving this task.

(Engster 2015, p.228)

The ability for material remains and sites of industrial ruin to create affective atmospheres (e.g. B. Anderson 2009b) and also to be party to practices of care with the emotional relationships and reciprocal contingencies that brings⁹³, hints at how an ethics of care could extend from beyond a site such as Pyramiden. The absent- presence of the former inhabitants that echoes through this 'ghost town' reaches out to connect present occupiers and visitors with distant others over space and time despite the unlikeliness of a 'genuine' connection being made, though this can also happen⁹⁴. Neither the material 'affective atmosphere' of the 'ruins', nor the embodied, emotional, social and personal subjectivities that visit this place work alone here. They do not produce homogenous responses either. For example, having previously worked as an administrator, I was moved especially by the disarray of offices and paperwork (Figure 35). Similar to Edensor's embodied remembering of assembly-line work when exploring ruined factories (Edensor 2005), I imagined the hours spent carefully caring for these records, now devoid of and detached from the activity they recorded.

⁹³ Degnan (2013) and Navaro-Yashin (2009) pave the way here for bringing the theoretical literatures on affect and emotional subjectivity together through landscapes of absent-presences, whereas Anderson achieves the same through his consideration of atmospheres (B. Anderson 2009b). Here I focus on the implications for developing an ethics of care, but I concur that what is at work here, through this ethics is not limited to affective currents stemming from Pyramiden's remains, nor human emotions but a meeting of the two, through the relation of caring.

⁹⁴ Nikolai does sometimes receive messages from previous residents of Pyramiden through his sharing photographs on a Russian social networking platform. Very occasionally, some find their way to a tucked away corner of the English-language equivalent, Facebook.



Figure 35: Filing room in mining office, Pyramiden, June 2014.

The valuation processes and regulatory frameworks for cultural heritage preservation in Svalbard are at odds with and/or indifferent to these micropractices of care I have described. Given much of the material remains of Pyramiden do not date back to before 1946, perhaps such practices can go 'under the radar'. Following a cultural heritage assessment, the new area management plan designates the majority of the town's centre as of historic value, with the accompanying 100 metre protection zones that go with it. However, only the fixed interior elements of particular buildings are identified as worthy of protection:

Fixed elements of the interior of certain buildings (including walls, floors, door and window openings, technical installations, construction elements, decorative elements and colour schemes) are assessed as being of great historical value and should be maintained intact; this applies to the house of culture, the swimming pool, the mess, the hen house and the piggery.

(Governor of Svalbard 2014b, p.4)

The items that I describe above are not 'of great historical value'. Their intangible, incomplete link to the recent-distant past is not rooted to the solidity of the built environment, but ready to latch onto the next passing subject open to its invitation to imagine, to care, like ticks in waiting. Between the diligent cataloguing and research of the historians, the negotiations of the cultural heritage directorate, the Governor's office, TA officials, Russian scientists and their representative; things not fixed enough can get trapped or swept away, lost in translation or compromise between ideas of what it can mean to care for this place.

> Maybe you lose some of the history, or the feeling of the people that were living there. Because the cultural palace, when it was left, there was a lot of stuff in the foyer in the main hall, but now it's all taken away... the TA, they are kind of annoyed that people go there and take pictures of the ghost town. They don't like that. They don't like the buildings to be in bad shape, they would like the buildings to be in good shape again. And that's a different way of seeing things and it makes all these terms within cultural heritage, and taking care of things, and maintaining things, a bit different ... Should it be the Norwegian cultural heritage theory and idea that we have now, that should be put in Pyramiden, or should it be how the Russians look at things, look at their history?

(Interview 19, architecture and planning sector, 2nd June 2014)

Indeed, this was the dilemma that Andreasson and Bjerck faced when they returned to Pyramiden in 2012:

Unfortunately, in the process all too many of the delicate and touching details we encountered in 2006 were torn down, displaced or destroyed. It is understandable, the urge to clean and tidy when visitors are expected. Unfortunately, the untidy chaos of things also harbors the intimate and delicate objects and constellations that are valuable encounters with the former citizens, with the living town. Making the settlement presentable, paradoxically, also means to insert a barrier between now and then, between the spectator and the attraction, a veil that blurs the authentic integration of humans and things.

(Andreassen & Bjerck 2012)

As DeSilvey (2006) notes, with preservation comes destruction. Pyramiden is not 'frozen in time', and Andreassen et al. recognise this. In the previous decade the town was largely abandoned, with the natural processes of slow decay, encroachments of water and ice, and settlement by other species being dominant. Now, in a compromise of geopolitical and economic value, new management approaches and ways to capitalise on what remains are at work; "as the economic use-value of these places [ruins] fades, other uses and values emerge as an alternative to, or in the absence of, other provision" (DeSilvey & Edensor 2013, p.475). What Andreassen and Bjerck mourn is perhaps the *lack* of care for the everyday material, which provides such intense emotional and embodied links to Pyramiden's former days, and those that lived there. Within the pages of the Pyramiden Area Plan and the practices of restoration and repair of the *TA*, the 'everyday' things of life in Pyramiden are conspicuously absent. Not cultural heritage or in use, they are perhaps, through lack of belonging to another 'category', 'waste', or 'surplus', potential ghosts which can invoke the past habits and lives of former residents, as Moran explains, bringing absent memories into the scene along with the more sterile histories slowly gathering:

> This notion of waste as a surplus which escapes formal mechanisms of remembrance is a useful way of thinking about memories of the everyday, which are also contained in unlikely things and places whose histories are unacknowledged: nondescript buildings, characterless suburbs, 'nonplaces' and 'rubbish'.

(Moran 2004, p.66)

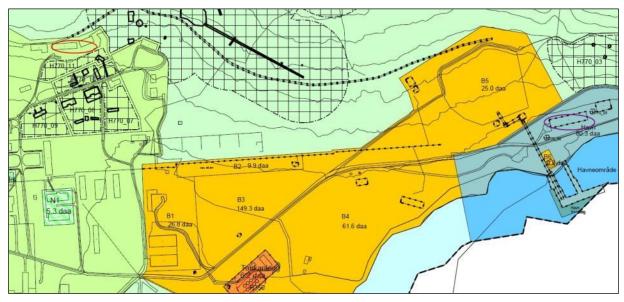
The small acts of care for such objects as described above offer a reprieve, for now, from these processes. They also work to challenge the notion that Russians and Westerners value this site differently. Whilst this may have mileage regarding the treatment and definitions of 'cultural heritage', there is much common ground in the personal, specific and emotional entanglements with material remains. The absent-present memories and the material ghosts of Pyramiden play with imaginations of all kinds, soliciting care for and care about. Imagining what it would be like to encounter these spaces (the offices devoid of books and paper work, the school empty of toys and drawings, workshops without tools, apartments without any trace of their inhabitants) would seem a sorry and incomplete history. Hence, through tracing value through practices of care, we have revealed value practices that are not recognised through the categorisation processes of conservation.

5.4.1. Uncaring Capital

Over the other side of town, the air is filled with the sounds of heavy machinery - banging and clanging - perhaps not too unlike the soundscape of the past in this industrial area. However, these are not the sounds of construction, production and maintenance. The 11 workers from Tajikistan have an entirely different purpose: recovering some value from TA's investments – harvesting metal and other components and stacking it ready to ship back to Murmansk for sale on the scrap market. What were once cogs in the wheels of the 'ideal Soviet industrial town', these parts, machines, and infrastructures, will no longer remain to help tell the story of how things once were. Their value is still connected with the market, not now as means to produce a valuable commodity, but as economically valuable raw material. This area and its contents have not made the transition to become official cultural heritage, though many of the items here have been gleaned from the old workshop area that is within this zone (see Figure 36). There are, as with cares about wildlife, competing interests at work, and care can be practiced with different motives. *Trust Arktikuqol* could argue that raising funds through scrap metal sales will help conservation efforts in the long run, or that it is more morally defensible to retrieve economic value from unused stocks to provide better living conditions for still-functioning mining communities such as Barentsburg. Indeed, clearing away some of the 'rusty junk' from the 'pristine wilderness' is likely to have some environmental benefits of limiting further heavy metal contamination.

However, as conversations and time spent with heritage researchers demonstrated, the benefits of scrap metal retrieval is not universally agreed upon. Not only do (slightly unusual) tourists like myself, should they get the opportunity to experience these off-tour areas, find such experiences interesting and aesthetically alluring as industrial ruins, but there is also a normative imperative to preserve not only the cultural areas but the industrial ones too. The heritage perspective is to view the industrial remains as essential to the historical story that Pyramiden should be able to tell. In a different way, such actors *care* about the way and extent that Pyramiden's story evolves.⁹⁵

Figure 36: Extract from Pyramiden Area Plan (Governor of Svalbard 2014). Much material has been stripped from the area circled in red between my visits in 2013 and 2014. The green shading means this area is 'cultural heritage', but the absence of hatching means it is not offered full protection. The area circled in purple is where work was concentrated in 2014, the grey shading here is listed as 'port'.



That [the central community and residential area] is also what the Trust Arktikugol is preserving, together with the governor, carefully taking care of this as a tourist resource, while at the same time they are knocking down and turning the different parts of the infrastructures...into scrap metal and transporting it down to the docks ... To me as ... a researcher, they are removing, all the ...

[SS] Interesting stuff?

YEAH, the stuff that sort of motivated the production. The mine is there because they wanted to produce coal. The coal was used in the North West of Russia, so the production of coal was central to this place. ...It was not only about geopolitics, it had a role in the Soviet economy, which people tend to forget, and this coal was produced by

⁹⁵ Pyramiden could well be at risk from becoming heritage which 'falls through the gaps', being difficult to comprehend and becoming 'mute', such as with the Malakoff Diggings former Hydraulic Gold Mining site in California (Hoskins 2011)

the production system in Pyramiden. And when you knock all that down and remove it, well you lose half of the value of the site. It's the whole, it's all the components that make this place so valuable, and therefore I think it's important to point out and map out what's still there and argue for preserving it.

(Interview 17, heritage sector, 30th May 2014)

I don't think they [TA] see it the same as we would, and the governor's [office] are not seeing it either. I think they are focussed on what is protected and what's not. It's difficult for the governor to say you have to take care of all the technical products. But some of the area was already part of the plan, some of it was protected, as cultural historical areas. If they follow the plan, then some will be protected.

[SS] Some of the buildings?

Yes, they are very focussed on the buildings but not on the infrastructure and the environment. When you are coming back there in 20 years, you are seeing not that much of the infrastructure, you see a very fascinating town, but why did they do it? Why were they here?

(Interview II, heritage sector, 22nd May 2014)

It is imperative here that we should not lose the possibilities to learn the socioeconomic, political and environmental lessons and stories that this site affords. As a snapshot in time, these different value ideologies converged during the cultural heritage assessment, as one researcher described: "when we were there, they had 15 men digging out metal. We documented the objects while they took them out". The act of doing something, intervening in what was happening, suggests that "the objects" are indeed "matters of care" as well as "matters of concern" (Bellacasa 2011). Here, the contingent and contested nature, the porous boundaries of the category of cultural/industrial heritage are prominent. Moreover, the caring relations for specific objects, places, memories, processes, histories and potential futures, that run through this 'heritage' site are generally hidden and excluded from the official channels of preservation policies and politics. The resulting numbered paragraphs, devoid of anything but 'objective', criteria-based, policy-consistent language, and neatly mapped zones pass over these 'affective currents' and emotionally laden, caring relations. And yet, through the processes and practices of valuation, we can trace the cracks, for,

behind the bureaucratic protocols and policies are people whose cares and values exceed such processes. As discussed in Section 5.8 of this chapter, knowledge production is not devoid of such emotional traces, and has effects on the processes of policy making and practices.

> What they actually decided to do, it may not be that. But he [the TA representative] immediately, he was like is this historically valuable? Well then let's keep it.

> > (Interview 17, heritage sector, 30th May 2014)

The ruins of Pyramiden have provided an example of how thinking with the ethics of care can be helpful to bring a further depth of understanding to the vital materialities of the remains. Thinking through reciprocity, care practices and motivations for care has helped to reveal value practices and processes that are in-excess to those which are incorporated into cultural heritage and area management plans. So, although there are, as the example of the scrap metal removal illustrates, multiple competing moralities and motivations through which to view caring relations, the ethics of care has been useful in unpicking some of these and has shown its potential to be applied beyond human-human relations.

5.4. Keeping up appearances in the city

I turn now to examine a further setting for caring relations: not the vast and sublime Svalbard wilderness or its species, nor the semi-abandoned ruins of Pyramiden, but the caring relations in the urban centre of Longyearbyen. Through the issue of waste and what to do about it, I explore two more aspects to the ethics of care approach: proximity and temporality. From interviews with local authorities and residents, it appears that many care *about* waste disposal, and in particular the detrimental aesthetic consequences of the lack of good waste disposal practice. However, it is unclear who should care *for* the town's appearance and how this should be done. The town's governance by the local council, in concert with the general Svalbard policies enforced by the governor's office, is relatively new. For more long term residents, this is something people

used to do for themselves, but now see the responsibility as lying with the authorities.

Though Longyearbyen is a small town within over 61,000 square kilometres of the archipelago, it is the population centre, the arrival point of most residents and visitors, the place where first impressions are made. Indeed, some visitors may not leave the vicinity of the town. The strict environmental protection policies are focussed very much on conservation within the national parks and reserves outside of the town. For some, this represents quite a hypocrisy when there are problems on the doorstep:

> Now as the snow is melting, you see lots and lots of garbage and litter showing up and living in a place like this, we should take better care of our environment. Definitely, we are far from good enough at that. It doesn't look nice at all.

> > (Interview 25, Long term resident, 5th June 2014)

You're walking around there are bits of snowmobile everywhere and jerry cans and random crap left lying around because nobody cares about it. I find it tedious because the worst thing is there are so many people up here who have really nice ideas about how the environment should be, and nobody cares about it in the place that they live. That should be the number one thing to start with before you start preaching about the wider area, at least sort this place out first.

(Interview 48, visiting researcher, 27th June 2014)

A key discussion on the limitations, or otherwise, of an ethics of care to date has been whether caring relations and embodied practices of care can extend to 'distant others' with which we may or may not have personal connections with (Smith 2000; Milligan & Wiles 2010; Engster 2015). That in Longyearbyen the practices of *local* environmental care are under criticism, highlights the tensions over the policy approach to environmental protection. In the effort to protect the Svalbard wilderness, the protected zones that have ensued are distant from the settled zones of Area 10. Milligan and Wiles "suggest that even physically distant care-givers can be affectively or socially proximate, and that physically distant care relationships can be literally embodied" (Milligan & Wiles 2010, p.749). We could interpret the environmental protection legislation at least at

some level as a governance of caring and those with experience of these more distant zones of Svalbard develop a connection to carry this care home (see Section 5.8). Yet, in the application of a zoning policy, 'preserving' large areas through the national parks in Svalbard can be seen as a justification to exploit and not to care for the areas outside of the parks (Katz & Kirby 1991; Katz 1998). The Area 10 zone, in which Longyearbyen is situated is, after all, already sullied by the historical exploitation of coal and other minerals. Despite Longyearbyen's current mission to diversify its economy and soci-cultural life away from a historical reliance on coal mining, there is a significant hangover from this period evident in the legislative regime, but also perhaps in the care taken within the town. The Longyearbyen community, transient as it is, has not 'grown up with' caring environmental relations, but exploitative ones. Whilst it is clear many do care about the local Longyearbyen environment and waste management specifically, it remains a problem. This suggests the importance of the socio-historical context in which caring relations develop, and thus challenges the primacy of distance as a discussion point.

5.5.1. Oceanhope

Here I recount the story surrounding the funding, construction and subsequent use of the rubbish hut, *Ocean Hope*.⁹⁶ *Ocean Hope* provides an example of how caring relationships, in this case about waste issues, can take on different forms, operate on multiple scales and develop over time. *Ocean Hope* is a project by artist Solveig Egeland which received funding of 350,000 NOK⁹⁷ from the Svalbard Environmental Protection Fund (Ylvisåker 2014). The aim, similar to that of the artist's previous installation on the mainland, was to turn waste collected from the annual litter pick around the coastlines of Svalbard into a piece of art to raise awareness about ocean litter and the possibilities of waste re-use and recycling (Egeland 2015). There has, however, been much heated debate in the local press and on social media sites about this project over the course of its announcement, implementation and eventual dismantlement.

⁹⁶ I have largely followed this story via social media and local online newspapers, Svalbard Posten and Ice People, though I was able to visit Ocean Hope in February 2015.

⁹⁷ Approximately £33,500 at 2014 exchange rates.

For some, the construction of some kind of 'monument' made from more rubbish would add to the already messy seafront area of Longyearbyen town, exacerbating the problem of unsightly litter. That such a project would receive funding from Environmental Protection monies and even include a trip to Venice to display the work, served to heighten the sense of outrage before the artist and team had got to work. Whilst the two sides of the discussion shared concerns about environmental problems, and wished to encourage action to alleviate them, care from the artist and care from local opponents were operating on different registers and scales. On the one hand the artist had a general concern for ocean waste, a global problem, but did not link this to wider global environmental issues, such as carbon emissions from air travel. On the other hand, her opponents were only willing to consider 'practical' and locally focussed environmental projects as worthy, and were perhaps lacking in care for the welfare of artists in questioning the funding, which included paying the artist a full salary.

The 'trash hut', was built in just over a week in August 2014, using 8 of the 90 cubic tonnes of litter collected on the Governor's annual litter picking cruise (Egeland 2015).⁹⁸ The original plan was to remove it two months later, before the winter. However, in its brief stay on the sea shore, it managed to gain enough interest and support from locals as a meeting place and way to bring environmental issues into educational talks for tourists and children more creatively, that two residents volunteered to take care of *Ocean Hope* for a further year.

⁹⁸ Further photographs and details of the construction process can be accessed via <u>www.oceanhope.no</u>

Figure 37: Ocean Hope, Longyearbyen, February 2015



During the course of this year the hut gained favour from its detractors as its longer life span meant it was better value for money. However, Egeland felt duty bound to honour her word and original application to the local authorities that this would be a temporary structure and exhibition. 14 months after its construction, *Ocean Hope* was dismantled. The debate briefly re-opened as residents discussed, via Facebook, how they were sad no one would take the responsibility for it any further and that as a sea-shore meeting place, it would be missed. Whilst a minority still viewed the hut as "garbage" (Sabbatini 2015c), some of the strongest naysayers had become fans of her project according to a local newspaper:

> 'The project – as originally presented – I didn't have much to spare for,' wrote Anne Lise Sandvik, perhaps the project's most vocal opponent, in a response to Egeland's Facebook post. 'But how it has evolved, it has been the delight of many – young and old – and it should be possible to allow the money to be spent to get its benefits by allowing the hut to stand. If the will is present, everything is possible'.

> > (Sabbatini 2015b)

Ocean Hope provides a good example of how caring relations can develop and change over time. While the original remit of raising awareness of ocean waste is

still visibly relevant, its value to residents emerged as the hut was interacted with, used and became more familiar in the landscape. This complicates my discussion of care so far. Care is defined within the ethics of care literature as being very much linked to the idea of conservation, 'saving' and moral behaviour. Yet, we must take into account the relational and fluid nature of caring. What we care for and about and how we do so is subject to change, as are our ideas of what it means to 'live well'. Returning to the broad definition of care afforded by Fisher and Tronto (1990) we are left to weigh up the most appropriate balance of maintaining, continuation and repair in each specific context. Comparing this relational, moveable ideal of an ethics of caring to the dominant discourses and 'regimes of care' (Harrison 2015) at work; the differences are vast. As we saw in Chapter 4, cultural and natural heritage management and protection are currently based upon 'fixed' devices of dates, geographically delimited zones and values criteria organised around hierarchical categories. In addition to the challenges that the material reality presents for putting fixed regimes into practice discussed, the value practices associated with care discussed here have shown the extent to which the formal evaluations of value are an incomplete picture of how Svalbard's heritage is valued and what practices this results in. In the following sections, I extend this critique by examining the role of embodied emotions, affects and caring relations specifically within knowledge production activities that feed into conservation policy and management strategies.

5.5. More than a Feeling?

On the one hand, 'Pete'⁹⁹ and I have a shared understanding of Svalbard. Words seem inadequate in describing quite what this understanding is exactly. Simply put, we know how Svalbard 'works' – practical knowledge – how best to get there, what kind of things to bring, what to expect, what the main settlements and typical weather conditions look and feel like. We have in fact spent time in Svalbard together socially; familiar faces to share our respective research worries

⁹⁹ Pete (pseudonym) studies glaciology. He had already visited Svalbard twice before, hence our shared understanding did not begin on equal footing and Pete was a key source of information and advice when planning my first field trip.

and triumphs with. On the other hand, we know Svalbard in very different ways. Early in my research we were on a shopping trip in Longyearbyen and Pete pointed out a particular glacier in the distance as being interesting. It is a 'rock glacier', a type of glacier that does not look much like a glacier, but one that is common in Svalbard. He noted how fortuitous it is that there happens to be one within close range to the Svalbard University Centre (UNIS). While I considered the value of the rock glacier to scientific work, the tourist industry, geopolitical implications, public perceptions of glaciers and so on, Pete was recounting details of rock glacial processes and features.

Pete claims that his work on glaciers and glacial processes has nothing to do with policy or politics. My attempts (and those of several other human geographers') to persuade him otherwise have been met with accusations of trying to "twist things" to our point of view. It is hard for us to see how he can refuse to make connections between his research and wider debates. As Carey et al (2016) have recently pointed out, glaciers are iconic cultural and environmental reference points. Pete's research has potential to matter to public imaginings of climate change; to provide evidence that informs climate and other environmental policies. In many ways my discussions with Pete have mirrored the fierce debate on, and opposition to, Carey et al's proffering of a 'feminist glaciology'. In their paper they challenge the traditionally accepted methods, knowledges and epistemologies of current glaciology. Objections to their suggestions have not been limited to glaciologists but extended to natural scientists in general (see for example Coyne 2016). Above all, the disagreement is about epistemology and the value of knowledge that deviates from a western science, enlightenment approach - one scathing review takes this to be an antiscientific postmodern perspective and that "other ways of knowing" are simply subjective and emotional views incorporated in human narratives, art, and literature. These are not "ways of knowing" that will "advance the field" (Coyne 2016, no pagination).¹⁰⁰

¹⁰⁰ There have also been critiques of Carey et al's paper for not acknowledging glaciological work that does not limit itself to a positivist outlook.

In the following sections, I delve deeper into value practices that are in excess of those taken into account by the environmental governance regime through looking 'behind the scenes' of scientific knowledge production in Svalbard. Despite his wanting to appear the ever-rational, objective scientist, Pete cannot hide his enthusiasm. Sometimes Pete was happy to talk about his passion for Svalbard and other glacial areas, for fieldwork and for the ice-climbing and caving that goes with it. He has told me about heated pub-time rows over opposing theories in glaciology as well as all his past adventures in Svalbard. This enthusiasm matters – as Hilary Geoghagen demonstrates in her work, enthusiasm "influences passions, performances and actions in space" (Geoghegan 2013, p.45). I argue that embodied, affectual and emotional experiences, including enthusiasm, play an important part in the processes of knowledge production, the value(s) associated with Svalbard and the practices of conservation of such value(s). For,

The exclusion of emotion in political deliberation is dubious, given the important role emotions can play in pointing out what we value. ... Emotions help us to reflect on which values we find important, how our actions relate to our lives and those of others, and allow us to care for the well-being of others.

(Roeser & Pesch 2016, pp.282–286)

Emotions and value have long been connected, yet this connection between these concepts and their separate definitions continue to perplex philosophers and theorists. For example, Deonna and Teroni (2015) sketch out a number of different views from philosophers on how emotions and values can be related and differentiated from each other. These range from views similar to that of Roeser and Pesch (2016), that emotions can be indicators of value, to the converse position that it is personal values which indicate emotions as well as considerations of evaluative, normative assessment of emotions and the value of emotions (Deonna & Teroni 2015). As Demertzis (2013) observes, a definitive answer to William James infamous question *What is an emotion?* (1884), still escapes us, and, as Chapter 2 demonstrated, our understandings of the term value are varied and equally troublesome. I hold that emotions and values (both personal and cultural) are important, entwined factors that feed in to the experiences we draw upon and the factors we consider when making decisions.

Emotions and pre-cognitive affect play a role in the way we make decisions and that this role is not easily separated from more 'reasoning', conscious practices we engage in (Marcus 2013; Whitehead et al. 2011). Although caution is needed in translating insights from neuroscience and psychology (Papoulias & Callard 2010), consumer behaviour studies and the rise of 'nudge' tactics in approaches to behaviour change policies rely on the premise that we make decisions on "more-than-rational" grounds (Whitehead et al. 2011), personally and socially (see for example Jackson 2005). It follows therefore, that in tracing value through the practices of 'saving' Svalbard that we should consider value from a more emotional and embodied perspective.

Mindful of the need to be specific with the terms, I briefly outline my interpretation of the intersections and relationships between the concepts of affect, emotions, atmospheres and enthusiasm. This is developed into a specific understanding of Svalbard as an 'affective atmosphere' in Section 5.7. Following this, I draw upon my field experiences with scientists in Svalbard to reveal some of the more-than-rational practices and embodied experiences of knowledge production and return to the notion of care in this context. This contributes to our understandings of value processes in the work of creating value through scientific knowledge production and how it relates to environmental policy and management. In Section 5.9 I examine the role of 'scientific' knowledge in environmental protection policies in Svalbard. I am interested here in how knowledge production relates and contributes to decision making processes surrounding the Svalbard environmental protection policies, in preparation for examining some of these processes further in Chapter 6.

5.6. Between Affect and Emotion

They've been here, they've seen it, they've felt it they've smelt it, they've heard it, yeah they know what it's about. To explain this place to someone who hasn't been here, it's not so easy, because it's something in the atmosphere I think. I guess you've noticed that as well.

(Interview 25, research and education sector, 5th June 2014)

The consideration of emotions and affect in political (Barnes 2012; Demertzis 2013; Hoggett & Thompson 2012; Roeser & Pesch 2016), scientific (Kerr & Garforth 2016; Lorimer 2008) and the general social realm is not a novel undertaking, following the 'emotional' and 'affective' turns in geography (Anderson & Harrison 2006; Bondi 2005; Bondi 2014; Davidson et al. 2007; Pile 2010; Thrift 2004a) and the wider social sciences. Nevertheless, I encountered a range of views and experiences in Svalbard that are worth discussing on at least two counts. Firstly, in connection to environmental policy decisions, emotions were deemed inappropriate forms of knowledge and pitted against 'rational' decision making. On the other hand, soundbites such as that in interview 25 make clear that Svalbard as a field site and/or home has an affective and emotionally embodied significance that undoubtedly affects the value that people assign to it. Hence, I explore this tension and what it might mean for value practices and their consequences in Svalbard. Secondly, and more broadly, as Roeser and Pesch (2016) alert us, we can trace value and values more thoroughly through discussions and experiences of emotion. An exploration of the affectual and emotional sides to Svalbard therefore is a key contribution to the investigation of value on which this thesis is centred.

For some geographers distinguishing between affect and emotion has been crucial to their conceptual and empirical deliberations. Pile (2010) locates the fundamental split between the two conceptual approaches to be at the level of cognition – with emotions being expressible, conscious, subjective embodied feelings, whilst affect is pre- or non-cognitive, moves through and between bodies and material and cannot be represented. Ben Anderson (2009a) asserts

therefore, that affect defined as such a capacity is central to nonrepresentational theory. However, even in key works of affective and nonrepresentational geographies, emotions can be conflated with or included in definitions of affect (for example Adey 2009; Thrift 2004a). The 'affective turn' has brought important considerations to the fore such as the role of the material and the limits of language and representation. It has also brought new philosophical ideas, political angles and inspirations to investigations of embodied experiences (Pile 2010). However, to uphold a clear dichotomous separation between affect and emotion, is a difficult project overall. In his explorations of ways of playing and moving in place and space, Stephen Saville suggests that whilst affect may come 'first' on a timeline of events, it is quickly entangled, woven into and effected by our sensory and emotional 'contact' with, and movement through the world (Saville 2008; 2009). Affect is always already emotional as we bring past experiences, memories and hopes of the future to each moment. It would seem that this has been recognised in the development of 'affective atmospheres' as a conceptual tool that reunites affect and emotion. And it is this way of thinking about embodied experience that is most helpful to me in analysing embodied experience in Svalbard.

Ben Anderson (2009b) and Bille et al (2015) describe atmospheres as being very much *in-between* and including elements of both affect and emotion. This hybrid concept of a vague, swirling mixture, "the very sensuous interface of people, places and things" (Bille et al. 2015, p.37), then enables reflection on "affective experience as occurring beyond, around, and alongside the formation of subjectivity" (B. Anderson 2009b, p.77). The meeting between individual and multiple subjecthoods, the material world of Svalbard and the more-thanrepresentational experience of such meetings encompasses much of the emotional and affectual accounts and experiences I and my participants (try to) describe. These accounts of atmosphere as "in-betweenness of subject and object in which the emotional and sensory experience are central" (Bille et al. 2015, p.32), for me brings together much of what is communicated about the need to experience Svalbard first hand and contracting the 'Svalbard bug' that is discussed shortly. The discussion proceeds acknowledging that emotional connections or experiences are not a fully self-contained, personal phenomena, but social, relational and wholly contingent on the context in which they occur.

Related to the rise of emotional and affective geographies has been the more recent specific interest in enthusiasm, led by Hilary Geoghegan. In her work she explores the social relations and emotions connected to groups of enthusiasts (Geoghegan 2013; Craggs et al. 2013; Geoghegan & Hess 2015). As DeLyser and Greenstein (2015) describe through their experiences of vintage car restoration, many emotions can be associated with enthusiasm and what undertakings it motivates, both positive (e.g. joy) and negative (e.g. frustration). Although, so far, work on the 'cultures of enthusiasm' has dealt mainly with leisure, or 'serious leisure' activities (see also Cole 2016), there is a recognition that the concept is applicable to professional activities as well (Craggs et al. 2013). In the emotional and social elements of laboratory and field science that geographers and science and technology studies scholars have described, a specific focus on enthusiasm is beginning to emerge (Cole 2016; Whitney 2013). It is clear that enthusiasm is a key motivational factor for scientific work.

My experiences talking about, observing and assisting in scientific practices in Svalbard suggest that enthusiasm acts as a useful conceptual grouping. Enthusiasm relates to the motivations and emotional connections to scientists' area of research, to scientific practice and to 'the field': the material, more-thanhuman spaces and species of their research. Though, of course, this categorisation of scientific activities does the practice an injustice.

5.7. Catching the bug

It's such a different place, I think it leaves something with you, 'cos it's so different to anywhere you've ever been.

(Focus group 2, student/researcher, 30th April 2013)

The feeling that to understand Svalbard one had to have physically been there and experienced it was widely shared across my entire data set. There is though, I would argue, more to it than recognising the importance of personal experience, something which was left unsaid or inexplicable in many conversations – something akin to the "magic" tourists in Antarctica describe (Picard 2015), yet distinct and different in Svalbard. As Anderson and Harrison (2006) suggest, it can be fruitful to experiment with language that attempts to express the inexpressible. Eventually, the concept of the 'Svalbard Bug' emerged, roughly translated from Norwegian 'Svalbard Basill', a term that matches previous research findings associated with local identity in Longyearbyen (Heiene 2009).¹⁰¹

Mainly it's nature. It's a combination of people and nature. It's a beautiful combination actually. There is something called this polar erferi, I also call Svalbard ergen – sun, the spots on your body that makes you hot

SS: Like a fever?

Yeah, but it's connected with this nice [feeling] when you are in love. It's nature and it's being out.

(Interview 63, long term resident, 7th July 2014)

I think the first several months were really hard and I was thinking to go back. But then this like, what we call this Arctic...err, not like a disease but something like this ... If you are like this, then it's very hard to leave this place.

(Interview 39, tourism sector, 20th June 2014)

I need this kind of space, this kind of nature, but if I need the Arctic and Svalbard, I'm not sure. Probably I am affected by the Svalbard basill, but how hard and how deep I can't say. But [I'm] still here so maybe it's very hard!

(Interview 26, long term resident, 5th June 2014).

The conceptualisation of atmosphere as a reflection of the in-betweeness and meeting of personal and social identities with the material, external 'nature' of Svalbard, goes some way to describing the embodied experience of the 'Svalbard bug'. As interview 63 details, it is not something that is entirely due to oneself, others or Svalbard, but a combination of these. The landscape, temperatures, wildlife, small social community and sense of freedom are all elements that can

¹⁰¹ The title of a Master's thesis by Tone Merete Heiene (2009) written in Norwegian is *Bitt av Svalbardbasillen?: konstruksjon av lokalidentitet i Longyearbyen* – which roughly translates as Bitten by the Svalbard bug?: Constructing local identity in Longyearbyen.

feature in conceiving Svalbard in this way, though it is unlikely any two versions would encompass the same ideas. The Svalbard Bug does not 'infect' everyone, and those who catch the 'bug' may get different mutations of varying intensities. Moreover, as Svalbard and the people that relate to it change, so too will its affective atmosphere.

There are emotional aspects to this bug, ways we can understand socially what kind of feelings it evokes, perhaps like the bitter-sweet fever of falling in love, and the actions it motivates us towards (staying or returning to Svalbard for instance). There are affectual experiences at work too, largely left as unspoken acknowledgements that Svalbard in general can get under one's skin, that there are special moments, experiences, times, light, animal encounters that can leave profound impressions. Entangled with these affective and emotional elements are cultural representations and expectations surrounding Svalbard. As discussed in Chapter 3, these have powerful, ongoing roles to play that intermingle with personal experiences.

As others have pointed out (see Campbell, Gray and Hathaway in West 2008a), we cannot necessarily separate out being in "science mode" (West 2008b, p.610) and being ourselves: the scientist is no less able or liable to enjoy time in Svalbard than anyone else. Gyimóthy and Mykletun (2004) highlight the complex array of motivations involved in undertaking a (tourist) trip to Svalbard. These include identity-forming, surviving in a challenging environment, testing one's skills and enjoying space away from modern stresses. It is surely an unrealistic notion that a researcher would not share these same motivations to some extent.¹⁰² Most scientists working in Svalbard seem to have contracted some strain of the Svalbard bug. In some of the more open conversations I had with researchers, they described how they got "hooked" on Svalbard from their first visit. Many of these tales seem to stem from to a combination of experiencing extreme, sublime landscapes and conditions and the opportunity and support for studying their phenomena of interest. Whilst at

¹⁰² A recent film starring one of our department's glaciologists, *Guilt Trip: A climate change film with a skiing problem* (Bonello & Douglas 2016), is a great example of how science and adventure often merge, especially in extreme Arctic conditions.

odds with the conventional construct of the model, objective, rational and neutral enlightenment scientist, researchers – as sensing, emotional beings – will react in some way to Svalbard's affective atmospheres, and their interaction with these atmospheres will have some bearing on the knowledge they produce (Livingstone 2003). Their experiences in the field, like my own, will also shape their wider embodied sense of the Svalbard landscape and its inhabitants and feed into their personal values of Svalbard. As participants described:

> It [fieldwork] just strengthens the impressions of the island, and how special it is. Because we're very lucky... we get to go on fieldwork all over... That's a very unusual thing, there aren't that many people who get to experience Svalbard like that. And every time you go out you are reminded of how special it is.

> > (Interview 9, research sector, 21st May 2014)

As I build up my experience it goes very quickly past just the practical aspects of how to actually do it ... You get a better and better understanding of what the data is saying, what patterns are emerging and you get a much more normal and natural approach to the species ... I get to see a lot more stuff than most people and I get to train my eye a lot more than most people. ... The more context you have for something, the more meaningful and interesting it becomes for you.

(Interview 22, research sector, 3rd June 2014)

Field scientists are more likely to spend long periods in a wider range of locations in Svalbard than residents, tourists and visitors of other professions. These practical, intimate relationships with more-than-human Svalbard feeds in to the 'Svalbard Bug' effect – researchers are reminded how "special" and "different" Svalbard is through regularly working there. That the knowledge they produce from this research is highly valued, as is discussed in Chapter 6, makes their experiences all the more significant, there is potential to directly influence policy here.

5.8. Touchy, feely, look-see and scientific knowledge production

I believe there are a number of good reasons, stringent reasons for being extra careful in the Arctic, beyond the emotional feeling that the Arctic should be exempt because it's a very sensitive place. So I'm towards that end of the scale, but the world is not black and white.

(Interview 12, research sector, 27th May 2014)

Mike Crang's (2003) paper, 'Qualitative Methods: Touchy, feely, look-see' asked researchers to "push further into the felt, touched and embodied constitution of knowledge" (Crang 2003, p.501). Over the last decade Human Geography has indeed risen to this challenge going beyond text-heavy representations through innovative research methods and analysis whilst reflecting on the ways in which the researcher has played a part in this research (e.g see Vannini 2015 for a review of non-representational geographies). Moreover, the role of the emotions, the body and affectual experiences has been recognised (Bondi 2005; Davidson et al. 2007). However, these developments have largely not extended to the 'physical side' of the discipline and 'natural' scientists in most sub-fields continue to exclude such considerations formally. This is despite increasing calls to more fully include perspectives from social science and arts and humanities that use these and other approaches in analysis of environmental problems (Carey et al. 2016; Castree et al. 2014; Lorimer 2008; Whitney 2013). The above interview extract characterises the situation aptly: emotions are seen as opposite to "stringent reasons", implying rationality and a scientific approach, if not objective scientific knowledge.¹⁰³ Yet through the acknowledgement that "the world is not black and white", a hint that a broader knowledge is not entirely irrelevant, as well as the suggestion that strict environmental protection might not always be the way forward. In this section I continue to trace value travelling 'under the radar' by exploring the embodied, emotional and affective aspects of field science and education in Svalbard, their role within scientific knowledge production, with a view to considering how such aspects filter

¹⁰³ In the context of this interview, the participant was keen to point out the many gaps and shortcomings of scientific knowledge in the Arctic region, including Svalbard.

through to the more formal value frameworks of Svalbard's environment. This also leads the discussion back to caring practices.

Some scientists were reluctant to talk specifically about any form of place attachment or emotional relation to their research, which chimes with previous observations of scientific practices (see for example Lorimer 2008; Whitney 2013; although see Filep et al. 2015 for a contrasting study). This is understandable, given the heavy leanings towards rational, 'scientific' approaches to decision making and policy here. Some prefer to keep the rational and emotional completely separate, finding a space for the more personal experiences and political views through producing 'coffee table' books largely aimed at the tourist market, such as *Svalbard Life* by marine biologist Paul Wassman (Wassmann & Caeyers 2013). Indeed, this split fits well with the account that Carey et al. (2016) give of the gendered depiction of glaciology: either it is represented as objective science, where the human is written out of the story, or through popularist tales of heroic, pioneering (male) explorers triumphing over the extreme Arctic conditions.

However, beyond the pub-time banter, itself full of enlivened enthusiasm for fieldwork, the majority of researchers I spoke to working in Svalbard at very least recognised their personal motivations for this work and the opportunities (see Chapter 6) that Svalbard presents for them. These opportunities, as well as the 'Svalbard Bug', have the ability to lure researchers back to Svalbard for more work. Although at times emotions are seen as inferior and potentially risky considerations, as in interview 12, it is nevertheless recognised that social and political factors are entwined in complex ways. Indeed, senior research managers Kim Holmén (NPI, International Director) and Ole Arve Misund (previous UNIS director) seem to recognise this in their venture that saw them team up with Longyearbyen's priest, Lief Magne Helgesen, to edit the collection of work for *The Ice is Melting: Ethics in the Arctic* (Helgesen et al. 2015).

For many, the biophysical features of Svalbard are tightly linked not only to the provision of research sites for data collection and material extraction, but the motivation, inspiration and enthusiasm to 'create value' through knowledge production, to 'do' science. Lorimer concludes from his work with field scientists, "it is likely that there is a clear topography of fun, awe or intellectual challenge that can be had in the field" (Lorimer 2008, p.398). This was certainly evident in the scientists I spoke to working in Svalbard who all shared an eagerness for fieldwork in Svalbard.¹⁰⁴

> I mean we are here for a reason in Svalbard because we love being outside and we like the challenge for collecting data in the field, so for me that's what I love ... I think all the researchers have an emotional connection to their field... having the luck to see glaciers out of my window everyday..., it inspires you a lot more. ... It's easier to do fieldwork to get the data. But at the same time we have this very tight connection with the landscape where we are, so I think it's a really big deal for sure.

> > (Interview 33, research sector, 13th June 2014)

I read recently something, someone posted on Facebook or Twitter, a quote from Shackleton saying that it's never only about the science, anyone who says it's only about the science is of course lying. I would of course lie if I would say that it's only about the research problems ... Svalbard and the Arctic in general is a fascinating place. It brings out not only interesting questions but also, well, a feeling of wanting to go back, get to know more about an environment that is so different from what we are used to. And that seems to bring out the big why questions, as to you know, why do people get involved in different activities.

(Interview 17, research sector, 30th May 2014)

The sentiment in interview 33 expresses a view I heard several times over the course of talking with researchers working in Svalbard. Their position (and my own) as having access to Svalbard as a research site is recognised as privileged and a 'big deal' for which we are grateful. The sense that Svalbard and the Arctic make "the big why questions" seem far more apparent is also an experience I

¹⁰⁴ Those working in the tourism industry are also highly enthusiastic about their work in the field. The honed skills, attentiveness and specific knowledge they bring to their work as tourist guides is certainly comparable, though distinct from, those conducting field science – both Lorimer (2008) and Whitney (2013) detail the embodied and tacit knowledges developed for particular field observations, see also Section 5.7.1. There are several areas of crossover specific to operating in Svalbard (e.g skills and equipment related to safety – polar bear protection, avalanche beacons, knowledge of glacier movements).

relate to, not to mention a sometimes overwhelming urge to return to Svalbard – a symptom of the Svalbard Bug no less. Enthusiasm for learning through experiencing the landscape first hand is also translated through the educational work researchers are involved in. An embodied appreciation for the Arctic is seen as essential to student learning experiences and a key 'unique selling point' to the courses offered at UNIS.

> I think you can speak to any scientist at UNIS and they'll tell you their main motivation is they just find it fascinating. For whatever reason, it's what turns them on, it's what they want to do ... You can learn about the Arctic anywhere but you can't physically experience it unless you come to the Arctic. There's no point in having a course which is only lectures, you gotta get the students out into the Arctic.

> > (Interview 9, research sector, 21st May 2014)

This is the only place in the world they get to do this and I think it inspires them, like I say, they are not sat in the lecture theatre all the time, they go out and see applications in the real life of things.

(Interview 20, research sector, 3rd June 2014)

This enthusiasm for fieldwork in Svalbard, coupled with funding structures that encourage collaboration with Norwegian institutes to do work in Svalbard¹⁰⁵, could well have an influence on the kind of research questions and methods that are employed. Carey et al (2016) suggest that the wider epistemological framework of environmental science is that the natural world can be objectively known and focusses on measuring, mapping and quantifying it. This, they argue results in methods leaning towards new technologies and computer modelling, for example. Hence, in Svalbard we can expect to see a large number of projects that are fieldwork based, undertaken by international teams in which Norwegian scientists and/or institutions play a role, undertaking projects that are focussed on producing objective, 'view from nowhere' knowledge about Svalbard's environment(s).

¹⁰⁵ The Svalbard Science Forum administers the Research Council of Norway's 'Arctic Field Grant' to alleviate the extra costs of working in Svalbard and Jan Mayen as well as the Svalbard Strategic Grant that encourages research networks and collaborations to develop based around research in Svalbard. <u>http://www.forskningsradet.no/prognett-ssf/Funding/1253977805508</u>

5.9.1. Measuring fjords and glaciers

That science is a cultural practice, then, is exemplified with particular clarity in the field. For here hands-on experience, routine improvisation, and performative rationality are highly valued.

(Livingstone 2003, p.45)

It is easy to fit the broad epistemological and gendered pattern of western "masculine" science, onto the large, headline research projects in Svalbard. Observing the polar projects my own institution partakes in, I witness huge crates of equipment arrive and be shipped out, massive ice drills, complex sensors in the making, I am told of the ionospheric heater arrays and radars the physicists use to observe the Aurora. I hear of helicopter and snow scooter rides and follow time lapse camera installations on Twitter. Yet, I also hear of fellow students anxiously waiting for their ice samples to arrive for analysis, hopeful they have not melted in transit and of wipe-out fieldtrips, technical failures, atrocious weather conditions. Science in Svalbard is not always as glamourous and exciting as can be portrayed in TV documentaries, or as straightforward as the couple of paragraphs of methodological explanation provided in published papers. I seek to trouble assumptions and representations of rational science somewhat through recounting my time spent with some scientists working in Svalbard. I am inspired by Gibson-Grahams' (2008) call to read things differently, for, as Wynne-Jones finds, "a focus upon everyday practice and individuals' subjectivity is important not only to understand neoliberal hegemony, but also to work toward its undoing" (2014, p.150). In this instance I am not so directly concerned with resisting neoliberalism¹⁰⁶, but rather with adding further weight to a push towards more transparent, open and epistemologically inclusive accounts of scientific knowledge production than currently dominates. I do this not with the intent to "weaken" or deconstruct the "matters of fact" in the making, but to attempt to make them more "real", more "thingy", more corporal meetings of "matters of concern" (Latour 2004c) and

¹⁰⁶ The links between scientific knowledge production and neoliberalisation in general (see for example Lave 2012; Olssen & Peters 2005) and within Svalbard are not insignificant however. For example, science and education in Svalbard is being developed as a key part of a diversified economy, with much of UNIS's research funding connected to the Oil and Gas industry.

"matters of care" (Bellacasa 2011). In this undertaking, I wish to bring value back from the field. What struck me about the two encounters that follow was the patient diligence, care and make-shift mixtures of equipment and skills needed to accomplish the work of measuring Svalbard. Here, in the field, scientific knowledge was not an abstracted view from nowhere but an enthusiastic, embodied, inquisitive and respectful connection with fjord and glacier.

5.9.1.1. A morning around the fjord

Figure 38: Preparing the Zodiac for its trip across Grønfjord, July 2014. Photograph courtesy of 'the Professor' edited for anonymity by the author.



In Barentsburg I spent a morning with Igor¹⁰⁷, a PhD student, and his supervisor, the Professor, who has been working in Svalbard for 20 years. They relished the opportunity to show me what their work entailed in as close detail as they could. Numbers, graphs and excited gestures made up for our struggles with pigeon Russian and English. We took a trip out in the Zodiac to their sediment sampling point in the fjord. When we got to the buoy, Igor pulled up 150m of rope to retrieve the sediment trap and little plastic sample jar (see Figure 38 and Figure 39). The professor replaced it with a new one and sent down again. Then,

¹⁰⁷ Pseudonym

with great care and reverence they took out a piece of equipment that takes a temperature reading every metre in its way to the fjord bed: made in Germany, Titanium, extremely expensive. It has an elaborate protective case and a special key to turn it on and off. The sampling took some time. The equipment needed to be safely secured with a weight and string before being carefully lowered off the side of the Zodiac via a long line, and carefully wound back up again; the Professor and I took turns at winding while Igor fed the string. They were keen to show me the other side of the fjord too, Igor explained how he loves the Arctic Ocean and working with the sea and how lucky he is to be working with the professor who set up the lab there. On our return, we took readings from the water samples and set them running through funnels with filters and a vacuum. Then, in stark contrast to the German sampling equipment, the Professor diligently laid out the filter papers of sediment samples on the radiator, to be analysed through a microscope when dried out. That evening they invited me back to the main science complex to meet more colleagues. I was treated as an honoured guest. Somehow, they have managed to source almost-fresh cucumber and tomatoes to share over explanations of research and trends in science funding in the Russian Arctic.

Spending time with the Professor and Igor underlined the sense of duty, enjoyment and passion that can be involved in scientific work. Each trip to collect data needed preparation and ample time to physically collect the samples as well as the analysis after returning to the lab. They sometimes take readings several times a day, occasionally at night. When some high-tech equipment was needed, this was treated almost as a colleague, wrapped up in the best safety gear and handled with utmost care. Moreover, the sophisticated gear was just one element to the mixture of physical work, patience, plastic jars, radiators that make this particular practice.

A Latourian approach might note the complex assemblage that producing "matters of fact" about the sedimentology of the fjord brings together. A vital materialist take might concentrate on the agency of the more than human things and their capacity to move and inspire us (e.g. Bennett 2004). Both of these potential accounts are interesting. In this instance, however, I am drawn again to considering the practices of care involved here. Similar to Kerr and Garforth's findings of the relevance of care practices within laboratories, the practices I witnessed and took part in were an insight into the care needed in scientific knowledge production, something which perhaps jars with the stereotypical notions of adventuring, extractive, all-knowing science that writers such as Carey et al (2016) are quick to critique. I found myself tuned in to the "material and affective practices of care for objects and subjects [that] were woven together in the everyday work" (Kerr & Garforth 2016, p.12), not of the lab, but of the field. Rather than a mastery of the fjord, it seemed to me that these scientists were using their measurements as a kind of conversation with the fjord, in which they are trying to interpret and translate the flows of material in and out of it, whilst being attentive to the objects and subjects involved in this relationship. My observations of the connections developed at this site hint at the kinds of affective atmosphere these scientists are enveloped in and at the emotions, and value caught up in that atmosphere.



Figure 39: Sample jar from Grønfjord, July 2014, near Barentsburg

5.9.1.2. A day on the glacier

Dominika's¹⁰⁸ research was centred around analysis of the snow on one particular glacier 15km from Longyearbyen. She invited me to assist her with one of her final data collection trips to the glacier and I jumped at the chance of getting out of town for a day. Much of her fieldwork relied on volunteer labour like mine, and there were a ready supply of eager visitors and students to provide it. A friend drove us to the end of the road (literally) where the furthest scientific and satellite bases from Longyearbyen are located. We then set out to traverse a couple of mountain sides pulling our two pulks¹⁰⁹ loaded with sampling and safety equipment, supplies and a rifle. Dominika was equipped with some less than perfect skis which needed frequent adjustment and I had borrowed some equally unreliable snow shoes from UNIS. There were some comic moments where the pulks threatened to drag us down the slope and we developed our own versions of ski/snow-shoe – pulk walk/slide/flail to make our way around the glacier.

Figure 40: Pulling the pulk back across the glacier, June 2014



¹⁰⁸ Pseudonym

¹⁰⁹ A plastic sledge without runners that is used to transport equipment, see Figure 40.

Figure 41: Awkward snow pit digging by an inexperienced snow-shoe wearer. Photograph courtesy of 'Dominika'.



We took samples at 5 points, located via GPS. At each one, we dug a roughly 1 metre squared snow pit to the depth required before we hit solid ice (Figure 41). Then two snow samples were taken with the corer, which is basically a long plastic hollow tube. The first sample was weighed and its depth measured. The second was transferred into a sampling bag, very carefully, so as to not touch or contaminate the snow. I noticed how much preparation had occurred just to enable this simple procedure: the plastic sampling bags were actually two freezer bags, one placed inside the other for extra security, brought over from a UK supermarket and labelled ready for use. We took more detailed readings at one of the sites: using the 'Norwegian density scale', or 'Hand Test' to test how hard the snow was with our hands and identified eight different layers between the surface and the ice layer (see Table 2). With a snow cutter (a stainless steel scoop with a lid) we tried to gather a sample litre of snow from each one. This became difficult in the harder layers. All of these samples were then taken back to the lab to be melted and then prepared to be sent to more sophisticated facilities for chemical analysis.

Test	Estimated Harness
Fist	Very Soft
Four fingers (tips)	Soft
One finger (tip)	Medium
Pencil point	Hard
Knife	Very Hard
	Ice

Table 2: Snow density measurements via hand testing (NASA Undated).

The reliance on our bodies not only as transportation for equipment and physical labour for digging the holes, but also as instruments, sensory devices for measuring the snow's density was notable here. Before we could translate this feeling into a standardised description ready to join the realm of facts, we needed to attune our hands and fingers. Wearing thin, base layer gloves meant our fingers were not instantly numb. Through the gloves we tried to apply even, gentle pressure to the snow and sense whether it was 'easily penetrating' under this pressure. We needed to judge where the ice layer began through the unyielding feedback of the shovel as it met with the ice. As Livingstone (2003) and Lorimer (2008) discuss, field research involves developing embodied skills and tacit knowledge to become sensitive to the appropriate haptic senses in order to 'know' the places, spaces and species we study.

As we worked, first in beautiful blazing sunshine, later in cold winds, Dominika told me she wished her field skills were better; she was not the overtly confident scientist I perhaps had come to expect. She was in fact very open, explained clearly what and why we were doing things and readily let me take part, despite the obvious care required to achieve the good quality data she needed. I was even allowed to record the measurements in her field book. Her ample capability was given the chance to shine through a laughable event. The black plastic storage case for the corer had expanded in the heat of the morning sunshine and the lid was wedged on, with the essential piece of equipment trapped inside. At this point, having managed the trek to the glacier but with only one hole dug and the weather about to take a turn for the worse, I tried to hide my feelings of dismay that we just did not seem to have the brute strength required. The whole trip would have been pointless if we could not get the lid off this thing. Dominika, however, came alive with the challenge of solving the problem, getting out her tool kit and various bits and pieces, coming up with a succession of ideas to coax the lid off. Afterwards she told me that she loved being faced with such problems to solve in the field, thinking on the spot. Our eventual solution involved using a snow shovel handle as a spanner-come-leverand much rejoicing.

Kristoffer Whitney tells the stories of scientists observing and tracking the red knot bird in Delaware Bay, New Jersey (Whitney 2013). He notes the emotionality and enthusiasm imbued in the pursuit of factual, accurate data and the scientists' "love of systematic method, problem-solving, and technological tinkering" (Whitney 2013, p.105). This care over detail, preparation, the desire to do 'good science' and enthusiasm for the tools and techniques that enabled it was evident in both of the above encounters. Through their work - like the scientists described by Livingstone (2003), Lorimer (2008), Whitney (2013) and Kerr and Garforth (2016) – Igor and the Professor had developed a relationship with Svalbard and the fjord, as with Dominika and the glacier. Their career paths, significant periods of their lives, memorable, embodied, affectual experiences in the field are entangled with the numbers they have produced through working with the physical environments of Svalbard. As such, their activity as knowledge producers not only contributes to the scientific reports and papers that may or may not influence the policy decision made about Svalbard and the wider Arctic environment, but also influences the way those involved in producing that knowledge value Svalbard. Analysing the situation reflectively, Dominika separates out the 'big picture' during her writing up, as she explains below. I would argue that behind the sense that Svalbard is "such a nice place" are a lot of embodied relationships to the field developed from her data collection, along with the social and leisure experiences that go along with a field trip to Svalbard, that contribute to creating this impression:

SS: How does *Svalbard* as a place influence your work, how do you feel about it?

To an extent it does because it's motivating, ... when I finally get to the stage of thinking how does this influence the wider environment and it's like, it's such a nice place, it would be nice protecting it, it comes up like that. But there are long periods when I need to detach from that and just think logically, get the magnifying glass and lose the big picture, that's probably when Svalbard doesn't matter too much.

(Interview 51, research sector ('Dominika'), 27th June 2014)

The above accounts have brought to light some of the more mundane, yet under-acknowledged and largely invisible, embodied, emotional aspects to scientific knowledge production in Svalbard. In presenting them, I am not suggesting that these particular field trips were special or involve affective care beyond field science elsewhere. Rather, these insights bring depth to the more general notion of the affectual atmosphere of Svalbard that induces specific variants of Svalbard Bugs amongst scientists working there. These affectual, emotional aspects then have bearing on the value associated with Svalbard by this extended, international community. I turn now to discuss how such aspects are incorporated into policy making.

5.9. More-than-rationality and environmental decision making

In this section, I connect the emotional, enthusiastic, embodied and affectual experiences that occur 'behind the scenes' of scientific knowledge production, as discussed above, to the tensions surrounding the policy approaches to natural and cultural heritage protection in Svalbard discussed in the next chapter. The views below suggest that this participant holds a similar perspective to my own, that, regardless of the rhetoric, formal processes and scientific involvement, values and indeed emotions, or "feelings from the heart", play a role in natural heritage protection:

Most environmental protection in the world is based on cultural and human feelings from the heart. It's not based on [what] it should be based on – statistics and what I call mathematics. Understanding the environment and saying ok, that polar bear really doesn't matter so much, but the Krill that is actually feeding the whole food chain and ends up at the polar bear is an extremely important part of the environment and we should put more energy in that.

(Interview 2, long term resident, 21st May 2014)

Where we diverge, however, is whether or not this should be the case. As in rational democratic theory and rational consumer models, the above position takes reason and scientific evidence as what *should* count exclusively in the decision making realm. As I argue in the following chapter, given that such scientific knowledge is always-already political and thoroughly shot through with human values, we might be better off making this transparent; with more deliberative, participatory style democracy as a goal. The perspective represented above did not come from the research community, but reflects the position that some critical observers to environmental decision making in Svalbard more generally take. This is perhaps not surprising given the dominant discourse of evidence based decision making.

While the emotional, affectual and caring experiences of scientists and students are usually written out of the formal channels of knowledge circulation and production, as I argued above, they are nevertheless important factors in the practice of research and education. These factors reflect the value that researchers associate with Svalbard and will subsequently have an influence on their endeavours. From a social science perspective, power relations, human subjectivity and affectivity clearly play a role in 'objective' science, and many consider it "unimaginable to think of scientific knowledge construction as devoid of emotions" (Spencer & Walby 2013, p.60). As Bakker observes, an engagement with emotional and affectual geographies leads us to recognise value relations with more-than-human life and material beyond neo-liberal and capitalistic extractive practices: This literature suggests that relationships with non-humans are not solely instrumental (as conventional definitions of resources suggest); they are also characterized by multiple noninstrumental values and emotions. Affective connections and emotional relationships between humans and non-humans play an important role in configuring political and ethical sensibilities; and, in turn, this plays a role in shaping consumption desires and resource extraction practices (Hinchliffe, 2008; Hinchliffe et al., 2007; Lorimer, 2005).

(Bakker 2010, p.719)

This recognition of the plural ways in which we value 'nature' includes and particularly applies to scientists. For researchers and students, 'nature' is clearly a resource from which to harvest data and produce knowledge about. However, there is more to the value of more-than-human nature here: through their often intimate connections with particular forms in the field and in the lab, a whole range of value practices and personal principles develop. Similar to the reluctance to speak of emotional connections that Lorimer has discussed (2008), Sandbrook et al's (2011; 2013) research with conservation professionals also finds conservationists may be disinclined to publically commit to a view of more-than-human-nature beyond use-value. Privately though, many identify a broad range of value, including intrinsic value, in nature.

David Takacs, Professor of Earth Science and Environmental Law, interviewed biologists working on biodiversity conservation for his book *The idea of biodiversity: philosophies of paradise* (1996). He explores the multiple ways in which these scientists speak of and value the more-than-human life they study and work with. He concludes that, although the 'scientific value' of biodiversity as a 'raw material' is prominent, they also relate to emotional and spiritual tropes of value – a love of and spiritual connection with nature. Takacs (1996) argues that it is through embodied contact with the more-than-human life these scientists study that these values develop and that the challenge for conservation is to extend this care and reverence outside the scientific community:

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You cannot love what you do not know. Enduring conservation efforts require that people in whose backyards biodiversity is maintained value biodiversity as much as do the scientists studying it and working to save it.

(Takacs 1996, p.284)

This leads us to the debate surrounding environmental protection policies in Svalbard and the issues of access. Many opponents to further access restrictions argue that in order for people, local and otherwise, to fully support environmental protection, they need to be able to experience the Svalbard 'wilderness' for themselves. The considerable opportunities that scientists in Svalbard have to be out in the field, mean that it is often their voices that are heard most advocating for the educational and experiential benefits of access to wilderness areas:

> I think that it's much better to do volunteer guidelines, teach people about it so that they can experience it, because you protect what you know, and you protect what you can see, you protect what you love. If you have a relation to it, it's much easier to get people to take care if it than it is than if you don't. And I don't think closing off large areas is really going to help anybody.

> > (Interview 8, research sector, 21st May 2014)

Considering these views about access, education and knowledge from a slightly different perspective, Haraway notes the moral consequences knowledge can entail: "Once we know, we cannot not know. If we know well, searching with fingery eyes, we care. That is how responsibility grows" (Haraway 2008, p. 287, cited in Yusoff 2010, p.89). There are certainly, as we will see in the following chapter, researchers that care in this way. The tracing of value leads us from this care to examine debates surrounding the role of such knowledge and legitimacy within conservation practice in Svalbard.

Throughout this chapter I have worked with notions of care, emotions and affect, to show how value is practiced and produced outside the processes and value encompassed by the categorisation and subsequent environmental regulation of Svalbard. A feminist ethics of care has been a useful companion in tracing value through these everyday, often neglected actions. To highlight hidden care practices, Puig de la Bellacasa (2011) argues, is important work, especially when such practices are considered 'out of place' or inappropriate. Certainly, so far, the ways in which value is practiced and produced in Svalbard through affective atmospheres and caring relations receives short shrift if any notice at all in the formal evaluation processes of Svalbard's heritage. This chapter contributes to the continuing development of an ethics of care that can accommodate all forms of 'others' within its "transformative ethos" (Bellacasa 2011, p.100).

Legitimate Knowledge, Value and Producing Environmental Governance

It ain't what you do, it's the way that you do it. And that's what gets results.

(Fitzgerald 1939; Fun Boy Three & Bananarama 1981)

In this chapter I move on from categorisation and the value practices that exceed these categorisation processes, to examine the second valuation process that Lamont (2012) identifies: legitimation (see Chapter 2, Section 2.7). This allows me to trace the value processes and practices involved in attempts to 'save' Svalbard in more detail, eventually honing in on the making of, and reactions to, a particular regulatory device: the East Svalbard Management Plan. To do this I take the role of scientific knowledge production in Svalbard, that we examined 'on the ground' in Chapter 5, as my focus in uncovering the processes of legitimation at work. As I argue in Chapter 3, in many respects this 'formal' or 'scientific' knowledge shares characteristics with other fields of knowledge production, such as tourism. However, in the context of evidenced-based policy decision making that is to be discussed, it is the more conventional conceptualisation of knowledge production that is applied here (though see Viken 2016 for a nuanced discussion on types of knowledge in this context).

First of all, I present Svalbard as a site of scientific knowledge production. Here value is practiced 'on the ground' at field sites and research bases; and beyond through geopolitical channels that international research feeds into. In Section 6.2 I examine the role of 'scientific' knowledge in environmental protection policies in Svalbard. I am interested here in the relationship between scientific knowledge and decision making surrounding the Svalbard environmental protectial protection policies asking how such knowledge contributes to, and potentially

legitimates these processes. In Section 6.3, the focus of the investigation is the recent completion of the East Svalbard Management Plan. In the final section I draw out the wider potential lessons from the investigation.

This management plan, to some, threatens what Pete (who we met in Chapter 5) and many other visitors and residents of Svalbard value highly about this place the freedom to do what you want to do and to go where you like without too many rules and regulations (focus group discussion 1, 24thApril 2013). For others it enables Norway to better manage Svalbard as a wilderness area and prevent environmental degradation due to human visitors. The role of different knowledges and claims to relevance and legitimacy of such knowledge is key in the processes of defining what the management plan aims to protect and how that could be achieved. Ultimately we are led back to questions of cultural, philosophical and ideological understandings of relations between different 'natures', and 'cultures'. The role of knowledge production is part of an ecology that encompasses state regulations, tourists, residents and more-than-human natures. In unpicking these value practices, tensions, and conflicts I argue that the range of values at work within environmental management in Svalbard is not fully incorporated into the processes of constructing management plans. Whether or not the content of the management plan is the best strategy for 'saving' certain versions of Svalbard, what this exploration reveals is that the process of negotiation and legitimation of that process and the knowledges drawn upon in constructing the plan are potentially just as important. To refrain: "it ain't what you do, it's the way that you do it".

In investigations into legitimation, Boltanski and Thévenot, introduced in Chapter 2, aim to treat scientific expertise and knowledge as equal to other forms of knowledge and justification: "In our construct, the nature studied by scientists and technologists – which is viewed by some as having the privilege of reality and objectivity – is not the only one in which objects can be found" (2006, p.41). I concur that there is certainly value in action elsewhere and the embodied, emotional aspects of value (re)production discussed in Chapter 5 need to be kept in mind throughout the following discussion. However, scientific knowledge production holds a specific position in relation to legitimation, evidence-based policy making and in relation to the historical and geopolitical context in Svalbard. Hence, in this first section I trace the different value processes and practices which contribute to this position in some detail, before moving on to how they play out in fraught arena of making management policies.

6.1. Value and knowledge production in Svalbard

As briefly described in Chapter 1, Svalbard has long been of interest to scientists and explorers, and this continues to be the case. In Boltanski and Thévenot's (2006) terms, we might say that we can justify the value of Svalbard as a scientific site due to its 'inspirational worth'. For climate change scientists, Svalbard's geographical position provides access to Arctic conditions in the East and the effects of the Gulf Stream in the West through the West Spitsbergen Current, as well as the Arctic Ocean and Greenland Sea - interesting too for marine biologists. Almost two thirds of the nearly 62,000 square kilometre land mass is glaciated, hence glaciologists have a range of glacial processes, including surging glaciers to attract them. Physicists can make use of the high latitudes and highly specified arrays to observe auroral conditions and other upper atmospheric phenomena. Terrestrial biologists are occupied with rare and unique species such as the polar bear, Svalbard reindeer and myriad invertebrates as well as the plethora of migratory birds that arrive in the summer. Arctic technology is a growing department at UNIS as well, combining the challenging climatic and physical conditions of the Arctic with access to existing and developing industrial activities. Beyond the scientific value of the knowledge it is possible to produce in Svalbard, knowledge production activities play an important geopolitical role, which legitimates scientific activities as necessary. Here I trace value through policy rhetoric to everyday and material expressions of symbolic capital that congeal to form a magnet of opportunities for scientists and policy makers – a magnet with global reach.

Svalbard can now be thought of as a hub for knowledge production in the Arctic, which is precisely what Norway's policies for this area have aimed to develop. In

this case, a conceptual reconfiguration towards a value-based approach is unnecessary, for "value creation" is a central theme and goal of Norway's High North Strategy. "Knowledge development" and "knowledge based business sector" are two of five areas¹¹⁰ that are seen as important to Norwegian activity in the region (Ministry of Foreign Affairs 2014). Indeed, the policy explains the link between scientific knowledge, environmental management and economic activity: "Knowledge is at the core of the High North strategy, and is closely linked to environmental management, utilisation of resources and value creation" (Ministry of Foreign Affairs 2007, p.8).

More specifically, research, knowledge and higher education forms a key focus area for development of the penultimate Svalbard white paper from Norway. Svalbard is seen as being, "Of vital importance as a platform for Norwegian and international research ... Although Svalbard must remain an attractive venue for scientists from around the world, Norway is to have a leading role and be a key player in the area of developing knowledge in and around Svalbard" (Norwegian Ministry of Justice and the Police 2010, p.11). These sentiments are reiterated even more strongly within the most recent white paper (Norwegian Ministry of Justice and the Police 2016, p.11). These sentiments are reiterated even more strongly mithin the most recent white paper (Norwegian Ministry of Justice and the Police 2016)^{III}. The strategic importance of scientific activities is writ large. Research and education are seen to be integral to the goal of maintaining a strong presence in Svalbard, especially with the coal industry's increasing instability and decline. UNIS, with government support, is preparing to take on more responsibility for the longevity of Longyearbyen through further developing the courses and facilities on offer there (Norwegian Ministry of Justice and the Police 2016; Palm 2015).

In addition to education and research facilities providing a strong physical presence through employment, infrastructure and economic activity; research and education are key contributors to territorial "geopower" (Parenti 2015) and 'soft' geopolitical power (Wojciuk et al. 2015). In Painter's (2010) theorisation, territory is the effect of constant work from a large (global, national and local)

¹¹⁰ The other three priority areas are international cooperation, infrastructure, and emergency preparedness and environmental protection.

¹¹¹ An official English-language version of the 2015-2016 report is not yet available.

network of human and non-human actors to produce and reinforce it. Part of that work in Svalbard is achieved through "environment making" activity from the Norwegian and indeed Russian states through what Parenti calls "geopower":

> Geopower is ... the statecraft and technologies of power that make territory and the biosphere accessible, legible, knowable, useable. As such, geopower is the ensemble of state practices that make environments. Geopower technologies include: exploring, describing, cadastral surveys; building roads, canals, dams, railroads, telegraphs; establishing property rights, borders, policing and identification systems; scientific surveys, and all the applied natural sciences, like botany, agronomy, and geology.

> > (Parenti 2015, p.835)

In other words, the very knowledge produced about Svalbard feeds into state institutional mechanisms that work to assert and enhance territorial effects. From a more economic viewpoint, Wojciuk et al (2015) discuss the increasing relative importance of education. Within the global economic capitalist system, they argue that knowledge and technological innovation are increasingly important to international competitiveness. Hence, through extending their educational and technological realm to Svalbard, Norway thus enhances its 'soft' power, its cultural attractiveness (Nye 2006). Yet Svalbard's corridors of research do not feel like they are running along a geopolitical fault line – international friendly relations are far more everyday.

In Ny Ålesund you have 13 different nations who are ... eating breakfast together every day. It has a very big role in collaboration and co-operation... You walk around UNIS and you hear five different languages in a few minutes, so I think it [science and research] has a big role in gathering people together.

(Interview 8, research sector, 21st May 2014).

Although individual scientists working along Kongsfjorden are often unaware of, or choose to ignore, the geopolitical function of their work, many cherish the exceptionality of the international community they are part of for weeks, months, or a series of summers.

(Roberts & Paglia 2016, p.14)

When you talk to the researchers in Barentsburg, it's one thing the Norwegian -Russian overall relation and so on, but when you are in Barentsburg and you talk to them, they just want to talk to you about their project.

(Interview 8, research sector, 21st May 2014)

Scientific activities can also act as an arena for "informal diplomatic activity engaged in by Norway (which makes such research possible) and by other states (which fund researchers)" (Grydehøj 2013, p.53). During my research, I was told about semi-formal "diplomatic cruises" where political cooperation and negotiations took place in research settings and through scientific collaborations (or lack thereof). Through the international nature of the knowledge production hub that Svalbard has become, the value of scientific activities is mobile and circulates outwards across the globe, taking the soft power and prestige of its supporters with them (be they Norwegian, Russian or otherwise).

Svalbard has become a meeting place for the Government's international network, where climate-related research and cooperation are given top priority... Svalbard has become a land of opportunity for the development of knowledge.

(Norwegian Ministry of Justice and the Police 2010, pp.74–76).

As the Svalbard White Paper above asserts, Svalbard acts as a central hub in an expanding network of value through the practice of knowledge production, a hub which is not just the point where many actors meet, but which exerts its own force upon those producing knowledge of it and with it. Following Jöns (2015) in a brief Latourian analysis of knowledge circulation and networks, the economic and geopolitical value of scientific activity in Svalbard to Norway becomes clearer.¹¹² Creating knowledge with/about Svalbard not only means that Norwegian scientists working there can be part of global knowledge networks and strengthen research centres in Svalbard and mainland Norway, but also that international scientists will find themselves encouraged to collaborate with Norwegian institutions through funding and logistical advantages. Therefore, relations with researchers and organisations in Svalbard and Norway increase

¹¹² This also applies for Russian scientific activity, though this research was unable to gain more than a surface appreciation of such activities.

and are developed internationally. The importance of asserting sovereignty and the geopolitical significance of their/our activities is not lost on those within (and outside of) research institutions, from high level managers to students:

> Everything we do, everything everyone does on Svalbard, including the janitors is part of a geopolitical framework. Having contact with all these nations means that every word I say has to be weighed ... It influences everything that happens in Svalbard, including your work.

> > (Interview 12, research sector, 27th May 2014)

The attractiveness of Svalbard as a destination for meetings and tours, due to its geographical position and accessibility, is also recognised. This comes with not only high pressure, diplomatic consequences, but also the potential to communicate research findings directly to decision makers. This is not just the case for senior administrators (as below), research students and other faculty are often called on to showcase their work to visitors.

From this position I am substantially influential.

(Interview 21, research sector, 3rd June 2014).

The list of politicians, business men, religious leaders and others that come here is very long. And we get to meet them and explain what we see and understand. So it's an opportunity to influence directly those who would listen that is not as readily available elsewhere.

(Interview 12, research sector, 27th May 2014).

So, science in Svalbard is reinforced as a legitimate and highly valued activity, not just through the academic channels of peer review and citations, but through diplomatic and geopolitical positioning and this influences the ongoing scope and impact of scientific work in Svalbard. These relatively high stakes are also materially manifest, for example, extra care appears to be taken that the practicing of scientific activity is made visible and overtly national through material inscriptions such as signage, flags and branded equipment. Even the post box (Figure 42) for the newly opened Longyearbyen base for the Centre for Polar Ecology¹¹³ (CPE) is adorned with not only the research centre's logo, but a national presence. The centre, which is part of the University of South Bohemia's department of ecosystem biology, specialises in "extreme environment biology" and physical geography. Their main research station is based 6km from Pyramiden, where they also have storage and living facilities in the shape of two shipping containers on the pier (Figure 43). The CPE has links with both Czech and Norwegian national funding bodies, private sponsors, and it co-operates with *Trust Arktikugol* in the use of land and facilities near Pyramiden. Indeed Figure 43 depicts the international and co-operative, yet highly nationally branded, nature of scientific activities here. Figure 44 and Figure 45 exemplify Russian and Norwegian versions of the overtly national and visible characteristics of the signage for scientific activity.¹¹⁴

Figure 42: Post box for new research station in Longyearbyen, July 2014.



¹¹³ Centre for Polar Ecology: <u>http://polar.prf.jcu.cz/index.htm</u>

¹¹⁴ I hesitate to generalise this to 'Svalbard's scientific activity', as, according to Paglia's report (2013), this phenomenon does not necessarily extend to the Ny Ålesund research bases, which I was not able to visit.

Figure 43: The University of South Bohemia's research container, complete with Czech, Russian and Norwegian flags. A US scientist discusses the attention to installing such symbols with students, whilst wearing a distinctive Swedish Polar Research Secretariat jacket. Pyramiden, July 2013.



Figure 44: Entrance way to UNIS and NPI displaying signs for Norwegian Institutions working out of the Svalbard Science Centre. Longyearbyen, June 2013



Figure 45: An example of one of the many projects and research facilities at the Russian Barentsburg Science base, July 2014.



The value of scientific activity in Svalbard is not limited to potential gains in international prestige however. As many involved attested, the opportunities for personal progression, learning, research, impact of research, access to field data, relevant colleagues, equipment and expertise make Svalbard an attractive research destination that offers a supportive environment for career development with direct access to interesting physical phenomena. As one interviewee described:

> The only reason I keep coming back is because the geology is so good, the research environment is so good, the opportunities we get to do the work that I want to do personally is just incredible.

> > (Interview 48, postgraduate researcher, 27th June 2014)

As networks, collaborations, equipment and experiences expand and link together, the value of doing research in Svalbard spirals outwards in a selfperpetuating cycle of value. This goes beyond the increasing circulation of value in the sense of political influence and funding arrangements: the *practice* of research itself and its growth creates value of a different sort. It is also important to recognise how this cycle pulls in a wider array of nonhuman and inorganic components: the glaciers, upper atmospheric particles and polar bears of Svalbard become embroiled in the outwards push for growing knowledge and the value of such knowledge through the specific skills, research methods, equipment and knowledge networks that research in Svalbard generates. As Livingstone (2003) notes, place matters in the doing of knowledge production, and Svalbard's position as a legitimate site for knowledge production is founded on multiple "orders of worth", that include the geopolitical factors often cited (Norum 2016; Roberts & Paglia 2016), but also exceed them.

6.2. The science of environmental protection policies

Scientific knowledge has been key to establishing and legitimising the environmental protection legislation throughout the archipelago and remains an important tool in the ongoing management of the protected areas.¹¹⁵ The Environmental Monitoring of Svalbard and Jan Mayen (MOSJ) is an important example here. Exclusively Norwegian scientific research organisations are involved in providing data, analysis and development of the monitoring process through research and reporting on environmental indicators linked to Norway's environmental policy goals for the polar region. Currently, there is one overall policy target: "the current extent of wilderness-like areas in Svalbard will be retained, biological and landscape diversity will be maintained virtually untouched by local human activity" (Norwegian Environment Agency 2016). This goal, its interpretation and associated implementations are significant. All research activities carry with them potential to risk progress towards this goal. Although the environmental impact of research has not previously been systematically evaluated (but see Krzyszowska 1985; West & Maxted 2000), the environmental impacts of scientific activities are now being weighed against the value of the knowledge they can produce:

> Research that is conducted ought to be of such a nature that it only or best can be conducted in Svalbard, and it must always take the vulnerability of the environment into consideration. This caution must go hand in hand with the acknowledgement that knowledge through research is necessary in order to achieve a reliable management of the natural wilderness in Svalbard.

> > (Norwegian Ministry of Justice and the Police 2010, p.75)

Environmental protection is prioritised over research in the penultimate White Paper: "environmental considerations are to take precedence over other interests whenever they conflict" (ibid., p. 10). As the above relationships demonstrate environmental protection policies and research are indeed closely

¹¹⁵ Systematic, scientific knowledge of Svalbard is largely seen by the research community and those observing and analysing them as insufficient (in quality and quantity) for decision making purposes (Nyseth & Viken 2016; Hagen et al. 2012). I will discuss Nyseth and Viken's perspective in a little more detail in Section 6.3.

linked. However, as Underdal discusses, although 'evidence-based policy' may be de rigueur, the transition from scientific research to policy integration is not guaranteed, wholesale, nor without substantial interpretation:

> Policy cannot simply be *derived* from knowledge, however firm the knowledge base may be. Research findings rarely, if ever, speak for themselves; no documentation of damage to nature by itself prescribes optimal care. Only when interpreted in a particular context and related to some particular concerns, interests and values can knowledge be 'used' by decision makers ... environmental policy will have to be guided by some notion of social welfare and some normative decision rules for dealing with uncertainty (e.g. precautionary principle).

(Underdal 2000, p.5)

This interpretation, as Underdal explains, will be according to the policymakers' overall aims and value systems. Whilst this may seem obvious, sciencepolicy relations are sometimes envisioned as a straight forward, rational, 'linear model', which "assumes that policy makers pose well-defined questions, scientists provide credible, legitimate, relevant and timely knowledge (Bradshaw and Borchers 2000; Cash 2001) and policy-makers will go on to develop solutions based on this knowledge (Habermas 1971; Pielke 2007)" (Young et al. 2014, p.389). Many authors working on the interface between science and policy refute such a linear model (Owens et al. 2006; Sarkki et al. 2015; Young et al. 2014). Others highlight the always-partial, changing and value-laden nature of 'knowledge' and 'evidence' and draw attention to the power relations intrinsic to knowledge production and integration (Benjaminsen et al. 2015; Nyseth & Viken 2016; Sinevaara-Niskanen 2015). In other words, the legitimacy of the scientists and Svalbard as a site for science, does not guarantee legitimation for the legislation which draws upon this science.

The environmental protection regime in Svalbard has a number of driving forces which influence the relationships between policy and science. Firstly, it is geopolitical, as discussed, both in terms of territorial control and gaining recognition on the world stage for best practice environmental management. Secondly, the view that environmental legislation in Svalbard is largely modelled on policies designed for mainland Norway, and that further integration directs policy, is common in Svalbard:

The central government wants to make regulations because they do so on the mainland and Svalbard is [an] even more vulnerable place and it's a tiny little island up there. They don't realise that this is as huge as the whole southern part of Norway.

(Interview 64, mining sector, 13th February 2015)

I think this is the same regime as in the mainland. So all protected areas in Norway, well there's an ambition, to make sure that all the protected areas have a management plan both describing the values that are there and how they should be managed based on the protection regulations.

(Interview 66, environmental management, 16th February 2015).

Whether this is a matter of contention, as in the first quote; or justification for action, as in the second, the link between 'mainland' policies and those applied to Svalbard from Oslo is a strong one. The national discourses around the ideas of wilderness discussed in Chapter 4 now become practically relevant as we start to look at how wilderness value is put into practice in environmental policy.

Somewhat more controversially, a third possible driver for environmental policies in Svalbard is the possibility for career advancement. The suggestion from some participants is that it is not only the attractive location, salary and additional benefits that entice applicants to positions in the Governor's environmental department, but also how prestigious the positions on offer are. Many actors believe that an environmental position in Svalbard is a powerful career move, where one can take things to the next level by pushing the environmental protection policies further, in order to "make a name for themselves" (Interview 49). As others commented:

Those persons that end up in the management area when it comes to here [Svalbard] ... they are in a small group nationally as well, they have to have some show cases as well for the next job, you know?

SS: For their CV?

Exactly, yeah, sometimes I get this feeling that when you come here it's oh now I *really* should show the world ... so it's a challenge.

(Interview 44, business sector, 26th June 2014)

They [the Ministry of Climate and Environment) listen very closely to their local environmental departments, so the Governor's office. So we are very dependent on who is in charge there. And that depends because they don't have permanent positions, people are only there 3-4 years at a time.

(Interview 10, mining sector, 22nd May 2014)

As interviewee 10 notes, the limited term of positions at the Governor's office can compound the 'problem' of needing to make an impact, whilst also providing a natural limitation on the scope for impact. Whether or not these suggestions always ring true, they do not in any case mean that environmental managers do not care about the job they do or hold strong environmental values, indeed my observations support the contrary. However, thinking back to Chapter 5, motivations matter in caring relations (Held 2006), and, it would seem, they also matter in processes of legitimation.

The aim of protecting a Norwegian version of wilderness that problematises the presence of humans, combined with seeking prestige either geopolitically or personally, has resulted in a policy approach to environmental regulation that has so far meant an increase in access restrictions through the development of protected area zones. Such restrictions come into conflict with the needs and wishes of the scientific community to further knowledge production, which includes data collection in Svalbard's wilderness areas. They also raise questions as to the role of scientific knowledge within environmental policy decisions. Whilst scientists, especially physical scientists, may have previously enjoyed an easy passage through the Governor's permissions systems (Viken 2011), compared to tourists for example, this is no longer necessarily the case.

Everybody knows the rules, we all abide by them, we know how to ... to operate in this environment and not destroy it. I don't see why researchers should be penalised ... I also don't think it's fair really to penalise everybody by assuming that it's gonna be destroyed. And of course you have to manage it and maintain it, but really is the traffic that much? ... If they do it right there shouldn't be any problem.

(Interview 48, researcher, 27th June 2014)

Most members of the scientific community I encountered expressed the view that carefully managed access for *all* (including local residents and tourists) should be possible and environmentally beneficial. Reasons for supporting relatively open access encompassed a variety of value perspectives. For some, more open and equal access is seen as an acceptable level of regulation (and therefore keeps good will towards other regulations from the Governor); others highlight the educational and potential advocacy effects for environmental campaigns of seeing and experiencing such areas. Another approach is from a social justice and equity position that access should be available equally among citizens¹¹⁶, not dependent on who they are employed by or where they are from. These positions connect with the enthusiasm for Svalbard's 'wilderness' as a field site discussed in Chapter 5.

Such tensions between protecting an untouched, pristine nature and allowing access (for recreation) as discussed in Chapter 4, are widespread within Norwegian National Park management debates (Vistad & Vorkinn 2012). These conflicts and different value perspectives become salient when exploring the decision making processes involved in developing environmental regulations in Svalbard. The East Svalbard Management Plan was still in-process during my research. It was devised through a mixture of top-down decisions and stakeholder consultations and sought to be evidence-based. It provides an insight into how scientific knowledge and value(s) are entangled in such environmental regulations and how value is practiced in this context.

¹¹⁶ This often comes with a sensible proviso that they are experienced and equipped enough to manage adequate safety precautions, or smart enough to go with a guide.

Legitimation, rather than categorisation, becomes an important value process to track here, as it is both the legitimacy of the evidence drawn upon and the legitimacy of the consultation that are questioned in the contestations and conflicts surrounding the plan.

6.3. Remotely contentious: the East Svalbard Management Plan

Conflicts within nature management are inextricably linked to the concept of value ... The day-to-day practice of nature management involves making political priorities, environmental policy, local management culture and evidence about what kinds of nature and which recreational opportunities should be given priority.

(Hagen et al. 2012, p.5)

This section firstly introduces the historical and geographical context of the plan. The East Svalbard Management Plan covers The Nordaust (North East) Svalbard and Søraust (South East) Svalbard Nature Reserves, which were established in 1973, Nature Reserves being the strictest form of protected area in Norway (see Figure 14 and

Figure 46). Together these two remote reserves comprise a significant area, "more than 51 per cent of Svalbard's land and sea areas", over 77,000 square kilometres (Sysselmannen på Svalbard 2015, p.15). The East Svalbard area (counting land and sea) is 1.5 times as large as all the protected areas in mainland Norway put together (Sysselmannen på Svalbard 2015, p.16). This part of Svalbard does not receive the tempering effect of the Gulf Stream unlike western areas. The North East Reserve "represents the most pristine and climatically most extreme parts of Svalbard", and is 77% glaciated with the majority of land being classed as polar desert climate (Sysselmannen på Svalbard 2015, p.18). The South East Reserve has tundra vegetation on the western shores but is more barren and glaciated in the east, with much floating ice in the surrounding area for most of the year (ibid.). There are historical traces of European whaling activity from the 1600s, Pomor winter hunting and to a lesser extent Norwegian over-wintering. Cabins and cairns from scientific expeditions starting in the 1800s are also still evident, along with the more recent, but less traceable oil drilling in 1972.

gives an overall insight into the particular 'values' and purpose of the two reserves.

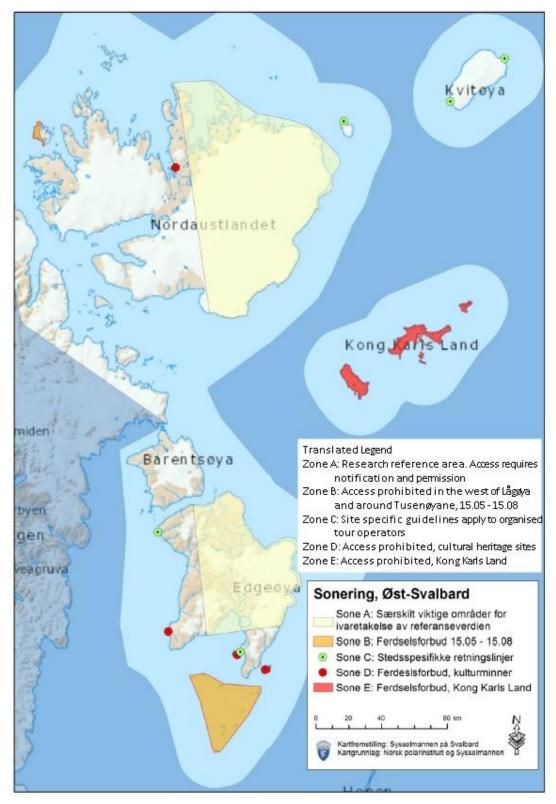


Figure 46: Overview of Management Zones in East Svalbard. (Authors adaptation of Thematic Map 12 Sysselmannen på Svalbard 2015, p.129)

Figure 47: Extract from 'Regulations relating to large nature conservation areas and bird reserves in Svalbard as established in 1973' (Ministry of Climate and Environment 2014, p.4)

Section 14. Purpose of the nature reserves

The purpose of protecting the areas is to maintain large, continuous and largely undisturbed areas of natural environment on land and in the sea with intact habitats, ecosystems, species, natural ecological processes, landscapes, cultural heritage and cultural environments as reference areas for research purposes.

Nordaust-Svalbard nature reserve is particularly intended to safeguard:

- an area with a spectacular landscape, including the largest glaciers in Svalbard and many fjords and peninsulas
- several small localities with cliff- nesting seabird colonies, breeding grounds for brent goose, haul-out and breeding areas for walrus and polar bear habitat
- many lakes containing Arctic char, especially landlocked char
- important structures and sites and cultural environments with traces of earlier whaling activities, overwintering hunters and trappers, North Pole expeditions, research and the Second World War.

Søraust-Svalbard nature reserve is particularly intended to safeguard:

- two large islands with a characteristic landscape of plateau mountains and many small islands (Tusenøyane)
- localities with cliff-nesting seabird colonies, breeding grounds for brent goose, haul-out and breeding areas for walrus and polar bear habitat
- habitat for large populations of Svalbard reindeer
- important structures and sites and cultural environments with traces of earlier whaling activities and overwintering hunters and trappers.

The final version of the East Svalbard Management Plan was released in December 2015. However, as part of the development of the plan, the environmental protection regulations for the nature reserves were amended in April 2014 and came into force in May 2014 (Ministry of Climate and Environment 2014). There are no new reserves or parks created as part of this dual process; however, the plan tightens restrictions to the access of East Svalbard, making two zones so-called 'scientific reference areas' (Zone A,

Figure 46). Other changes include the summer closing of the bird reserve areas Tusenøyane and the west of Lågøya (Zone B), meaning that due to sea ice, and

restrictions on helicopter usage it is highly unlikely access will be possible at all. According to the final document, the work on the management plan began in 2010, however, some participants date the start of stakeholder consultations prior to this, with the general impression all round that it has been a long¹¹⁷ and fraught process. According to Nyseth and Viken (2016), the Norwegian Ministry of the Environment attempted to implement a near full closure of the East Svalbard area from the 'top down' in 2005. This was met with fierce resistance from all sectors:

> The proposal provoked many, particularly the cruise tourism industry, which is an industry with a long tradition of visiting the area. Within the scientific community, the proposed regulation was interpreted as an exclusion of the research milieus of the local university studies. The public in general was provoked by both the reduced access to land and sea areas and by the way the proposal had been introduced.

> > (Nyseth & Viken 2016, p.69)

The Directorate level approach was also seen as a challenge to the local governance regime of Svalbard and the Governor of Svalbard decided to make the development of a management plan more open through a stakeholder process. Working groups for 'user interests' were formed for tourism, research and education, and fishery sectors, as well as one for local users. The working groups provided input into the process together with government bodies and other related research (e.g. the Norwegian Petroleum Directorate and the Norwegian Polar Institute).

The scientific reference area means that access will be very limited, even for science activities, the idea being to create an area as unaffected by humans as possible. According to the management plan, climate research and other environmental research that requires access to large, and essentially undisturbed, areas *may* receive permits for activities. Ongoing monitoring can continue (but will be re-evaluated), with the best available environmentally sound technology, but is expected to require less travel and presence in the

¹¹⁷ One participant stated the beginning of the process as being 9 years ago in 2014, correlating with Nyseth and Viken's (2016) account.

nature reserves, and less direct handling of animals. New surveys that require permits will be kept to a minimum. Surveys that will create basic knowledge about prioritised or Red-listed habitats and species, or natural qualities mentioned in the purpose of protection, will be granted permission (Sysselmannen på Svalbard 2015, pp.63–65).

The plan, or rather the changes in regulation due to the development of the plan, was already taking an effect in 2014, with permits being harder to obtain:

We've been absolutely slammed recently, by Sysselmannen [the Governor's office] ... they are really trying to limit the areas in which people work. We're very lucky because as geologists we have to go where the rocks are. But I think it's unfair to limit the research in other kind of areas because there's a lot to see over there [East Svalbard].

(Interview 48, research sector, 27th June 2014)

Even research activity is being perceived as a problem, even though we researchers are normally supposed to be part of the management system, or part of the management support, even NPI researchers are struggling to get things done because there are higher restrictions on things.

(Interview 22, research sector, 3rd June 2014)

Science and tourism are recognised as important activities in the area, but as promised through the Svalbard White Paper, environmental protection has been prioritised in these eastern zones of Svalbard. This prioritisation, as the above participant notes, is problematic in the on-going tasks of managing wilderness areas and tourism to those areas, where existing knowledge is found to be lacking and the continuation of developing knowledge, preferably site-specific knowledge, that Hagen et al (2012) recommend is becoming less, rather than more, probable.

The tensions surrounding this plan are interesting to unpick as they shed light on a number of prominent themes throughout this research. One contention is that the management plan's very existence threatens the sense of freedom many associate with Svalbard life, and its affective atmosphere (as discussed in Chapter 5). Another is frustration with the way in which scientific knowledge was used and incorporated into the plan, and the consultation process in general. These first two concerns can be treated as matters of legitimation, which I will discuss in Sections 6.3.1 and 6.3.2. The conflicting ways in which natural (and cultural) heritage or wilderness is valued and the consequent actions and policies this results in is a third tension that relates to, and looms above the previous two, that will be discussed in Section 6.3.3. I tease out these entangled strands in separate sections, however all three are closely linked. Unpicking the details of this plan allows a close examination of a contested legitimation process. As discussed in Chapter 2, it is only through legitimation that value frameworks, in this case the East Svalbard Management Plan and the connected regulations described and analysed in Chapter 4, hold power and relevance.

As Sarkki et al (2015) describe, some authors have identified the salient factors for successful science-policy integration as being credibility, relevance and legitimacy, abbreviated as CRELE. Often, it is the science itself that is analysed through the lens of CRELE. However, Sarkki et al. (2015) argue convincingly that it is the processes of decision making, consultation and negotiation where the factors of CRELE are most important. The extent to which the process of developing and negotiating the East Svalbard Management Plan relates to these science-policy interface concepts has some explanatory power within the different areas of conflict and aids the wider understanding of the workings of legitimation.

6.3.1. Why a management plan?

Close observers and some of those involved in the consultation for the management have certainly questioned the purpose of the management plan. In terms of CRELE, the main question at hand is whether the management plan is *relevant* or perceived to be relevant. Here, "relevance (or salience) refers to the ability to match knowledge with policy and societal needs, and the extent to which knowledge is usable" (Sarkki et al. 2015, p.507). According to the management plan,

The regulations governing nature reserves allow for some discretion. The Management Plan ... elaborates on and further specifies how to apply the protection regulations in the practical and daily management of the reserves ... The plan shall pave the way for predictable and knowledge-based management of the nature reserves.

(Sysselmannen på Svalbard 2015, p.5)

As we saw earlier, this is part of a wider trend in Norwegian environmental policy to develop more concrete management plans for protected areas. From the Governor's office perspective, the management plan should be a simple matter of making sure the way that the protected areas are managed is in line with the regulations and other policy objectives (i.e. the Svalbard White Paper and the Environment Act):

> The decisions are already taken. This management plan is not deciding anything new. It's a way to maintain the purpose of the regulation in practice. I think that's what was typical about that process, people disagree on the regulation, they don't want that kind of regulation. And that was not really part of the discussion on the management plan. That's the frame we're working in ... it's not part of the, erm, our mandate to reduce the level of regulation, rather to increase [laughs]. Actually to make sure that you maintain the purpose of the regulation.

(Interview 66, environmental management, 16th February 2015)

This extract raises multiple points. Firstly, it questions the need for such a detailed stakeholder consultation if the key points have already been decided upon within the regulatory framework (though it is clear the consultation process *did* affect the outcomes of the plan and regulations¹¹⁸). Secondly, the statement is quite a simplification; as the participant goes on to qualify: the regulations themselves *did* change during the consultation process and it is hard to separate the changes in regulation from the management plan itself. It also introduces the problem that many Svalbard residents do not particularly appreciate an increasingly restrictive environmental management regime:

¹¹⁸ The number of restricted areas in the final plan were reduced from the 2005 starting point.

I don't want to see 99% of Svalbard turned into a national park. Because as a local, I want to be able to move freely. I don't want to have to get permissions on forms and everything else and then be told no. There aren't very many of us that are able to go outside of area 10 freely. There's only about 2000 of us and probably 50% of that do go out of management area 10 for private trips. When you think about it, that's a pretty small footprint. The Norwegian government, have this principle of banning things on principle.

(Interview 49, resident with experience in tourism industry, 27th June 2014)

It's getting too much. We want it to be a place we take care of ourselves our own way. Of course, all the laws and regulations are forced on you. ... They set the rules, they set the standards so they handle it and you don't handle it... If I want to go to North Spitsbergen, then I have to fill out a form, tell the governor where I'm going. Why would I do that? I tell a friend where I'm going, I bring my satellite phone and my emergency kit, the right gear. I'll be alright. That's a part of what's wrong with this place, if there is anything wrong. It's part of the freedom that is taken away.

(Interview 18, medium term resident, 30th May 2014)

Regulation, or at least further regulation, is seen by many to be disproportionate to the scale of the problem and counter to the way some people wish the society to be run. Individual freedom is seen as important to protect as a social value, or "civic order of worth" in Boltanski and Thévenot's terms (2006) to uphold. The issues of the clarity and purpose of the management plan then are set in a little more context, of frustration at the system and motivations for change. Indeed this echoes earlier links made between environmental protection and international recognition and prestige: to become the world's best managed wilderness, you need to be seen to manage. This need is rather transparent to some:

> The restrictions, sometimes they are done for political reasons, and sometimes, more seldom, they are really done for taking care of the nature... we have to do something...some politician says, do something, shut down some areas. OK, so 10 spots with the restriction, give us that and they will be satisfied.

> > (Interview II, Heritage Sector, 22nd May 2014)

Lots of inhabitants in Longyearbyen don't really see what the government is protecting ... it's really important for me and many people that it doesn't come too many regulations, they have to make real impacts, or make real differences for nature and environmental protection. Not symbolic.

(Interview 64, environmental management, 13th February 2015)

Several participants made this link, reading the environmental protection measures as symbolic, political and sometimes arbitrary gestures rather than centred on wilderness conservation. The relevance of the management plan to Svalbard's society can therefore be seen as questionable from a number of angles. However, the plan fits very well with the needs of the policy makers. The latest dominant and popular styles of management are both evidence based and involve stakeholder engagement, both of which it is claimed the management plan includes. In terms of the overall legitimisation process needed for an ordered, uncontested system to arise (Boltanski & Thévenot 2006), there are already problems. There are multiple, but conflicting, 'orders of worth', or sets of value frameworks in play: the national and perhaps global level of making progressive environmental conservation policy (which could be connected with Boltanski and Thévenot's *fame* order and certainly a geopolitical order); and in contrast, the local *civic* order and values of freedom and access to the wilderness areas. Working across these are embodied emotional and affectual processes of inspiration, another of Boltanski and Thévenot's orders, in connection with experiencing Svalbard's wilderness areas and wanting to protect them.

6.3.2. Long-haul community consultation: "it's the way that you do it"

By all accounts the consultation process did not start on the best of terms, with early drafts suggesting the closure of many more areas than the final plan allows for (see also Nyseth & Viken 2016). Through this consultation process, the stakeholder groups reduced the areas affected by the plan, which to some is seen to be a successful eventual outcome. This 'success' is viewed very much as occurring despite the considerable challenges the volunteer stakeholders faced. They noted that the drawn out nature of the process itself put stakeholder groups at a disadvantage compared to those in governmental positions, given the substantial amount of unwaged time involved. Other stakeholders view it as a win for the Government having worn those in opposition out through a long, well-resourced campaign (Interview 2, stakeholder, 14th May 2014). In Sarkki et al.'s analysis, *legitimacy* is the issue here, which rather than a more broad reference to the acceptance of an evaluative judgement, "refers to the (perceived) fairness and balance of the SPI [Science Policy Interface] processes" (2015, p.507).

A lack of legitimacy also seems to be the issue regarding *how* the evidence that was fed into the process was dealt with. A number of participants felt that their advice and experience were not taken on board, nor was scientific evidence treated from a balanced perspective. The resulting plan is considered to reflect the values of the Governor's Office and staff at the Norwegian Environment Ministry, rather than be reflective of the community stakeholders involved.

There was discrepancy between the evidence presented and the case built on the evidence. And ... researchers responsible for that mentioned that. There has been a case built for protection for this and that, and there was no evidence. All the evidence was flawed, or out-dated, or simply not there, or made on presumption ... I must say, I find it hard to take these people seriously now, because they wilfully ignore evidence, which is my profession is a cardinal sin.

(Interview 22, research sector, 3rd June 2014)

The point is that they say that forvaltning [management] should be based on knowledge and knowledge is not coming from heaven, it's coming from science. ... but those who are using the material are biased. ... then scientists in Polar Institute was pissed because they felt that our research is used in some directions drawing into politics. ... they say all results should be based on knowledge, but it's not ...

(Interview 63, long term resident, 7th July 2014)

They close one area which is actually quite big which they call a bird reserve: A Thousand Islands [Tusenøyane], yet there's no birds there ... you've put lots of lines on the map you made lots of legal texts and operation manuals that no one can understand, but you protect nothing of the environment.

(Interview 2, stakeholder, 14th May 2014)

The case of the Tusenøyane bird reserve is illustrative of the problems here. As Hinchliffe explains, conservation relies on presence, meaning conservation efforts often involve trying to make nature – a species or habitat – more present.

The facts are far from settled ... thus, the objects of conservation (like species and habitats) are not fully formed or always fully present, but in the process of being made present.

(Hinchliffe 2008, p.89)

The birds themselves provide a challenge to legitimation in this instance through their absence. In fact, the policy documentation states that "there is no systematic localised information about the distribution and range of the duck and seabird colonies. In addition, the seabird occurrences undergo constant changes" (Sysselmannen på Svalbard 2015, p.24). Sightings of red-listed birds have been known in these areas, and this is deemed to be enough evidence to support specific bird-related restrictions on access. A favourable reading of this example would cite the precautionary principle, which is at the core of the management plan. Claims to evidence-based policy are certainly weak at this point and the value of scientific knowledge to the process is in question.

For Nyseth and Viken (2016), it is the application of the precautionary principle and the forms of knowledge consulted in the process that raises problems. This echoes earlier concerns over possible tensions caused by engaging the precautionary principle: "Conflicts might easily occur if involved stakeholders feel that the precautionary principle has been a substitute for using existing knowledge" (Hagen et al. 2012, p.12). Nyseth and Viken (ibid.) posit that knowledge from outside of the formal scientific process of peer review, such as site reports from tourist operation organisations, observations from Governor's inspections and beach cleaning visits, should be more systematically reported, available and respected as relevant and useful in management decisions. Were this to be the case, they argue, the need to fall back on the precautionary principle would be reduced and the legitimacy of the management decisions increased. This may well be the case, although Nyseth and Viken's conceptualisation of the precautionary principle is problematic¹¹⁹, however, as I will argue below, taking a wider view using a value framework leads to a different perspective.

The doubts over how scientific evidence is used in policy are not unique to this management plan process. Owens et al's (2006) work on science-policy boundaries is to the point here,

Even if communicated with the utmost clarity, findings can be unwelcome if they do not suit predefined agendas or provide answers to preconceived problems. In other words, policy often comes before scientific and research evidence rather than the other way round"

(Owens et al. 2006, p.638).

Observers and participants to the consultation process suggest that the results are to some extent pre-determined, which is not at odds with some views from the policy side as we saw in the previous section. More generally, those working in the Svalbard scientific community involved with informing policy makers recognise that there are limits to the influence they can have, as one such participant commented, "sometimes [for] numbers of reasons, ideology sometimes, but also balance with other interests: makes the decisions different to our advice" (Interview 12, research sector, 27th May 2014). The issue, and perceived lack of legitimacy, as well as relevance of the management plan is contested in relation to the role and treatment of scientific knowledge and the fairness of the consultation process overall.

These two factors amplify each other, as Treffny and Beilin's (2011) research also finds, if stakeholders are involved, there is an expectation their evidence will make a difference to the process. If this is in doubt, then legitimacy and trust in the environmental agencies decreases. This is closely linked to credibility as well, defined as "the (perceived) quality, validity and adequacy and reliability of the knowledge, evidence and arguments exchanged at the interface" (Sarkki et

¹¹⁹ They imply that scientific evidence can be 'established' with 'proof' and once this has occurred all decisions should be based on such evidence rather than the precautionary principle. We need only to apply such a conceptualisation to the issue of climate change to realise that it cannot be as simple as that.

al. 2015, p.507). Below, it is the credibility of the plan's development process rather than the science itself which is in question:

I got the impression in the East Svalbard process, that there was evidence, and it was selectively over-looked, or not fully weighed in and there were measures taken based on precautionary principle, but then people said, there is evidence, the evidence doesn't support your case – well then we don't want it. And that's bad management. ... if the people that are tasked with the management of these values arrive at the scene with their minds made up and they choose to not take some evidence into account because they don't like it, or choose to take a harder approach based on principle, even though other people advise to do something else, then they just lose credibility in a big way. And they've lost it with me.

(Interview 22, research sector, 3rd June 2014)

Considering the wider use of community consultation in policy making, Arctic scholar Heidi Sinevaara-Niskanen (2015) suggests that communities have become another tool through which states can exercise power in the Arctic. Whilst the intentions behind the public consultation on the East Svalbard Management Plan were to democratise the decision making and move away from a top-down approach (Nyseth & Viken 2016), the attachment to (or perceived attachment to) pushing through a defined outcome – reducing access, reveals the limitations to this approach: it eroded legitimacy and respect for governance more generally. Like the problems with the relevance of the management plan, the multiple 'orders of worth' at work are not in concert, but conflict here leaving the legitimation of the plan incomplete.

6.3.3. Contested heritage value: doing more harm than good? These conflicts are not so much about *what* is valued – all are in agreement that Svalbard's natural and cultural heritage is highly valuable – but *how* it is valued and what such a valuation does. The same area can have multiple meanings and very different kinds of value associated with it: as Endres (2012) puts it, value can be polysemous. In this case, the polysemous nature of value goes beyond Boltanski and Thévenot (2006) orders of worth and is rather related to definitions and ideas of wilderness and human relations within and as part of that wilderness. Kellert's (1996) framework of different value tropes that describe our multiple ways of valuing 'nature' can be of use here (see Table 3¹²⁰). As described in Chapter 4, the dominant discourse in terms of government policy, and to a lesser extent tourism, is of Svalbard's nature being a 'pristine wilderness' that is 'virtually untouched by local human activity'. This highly idealised, modernist conceptualisation of the need for separation of humans from wilderness is not only philosophically problematic, but also causes 'trouble' more practically in the tensions surrounding environmental protection policies in Svalbard.¹²¹ In his valuation of nature, Kellert's 'moralistic' value, an ethical concern for nature, is engaged. Whilst most of the other value typologies are recognised within the management approach, the aim and intervention seems to be to limit or prevent all but a few in experiencing them in this particular corner of the earth.

Value	Definition	Function
Utilitarian	Practical and material exploitation of nature	Physical sustenance/security
Naturalistic	Direct experience and exploration of nature	Curiosity, understanding, recreation
Ecologistic – scientific	Systematic study of structure, function and relationship in nature	Knowledge, understanding, observational skills
Aesthetic	Physical appeal and beauty of nature	Inspiration, harmony, security
Symbolic	Use of nature for language and thought	Communication and mental development
Humanistic	Strong emotional attachment and "love" for aspects of nature	Bonding, sharing, cooperation, companionship
Moralistic	Spiritual reverence and ethical concern for nature	Order, meaning, kinship, altruism
Dominionistic	Mastery, physical control, dominance of nature	Mechanical skills, physical prowess, ability to subdue
Negativistic	Fear, aversion, alienation from nature	Security, protection, safety, awe

Table 3: A typology of Values	(Kellert 1996. r).38)
Tuble 5.7 (typology of values		

¹²⁰ There are of course problems with any strict categorisation of value, as discussed in Chapter 4, however, in this case Kellert's scheme has potential to help to fine tune our understanding of the value practices at work.

¹²¹ Indeed some authors suggest such conceptualisations of the Arctic are barriers to sustainable and just tourism in the region as the glossing over of current and past human activities does not promote co-operation (Grimwood 2015).

We must have the guts to say no for a lot of activities. Everybody wants to go into the wilderness and they want to go to places which nobody else has been before and we must say no. We don't want people to go in there because of the possibility to destroy the wilderness and the untouched landscape. When you come back in 50 years, it still has to be looking like there hasn't been any people there.

(Interview 38, environmental management, 19th June 2014)

The misanthropic view exemplified above, treats the 'pristine wilderness' of Svalbard as a unique and highly valuable gift to future generations. Such views are not, from my observations wholly formed in malice towards the human race, but from a normative position which seeks to withhold a small fragment of a largely otherwise degraded planet for future enjoyment or use. It can be associated with notions of both concern and care for 'nature' and future human generations (see Chapter 5). Such a narrative is consistent with the wider discourse within natural and cultural heritage programmes such as UNESCO world heritage sites.

The now-familiar critique of the very idea of pristine nature (Cronon 1995) is recognised by those opposed to the government's approach. Svalbard's nonsettlement areas constructed as pristine wilderness, erase not only the history of natural resource exploitation on and around the archipelago (Avango et al. 2014), but also obscure present activities. Tourism, fishing, resource exploration, scientific work, environmental protection and geopolitical narratives continue to shape and affect these areas. Whilst activity levels in the East Svalbard Nature Reserves have been lower than elsewhere with respect to tourism and resource exploitation, due to the existing protected area legislation and this area being relatively more difficult to access, this general argument still holds.

> It looks like in their mind set they [the Governor's Office] are against humans. Humans disturb nature. And nature should be left alone and not disturbed, not visited, and not used by humans. On a philosophical level I disagree. ... humans are a part of nature, not a separate entity. To uphold this separation is meaningless and indeed harmful.

> > (Interview 22, research sector 3rd June 2014 and email 11th September 2014)

I would say the East Svalbard protection plan probably does damage to the environment. What did you stop there? You stopped 173 environmental protectionists...who are some of the richest people in the world, or a film maker or a scientist who wants to do good.

(Interview 2, stakeholder, 14th May 2014)

6.3.3.1. Educational and inspirational orders of worth? That some participants believe that the management plan and the way wilderness is valued within it is actually more harmful than beneficial to the environment is worth exploring further. Both positions work from the starting point that managed access can have a positive educational effect. The ability to experience such environments, in person (naturalistic value in Kellert's terms) or via documentaries, films (symbolic value) or published research (scientific value) has the potential to inspire greater understanding for the need for more sustainable human-nature relations and interactions, action on climate change, care for the environment: this is widely accepted in the environmental education sphere and beyond through the 'nature deficit disorder' and 'connection with nature' theses (see Fletcher 2016 for a review). Whilst such effects seem intuitively to make sense, are supported by literary accounts, and fit with wider notions of the 'humanistic' (Kellert, 1996) or 'transformative' values of 'nature' (Takacs 1996); there has been very little research into the effects on tourists of visits to polar regions. In fact, research into changes in attitudes and behaviours connected with ecotourism and nature based tourism in general, is scant, though generally affirmative that positive effects are *possible*, they certainly do not always occur (Ardoin et al. 2015).

Johnston et al.'s (2014) work evaluating the possible effects of undergraduate trips to Antarctica indicates such inspiration can and does occur. Students gained a more personal connection to environmental issues such as climate change and many reported this has had a lasting effect.¹²² Powell et al.'s research (2012; 2008) with tourist cruises to Antarctica show the sometimes profound

¹²² See also Filep et al (2015): here researchers' accounts of Antarctica are explored through diaries and interviews, whilst the paper concentrates on the methodological aspects, it also gives a sense for the inspirations and emotional effects that the Antarctic landscape can induce.

effects that their experiences can have, and to some extent provide evidence of changes in environmental awareness, attitudes and behaviours. Many of the guides I spoke to in Svalbard actively try to encourage the 'ambassador effect', whereby past visitors advocate for that place or its wildlife. In addition, students on the Petunia bay trip and those I spoke to in focus groups are examples of largely positive environmental ambassadors for Svalbard. Hence, to limit access limits the potential for expanding a network of ambassadors and thereby disseminating moral codes of caring relations that some Svalbard residents and visitors practice (as discussed in Chapter 5).

However, Picard's (2015) analysis detailing the different values that tourists derive from visits to Antarctica complicates the above assumptions. Picard notes that experiencing Antarctica as "magical" and pristine nature could reinforce the perceived separation of human and more-than-human nature through the construction of the journey from civilisation, through the frontier and to the wild, where humans do not belong and need to struggle to survive. One could argue that the therapeutic value of experiencing such 'magic' nature overall does create a positive ambassador effect, but whether all areas of Svalbard's wilderness need to be accessible (as is certainly not the case in Antarctica) is still debatable. Fletcher (2016) takes this point further to question the connection with nature approach, challenging the need to conceptualise environmental problems with reference to the nature-culture binary. He argues that focussing on individual actions and responsibilities (such as making sure one connects with nature often enough) shifts attention away from the wider political and economic systems that support wide scale environmental degradation (Fletcher 2016).

Excluding human's from 'wilderness' areas has been a common conservation approach globally and widely criticised due to the social and ethical implications, traditional livelihood disruption and displacement – creating 'conservation refugees'. The reaction against this approach to conservation is at work here in Svalbard. Yet, in this remote, unpopulated location, we can legitimately ask how far a more community-oriented approach should stretch

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and who and what is best served by an exclusion or inclusion of human presence in this area. On the one hand, the 'local' community is distant, small and exerts little environmental pressure; another perspective is the international research and tourism activities pose both a growing risk, and a growing opportunity for learning, through increased accessibility due to sea ice retreat.

6.3.3.2. Cascading legitimacy

Another issue discussed with the above participants and others, is public attitudes towards environmental regulations. The concerns and debates surrounding the relevance and legitimacy of the management plan and its development and consultation process can be seen to erode the credibility of the organisations upholding them. As we have heard in Chapter 5, environmental regulations are not always adhered to. Part of the suggested reason for this, beyond a mere distaste for regulation, is that people have lost respect for the regulatory bodies, the frameworks of value they seek to enforce are losing their structural integrity through decreasing legitimacy. Furthering access restrictions, and the arguments used to do so, in this case were seen as going too far, or "over-doing it", as one participant described:

> I'm absolutely convinced there are ongoing acts to flaunt limits. The unfortunate effect is that locals ... don't discriminate, they see that there is one measure taking place, and then they decide to flaunt something else. Just to spite it. ... they might be rumours, but they might not care about hunting limits anymore, they say "oh the governor's gone crazy they're doing this and that, so I'll shoot what I want when I want and I'll fish as much as I want and not report it" and thereby they're undermining any management they can meaningfully have.

> > (Interview 22, research sector, 3rd June 2014)

As well as the potential for direct harm (e.g. to species populations), deviating from the regulations can have knock on effects to scientific research and in turn further environmental management policies and evidence to feed in to policy decisions. In the example above, the data collected on hunting numbers and species population figures based on hunting quotas is then questionable. Hence, if the management plan has led to a decrease in overall cooperation with environmental regulations, then the claims that it is 'doing more harm than good' have some standing.

6.3.4. Power and generational justice

Participants have also highlighted the unequal access the new (and previous) regulations and management plan enforces. Here, Bourdieu's take on legitimisation is perhaps more relevant, for this problem lies with the power relations inherent within the regulatory system that produced the management plan. It is the authorities with which some members of the community have lost faith in that have the power to decide who can enter these zones.

These rings on the map and these low intensity zones, 'no humans have been here since Sysselmannen has last inspected the site' certified, verified, this is something that they place value in, and I find that value meaningless and offensive even. Because ... it treats them as a better class of humans, you know, they are the stewards, they have a deeper understanding, have a better appreciation, know far more and will always know far more because they are the only ones who have access.

(Interview 22, research sector, 3rd June 2014)

This issue becomes most striking when considering the effects of the regulations to accessing cultural heritage. Perhaps this is because conceptualising presentday humans as a threat to the cultural remains of the past, we go even further into the realms of categorisation. We find ourselves categorised as less responsible, less trustworthy and less knowledgeable than future generations or current experts, and less interesting than remains of previous ones.

> Cultural remains are by definition, not cultural remains if people don't get to see them. There is a blubber oven on Zieglerøya¹²³, which is the only blubber oven in Svalbard which has not been used. So you can see the structure of the blubber oven very clearly, because all blubber ovens that have been used are covered in asphalt, due to the blubber. ... but this particular oven, you can see exactly how it is built, brick by brick. Then the authorities have chosen to close the whole

¹²³ This area is classified as Zone D in the management plan (See

Figure 46**Error! Reference source not found.**), located in the South East Svalbard nature reserve, in the South of Edgeøya.

island. So instead of giving people access to learn about this very interesting part of history, they close not only the blubber oven, but the whole island. Where are the arguments? For the researchers to look at? For who, why?

(Interview, tourism sector, 5th June 2014)

They're building ... miniature museums and then throw away the key and tell people not to go there. What they do is provoke people to go there anyway and do more damage than they would have otherwise if they had come there in a positive spirit. They prevent people from actually seeing it, and in my view they're eroding and eventually taking away any value that might have been in that remainder of coffin. If no one sees that remainder of coffin, it's just any piece of wood. And you could argue that future generations of archaeologists will be thrilled, but I find that concept too far out ... They just say, 'don't go there, it's supposed to rot at its own pace, available for future archaeology. You can't watch it, I can watch it because I'm the legal guardian of this skull, nobody else can go here and I'll tell a humorous story about it followed by a picture taken by me because I can go there'... That is hubris at its most extreme.

(Interview 22, research sector, 3rd June 2014)

This discussion speaks to the wider conservation literature: research and access to cultural heritage now versus in the future is a recognised area of tension and debate that brings into question the role of governing bodies and the rights of the wider public (Arler 2003; Holtorf & Ortman 2008).

The notion that we should save everything for the future when techniques will be better is a transparent absurdity, since the future, by definition, can never come ... to impose this policy on field research is an act of academic vandalism whose effect is to empower state officialdom at the expense of the people to whom the heritage truly belongs.

(Faulkner 2000, p.29 cited in Holtorf & Ortman 2008, p.82)

How cultural heritage is valued, as a resource for geopolitical prestige through mapping and research activities; as a cultural resource for education and tourism revenue – either now or in the future, matters to the way in which management is then approached. Moreover, the power relations behind the valuation are important here: it is not *necessarily* access that is the problem, but the way in which it is negotiated and framed. Legitimation then, as a subprocess of value, has been another useful concept with which to trace value through ideas and practices of 'saving' Svalbard. It has shown how value, without legitimation, struggles to be put into practice. In this case, the categorisation processes and the regulatory frameworks of value they construct identified in Chapter 4 and exceeded in Chapter 5, are held in question and are practiced unevenly due to the lack, or perceived lack of legitimacy. In this last section I consider how legitimacy of future such processes might be improved, and to what practices that might lead to.

6.4. For a value(s) inclusive management approach?

At the Governor's office, I heard very similar views to those complaining about the restrictions: a will to let people experience 'the nature' and to a lesser extent cultural heritage sites, but in limited areas so that some can be 'saved' from the risks of human activities. Zoning approaches and site specific management is a well-recognised management approach that has been recommended for Svalbard, alongside further research and inclusion of less formal knowledge production (Hagen et al. 2012). My conclusion as an outside observer of this consultation process is that a transparent inclusion of the breadth of values associated with the East Svalbard area, wilderness and cultural heritage could have greatly improved the CRELE – the credibility, relevance and legitimacy of both the process and the outcome.

Rather than basing the discussion solely around the available scientific evidence that fit the imperative for closure, openly discussing and acknowledging the multiple value conceptualisations of what is at stake could have greatly improved the transparency and the chance of a more successful legitimation process. By this I mean a move beyond a quantitative (or at least qualculative) approach to measuring, assessing and documenting site 'values' in terms of species, landforms or historical objects present there and towards an appreciation of *how* such things are valued, our affective-emotional relationship with them, how we want that relationship to develop and why. As we have seen through both an exploration of these 'orders of worth' in Chapter 5 and through the emotive language invoked when recounting this process to me in interviews, there is plenty of ground for discussion here. Acknowledging the value processes within knowledge production activities of all kinds does not limit values to the realm of the public only, but includes both sides of the science-policy interface.

As Endres (2012) notes, this suggestion of finding a place at the consultation and decision making table for 'polysemous' value(s) is not new. For example, Hamilton and Wills-Toker (2006) describe how for a site-specific advisory board working on the policy for cleaning up a previous energy generation site in Ohio, developing a consensus values statement as an initial step in decision making processes was found to be extremely helpful as part of a sense-making approach to decisions:

As they discussed the values important to them, members had the opportunity to develop an understanding of their own and others' priorities and expectations in relation to one another. Their views became "relativized" and "de-privileged" through this process. They suspended or delayed problem-solving discourse and instead focused on understanding their "relatedness" as a starting point for a process that may or may not eventually lead to consensus. Talking about values and not problems, solutions, or positions, emphasized the importance of recognizing and validating one another's views and of developing relationships as the basis for working as a board.

(Hamilton & Wills-Toker 2006, pp.767-768)

Incorporating values into consultation processes has been discussed in relation to making fairer and more acceptable environmental decisions for some time (see Fiorino 1990). Hence, Endres argues that any decision making processes should have "a mechanism to address the underlying values of all stakeholders in the process and openly acknowledges values as crucial components of environmentally just participation" (Endres 2012, p.12). Such an approach would also provide opportunities for emotions to be a legitimate source of reflection and is compatible with a values inclusive approach to decision making (Roeser & Pesch 2016). Yet, there will also be a need to recognise that though multiple knowledges are valid, they are not always equal. Legitimation processes, as demonstrated in this chapter, are important considerations. Jamie Lorimer (2015) notes the importance of "tracing the processes through which key actors come to speak for the environment", (2015, p.182) including those entrenched within existing governance structures. In my explorations of tracing different forms of value practices, I have contributed to developing possible ways to perform such a task when considering how a "cosmopolitan wildlife" (Lorimer 2015) might operate in the Anthropocene.

We might also think ahead to what kind of outcomes a values-inclusive management approach might produce. As those working towards positive change in 'environmental behaviours', such as support for nature conservation have found, if we wish to tip the balance towards further environmental protection measures, we may need to pay special attention to engaging our more 'universalist' values¹²⁴ (Blackmore et al. 2013; Crompton 2010). The importance of personal freedom that many wish to protect in Svalbard need not necessarily conflict with this. Moreover, revisiting the aims of the environmental policies is perhaps where such a process needs to begin. It may be time to let go of returning to imaginary Edenic scenes and to let go of the ideals of apolitical, value-free knowledge production (Lorimer 2015; Robbins & Moore 2013).

We must enunciate (literally speak) novel ecologies and why we want or do not want them in their specificities, admitting the very normative and power-laden urges that such a naming will expose and make transparent. It is further likely that in the process we will admit to our desire to alter the world even as we measure it, and to create new ecologies even as we fear them.

(Robbins & Moore 2013, p.12)

This might involve reconsidering how best to "cut up" difference – Lorimer (2015) demonstrates the political consequences of using categories of species, ecologies, individuals, genes or cultures as bases for conservation practices for example. An approach whereby values and their meanings are discussed openly has the potential to improve the democratic nature of the consultation and could pave the way for Norway to achieve its environmental management goals in a just and acceptable manner. Given the future directions that conservation

¹²⁴ In Schwartz's value framework, values such as equality, protecting the environment, unity with nature, social justice, a world at peace, wisdom and tolerance are grouped together as values that make up universalism (Holmes et al. 2011; Schwartz 1992)

will likely need to take, accounting for the already hybrid, multiple natures we are acting within (Lorimer 2015; Robbins & Moore 2013) this perhaps could open a space to rethink some of these goals. Whether a similar result as the current East Svalbard Management Plan and associated legislation would be the outcome of such an approach is hard to say. Plural values will not be the same the world over. As ever, place matters (Robinson 2011). These uninhabited areas of Svalbard may well be the perfect place to mount a last defence for 'wilderness', or rather, highly wild spaces. As the views in the preceding sections show, a large part of the tensions surrounding the plan are rooted in the way in which a version of this defence was devised. If such a defence is to continue with less conflict and tension, the value practices within conservation, those of categorisation and legitimation, will need to be revisited.

7. Conclusions

The contributions of this thesis are three fold: empirical, theoretical and methodological. Through an empirically rich account of everyday relations and practices in unique communities of Svalbard, I have expanded our understandings of socionatural relations in this place. By following value practices through mundane territory, alternatives and nuances to more prevalent meta-narratives are produced. These micro-narratives draw contour lines between international, national, cultural and everyday personal relations entangled in value practices of conservation in Svalbard: a critical topography (Katz 2001b). More broadly, this work has addressed recent calls in political ecology and geographic literatures of conservation that encourage us to think past old binaries and towards futures that are new, evolving and that we are partially responsible for.

I have gathered together a disparate collection of conceptualisations of value to develop and advance an approach that puts value theory into action through research. Treating value as practice brought attention to the processes and work that value is enmeshed within. This shifts the focus away from what value is, to what value does, as a verb. In distilling this into a research approach, I have traced value practices surrounding environmental protection in Svalbard by seeking to identify what is being valued, by whom, how and what consequences and contestations arise from these practices. Using value as the central axis of investigation has provided a way to unpick complex, multi-scaled processes.

Methodologically, I introduced the potential of a 'humble' research approach. This notion combines thinking from posthuman (Hobden 2014) and participatory research approaches (Participatory Geographies Research Group 2012) as well as ideas around the importance of place (Anderson et al. 2010) and methodologies of messiness (Law 2004), co-production (Jasanoff 2004), reflexivity (Rose 1997), vulnerability (Harrison 2008) and situated solidarities (Nagar 2014; Routledge & Derickson 2015). In short, it asks us to consider the value(s) of being more humble in our academic practice. I demonstrated how this 'humble geography' can be combined with the above value-as-practice approach throughout the research and writing of the thesis.

In this chapter, I begin by reflecting further on the theoretical and methodological approaches I have engaged with. In Section 7.1, I lay out the main arguments and contributions of the empirical chapters. I look ahead to how these contributions may be taken forward and what they could mean, for Svalbard and for conservation in general in Section 7.3. I extend this in Section 7.4 to consider possibilities for future research.

7.1. Reflections on thinking tools

As Donna Haraway repeatedly refrains in her latest work, "it matters what ideas we use to think other ideas" (Strathern 1992, p.10 cited in Haraway 2016, p.34), and as I have argued throughout, value is an idea worth thinking with. In Chapter 2, I brought together some of the salient literatures and thinkers on value. Working through examples of research that utilises this concept, and engaging with some core critiques of its use, I suggested that there was scope to further develop an approach to value enquiry that treats value as a contingent practice. In particular, I noted the potential of using categorisation and legitimation as aspects of value practice that help to make more visible practices of value within conservation, and sought to flesh out and adapt Lamont's (2012) conceptual frameworks of these processes.

Value conceived as a practice, and contingent process has proven to be a theoretically flexible thinking companion. Capable of taking a leading role, such as when symbolic capital from geopolitical events and actions take president, like during negotiations of international treaties on Svalbard. Or when economic pressures come to the fore, as they have in the recent accelerated decline of the Norwegian coal industry. Value is also operational beyond the headline events, through the enactment of mundane regulations and cultural, historical legacies, or through the embodied experiences of Svalbard's affective atmospheres and most every activity inbetween. Geopolitical, economic, cultural and social value(s) are relational and converge to work through legislative practices and everyday life, which is full of 'moments' of varied intensities where value is in action.

At a broader level, Katz's (2001a; 2001b) countertopography has also been an idea that has been helpful to think with, alongside value. I was inspired to create a version of Katz's critical topographies, which are rooted in the socio-natural materialities of life, "thick descriptions of particular places that can get at the ways in which a process [such as value in conservation] affects a particular place" (2001b, p.720). The metaphor of contour lines that join distinct local places with others experiencing similar material effects of global processes, is key to Katz's conceptualisation of countertopographies. I aimed to trace value practices and processes connected with conservation through a multitude of scales. The contour lines I have 'drawn' join different locations, people, institutions, species together via numerous and related value tropes, practices and processes (for example categorisation, care, legitimation). However, where these value relations extend beyond Svalbard's waters, as they often do, I do not follow far and as such, I would hesitate to call this geographically bounded study a full countertopography. The political consequences of my topography are somewhat different to Katz's aim of drawing connections and developing solidarities between places sharing similar experiences of global processes. Yet, there is potential for this work to be the start of a wider 'map', as discussed in Section 7.4. The general push to counter power relations of topographical knowledge production in their contribution to continued "uneven development" is more relevant.

In Chapter 3, I incorporated my value-as-practice theoretical approach within the methodological conception of a 'humble research practice'. This approach to research draws together a raft of extant work and pushes it to further consider our own limitations and strengths, to not only "get over ourselves" (Yusoff 2013, p.225) as a species, but also as researchers. I used accounts of my own research experiences to illustrate what a humble research practice might look and feel like and what kind of knowledge it might produce. I demonstrated that a

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humble approach can be productive in gaining access and trust in research situations. In sum, such an approach embraces being part of the world, rather than master, and is open to being affected by its objects and beings and to the limitations, the knowledges and the new relations and identities that openness can bring. A humble researcher is willing to tell the backstory of their research, hold theories and research 'goals' in proxy, and welcomes messy thinking and messy methods (old and new). They are willing to concede their own shortcomings and the partial nature of the knowledge they produce, and are conscious about how they go about their research practice: the means matter to the ends. Accordingly, it is appropriate to discuss the limitations of this approach here too.

As discussed in Section 3.1.1, value inquiry is untidy, imperfect, doubt-filled and resists conclusions (Ginsberg 2001); its subject matter is "discordant and conflictual" (Herrstein Smith 1988, p.148), "wild" (Carolan 2013). However, conclude I must: participants are rightly curious as to what has been 'found out'; research funders wish to trace impacts, to evaluate their investment. 'Results' are expected. What can a humble research practice give in answer to these reasonable demands? Explanation is one potential expectation.

At first pass, this sits uncomfortably with the 'humble' approach to value inquiry, explanation is afterall an "unreachable" and "undesirable" goal for reflexive social scientists (Latour 1988, p.164). The argument behind Latour's assessment here is more helpful. There is, he posits, only one circumstance in which one would wish to produce explanation – when you wish to act at a distance. If you are in situ, you can act (he suggests) without explanation, if you are not there, but do not intend to act, there is also no need for explanation. If you are remembering how it was when you were there, a story does a better job, only when you are acting at a distance from the research site, but want to do something, do you then need an explanation. Regardless of whether or not one is seeking to exert power, explanations necessarily create power relations between a distant knowledge producer and their site of interest: This need [for explanation] does not arise from any psychological, political or metaphysical lust for power, it is simply the consequence of solving the practical problems of acting at a distance... In other words, the notion of a powerful explanation cannot be dissociated from the slow establishment of what I have called centres of calculation for acting at a distance.

(Latour 1988, p.160)

At this point it seems I have a choice as to whether to absolve the need for explanation by down-grading the stories told to mere memories or to step up and make some grand proposition(s) for action and therefore prepare the grounds for explanation. However, Latour offers a reprieve in the form of 'infrareflexivity', through which he implores social scientists to "just offer the lived world and write" (1988, p. 170). This writing should be interesting, detailed and offer small, one-off explanations, rather than trying to relate to grand theory (ibid.). Moreover, the text produced should be treated as an equal account, no more or less valid than others. More recently, similar calls have been made within geography that there is room to step back from grand theory based critiques and develop more descriptive work that is attentive to things, emotions, change and alternatives going on at the margins (Woodyer and Geoghegan 2013). Woodyer and Geoghegan suggest a more cheerful, enchanted engagement with the world.

Having taken inspiration from these lines of thought, the moments, processes and practices I have presented are the result of holding a conflicting set of ideals in tension throughout. On the one hand, my desire to be open, vulnerable and attentive to Svalbard, its more than human capacities and human relations with these, has given rise to small stories and imaginings. Examples of a more creative approach are evident in the opening passages of the thesis and, to a different extent, discussions of assemblages in Section 4.8 and of care and affective atmospheres in Chapter 5. On the other hand, in its tracing of value in action connected to conservation – very human concerns – most stories follow a more traditional ethnographic approach and respond to the responsibility I developed as a listening researcher to share them. In doing so, I hope to initiate positive change, perhaps even policy change. The analysis I develop through thinking with value does accordingly go some way towards explanations and critique. It was not, in my view, enough to write an enchanted view of the world, entangled as I was/ am within the micro-politics of Svalbard (DeSilvey 2017 also discusses similar issues with working with heritage as verb to these with value as verb).

With all this in mind, before summarising what I take as being the key 'findings' to the empirical work, a summary of its backstory. The knowledge I have coproduced with a hybrid, multiple range of participants and thinking companions, is contingent and not solid. The 'results', narratives and conclusions presented here are one version of many possibilities. There are countless other ways I could have written it, and others would find countless more. They represent snap-shots in time, understandings drawn from a place that does not stand still. There are also many stories left untold, 'hot moments' (Lamont 2012) left unexamined. These other possibilities do not make what is presented here less valuable or true. For all its tensions and limitations, this work has drawn together, through its attention to value in action, a unique set of disparate, competing views, expertise, experience and knowledges. From this investigation, I can 'humbly' offer new perspectives on the way conservation processes unfold in Svalbard, and suggestions and questions for these practices in the future.

7.2. Tracing the argument

In Chapter 4, the role of categorisation within conservation is examined in detail. Harrison's (2015) notion of a regime of care draws out common practices across natural and cultural heritage conservation: categorising, curating, conserving and communicating. I have sought to build on this useful thinking tool through the work of tracing value in Svalbard. The categories of wilderness and cultural heritage are imbued with much meaning, historically and culturally, and within the legislative frameworks of environmental protection. Value is shaped and travels with these concepts into policy structures and everyday practices. Environmental regulations dictate who is allowed to do

what, where in Svalbard, according to the spatial and non-spatial hierarchies created through categorisation processes. The static-seeming, clearly delimited terms of wilderness and cultural heritage within the regulations and management plans, do not, however have full control, nor are they as 'solid' as they first appear. As the latter parts of this chapter demonstrates, thinking through value in concert with assemblage thinking, allows the material and more-than-human vitalities at work to become apparent. Value practices were traced at the boundaries of categories where the consequences of stepping over the line, from one management zone to another for instance, were questioned. Foxes, goslings, snowmobiles, gulls, grasses and ruins pushed at the edges of category distinctions. Hence, this chapter followed value through the processes of constructing and practicing frameworks of value that attempt to 'save' certain areas, species and objects in Svalbard. It shows the conceptual power of interrogating particular aspects of value processes, in this case, categorisation, and, the flexibility of value to work in combination with other theoretical approaches.

Chapter 5 uncovers value practices that operate in excess of, or that are excluded from those identified through the categories of wilderness and cultural heritage in formal evaluative frameworks. Here I examined the role of a particular type of value in practice - care. By investigating moral practices and how this relates to value(s) in environmental protection in Svalbard, I explored ways we can usefully think with care and value in concert. This chapter extends ideas from feminist care ethics to analyse value practices which are motivated by caring attitudes to Svalbard's landscape, things and non-human species, arguing that such value practices are important when considering what heritage we choose to 'save' and how we go about it. Secondly, it shows, through a focus on caring for the material remains of Pyramiden, small acts of caring make material differences to the remains. These practices also contribute to the re-making of place, developing new relationships with the past and those who were once there, without resorting necessarily to nostalgia. The example of the Ocean Hope 'rubbish hut' highlights the processes of how caring relations develop, change and are practiced. This continual shifting of value(s), I argue, is not

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something that rigid policy procedures and static evaluative criteria can well account for.

I discussed relationships individuals develop with Svalbard as a place and attempted to pin down a shifting, amorphous conception of the affective atmosphere that some experience, the 'Svalbard Bug'. Through a consideration of field science experiences, I explored how this affective atmosphere develops, what value practices (of care) it infiltrates and what effects it can have, particularly for knowledge production about Svalbard. This brought attention to the role of value(s) in the making of knowledge production and how this is incorporated into evaluative judgements over environmental management frameworks. Combining the theoretical lenses of value and care ethics, revealed value practices that often go unrecognised and neglected. In using this approach to look at relations between species and things, I further demonstrated the flexibility of value-as-practice and advanced discussions over how an ethics of care can be more widely applied.

Returning to the issues of environmental protection legislation, now armed with the insights from Chapter 5, in Chapter 6 I continued to trace value practices in knowledge production. Examining legitimation offered another powerful route to analysing the processes of value creation and its consequences. Legitimation, like categorisation, works at varying scales, from the many elements in confederation for a single event to occur, to over-arching claims to sovereignty. This chapter illustrates how Svalbard is continually produced as a legitimate site for knowledge production encompassing symbolic capital, geopolitical leverage and economic value as well as the enthusiasms, affective embodied skills and 'matters of care' of knowledge producers. This knowledge was revealed as political and selectively used in the production of environmental protection policies and regulations in Svalbard. The legitimacy of knowledge drawn upon and the ways stakeholder consultations are managed, were identified as key factors contributing to the levels of acceptance and success of measures designed to 'save' certain versions of Svalbard. Legitimation was recognised as an essential process for putting frameworks of value into practice. Chapter 6

concludes by beginning to think through how these conclusions could be taken forward. I argued that, given the prevalence of value within the processes of conservation and environmental management in Svalbard, a broader range of value(s) could be incorporated, discussed and recognised within consultations, discussions and strategies that define and influence these policies. What the thesis cannot do however is stand in final judgement of valuation systems in Svalbard. Remembering the limitations and the epistemological approach followed here, I do not claim to know the 'right' way to develop conservation in Svalbard, but I hope the analysis presented is helpful in thinking through alternative possibilities.

7.3. Thinking big

An analysis led by value has provided a possible means to contesting uneven power relations and less-than-representative political processes. The question is then, where do we go from here? The explorations in Chapter 5 and Section 6.4 can help point towards possible directions. Can we imagine, for example, how environmental management policies that are driven by an ethics of care approach might work? How new hierarchies and ways to deal with the messy ontologies of more-than-human vitality might be re-configured? How we might resist "the pressure for science to exhibit rationality" (Katz & Kirby 1991, p.262) and not shy away from making moral and political decisions (Hennessy 2015)?

Although my suggestions in Section 6.4 are focussed on reducing conflict and tensions, it is worth taking a step back from the 'frontline'. Conflicts are perhaps unavoidable, it is unlikely that an alternative qualculative strategy will be able to account for all versions of value(s) and satisfy all interests and goals (and even less possible if we are to consider nonhuman species). David Stark's research on innovation leads him to conclude that if we are looking for novel ways to evaluate, qualculate, make decisions, conflict or friction may be just what is needed:

Action - and, in particular, innovative action - was facilitated not by convergence or agreement on a principle of justification but by the divergence of evaluative principles. ...innovation is promoted by the collision of evaluative principles. It is when things do not fit together comfortably that novel recombinations become thinkable. Disagreement about what's valuable can make for new value propositions.

(Stark 2017, p.388)

On this basis, it would seem that the time is ripe for change. As Stark continues, value-understandings do not necessarily need to be in alignment for communal action. The many different strands of value, value systems and processes at work in Svalbard operate alongside some common actions to 'save' Svalbard in various ways, which are testament to this observation. Since completing my fieldwork, the Longyearbyen community has faced considerable challenges: not only has the coal industry's role in the town sharply declined, but an avalanche just before Christmas 2015 claimed two lives with storms and melting permafrost wreaking further evacuation havoc this year. No doubt worries about particular environmental regulations are distant memories. Such challenges have seen the whole community come together. Looking beyond funding regimes and emergency strategies, we could begin to think how caring relations seen within tight-knit communities, even highly transient ones like Svalbard, could be expanded. There are exciting visions for the future of Svalbard (and elsewhere) circulating, ones which push past political stalemates and business as usual, that treat ruptures as opportunities to try new models.

Revisiting the ethics of care, Held posits that governments should not only be "the protector of rights or the maximiser of preference satisfaction" (Held 2006, p.119), but foster caring relations for one another and limit markets which undermine that goal. In other words, the state should not only wield economic and legal powers and tools to shape our society, but actively steer society and regulate activities which cause overall harm. If, following the discussions in Chapter 5, we expand Held's notion of 'one another' to non-humans beings and things, as well as future beings and things, what might strategy documents such as the Svalbard White Paper, and the regulations that stem from them, look like? In many ways, developing a strong community and environmentally sensitive regime that recognises value(s) of Svalbard *is* central to current policy. However, this is presented, conceptualised and evaluated using frameworks of value that emphasise political and economic gains to be made from such approaches. In doing so, they underpin the static, 'objective' notions of value, which I have argued, at best distort what and how Svalbard is valued by those visiting and living there, and at worst cause conflict and ill-will towards regulatory intervention, rendering it less effective.

The contributions of the preceding chapters should perhaps also offer a word of caution: that we cannot expect, or even desire policy frameworks to be able to cover all micro-processes and practices of value. However, it would seem that stakeholder consultations could be adapted to take into account a wider range and type of value(s). This would likely lead to a more transparent and amenable process, improving legitimacy and potentially re-drawing the category boundaries used in conservation. Indeed taking polysemous value into account could be incorporated in all four of Harrison's (2015) regime of care conservation processes: in categorisation, curation, conservation and communication. For example, thinking back to the Governor's Office booklet, *Experience Svalbard on Nature's own terms* (Sysselmannen på Svalbard 2010), we might imagine a process prior to republishing this communication where the suggested terms for experiencing Svalbard are openly discussed and negotiated, perhaps with caring relations in mind. These broader conclusions can be applied to ongoing work in science-policy integration and conservation practices.

7.4. Thinking on

The above contributions have the potential to be taken forwards in a number of different directions. There are many more stories to tell of and with Svalbard. In terms of frameworks of value in conservation, this research was decidedly land-based and barely dipped its toes into the marine environment (as Anderson & Peters 2014 show, there is much scope for further analysis of watery worlds). Thinking more broadly, the discourse surrounding its likely less icy future, bears potential for insights into how landscapes in change will or should evolve. These debates about the future also connect with recent calls to consider how we imagine future ecologies and societies developing (see for example Bachika et al.

2011 on values of the future, and; Collard et al. 2015 for a 'Manifesto for Abundant Futures'). The ways we imagine the future matter to how we continue to re-construct our value frameworks, and although we now perhaps regard anthropocentric futures as a thing of the past, as Haraway's de-centred conception of the Chthulucene¹²⁵ admits, our actions still count:

> The order is reknitted: human beings are with and of the earth, and the biotic and abiotic powers of this earth are the main story. However, the doings of situated, actual human beings matter. It matters with which ways of living and dying we cast our lot rather than others. It matters not just to human beings, but also to those many critters across taxa which and whom we have subjected to exterminations, extinctions, genocides, and the prospects of futurelessness.

> > (Haraway 2016, p.55)

Imagining the future, there is further scope to explore how value and conservation practice might be re-figured. As Lorimer (2015) and Robbins and Moore (2013) push at what this will mean for natural heritage, so too does DeSilvey (2017) from a cultural heritage perspective: she asks, can we find ways to value that do not assume saving? Value that accepts loss?

Value-as-practice has proven to be epistemologically relational (Heley & Jones 2012), capable of being integrated into theoretically and empirically plural analysis. Perhaps not "everything hinges on value" (Doel 2006, p.55) alone, but given its analytical and explanatory power and potential to work alongside other concepts, such as assemblage thinking and the ethics of care, I contend it deserves further attention. Value-as-practice, may still be a little too biocentric, if not anthropocentric, however, 'after ANT', vital materialist assemblage style thinking proved to be an effective corrective for this (see Chapter 4). Likewise, tracing value practices does not inherently lead to advocating for change, yet by uncovering relations and processes it can fuel the fires of care, can – as the suggestions above illustrate – lead us closer to action. There is potential here to grow such an approach to investigating value in action to more fully resemble a

¹²⁵ Haraway introduces this as an alternative to the Anthropocene and Capitalocene.

countertopography (Katz 2001a; 2001b) and start joining the dots between varying scales and places where such an approach can produce helpful critical topographies. Considering the prevalence of evaluative practices and the growing attention value is attracting from policy making arenas, a value-aspractice approach has potential to be applied and adapted for use by those, in geography and beyond, seeking to query what work this concept is being enrolled in.

Appendices

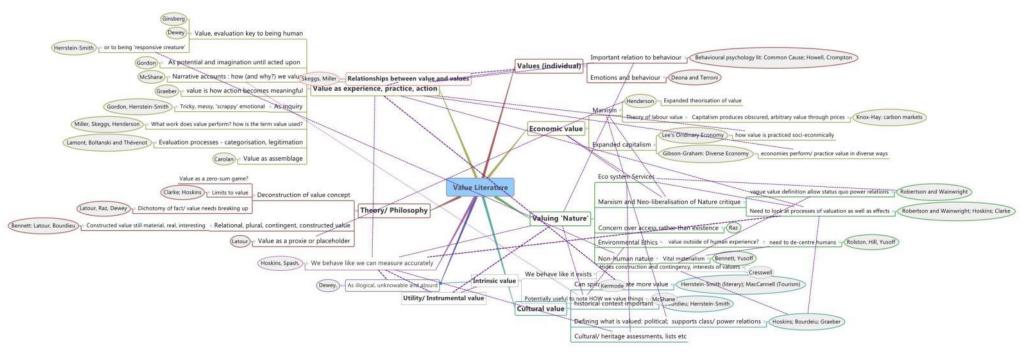
A. Base interview questions

These were used to guide the start of interviews 1-71, after which specific questions related to the individual's experiences were asked.

- 1. How long have you been in Svalbard? Is it home? / How long are you visiting Svalbard for?
- 2. What did you first come to do?
- 3. What attracted you to Svalbard?
- 4. What are the important aspects of living in Svalbard to you? To others?
- 5. What kinds of activities do you get involved with here, what do you do in your spare time? How often?
- 6. Are there any particular challenges or issues to living in/visiting Svalbard for you?
- 7. Are there any local issues you are following or care about? What, why, how?
- 8. Are there any changes you would like to see in the future (policies, behaviours...?)
- 9. Do you think your life in Svalbard matches with your life values generally?
- 10. What does the idea of nature mean to you?

B. Value Mind-mapping

Figure 48: Mind map of value literature, a work in progress.



C. Interview Log

Table 4: Interview log

Summer 2013	Trip		
Date	Identifier	Sector	Location of
			Interview
25/06/2013	А	Journalist	Café
25/06/2013	В	Longyearbyen Lokalstyre	Work Place
28/06/2013	С	Retail	Work Place
06/07/2013	D	Tourism	On Tour
07/07/2013	E	Tourism	Work Place
07/07/2013	F	Historian	In field
Summer 2014	•		1
13/05/2014	1	Tourism	Work Place
14th and	2	Film producer	
21st May	3	Librarian	Work Place
16/05/2014	-	Librarian	Work Place
17/05/2014	4	Film producer, photographer	Bar
20/05/2014	5	Environmental department, Sysselmannen	Work Place
20/05/2014	6	Arts	Work Place
21/05/2014	7	Environmental department, Sysselmannen	Work Place
21/05/2014	8	Research Organisation	Work Place
21/05/2014	9	Biology	Work Place
22/05/2014	10	Mining	Work Place
22/05/2014	11	History	Work Place
27/05/2014	12	Research Institute	Work Place
27/05/2014	13	Longyearbyen Lokalstyre	Work Place
28/05/2014	14	Longyearbyen Lokalstyre	Work Place
28th an 2nd	15	Longyearbyen Lokalstyre	Work Place
30/05/2014	16	Longyearbyen Lokalstyre	Work Place
30/05/2014	17	History	Skype
30/05/2014	18	Mining	Home
31/05/2014	27	Tourism	Work place
02/06/2014	19	Built Environment	Work Place
03/06/2014	20	Physics	Work Place
03/06/2014	21	Research Institute	Work Place
03/06/2014	22	Biology	Work Place
03/06/2014	23	Photographer	Bar
04/06/2014	24	Arts	Home
05/06/2014	25	Administration	Work Place
05/06/2014	26	Tourism	Work Place
10/06/2014	28	Community	Work Place
11/06/2014	29	Tourism	Work Place
11/06/2014	30	Tourism	Work Place

11/06/2014	31	Biology	Café			
12/06/2014	32	Postgraduate student	My Flat			
13/06/2014	33	Postgraduate student UNIS				
15/06/2014	34	Tourism Home				
15/06/2014	35	Tourism Work Place				
17/06/2014	36	Administration Home				
18/06/2014	37	Retail	Public meeting place			
19/06/2014	38	Environmental department, Sysselmannen	Work Place			
20/06/2014	39	Tourism	Bar			
24/06/2014	40	Community	Work Place			
23/06/2014	41	Longyearbyen Lokalstyre	Work Place			
23/06/2014	42	Entrepreneur	Work Place			
25/06/2014	43	Longyearbyen Lokalstyre	Work Place			
26/06/2014	44	Logistics	Work Place			
26/06/2014	45	Writer	Cafe			
26/06/2014	46	Tourism	Bar			
27/06/2014	47	Member of hunting and fishing club	Bar			
27/06/2014	48	Postgraduate student	UNIS			
27/06/2014	49	Tourism	UNIS			
27/06/2014	50	Tourism	UNIS			
27/06/2014	51	Postgraduate student	Home			
28/06/2014	52	Journalist	Cafe			
29/06/2014	53	Tourism	Outside			
30/06/2014	54	Tourism	Work Place			
30/06/2014	55	History	Work Place			
30/06/2014	56	Journalist	Work Place			
30/06/2014	57	Tourism	Work Place			
01/07/2014	58	Tourism	Work Place			
01/07/2014	59	Tourism	Work Place			
02/07/2014	60	Community	Work Place			
04/07/2014	61	Retail	Work Place			
07/07/2014	62	Mining	Work Place			
07/07/2014	63	Writer	Café			
	1					
February 2015	5 Trip					
13/02/2015	64	Mining	Café			
13/02/2015	65	Postgraduate student	Home			
16/02/2015	66	Environmental department, Sysselmannen	Work Place			
17/02/2015	67	Environmental department, Sysselmannen	Work Place			
17/02/201	68	Staff, Sysselmannen	Work Place			
17/02/2015	69	Tourism	Work Place			
19/02/2015	70	Mining	My accommodation			
23/02/2015	71	Tourism	Work Place			
,,,,						

Discussions with previous participants							
Date	Sector	Meeting Place					
16/02/2015	Research Institute	Work Place					
17/02/2015	Curator	Work Place					
17/02/2015	Tourism	Bar					
19/02/2015	Biology	Work Place					

D. Focus Group Guide

Check everyone has had the info and do consent forms, get tea, cake etc. Say something about it being an open discussion, join in and contribute whenever you like, whilst being courteous and respectful of other people's views.

- Intro round names, when you went to Svalbard and what you were doing there
 Why did you go to Svalbard/ how did you end up going to Svalbard?
- Sketching/ doodling 5-10 mins perceptions of Svalbard versus your reality and then discuss

Possibly leading to ...

- Describing favourite, or strongest memory of being here, first impressions
- Do you find you talk about your experiences in Svalbard very often?
 - How would you describe Svalbard to people who haven't been there?
 - How easy is it to describe/ communicate your experiences there?
 - How important is it to you to be able to share these experiences?
- How does going to Svalbard relate to other things you have done? Before and afterwards
- Show and tell session with the brought –in photos/ objects sharing the memories

Prompts/ questions: Why did you choose this x?

What emotions do you associate with this time/ place?

Has anyone else been here/ done that...?

How important are the photos/ objects etc in the process of remembering your experiences of Svalbard?

Do they match up with your memories?

- If people haven't got stuff, did they look at things beforehand how do they take themselves back there?
- Do you remember how you felt when you got back from your trip?
- Did it have any effect on your everyday life? Does it now?

Anyone got any advice for me before I go?

Remember to thank everyone and ask them if they would mind being contacted in the future about the project.

E. Visitor Survey Visiting? How was your Svalbard experience?

Please take 5 minutes to share your thoughts as part of a PhD project researching value in Svalbard.



Fill in online in your own time or ask for a paper copy at reception.

Direct link to the survey: https://www.surveymonkey.com/s/DWST85Y





Samantha Saville is a PhD student from Aberystwyth University, Wales, UK. Her research is about value, decision making and natureculture relationships in Svalbard.

Thank you. Your responses are anonymous and will be stored securely. If you have any questions or would like further information, please contact me by email: sms10@aber.ac.uk or call +447905324026. Project blog: <u>http://samsaville.weebly.com</u>



Samantha Saville is a PhD student from Aberystwyth University, Wales, UK. Her research is about value, decision making and nature-culture relationships in Svalbard, a project that is funded by the Economic and Social Research Council of the UK.

I appreciate your time in filling out this short survey. Your responses are anonymous and will be stored securely. If you have any questions or would like further information, please contact me by email: sms10@aber.ac.uk or call +447905324026. Project blog: <u>http://samsaville.weebly.com</u>

Where are you	How long was your stay in	
from?	Svalbard?	
	Svalbara	
Why did you decide to come to Svalbard?		
		L 2
What was the best, most memorable or va	aluable experience of the trip	, why?
What is your overall impression of Svalbar	rd?	
	/	
How do you imagine Svalbard in the futur	e (20, 50 or 100 years from n	ow)?
To what extent do you consider Longyearl	oyen and Svalbard as eco-frie	ndly,
sustainable destinations?		

F. Coding Framework

Table 5: Coding framework, organised in Alphabetical order

Code label	Theme description	Emic/ Etic		
3 legs	Describing Svalbard's economy/ society as based around 3 pillars/ legs: coal mining, tourism, science			
Access for science	Access to Svalbard in general or wilderness areas for purpose of research			
Accessible	Svalbard described as accessible	Emic		
Activities and trips	Leisure time, going out in 'the nature' – e.g. skiing, snow- scooter, walking, boat trips	Emic		
Anonymity	Explicit discussion on anonymity	Emic		
Architecture and services	Built environment, infrastructure, community facilities and aesthetics	Emic		
Arctic development	Svalbard and wider arctic economic growth possibilities and history	Emic		
Arctic hub and shipping	Discussion of future plans to development Svalbard or Longyearbyen as a logistical hub for increased arctic activities.	Emic		
Art	Role of art, process and subject of art activities	Emic		
Barentsburg	Explicit discussion of the town	Emic		
Being there	Role of personal, embodied experience in understanding Svalbard issues	Etic		
Climate change	All mentions and connections to	Emic		
 climate change action 	Mitigation or adaptation possibilities, ideas, projects	Etic		
 climate change happening 	Evidence of, experiencing and discussing effects of climate change			
-denial or skeptism	Doubt or denial that climate change is happening or in anthropogenic causes	Etic		
Coal mining	All mentions of and connections to coal mining	Emic		
 Environmental impact 	Environmental impacts of coal mining, including remediation	Emic		
-identity	Cultural, social and historical role of coal mining	Emic		
-infrastructure	Mining technologies, future uses, connection to wider services and infrastructures for the towns	Emic		
-profit	Or lack of profit and effects on decisions to mine/ not mine. Ability to turn a profit, coal prices	Emic		
-rate of extraction	Management, strategies, historic and in the future. Production processes.	Emic		
Communication	Communication Technologies and infrastructure (satellite, internet, mobile etc); communication strategies (especially to tourists).			
Cost of living	Financial	Emic		
Cultural and social	Cultural and social services, facilities and funding thereof	Emic		
Cultural heritage	All mentions and connections to	Emic		
– museum,	Cultural heritage as tourism attraction, museum strategies,	Emic		

histories	design and activities.	
– value	Valuation processes	Etic
Decision making processes	Local and national policy processes, democracy, strategic and regulation connected valuation processes.	Etic
East Svalbard		
Management Plan	Specific discussion of this process or consequences.	Emic
	Of tourists (especially on environmental impacts and risks);	
Education	education programmes, links to business, student	Emic
	experiences	
	Worries, concerns, stress, life-changing experiences,	
Emotions	spiritual feelings, place-attachment, managing emotions, moods.	Etic
- I .	Discussions of jobs , turnover of personnel, skills, working	
Employment	life, motivation to come to Svalbard, job role descriptions	Emic
Eporgy	Energy provision, technology and resources – present, past	Emic
Energy	and future.	EIIIIC
Environmental	Efforts to reduce environmental impacts – or lack thereof	Etic
Behaviour		
Environmental	Mentions of specific fund – workings, valuation processes,	Emic
Protection Fund Environmental	projects	
protection legislation	Strategies, policies, reactions and opinions on.	Emic
Environmental		
campaigns and NGOs	Discussions of tactics projects and reputations.	Emic
	Svalbard as place to escape stresses of modern life – access	
Escapism	to big natural space, access to well-paid employment, less	Emic
	stressful society	
Ethics of care	Discussions of care and normative positions related to	Etic
	feminist ethics of care theories	
Northern Imaginary	Polar explorers and adventure, history, proximity to the North pole, stereotypical assumptions. Svalbard as extreme,	Etic
	frontier, exotic	
	Motivations to come to or awareness of Svalbard in the	F
Family connection	family, challenges of connection with family elsewhere.	Emic
Feelings not science	Rationality vs emotional or personal values.	Emic
Freedom	Svalbard and feelings of and challenges to freedom	Emic
Future growth	Of different sectors of the economy, population and infrastructure.	Emic
Geopolitics	Discussion of the Svalbard Treaty, international relations	Emic
Global perspective	Connecting local issues with wider debates and concerns	Emic
· ·	Role of ice and snow, conditions and trends, safety, links to	
Ice and snow	climate change.	Etic
Language	Skills, problems, motivations to come to Svalbard	Emic
Local knowledge	Importance of, safety, range of experiences and places visited.	Emic
Local politics	Local council and Sysselmannen activities, policies.	Emic
Love of field work	Passion for doing field work in Svalbard, in general	Emic

Material agency	Non-human affects and effects on activities. Bennett's 'thing-power'.			
Media	Media coverage of Svalbard, role of media, social media, local journalism			
Motivation and enthusiasm	About and for Svalbard, particular enthusiasm for their work or about a cause or place.	Etic/Emic		
Nature and value	Descriptions and discussions on what nature means, how and what it is valued as.	Etic		
– extreme	Svalbard landscape described as extreme	Emic		
 polar bear 	Stories and discussions about polar bears	Emic		
Norwegian cultural references and stereotypes	Rugged, survival in wilderness: Friluftsliv	Emic/Etic		
Norwegian politics	Policies, influences from mainland Norway in Svalbard, policy processes and connections	Emic		
Oil	Drilling, resources, industry interest, potential impacts, environmental protection connected with oil	Emic		
 funding 	Activities and projects funded by oil companies	Emic		
Opportunities	Svalbard as a place of opportunity – scientific expertise, employment, visiting politicians, physical environment and conditions	Emic/ Etic		
Other mining	Resource extraction: Gold, minerals, uranium, gas, fishing resources – potential for, and history of.	Emic		
Nostalgia	Describing less modern Svalbard in nostalgic terms, nostalgia for Soviet times.	Etic/ Emic		
Personal values, practice of values	Perception of other's values, matching personal values to life in Svalbard, personal value systems	Etic/ Emic		
Planning	Local area planning, development plans and processes.	Emic		
Pyramiden	Explicit discussion of the town	Emic		
Valuation processes	Priorities, role of science and other factors, criteria.	Etic		
Russian cultural references and stereotypes	Soviet and modern Russian ideals.	Emic/ Etic		
Russian relations	Geopolitical and local relationships between Russia and Norway	Emic		
Science funding	Sources and relationships	Etic		
Search and rescue, outdoor safety	Emergency services, precautions, training, equipment.	Emic		
Seasons	Discussion about experiences and influence of seasons	Emic		
 seasonal work 	Working in tourism, hospitality etc	Emic		
Seed vault	Discussion about Svalbard Global Seed Vault	Emic		
Short term society	Quick turn around of residents, short term employment, not full life cycle settlement provision, limitations to friendships	Emic		
Social life and community	Likes, dislikes, changes, value	Emic		
Sovereignty	Motivations for activities, as a value, challenges to	Emic		

Svalbard bug	Affective atmosphere of Svalbard	Emic/ Etic			
Symbolic politics	Political moves and policies discussed as being not effective or positive but motivated by creating a positive image (often outside of Svalbard).	Emic			
Science in conflict	e in conflict Competition for access and resources, conflict between e in conflict environmental department goals and data collection, use of E data, allocation of funding.				
Tourism	All discussion relating and connected to tourism	Emic			
 activities 	Descriptions of current, past and possible future activities and tours for tourists	Emic			
 adventure 	Motivation for visiting – seeking adventure	Emic			
 attractions 	What are attractions, possible future attractions	Emic			
 go somewhere different 	As a pull factor	Emic			
– impact	Of tourist activities	Emic			
 last chance tourism 	Tourists motivated to visit to witness landscape and species before climate changes.	Etic			
 length of stay 	Discussion or survey response on visit length	Etic			
 nature as attraction 	Arctic wilderness, nature, species, landforms, physical processes as motivation to visit	Emic			
 profit and business 	How tourist businesses are run, pricing structures, profit areas, contribution to local economy	Emic			
 regulation 	Regulations on tourist activities – access, number restrictions etc	Emic			
 tourist guide 	Guides's perspectives, discussion of guiding.	Emic			
Town different to outside	Describing two Svalbard's- within Longyearbyen, or Barentsburg and its contrast to 'real' Svalbard outside the settlements.	Emic			
Trust Arktikugol	Russian State mining company operations and involvement	Emic			
Value as field site	Svalbard as interesting and valuable to research	Etic			
Value of data	'alue of data How research findings and data streams are put to use and seen as valuable				
Value of research and education	As economic resource and activity, as tourist attraction, as knowledge production	Etic			
 environmental impact 	Of research activity	Etic			
Waste	Waste disposal, litter and recycling facilities	Emic			

G. Participant Information and consent form

Exploring values in Svalbard

Who am I?

My name is Samantha (Sam for short), I am a PhD student in Human Geography from Aberystwyth University, Wales, UK. I am conducting social research in Svalbard for my PhD May-July this year. More details about me are available on the website and blog listed below.

Purpose of the research

The PhD is entitled 'Polarising nature-culture: An examination of value in Svalbard'. The aim of the project is to explore the value systems which inform everyday life here in Svalbard. I am interested in how decisions are made, what is important to you and Svalbard generally: culturally, economically, environmentally; in how activities and values in Svalbard operate and what effects this has. I will therefore be asking questions about why you are here, what you do and your opinions on policies, the economy, society, culture and the environment in Svalbard.

Your participation

All participation is entirely voluntary, you do not need to answer any questions or discuss subjects which make you feel uncomfortable or are upsetting. Should you wish to withdraw, either during the discussion, or afterwards, please inform me and your data will not be used.

How will the data be recorded and used

The discussions will be recorded using audio equipment. These recordings will be stored securely on a password protected hard drive.

The contents of the recording will be fully anonymous (unless otherwise agreed) and are likely to contribute towards conference presentations, academic journal papers and the final thesis. They might also feature in media communications.

If you have any questions about any aspect of the project, or if you would like to see a copy of transcripts or the final research outputs, please do get in contact with me.

Many thanks for your participation.

Samantha Saville PhD Candidate & Undergraduate tutor Department of Geography and Earth Science Aberystwyth University Llandinam Building, Penglais Campus, SY23 3DB. Office: G1 Wales, UK This research is funded by the Econo Department of Geography and Earth

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This research is funded by the Economic and Social Research Council, UK and the Department of Geography and Earth Science, Aberystwyth University.

Consent form

Title of Project: PhD entitled 'Polarising nature-culture: An examination of value in Svalbard'.

Name of Student: Samantha Saville

Participant Identification Number for this project:

- **1** I confirm that I have read and understand the information sheet for the project in which I have been asked to take part and have had the opportunity to ask questions.
- 2 I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, up until September 2016.
- **3** I understand that my responses will be recorded and that the data file will be stored securely.
- 4 I understand that my responses will be anonymised and that all personal data about me will be kept confidential (unless otherwise agreed).
- 5 I understand that my responses could be published, anonymously, beyond the PhD thesis such as in academic papers, conferences or blog posts.
- 6 I understand anonymised data from the project may be shared with and used by other researchers through a secure, registered data repository.
- 7 I agree to take part in the above research project.

Later in the project, I may wish to contact you again for further

input, are you happy for me to do this?

Name of Participant

Date

Signature

H. Example Risk Assessment

Brief Description of Activity:					Assessor/s	Date
Fieldwork in Svalbard settlements: interviews, discussions, photography and field notes					Samantha Saville (Researcher) Dr Joe Williams (DGES Fieldwork Safety Adviser)	
Hazard	Persons at risk	Risk factor	Risk factor		Control measures required	Residual Risk
List what could cause harm from this activity, use appendix A to assist in identifying hazards	List who might be harmed eg staff, students,	For each hazard, decide level of risk as if you were to do the activity without controls, see appendix B			For each hazard. List the measures you will be taking to minimise the risk identified, e.g. appointing competent persons, training received, planning and try-outs, use of personal	For each hazard now decide the residual risk after the control
	visitors	Severity	Likelihood	Risk	protective equipment	measures are in place
Attack by animal to researcher	Researcher	Very Severe	Possible	High to extreme	Undertake rifle training (ongoing) and carry rifle and flare gun for polar bear protection when outside of settlement protection (in Pyramiden and if going outside of Longyearbyen or Barentsburg safe areas). Time outside of main settlements will be minimised and where possible be accompanied.	Low-medium
					Carry walking pole or stick to deter Arctic tern attacks, aviod nesting areas.	
Drowning risk to researcher when travelling by boat	Researcher	Severe to very severe	Unlikely	High	Only travel on chartered and registered boat transport with appropriate life-saving equipment and adhere to safety protocol onboard	Low
Cold environment	Researcher	Moderate to severe	Very Unlikely	Medium	Wear appropriate, layered cold weather clothing, not being static for prolonged periods of time in unheated spaces or outside.	Low to very Low
Shot by firearm (accidental use)	Researcher, tourists	Severe to very severe	Remote to Very Unlikely	Low to Medium	Ensure familiarity with rifle and flare gun equipment, ensuring safety catch is engaged and maintain field awareness of others with firearms in range.	Low to very Low
Slippery Surface	Researcher	Negligible to moderate	Possible	Low	Avoid icy surfaces where possible, carry ice grip attachments on shoes.	Very low

Contact with cold surfaces	Researcher	Slight to moderate	Unlikely	Low	Main risk is from contact with cold metal rifle, appropriate care and cold weather protection gear should alleviate this risk	Very Low
Hazardous Substances	Researcher	Slight	Remote to unlikely	Very Low	Main risk is in old industrial areas (Pyramiden): research locations of waste dumps and avoid skin contact with soil or water from this area.	Very low
Assault	Researcher	Slight	Very Unlikely	Very low	Carry personal alarm and maintain a buddy system with next of kin.	Very low
Intimidation	Researcher, participants	Negligible to slight	Unlikely	Very low	Operate under ethical research guidelines, making sure participants have adequate information about the research and opportunities to withdraw.	Very low
Signed Muellurs		Date February 1	9 th 2014	<u>.</u>	Date for review of risk assessment	March 2015

Bibliography

- Aasetre, J. & Gundersen, V. (2012) 'Outdoor recreation research: Different approaches, different values?', Norsk Geografisk Tidsskrift - Norwegian Journal of Geography, 66(4), pp.193–203.
- Abulof, U. (2016) 'Public political thought: bridging the sociologicalphilosophical divide in the study of legitimacy', *The British Journal of Sociology*, 67(2), pp.371–391.
- Adams, C.J. (2006) 'The War on Compassion', in J. Donovan & C. J. Adams, eds. *The Feminist Care Tradition in Animal Ethics: A Reader*. New York: Columbia University Press, pp. 21–36.
- Adams, W.M. (2016) 'Geographies of conservation I De-extinction and precision conservation', *Progress in Human Geography*, (Online). Available at: http://phg.sagepub.com/content/early/2015/07/28/0309132515596880 (Accessed: 20 May 2016).
- Adey, P. (2009) 'Facing Airport Security: Affect, Biopolitics, and the Pre-emptive Securitisation of the Mobile Body', *Environment and Planning D: Society and Space*, 27(2), pp.274–295.
- Agamben, G. (2004) *The Open: Man and Animal*, Stanford: Stanford University Press.
- Anderson, B. (2009a) 'Affect', *Dictionary of Human Geography*, 5th Ed, London: Blackwell, pp.8–9.
- Anderson, B. (2009b) 'Affective atmospheres', *Emotion, Space and Society*, 2(2), pp.77–81.
- Anderson, B. et al. (2012) 'On assemblages and geography', *Dialogues in Human Geography*, 2(2), pp.171–189.
- Anderson, B. & Harrison, P. (2006) 'Questioning Affect and Emotion', *Area*, 38(3), pp.333–335.
- Anderson, B. & McFarlane, C. (2011) 'Assemblage and geography', *Area*, 43(2), pp.124–127.
- Anderson, B. & Wylie, J. (2009) 'On Geography and Materiality', *Environment* and Planning A, 41(2), pp.318–335.
- Anderson, D.H. (2009) 'The Status Under International Law of the Maritime Areas Around Svalbard', *Ocean Development & International Law*, 40(4), pp.373–384.

- Anderson, J., Adey, P. & Bevan, P. (2010) 'Positioning place: polylogic approaches to research methodology', *Qualitative Research*, 10(5), pp.589–604.
- Anderson, J. & Peters, K. eds. (2014) *Water Worlds: Human Geographies of the Ocean*, Farnham: Ashgate Publishing Ltd.
- Andreassen, E. & Bjerck, H. (2012) 'Back in Pyramiden, Svalbard', Ruin Memories. Available at: http://ruinmemories.org/2012/08/back-inpyramiden-svalbard/ (Accessed: 10 October 2012).
- Andreassen, E., Bjerck, H.. & Olsen, B. (2010) *Persistent Memories: Pyramiden a Soviet mining town in the High Arctic*, Trondheim: Tapir Academic Press.
- Anon (1920) 'Treaty concerning the Archipelago of Spitsbergen, signed at Paris, February 9, 1920', Available at: http://en.wikisource.org/wiki/Spitsbergen_Treaty. (Accessed: 3 March 2015)
- Apostolopoulou, E. & Adams, W.M. (2015) 'Neoliberal Capitalism and Conservation in the Post-crisis Era: The Dialectics of 'Green' and 'Ungreen' Grabbing in Greece and the UK', *Antipode*, 47(1), pp.15–35.
- Ardoin, N.M. et al. (2015) 'Nature-based tourism's impact on environmental knowledge, attitudes, and behavior: a review and analysis of the literature and potential future research', *Journal of Sustainable Tourism*, 23(6), pp.838–858.
- Arler, F. (2003) 'Ecological Utilization Space: Operationalizing Sustainability', in A. Light & A. de-Shalit, eds. *Moral and Political Reasoning In Environmental Practice*. Cambridge Massachetts: MIT Press, pp. 155–185. Available at: http://vbn.aau.dk/en/publications/ecological-utilizationspace(7ad35320-9c2e-11db-8ed6-000ea68e967b).html (Accessed: 24 November 2014).
- Åtland, K. & Pedersen, T. (2008) 'The Svalbard Archipelago in Russian Security Policy: Overcoming the Legacy of Fear – or Reproducing It?', *European Security*, 17(2–3), pp.227–251.
- Åtland, K. & Pederson, T. (2009) 'Russia's Svalbard Policies: Securitization Still in Fashion?', in 50th Annual Convention of the International Studies Association. New York: All Academic.com. Available at: http://citation.allacademic.com//meta/p_mla_apa_research_citation/3/1/ 3/2/0/pages3I3206/p3I3206-1.php (Accessed: 24 June 2015).
- Augustine, S.M. (2014) 'Living in a Post-Coding World Analysis as Assemblage', *Qualitative Inquiry*, 20(6), pp.747–753.

- Avango, D. et al. (2006) Industrial Heritage in the Arctic: Research and Training in Svalbard 2004, Available at: www.svalbardarchaeology.org/reports/Sval_Report_2004_web.pd (Accessed: 18 September 2016).
- Avango, D. et al. (2011) 'Between markets and geo-politics: natural resource exploitation on Spitsbergen from 1600 to the present day', *Polar Record*, 47(01), pp.29–39.
- Avango, D., Hacquebord, L. & Wråkberg, U. (2014) 'Industrial extraction of Arctic natural resources since the sixteenth century: technoscience and geo-economics in the history of northern whaling and mining', *Journal of Historical Geography*, 44, pp.15–30.
- Avango, D. & Hogselius, P. (2013) 'Under the Ice: Exploring the Arctic's Energy Resources, 1898-1985', in M. Christensen, A. E. Nilsson, & N. Wormbs, eds. *Media and the Politics of Arctic Climate Change: When the Ice Breaks*. Palgrave Macmillan, pp. 128–156.
- Bachika, R., Schulz, M.S. & Schulz, M.S. (2011) 'The values of global futures', *Current Sociology*, 59(2), pp.268–272.
- Baigent, E. (2010) "Deeds not words"? Life writing and early twentieth-century British polar exploration, in S. Naylor & J. R. Ryan, eds. New Spaces of Exploration: Geographies of Discovery in the Twentieth Century. London: I.B. Tauris, pp. 23–51.
- Bakker, K. (2010) 'The Limits of 'neoliberal Natures': Debating Green Neoliberalism', *Progress in Human Geography*, 34(6), pp.715–735.
- Banks, M. (2001) Visual Methods in Social Research, London: Sage Publications.
- Barnes, M. (2012) 'Passionate participation: Emotional experiences and expressions in deliberative forums', in P. Hoggett & S. Thompson, eds. *Politics and the Emotions*. London: Continuum, pp. 23–40.
- Barnett, C. (2014) 'Geography and ethics III From moral geographies to geographies of worth', *Progress in Human Geography*, 38(1), pp.151–160.
- Barry, A. (2002) 'The Anti-Political Economy', *Economy and Society*, 31(2), pp.268–84.
- Bauman, Z. (1991) Modernity and Ambivalence, Cornell University Press.
- Baxter, J. & Eyles, J. (1997) 'Evaluating Qualitative Research in Social Geography: Establishing 'Rigour' in Interview Analysis', *Transactions of the Institute* of British Geographers, 22(4), pp.505–525.
- Bear, C. (2011) 'Being Angelica? Exploring individual animal geographies', Area, 43(3), pp.297–304.

- Bellacasa, M.P. de la (2010) 'Ethical doings in naturecultures', *Ethics, Place & Environment*, 13(2), pp.151–169.
- Bellacasa, M.P. de la (2011) 'Matters of care in technoscience: Assembling neglected things', *Social Studies of Science*, 41(1), pp.85–106.
- Benjaminsen, T.A. et al. (2015) 'Misreading the Arctic landscape: A political ecology of reindeer, carrying capacities, and overstocking in Finnmark, Norway', Norsk Geografisk Tidsskrift - Norwegian Journal of Geography, 69(4), pp.219–229.
- Benjaminsen, T.A. & Svarstad, H. (2008) 'Understanding Traditionalist Opposition to Modernization: Narrative production in a Norwegian mountain conflict', *Geografiska Annaler: Series B, Human Geography*, 90(1), pp.49–62.
- Bennett, J. (2004) 'The Force of Things Steps toward an Ecology of Matter', *Political Theory*, 32(3), pp.347–372.
- Bennett, J. (2010a) 'A Vitalist Stopover on the Way to a New Materialism', in D. Coole & S. Frost, eds. New Materialisms: Ontology, Agency and Politics. Durham: Duke University Press, pp. 46–69.
- Bennett, J. (2010b) *Vibrant Matter: A Political Ecology of Things*, Duke University Press.
- Bennett, T. (2005) 'The historical universal: the role of cultural value in the historical sociology of Pierre Bourdieu', *The British Journal of Sociology*, 56(1), pp.141–164.
- Bille, M., Bjerregaard, P. & Sørensen, T.F. (2015) 'Staging atmospheres: Materiality, culture, and the texture of the in-between', *Emotion, Space and Society*, 15, pp.31–38.
- Billo, E. & Hiemstra, N. (2013) 'Mediating messiness: expanding ideas of flexibility, reflexivity, and embodiment in fieldwork', *Gender, Place & Culture*, 20(3), pp.313–328.
- Birkeland, S. (2012) Rare to be warm in Svalbard: An ecological and genetic snapshot of four red listed plant species. Universitetet i Oslo. Available at: https://www.duo.uio.no/handle/10852/11686 (Accessed: 31 March 2015).
- Bjørke, C., N. (2014) 'Frykter hard fornying [Fearing Hard Renewal]', *Svalbardposten*. Available at: http://svalbardposten.no/index.php?page=vis_nyhet&NyhetID=4660 (Accessed: 4 November 2016).

- Blackmore, E. et al. (2013) Common Cause for Nature: A practical guide to values and frames in conservation, Machynlleth: Public Interest Research Centre. Available at: http://valuesandframes.org/new-report-nature/ (Accessed: 28 August 2013).
- Blix, S.B. & Wettergren, Å. (2015) 'The emotional labour of gaining and maintaining access to the field', *Qualitative Research*, 15(6), pp.688–704.
- Bloom, L. (1993) Gender on Ice: American Ideologies of Polar Expeditions, U of Minnesota Press. Available at: http://books.google.co.uk/books?hl=en&lr=&id=uLZCWOIa52EC&oi=fnd &pg=PR7&dq=gender+on+ice&ots=p2GW2vcwOr&sig=zyBl29ZlL_v_HxY uvSC3Jr6gIeO#v=onepage&q=gender%20on%20ice&f=false (Accessed: 28 November 2012).
- Boltanski, L. & Thévenot, L. (2006) *On Justification: Economies of Worth,* Princeton, N.J: Princeton University Press.
- Bondi, L. (2005) 'Making connections and thinking through emotions: between geography and psychotherapy', *Transactions of the Institute of British Geographers*, 30(4), pp.433–448.
- Bondi, L. (2014) 'Understanding feelings: Engaging with unconscious communication and embodied knowledge', *Emotion, Space and Society*, 10, pp.44–54.
- Bonello, A. & Douglas, M. (2016) *Guilt Trip: A climate change film with a skiing problem*, Saloman TV.
- Bosco, F.. & Herman, T. (2010) 'Focus Groups as Collaborative Research Performances', in *The SAGE handbook of Qualitative Geography*. London: Sage, pp. 193–207.
- Bourdieu, P. (1977) Outline of a Theory of Practice, Cambridge: Cambridge University Press. Available at: https://monoskop.org/images/7/71/Pierre_Bourdieu_Outline_of_a_Theo ry_of_Practice_Cambridge_Studies_in_Social_and_Cultural_Anthropolog y_1977.pdf (Accessed: 18 October 2016).
- Bourdieu, P. (1984) *Distinction: A Social Critique of the Judgment of Taste,* Cambridge Massachetts: Harvard University Press.
- Bourdieu, P. (1986) 'The Forms of Capital', in *Handbook of Theory and Research for the Sociology of Education*. Westport, CT: Greenwood, pp. 241–258.
- Bourdieu, P. (1993) *The Field of Cultural Production*, New York: Columbia University Press.

- Brace, C. & Geoghegan, H. (2010) 'Human Geographies of Climate Change: Landscape, Temporality, and Lay Knowledges', *Progress in Human Geography*, 35(3), pp.284–302.
- Braun, B. (2006) 'Towards a New Earth and a New Humanity: Nature, Ontology, Politics', in N. Castree & D. Gregory, eds. *David Harvey*. Blackwell Publishing Ltd, pp. 191–222. Available at: http://onlinelibrary.wiley.com/doi/10.1002/9780470773581.ch10/summa ry (Accessed: 31 October 2014).

Braun, B. (2013) 'Vital materialism and neoliberal natures', Antipode RGS-IBG 2013 Lecture, Royal Geographical Society with IBG Annual Conference August 2013, London. Available at: http://link.brightcove.com/services/player/bcpid982198451001?bckey=A Q%7E%7E%2CAAAAkPubcZk%7E%2C_5wRjVEP-2SmalwhESEDFKmqjWi9oghp&bctid=2731117702001 (Accessed: 2 December 2013).

- Breidenbach, J. & Nyíri, P. (2007) "Our Common Heritage' New Tourist Nations, Post-'Socialist' Pedagogy, and the Globalization of Nature', *Current Anthropology*, 48(2), pp.322–330.
- Brosch, T. & Sander, D. (2016) 'From Values to Valuation: an interdisciplinary approach to the study of value', in T. Brosch & D. Sander, eds. *The Handbook of Value: Perspectives from economics, neuroscience, philosophy, psychology and sociology*. Oxford: Oxford University Press, pp. 397–404.
- Bruun, J.M. & Medby, I.A. (2014) 'Theorising the Thaw: Geopolitics in a Changing Arctic', *Geography Compass*, 8(12), pp.915–929.
- Bryman, A. (2006) 'Integrating quantitative and qualitative research: how is it done?', *Qualitative Research*, 6(1), pp.97–113.
- Bryman, A. (2012) *Social Research Methods* 4th ed., Oxford: Oxford University Press.
- Buller, H. (2015a) 'Animal geographies II Methods', *Progress in Human Geography*, 39(3), pp.374–384.
- Buller, H. (2015b) 'Animal geographies III Ethics', *Progress in Human Geography*, early release, pp.1–9.
- Buonsanti, F. (2011) 'Promoting Renewable Energy in Longyearbyen: A
 Sustainable Means to Prevent Svalbard's Environmental Degradation',
 Consilience: The Journal of Sustainable Development, 6(1), pp.192–209.
- Burgess, J. & Gold, J. (1982a) 'On the significance of valued environments', in J. Burgess & J. Gold, eds. *Valued Environments*. London: George Allen & Unwin, pp. 1–9.

- Burgess, J. & Gold, J. eds. (1982b) Valued Environments, London: George Allen & Unwin.
- Büscher, B. & Davidov, V. eds. (2013) *The Ecotourism-Extraction Nexus: Political Economies and Rural Realities of (un)Comfortable Bedfellows*, Routledge.
- Callon, M. (1998) 'Introduction: The embeddedness of economic markets in economics', in M. Callon, ed. *The Laws of the Markets*. Oxford: Blackwell Publishers, pp. 1–57.
- Callon, M. & Law, J. (2003) 'On Qualculation, Agency and Otherness'. Centre for Science Studies, Lancaster University. http://www.comp.lancs.ac.uk/sociology/papers/Callon-Law-Qualculation-Agency-Otherness.pdf (Accessed 20 October 2017).
- Cambridge English Dictionary (2016) 'Meaning of 'humble' in the Cambridge English Dictionary', *Cambridge English Dictionary*. Available at: http://dictionary.cambridge.org/dictionary/english/humble (Accessed: 6 October 2016).
- Cameron, C.M. (1994) 'The destruction of the past: Nonrenewable cultural resources', *Nonrenewable Resources*, 3(1), pp.6–24.
- Cameron, E. (2012) 'New geographies of story and storytelling', *Progress in Human Geography*, 36(5), pp.573–592.
- Carey, M. et al. (2016) 'Glaciers, gender, and science: A feminist glaciology framework for global environmental change research', *Progress in Human Geography*, 40(6), pp.770–793.
- Carolan, M.S. (2007) 'Saving seeds, saving culture: A case study of a heritage seed bank', *Society & Natural Resources*, 20(8), pp.739–750.
- Carolan, M. (2013) 'Doing and enacting economies of value: Thinking through the assemblage', *New Zealand Geographer*, 69(3), pp.176–179.
- Carver, L. (Forthcoming) 'Commensuration as value making: transforming Nature in English biodiversity offsetting under the DEFRA metric', in Hoskins, G. and Saville, S, eds. *Locating Value*. London: Routledge.
- Castree, N. et al. (2014) 'Changing the intellectual climate', *Nature Climate Change*, 4(9), pp.763–768.
- Castree, N. (2003) 'Commodifying what nature?', *Progress in Human Geography*, 27(3), pp.273–297.
- Castree, N. (2008a) 'Neoliberalising nature: processes, effects, and evaluations', *Environment and Planning A*, 40(1), pp.153 173.

- Castree, N. (2008b) 'Neoliberalising nature: the logics of deregulation and reregulation', *Environment and Planning A*, 40, pp.131–152.
- Castree, N. (2011) 'Neoliberalism and the Biophysical Environment 3: Putting Theory into Practice', *Geography Compass*, 5(1), pp.35–49.
- Castree, N. & Braun, B. eds. (2001) *Social Nature: theory, practice and politics,* Oxford: Blackwell.
- de Certeau, M. (1984) *The Practice of Everyday Life*, Berkeley, University of California: University of California Press.
- Chang, J. (2001) 'Axiology and Ethics: Past, Present, and Future', in M. Häyry & T. Takala, eds. *The Future of Value Inquiry*. Amsterdam: Rodopi, pp. 67–73.
- Chen, S. & Gunster, S. (2016) "Ethereal Carbon': legitimizing liquefied natural gas in British Columbia', *Environmental Communication-a Journal of Nature and Culture*, 10(3), pp.305–321.
- Christophers, B. (2014) 'From Marx to market and back again: Performing the economy', *Geoforum*, 57, pp.12–20.
- Clals, P. et al. (2013) 'Carbon and Other Biogeochemical Cycles', in T. . Stocker et al., eds. *Climate Change 2013: The Physical Science Basis. Contribution* of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK and New York, USA: Cambridge University Press, pp. 465–570.
- Clark, N. (2010) Inhuman Nature: Sociable Life on a Dynamic Planet, Los Angeles ; London: Sage Publications UK.
- Clarke, D. (2009) 'The Limits to Value', in *The SAGE Handbook of Social Geographies*. Sage, pp. 253–268.
- Clarke, D. (2010) 'Value + Structural law of value', in R. Smith G., ed. *The Baudrillard Dictionary*. Edinburgh: Edinburgh University Press, pp. 234– 236.
- Clarke, D.B., Gibson, K. & Henderson, G. (2013) 'Book review symposium: Value in Marx: The Persistence of Value in a More-Than-Capitalist World', *Progress in Human Geography*, 37(6), pp.842–854.
- Clemens, P. (2011) *Punching Out: One Year in a Closing Auto Plant*, New York: Anchor.
- Cochoy, F. (2008) 'Calculation, qualculation, calqulation: shopping cart arithmetic, equipped cognition and the clustered consumer', *Marketing Theory*, 8(1), pp.15–44.

- Cole, E. (2016) 'Blown out: the science and enthusiasm of egg collecting in the Oologists' Record, 1921-1969', *Journal of Historical Geography*, 51, pp.18– 28.
- Collard, R.-C., Dempsey, J. & Sundberg, J. (2015) 'A Manifesto for Abundant Futures', Annals of the Association of American Geographers, 105(2), pp.322–330.
- Coole, D. & Frost, S. (2010a) 'Introduction', in *New Materialisms: Ontology, Agency and Politics.* Durham: Duke University Press, pp. 1–43.
- Coole, D. & Frost, S. eds. (2010b) *New Materialisms: Ontology, Agency and Politics*, Durham: Duke University Press.
- Corner, A., Markowitz, E. & Pidgeon, N. (2014) 'Public engagement with climate change: the role of human values', *Wiley Interdisciplinary Reviews: Climate Change*, 5 (3), pp. 411–422.
- Costanza, R. et al. (1997) 'The value of the world's ecosystem services and natural capital', *Nature*, 387(6630), pp.253–260.
- Coulson, S.J. et al. (2015) 'Microarthropod communities of industrially disturbed or imported soils in the High Arctic; the abandoned coal mining town of Pyramiden, Svalbard', *Biodiversity and Conservation*, 24(7), pp.1671–1690.
- Council of Europe (2014) 'Faro Convention on the Value of Cultural Heritage for Society (2005)', *Council of Europe*. Available at: http://www.coe.int/t/dg4/cultureheritage/heritage/Identities/default_en .asp (Accessed: 1 July 2015).
- Council of Europe (2015) 'European Convention on the Protection of the Archaeological Heritage (Revised)', *Council of Europe*. Available at: http://conventions.coe.int/Treaty/Commun/ChercheSig.asp?NT=143&C M=1&DF=&CL=ENG (Accessed: 1 July 2015).
- Coyne, J. (2016) 'Postmodern Glacier professor defends his dreadful study as 'misunderstood'. It wasn't.', *Why Evolution is True*. Available at: https://whyevolutionistrue.wordpress.com/2016/03/13/postmodernglacier-professor-defends-his-study-says-it-was-misunderstood-it-wasnt/ (Accessed: 20 May 2016).
- Craggs, R., Geoghegan, H. & Neate, H. (2013) 'Architectural enthusiasm: visiting buildings with The Twentieth Century Society', *Environment and Planning D: Society and Space*, 31(5), pp.879 896.
- Crang, M. (1997) 'Picturing practices: research through the tourist gaze', *Progress in Human Geography*, 21(3), pp.359–373.
- Crang, M. (2003) 'Qualitative methods: touchy, feely, look-see?', *Progress in Human Geography*, 27(4), pp.494–504.

- Crang, M. (2007) 'Flexible and fixed times working in the academy', *Environment and Planning A*, 39(3), pp.509–514.
- Crang, M. (2010a) 'The death of great ships: photography, politics, and waste in the global imaginary', *Environment and Planning A*, 42(5), pp.1084–1102.
- Crang, M. (2010b) 'Visual Methods and Methodologies', in *The SAGE handbook* of Qualitative Geography. London: Sage, pp. 208–224.
- Crang, M. et al. (2013) 'Rethinking governance and value in commodity chains through global recycling networks', *Transactions of the Institute of British Geographers*, 38(1), pp.12–24.
- Crang, M. & Cook, I. (2007) Doing Ethnographies, London: Sage Publications.
- Cresswell, T. (2012) 'Value, gleaning and the archive at Maxwell Street, Chicago', *Transactions of the Institute of British Geographers*, 37(1), pp.164–176.
- Cresswell, T. (forthcoming) 'Regimes of Value in a Chicago Market', in G. Hoskins & S. M. Saville, eds. *Locating Value:*. Routledge.
- Crompton, T. (2010) Common Cause: The Case for Working with our Cultural Values, WWF, COIN, CPRE, FoE, Oxfam. Available at: http://assets.wwf.org.uk/downloads/common_cause_report.pdf (Accessed: 11 October 2010).
- Cronon, W. (1995) 'The trouble with wilderness, or getting back to the wrong nature', in Uncommon Ground: Toward reinventing nature. New York: W.W. Norton & Co, pp. 69–90. Available at: http://www.williamcronon.net/writing/Trouble_with_Wilderness_Main. html (Accessed 31 October 2012).
- Curry, M.R., Lee, R. & Buttimer, A. (1996) 'Buttimer, A. 1974: Values in geography. Commission on College Geography Resource Paper 24. Washington, DC: Association of American Geographers', *Progress in Human Geography*, 20(4), pp.513–519.
- Curtin, D. (2007) 'Towards an Ecological Ethic of Care', in J. Donovan & C. J. Adams, eds. *The Femininst Care Tradition in Animal Ethics: A Reader*. New York: Columbia University Press, pp. 87–104.
- Dalby, S. (2003) 'Geopolitical Identities: Arctic Ecology and Global Consumption', *Geopolitics*, 8(1), pp.181–202.
- Dalby, S. (2013) 'The geopolitics of climate change', *Political Geography*, 37, pp.38–47.
- Daniels, S. & Lorimer, H. (2012) 'Until the end of days: narrating landscape and environment', *Cultural Geographies*, pp.3–9.

- Davidov, V. (2013) 'Ecological Tourism and Elite Minerals in Karelia: The Veps' experience with extraction, commodification and circulation of natural resources', in B. Büscher & V. Davidov, eds. *The Ecotourism-Extraction Nexus*. Routledge, pp. 129–148.
- Davidson, D.J., Smith, M.M. & Bondi, P.L. eds. (2007) *Emotional Geographies* New edition., Ashgate Publishing Limited.
- Davies, G. (2012) 'Caring for the Multiple and the Multitude: Assembling Animal Welfare and Enabling Ethical Critique', *Environment and Planning D: Society and Space*, 30(4), pp.623–638.
- Davies, G. & Dwyer, C. (2007) 'Qualitative methods: are you enchanted or are you alienated?', *Progress in Human Geography*, 31(2), pp.257–266.
- Davis, J.S. (2007) 'Scales of Eden: conservation and pristine devastation on Bikini Atoll', *Environment and Planning D: Society and Space*, 25(2), pp.213 – 235.
- Death, C. (2014) 'Critical, environmental, political: an introduction', in C. Death, ed. *Critical Environmental Politics*. London: Routledge, pp. 1–12.
- Degnen, C. (2013) "Knowing', Absence, and Presence: The Spatial and Temporal Depth of Relations', *Environment and Planning D: Society and Space*, 31(3), pp.554–570.
- Delanda, M. (2006) A New Philosophy of Society: Assemblage Theory And Social Complexity annotated edition., London ; New York: Continuum.
- DeLyser, D. & Greenstein, P. (2015) 'Follow That Car!' Mobilities of Enthusiasm in a Rare Car's Restoration', *The Professional Geographer*, 67(2), pp.255– 268.
- DeLyser, D. & Sui, D. (2014) 'Crossing the qualitative-quantitative chasm III Enduring methods, open geography, participatory research, and the fourth paradigm', *Progress in Human Geography*, 38(2), pp.294–307.
- Demertzis, N. (2013) 'Introduction: Theorizing the Emotions-politics Nexus', in Emotions In Politics: the Affect Dimension in Political Tension. Basingstoke: Palgrave Macmillan, pp. 1–16.
- Deonna, J. & Teroni, F. (2015) 'Value and Emotion', in T. Brosch & D. Sander, eds. *The Handbook of Value*. Oxford: Oxford University Press, pp. 155– 174.
- Depledge, D. & Dodds, K. (2014) "No "Strategy" Please, We're British", *The RUSI Journal*, 159(1), pp.24–31.

- DeSilvey, C. (2005) 'Rot in Peace', *Slate*. Available at: http://www.slate.com/articles/health_and_science/science/2005/12/rot_ in_peace.html (Accessed: 27 September 2016).
- DeSilvey, C. (2006) 'Observed Decay: Telling Stories with Mutable Things', *Journal of Material Culture*, 11(3), pp.318–338.
- DeSilvey, C. (2017) *Curated Decay: Heritage Beyond Saving*. Minneapolis: Minnesota University Press.
- DeSilvey, C. & Edensor, T. (2013) 'Reckoning with ruins', *Progress in Human Geography*, 37(4), pp.465–485.
- Dewey, J. (1939) 'Theory of Valuation', International Encyclopaedia of Unified Science, 2(4).
- Dewsbury, J. (2010) 'Performance, Non-Representational and Affect-based Research: Seven Injunctions', in *The SAGE handbook of Qualitative Geography*. London: Sage, pp. 321–334.
- Dittmer, J. et al. (2011) 'Have you heard the one about the disappearing ice? Recasting Arctic geopolitics', *Political Geography*, 30(4), pp.202–214.
- Dodds, K. (2008) 'Icy Geopolitics', *Environment and Planning D: Society and Space*, 26(1), pp.1–6.
- Doel, M. (2006) 'Dialectical Materialism: Stranger than Friction', in N. Castree & D. Gregory, eds. *David Harvey: A Critical Reader*. Antipode Book Series. Oxford: Blackwell Publishing Ltd, pp. 55–79.
- Donovan, J. (2006) 'Caring to Dialogue: Feminism and the Treatment of Animals', in J. Donovan & C. J. Adams, eds. *The Feminist Care Tradition in Animal Ethics: A Reader*. New York: Columbia University Press, pp. 360– 369.
- Donovan, J. & Adams, C.J. (2007a) *The Feminist Care Tradition in Animal Ethics: A Reader*, New York: Columbia University Press.
- Donovan, J. & Adams, C.J. (2007b) 'Introduction', in J. Donovan & C. J. Adams, eds. *The Feminist Care Tradition in Animal Ethics: A Reader*. New York: Columbia University Press, pp. 1–20.
- Dowling, R., Lloyd, K. & Suchet-Pearson, S. (2015) 'Qualitative methods 1 Enriching the interview', *Progress in Human Geography*, p.0309l325l5596880.
- Driver, F. (2010) 'Modern Explorers', in *New Spaces of Exploration: Geographies* of Discovery in the Twentieth Century. London: I.B. Tauris, pp. 241–249.

- Dudley, N. ed. (2008) Guidelines for Applying Protected Area Management Categories, Gland, Switzerland: IUCN. Available at: http://www.iucn.org/about/work/programmes/gpap_home/gpap_capaci ca2/gpap_pub/gpap_catpub/?13959/Guidelines-for-applying-protectedarea-management-categories (Accessed: 24 June 2015).
- Dushkina, N. (2008) 'Heritage at Risk: The Fate of Modernist Buildings in Russia', *Future Anterior*, 5(1), p.xx-14.
- Duyck, S. (2012) 'Which Canary in the Coalmine? The Arctic in the International Climate Change Regime', *The Yearbook of Polar Law*, 4, pp.583 617.
- Edensor, T. (2005) 'The Ghosts of Industrial Ruins: Ordering and Disordering Memory in Excessive Space', *Environment and Planning D: Society and Space*, 23(6), pp.829–849.
- Edensor, T. (2015) 'Introduction to geographies of darkness', *Cultural Geographies*, 22(4), pp.559–565.
- Egeland, S. (2015) Ocean Hope Små hytter av søppel [small hut of rubbish], Longyearbyen, Svalbard: Sysselmannen på Svalbard [Governor of Svalbard]. Available at: http://www.sysselmannen.no/Documents/Svalbard_Miljovernfond_dok/ Prosjekter/Rapporter/2015/Oceanhope-rapport%20svalbard%202015.pdf (Accessed: 14 November 2015).
- Eliassen, T. (2009) An Arctic Aboriginal or an Adventure Tourist? Studying the Svalbardian in a perspective of Mobility. Masters Thesis. Alta, Norway: University College Finnmark.
- Endres, D. (2012) 'Sacred Land or National Sacrifice Zone: The Role of Values in the Yucca Mountain Participation Process', *Environmental Communication: A Journal of Nature and Culture*, 6(3), pp.328–345.
- Enger, A. (2011) *Gjesteundersøkelse Svalbard Polarnattperioden 2010 [Svalbard Guest Survey Polar Night 2010]*, Longyearbyen, Svalbard: Menon Business Economics.
- Enger, A. & Jervan, M. (2010) Rapport Gjesteundersøkelse Svalbard Sommer 2010 [Report: Svalbard Guest Survey, Summer 2010], Longyearbyen, Svalbard: Svalbard Reiselev.
- Engster, D. (2015) 'Care in the state of nature: The biological and evolutionary roots of the disposition to care in human beings', in *Care Ethics and Political Theory*. Oxford: Oxford University Press, pp. 227–251.
- Engster, D. & Harrington, M. (2015) 'Introduction', in D. Engster & M. Harrington, eds. *Care Ethics and Political Theory*. Oxford: Oxford University Press, pp. 1–16.

- Faulkner, N. (2000) 'Archaeology from below', *Public Archaeology*, 1(1), pp.21–33.
- Fielding, P. (1998) ' 'No Pole nor Pillar': Imagining the Arctic with James Hogg', *Studies in Hogg and his World*, 9, pp.45–63.
- Filep, C.V. et al. (2015) 'Reaching revelatory places: the role of solicited diaries in extending research on emotional geographies into the unfamiliar', *Area*, 47(4), pp.459–465.
- Fiorino, D.J. (1990) 'Citizen Participation and Environmental Risk: A Survey of Institutional Mechanisms', Science, Technology, & Human Values, 15(2), pp.226–243.
- Fisher, B. & Tronto, J. (1990) 'Toward a Feminist Theory of Caring', in E. Abel & M. Nelson, eds. *Circles of Care: work and identity in women's lives*. Albany: State University of New York Press, pp. 40–60.
- Fisher, K. et al. (2015) 'Writing difference differently', *New Zealand Geographer*, 71(1), pp.18–33.
- Fitzgerald, E. (1939) It Ain't What You Do (It's The Way That You Do It), New York: Decca Records. Available at: http://ellafitzgerald.altervista.org/discog_01.htm (Accessed: 16 November 2016).
- Flemsæter, F., Setten, G. & Brown, K.M. (2015) 'Morality, mobility and citizenship: Legitimising mobile subjectivities in a contested outdoors', *Geoforum*, 64(August), pp.342–350.
- Fletcher, R. (2016) 'Connection with nature is an oxymoron: A political ecology of 'nature-deficit disorder', *The Journal of Environmental Education*, 0(0), pp.1–8.
- Fois, F. (2017) 'Understanding ethnography through a lifecourse framework: a research journey into alternative spiritual spaces', Area, 49 (4), pp.421– 428.
- Ford, J.D. et al. (2013) 'The Dynamic Multiscale Nature of Climate Change Vulnerability: An Inuit Harvesting Example', Annals of the Association of American Geographers, 103(5), pp.1193–1211.
- Fredriksen, A. et al. (2014) A conceptual map for the study of value: An initial mapping of concepts for the project 'Human, non-human and environmental value systems: an impossible frontier?', University of Manchester: Leverhulme Centre for the Study of Value. Available at: http://thestudyofvalue.org/publications/#2 (Accessed: 25 October 2015).
- Fun Boy Three & Bananarama (1981) *It Ain't What You Do It's The Way That You Do It,* Chrysalis.

- Gareau, B.J. (2005) 'We Have Never Been Human: Agential Nature, ANT, and Marxist Political Ecology', *Capitalism Nature Socialism*, 16(4), pp.127–140.
- Gauntlett, D. & Holzwarth, P. (2006) 'Creative and visual methods for exploring identities', *Visual Studies*, 21(1), pp.82–91.
- Geoghegan, H. (2013) 'Emotional geographies of enthusiasm: belonging to the Telecommunications Heritage Group', *Area*, 45(1), pp.40–46.
- Geoghegan, H. & Hess, A. (2015) 'Object-love at the Science Museum: cultural geographies of museum storerooms', *Cultural Geographies*, 22(3), pp.445–465.
- Gergen, K.. (1999) An Invitation to Social Construction, London: Sage.
- Gerhardt, H. et al. (2010) 'Contested Sovereignty in a Changing Arctic', Annals of the Association of American Geographers, 100(4), pp.992–1002.
- Gibson, L. (2008) 'In defence of instrumentality', *Cultural Trends*, 17(4), pp.247–257.
- Gibson, L. & Pendlebury, J. (2009a) 'Introduction: Valuing Historic Environments', in L. Gibson & J. Pendlebury, eds. *Valuing Historic Environments*. Farnham: Ashgate, pp. 1–16.
- Gibson, L. & Pendlebury, J. eds. (2009b) *Valuing Historic Environments*, Ashgate.
- Gibson-Graham, J.-K. (2008) 'Diverse economies: Performative practices for 'other worlds'.', *Progress in Human Geography*, 32, pp.613–632.
- Gidwani, V. (2013) 'Six theses on waste, value, and commons', *Social & Cultural Geography*, 14(7), pp.773–783.
- Gillighan, C. (1982) In a different voice: Psychological theory and women's development., Cambridge Massachetts: Harvard University Press.
- Ginsberg, R. (2001) 'Value Inquiry as the Future of Philosophy', in M. Häyry & T. Takala, eds. *The Future of Value Inquiry*. Amsterdam: Rodopi, pp. 1–6.
- Gobster, P.H. (2014) 'Re-wilding Europe's traditional agricultural landscapes: Values and the link between science and practice', *Landscape and Urban Planning*, 126, p.65.
- Goulder, L.. & Kennedy, D. (1997) 'Valuing Ecosystems Services: Philosophical bases and empirical methods', in G. C. Daily, ed. *Nature's Services: Societal Dependence on Natural Ecosystems*. Washington DC: Island Press, pp. 23–48.

- Governor of Svalbard 'Driving a Snowmobile in Svalbard', Available at: http://www.sysselmannen.no/Documents/Sysselmannen_dok/English/Br ochures/Driving%20a%20snowmobile%20in%20Svalbard.pdf (Accessed: 8 January 2015).
- Governor of Svalbard (2010) *Svalbard: Experience Svalbard on Nature's own terms* 5th ed., Longyearbyen: Governor of Svalbard.
- Governor of Svalbard (2013) 'Animal safety is your responsibility', Available at: http://sysselmannen.no/en/ (Accessed: 30 November 2015).
- Governor of Svalbard (2014a) 'Handlingsplan mot skadelige fremmede arter pa Svalbard [Action plan for harmful alien species in Svalbard]', Available at: http://www.sysselmannen.no/Nyheter/Vil-begrense-fremmedeskadelige-arter/ (Accessed: 26 November 2015).
- Governor of Svalbard (2014b) 'Supplementary provisions to the land-use plan for the settlement Pyramiden, Svalbard', Available at: http://www.sysselmannen.no/Documents/Sysselmannen_dok/English/R egulations/Land%20use%20plan%20Pyramiden%20-%20regulations.pdf (Accessed: 10 November 2015).
- Graeber, D. (2001) *Toward an anthropological theory of value: the false coin of our own dreams*, Basingstoke: Palgrave.
- Gregson, N. et al. (2010) 'Following things of rubbish value: End-of-life ships, 'chock-chocky' furniture and the Bangladeshi middle class consumer', *Geoforum*, 41(6), pp.846–854.
- Gregson, N. & Crang, M. (2015) 'From Waste to Resource: The Trade in Wastes and Global Recycling Economies', *Annual Review of Environment and Resources*, 40(1), pp.151–176.
- Grimm, J. & Grimm, W. (1884) *Household Tales* 1884th ed., London: George Bell. Available at: http://www.surlalunefairytales.com/authors/grimms/86foxandgeese.htm l (Accessed: 11 January 2016).
- Grimwood, B.S.R. (2015) 'Advancing tourism's moral morphology: Relational metaphors for just and sustainable arctic tourism', *Tourist Studies*, 15(1), pp.3–26.
- Grydehøj, A. (2010) 'Uninherited heritage: tradition and heritage production in Shetland, Aland and Svalbard', *International Journal of Heritage Studies*, 16(1–2), pp.77–89.
- Grydehøj, A. (2013) 'Informal diplomacy in Norway's Svalbard policy: the intersection of local community development and Arctic international relations', *Global Change, Peace & Security*, 26(1), pp.41–54.

- Grydehøj, A., Grydehøj, A. & Ackren, M. (2012) 'The Globalization of the Arctic: Negotiating Sovereignty and Building Communities in Svalbard, Norway', *Island Studies Journal*, 7(1), pp.99–118.
- Guttormsen, T.S. & Fageraas, K. (2011) 'The social production of 'attractive authenticity' at the World Heritage Site of Roros, Norway', *International Journal of Heritage Studies*, 17(5), pp.442–462.
- Gyimóthy, S. & Mykletun, R.J. (2004) 'Play in adventure tourism: The Case of Arctic Trekking', *Annals of Tourism Research*, 31(4), pp.855–878.
- Hacking, I. (2000) *The Social Construction of What?*, Cambridge, Mass: Harvard University Press.
- Hacquebord, L. & Avango, D. (2009) 'Settlements in an Arctic Resource Frontier Region', *Arctic Anthropology*, 46(1–2), pp.25–39.
- Hagen, D. et al. (2012) 'Managing visitor sites in Svalbard: from a precautionary approach towards knowledge-based management', *Polar Research*, 31(18432). Available at: http://www.polarresearch.net/index.php/polar/article/view/18432 (Accessed: 14 February 2013).
- Hagen, D., Aasetre, J. & Emmelin, L. (2002) 'Communicative Approaches to Restoration Ecology: a case study from Dovre Mountain and Svalbard, Norway', *Landscape Research*, 27(4), pp.359–380.
- Hall, C.M. & Saarinen, J. (2010) *Tourism and change in polar regions: climate, environments and experiences*, Oxon: Routledge.
- Hall, T. (2009) 'The Camera Never Lies? Photographic Research Methods in Human Geography', *Journal of Geography in Higher Education*, 33(3), pp.453–462.
- Hamilton, J.D. & Wills-Toker, C. (2006) 'Reconceptualizing Dialogue in Environmental Public Participation', *Policy Studies Journal*, 34(4), pp.755–775.
- Harari, Y.N. (2014) *Sapiens: A Brief History of Humankind*, London: Harvill Secker.
- Haraway, D. (1985) 'Manifesto for cyborgs: Science, technology, and socialist feminism in the 1980s', *Socialist Review*, 80, pp.65–108.
- Haraway, D.J. (1997) Modest_Witness@Second_Millenium. Female_Man©_Meets_Oncomouse[™]: Feminism and Technoscience, London: Routledge.
- Haraway, D.J. (2007) *When Species Meet*, Minneapolis: University of Minnesota Press.

- Haraway, D.J. (2016) *Staying with the Trouble*, Durham: Duke University Press Books.
- Harrison, P. (2008) 'Corporeal Remains: Vulnerability, Proximity, and Living on after the End of the World', *Environment and Planning A*, 40(2), pp.423–445.
- Harrison, R. (2011) 'Surface assemblages. Towards an archaeology in and of the present', *Archaeological Dialogues*, 18(02), pp.141–161.
- Harrison, R. (2015) 'Beyond 'Natural' and 'Cultural' Heritage: Towards an Ontological Politics of Heritage in the Age of Anthropocene', *Heritage and Society*, 8(1), pp.24–42.

Hartnell, C. (2012) 'Heritage in Our Wake: A review of Heritage Provisions Managing Svalbard's Industrial Past', in L. Hacquebord, ed. *LASHIPA* (*History of Large Scale Resource Exploitation in Polar Areas*). Barkhuis, pp. 105–112. Available at: https://books.google.co.uk/books?id=zvYF5F5fUY0C&dq=land+use+area +plans+in+svalbard&source=gbs_navlinks_s (Accessed: 25 June 2015).

- Harvey, D. (2016) 'David Harvey Marx & Capital Lecture 1: Capital as Value in Motion', Available at: http://davidharvey.org/2016/10/david-harveymarx-capital-lecture-1-capital-value-motion/ (Accessed: 6 October 2016).
- Harvey, D.C. (2015) 'Heritage and scale: settings, boundaries and relations', *International Journal of Heritage Studies*, 21(6), pp.577–593.
- Hassol, S. (2004) *Impacts of a Warming Arctic: Arctic Climate Impact Assessment*, Cambridge: Cambridge University Press. Available at: http://amap.no/acia/ (Accessed: 16 October 2012).
- Hawkins, H. (2015) 'Creative geographic methods: knowing, representing, intervening. On composing place and page', *Cultural Geographies*, 22(2), pp.247–268.
- Head, L. & Gibson, C. (2012) 'Becoming differently modern: Geographic contributions to a generative climate politics', *Progress in Human Geography*, 36(6), pp.699–714.
- Heiene, T.M. (2009) *Bitt av Svalbardbasillen? : konstruksjon av lokalidentitet i Longyearbyen*. Masters Thesis. Oslo: Universitetet i Oslo. Available at: https://www.duo.uio.no/handle/10852/16828 (Accessed: 27 April 2016).
- Held, V. (2006) *The Ethics of Care: Personal, Political, and Global*, Oxford; New York: Oxford University Press.
- Helgesen, L.M., Holmen, K. & Misund, O.A. eds. (2015) *The Ice is Melting: Ethics in the Arctic*, Bergen: Fagbokforlaget.

- Henderson, G. (2013) Value in Marx: The Persistence of Value in a More-Than-Capitalist World, Minneapolis, USA: University of Minnesota Press.
- Hennessy, E. (2015) 'The Molecular Turn in Conservation: Genetics, Pristine Nature, and the Rediscovery of an Extinct Species of Galapagos Giant Tortoise', Annals of the Association of American Geographers, 105(1), pp.87–104.
- Hennion, A. (2015) 'Paying Attention: What Is Tasting Wine About?' In A.Berthoin Antal, M. Hutter & D. Stark, D., *Moments of Valuation: Exploring Sites of Dissonance*. Oxford: Oxford University Press, pp. 36-57.
- Herrstein Smith, B. (1988) Contingencies of Value: Alternative Perspectives for Critical Theory, Cambridge Massachetts: Harvard University Press.
- Hill, T. (2006) 'Finding Value in Nature', *Environmental Values*, 15(3), pp.331–341.
- Hinchliffe, S. (2008) 'Reconstituting nature conservation: Towards a careful political ecology', *Geoforum*, 39(1), pp.88–97.
- Hirose, I. & Olson, J. (2015) 'Introduction to Value Theory', in I. Hirose & J. Olson, eds. *The Oxford Handbook of Value Theory*. Oxford: Oxford University Press, pp. 1–12.
- Hitchings, R. (2012) 'People can talk about their practices', Area, 44(1), pp.61–67.
- Hobden, S. (2014) 'Posthumanism', in C. Death, ed. *Critical Environmental Politics*. London: Routledge, pp. 175–183.
- Hoggett, P. & Thompson, S. (2012) 'Introduction', in P. Hoggett & S. Thompson, eds. *Politics and the emotions the affective turn in contemporary political studies*. London: Continuum, pp. 1–20.
- Holmes, T. et al. (2011) *The Common Cause Handbook*, Machynlleth: Public Interest Research Centre.
- Holtorf, C. & Ortman, O. (2008) 'Endangerment and Conservation Ethos in Natural and Cultural Heritage: The Case of Zoos and Archaeological Sites', *International Journal of Heritage Studies*, 14(1), pp.74–90.
- Holtsmark, S. (1993) A Soviet Grab For the High North? USSR, Svalbard and northern Norway 1920-1953, Oslo: Institutt for Forsvarsstudier.
- Hornborg, A. (2016) 'Post-capitalist ecologies: energy, money and 'value' in the Anthropocene', *ENTITLE blog*. Available at: https://entitleblog.org/2016/04/07/post-capitalist-ecologies-energymoney-and-value-in-the-anthropocene/ (Accessed: 21 October 2016).

- Hoskins, G. (2010) 'A secret reservoir of values: the narrative economy of Angel Island Immigration Station', *Cultural Geographies*, 17(2), pp.259–275.
- Hoskins, G. (2011) 'Bewildered by Absence: Environmental ruin and the sublime at Malakoff Diggins State Historic Park', in *On the Surface: The Heritage* of *Mines and Mining*. Innsbruck, Austria: Leeds Met Press. Available at: https://www.academia.edu/1610039/Bewildered_by_Absence_Environme Envi_ruin_and_the_sublime_at_Malakoff_Diggins_State_Historic_Park (Accessed: 19 March 2012).
- Hoskins, G. (2015) 'Vagaries of value at California State Parks: towards a geographical axiology', *Cultural Geographies*, p.1474474015575474.
- Houltz, A. (2010) 'Captives of Narrative Scandinavian Museum Exhibits and Polar Ambitions', *Culture Unbound: Journal of Current Cultural Research*, 9, pp.719–744.
- Howell, R.A. (2013) 'It's not (just) 'the environment, stupid!' Values, motivations, and routes to engagement of people adopting lower-carbon lifestyles', *Global Environmental Change*, 23(1), pp.281–290.
- Hua, W. et al. (2012) 'A quantitative analysis of Arctic related articles in the humanities and social sciences appearing in the world core journals', *Scientometrics*, 91(3), pp.703–718.
- Hultgreen, T. (2002) 'When Did the Pomors Come to Svalbard?', *Acta Borealia*, 19(2), pp.125–145.
- Hunt, M.A. (2014) 'Urban Photography/Cultural Geography: Spaces, Objects, Events', *Geography Compass*, 8(3), pp.151–168.
- Hurum, J.H. et al. (2006) 'Tracking polar dinosaurs new finds from the Lower Cretaceous of Svalbard', *Norwegian Journal of Geology*, 86(4), pp.397– 402.
- Ingold, T. (2010) 'Footprints through the weather-world: walking, breathing, knowing', *Journal of the Royal Anthropological Institute*, 16, pp.S121–S139.
- 'Intelligent Travel' (2011) 'Top 10 Ghost Towns', *National Geographic, Travel.* Available at: http://intelligenttravel.nationalgeographic.com/2011/10/27/top-10-ghosttowns/ (Accessed: 11 October 2012).
- Jackson, S. & Palmer, L.R. (2015) 'Reconceptualizing ecosystem services Possibilities for cultivating and valuing the ethics and practices of care', *Progress in Human Geography*, 39(2), pp.122–145.

- Jackson, T. (2005) Motivating Sustainable Consumption a review of evidence on consumer behaviour and behavioural change, Guildford, Surry: Centre for Environmental Strategy. Available at: http://www.compassnetwork.org/images/upload/MotivatingSCfinal.pdf (Accessed: 29 November 2008).
- James, A. (2013) 'Seeking the analytic imagination: reflections on the process of interpreting qualitative data', *Qualitative Research*, 13(5), pp.562–577.
- James, W. (1884) 'What is an emotion?', Mind, 9, pp.188-205.
- Jasanoff, S. (2004) 'The idiom of co-production', in S. Jasanoff, ed. *States of Knowledge: The co-production of science and social order*. Iinternational Library of Sociology. London: Routledge, pp. 1–12.
- Johnston, M. e. et al. (2014) 'Exploring post-course outcomes of an undergraduate tourism field trip to the Antarctic Peninsula', *Polar Record*, 50(02), pp.147–155.
- Johnston, M., Viken, A. & Dawson, J. (2012) 'Firsts and lasts in Arctic tourism: last chance tourism and the dialectic of change', in H. Lemelin, J. Dawson, & E. J. Stewart, eds. *Last Chance Tourism*. London: Routledge, pp. 10–24.
- Jones, A. (2014) 'Geographies of production I Relationality revisited and the 'practice shift' in economic geography', *Progress in Human Geography*, 38(4), pp.605–615.
- Jones, D.O. & Garde-Hansen, J. eds. (2012) *Geography and Memory: Explorations in Identity, Place and Becoming*, Palgrave Macmillan.
- Jones, O. (2005) 'An Ecology of Emotion, Memory, Self and Landscape', in *Emotional Geographies*. Oxford: Ashgate, pp. 205–218.
- Jones, R. (2009) 'Categories, borders and boundaries', *Progress in Human Geography*, 33(2), pp.174–189.
- Jones, R., Pykett, J. & Whitehead, M. (2011) 'Governing temptation: Changing behaviour in an age of libertarian paternalism', *Progress in Human Geography*, 35(4), pp.483–501.
- Jöns, H. (2015) 'Talent Mobility and the Shifting Geographies of Latourian Knowledge Hubs', *Population, Space and Place*, 21(4), pp.372–389.
- Kaltenborn, B.P. (1998) 'Effects of sense of place on responses to environmental impacts: A study among residents in Svalbard in the Norwegian high Arctic', *Applied Geography*, 18(2), pp.169–189.

- Kappeler, S. (1995) 'Speciesism, Racism, Nationalism... or the Power of Scientific Subjectivity', in C. J. Adams & J. Donovan, eds. *Animals and Women: Feminist Theoretical Explorations*. Durham, N.C: Duke University Press, pp. 320–352.
- Katz, C. (1998) 'Whose nature, Whose culture? private productions of space and the 'preservation' of nature', in B. Braun & N. Castree, eds. *Remaking Reality: Nature at the End of the Millennium*. London: Routledge, pp. 46–63.
- Katz, C. (2001a) 'On the Grounds of Globalization: A Topography for Feminist Political Engagement', *Signs*, 26(4), pp.1213–1234.
- Katz, C. (2001b) 'Vagabond Capitalism and the Necessity of Social Reproduction'. *Antipode* 33 (4), pp.709–28.
- Katz, C. & Kirby, A. (1991) 'In the Nature of Things: The Environment and Everyday Life', *Transactions of the Institute of British Geographers*, 16(3), pp.259–271.
- Keeling, P.M. (2008) 'Does the Idea of Wilderness Need a Defence?', *Environmental Values*, 17(4), pp.505–519.
- Kellert, S. (1996) *The value of life : biological diversity and human society,* Washington, DC: Island Press/Shearwater Books.
- Kelman, I., Rauken, T. & Hovelsrud, G. (2012) 'Local Business Perceptions of Weather Impacts on Tourism in Svalbard, Norway', Northern Review, 0(35). Available at: http://journals.sfu.ca/nr/index.php/nr/article/view/240 (Accessed: 21 October 2013).
- Kermode, F. (1996) 'Value in literature', in M. Payne, ed. *A Dictionary of Cultural and Critical Theory*. Oxford: Blackwell Publishers, pp. 548–555.
- Kerr, A. & Garforth, L. (2016) 'Affective practices, care and bioscience: a study of two laboratories', *The Sociological Review*, 64(1), pp.3–20.
- Kirchhoff, T. & Vicenzotti, V. (2014) 'A Historical and Systematic Survey of European Perceptions of Wilderness', *Environmental Values*, 23(4), pp.443–464.
- Kitson, J. & McHugh, K. (2015) 'Historic enchantments materializing nostalgia', *Cultural Geographies*, 22(3), pp.487–508.
- Knox-Hayes, J. (2013) 'The spatial and temporal dynamics of value in financialization: Analysis of the infrastructure of carbon markets', *Geoforum*, 50, pp.117–128.

- Kristiansen, J.E. (2014) *This is Svalbard 2014*, Statistics Norway. Available at: http://www.ssb.no/en/befolkning/artikler-ogpublikasjoner/_attachment/213945?_ts=14aca3dea58 (Accessed: 25 March 2015).
- Krupnik, I. & Hovelsrud, G.. (2011) 'Polar Societies and Social Processes', in Understanding Earth's Polar Challenges: International Polar Year 2007-2008. International Council for Science, pp. 311–334. Available at: http://www.icsu.org/publications/reports-and-reviews/ipy-summary/ipyjc-summary-part2.pdf (Accessed: 12 October 2012).
- Krzyszowska, A.J. (1985) 'Tundra degradation in the vicinity of the Polish Polar Station, Hornsund, Svalbard', *Polar Research*, 3(2), pp.247–252.
- Lahusen, T. (2006) 'Decay or Endurance? The Ruins of Socialism', *Slavic Review*, 65(4), pp.736–746.
- Lakoff, G. & Johnson, M. (1999) *Philosophy in the Flesh: the embodied mind and its challenge to western thought*, New York: Basic Books.
- Lamont, M. (2012) 'Toward a Comparative Sociology of Valuation and Evaluation', *Annual Review of Sociology*, 38(1), pp.201–221.
- Lamont, M. & Molnár, V. (2002) 'The Study of Boundaries in the Social Sciences', *Annual Review of Sociology*, 28(1), pp.167–195.
- Latham, A. (2003) 'Research, performance, and doing human geography: some reflections on the diary-photograph, diary-interview method', *Environment and Planning A*, 35(11), pp.1993 2017.
- Latour, B. (1988) 'The Politics of Explanation: An Alternative'. In Woolgar, S. ed., *Knowledge and Reflexivity, New Frontiers in the Sociology of Knowledge*, London: Sage, pp. 155–77.
- Latour, B. (1993) We Have Never Been Modern, MA: Harvard University Press.
- Latour, B. (2004a) 'How to Talk About the Body? The Normative Dimension of Science Studies', *Body & Society*, 10(2–3), pp.205–229.
- Latour, B. (2004b) *Politics of nature : how to bring the sciences into democracy,* London: Harvard University Press.
- Latour, B. (2004c) 'Why has critique run out of steam? From matters of fact to matters of concern', *Critical Inquiry*, 30(2), pp.225–248.
- Latour, B. (2005) *Reassembling the social: An introduction to Actor-Network Theory*, Oxford: Oxford University Press.

- Latour, B. (2013) An Inquiry into Modes of Existence: An Anthropology of the Moderns English-Augmented., Online. Available at: http://modesofexistence.org (Accessed: 13 September 2013).
- Latour, B. & Lepinay, V.A (2009) *The Science of Passionate Interests: An Introduction to Gabriel Tarde's Economic Anthropology*, Chicago: Prickly Paradigm Press.
- Latour, B. & Woolgar, S. (1986) *Laboratory Life: The Construction of Scientific Facts* 2nd ed. edition. J. Salk, ed., Princeton, N.J: Princeton University Press.
- Lave, R. (2012) 'Neoliberalisation and the Production of Environmental Knowledge', *Environment and Society: Advances in Research*, 3, pp.19–38.
- Law, J. (2004) After Method: mess in social science research, London: Routledge.
- Law, J. & Urry, J. (2004) 'Enacting the social', *Economy and Society*, 33(3), pp.390–410.
- Lee, R. (2006) 'The ordinary economy: tangled up in values and geography', *Transactions of the Institute of British Geographers*, 31(4), pp.413–432.
- Lee, R. (2011) 'Spaces of Hegemony? Circuits of Value, Finance Capital and Places of Financial Knowledge', in J. . Agnew & D. Livingstone, eds. *The Sage Handbook of Geographical Knowledge*. London: Sage Publications, pp. 185-201.
- Lefebvre, H. (1991) *Critique of Everyday Life* 2nd ed., London: Verso. Available at: https://chisineu.files.wordpress.com/2012/08/lefebvre-henri-thecritique-of-everyday-life-vol-1.pdf (Accessed: 16 June 2016).
- Lehtinen, A. (2003) 'Samhallsgeografi and the politics of nature', in *Voices from the North: New Trends in Nordic Human Geography*. Aldershot: Ashgate, pp. 233–258.
- Lemelin, H. et al. (2010) 'Last-chance tourism: the boom, doom, and gloom of visiting vanishing destinations', *Current Issues in Tourism*, 13(5), pp.477– 493.
- Leopold, A. (1949) A Sand County Almanac: And Sketches Here and There, Oxford University Press.
- Leyshon, C. (2014) 'Cultural Ecosystem Services and the Challenge for Cultural Geography', *Geography Compass*, 8(10), pp.710–725.

- Lien, I.H. (2011) 'Concept paper Gender and Arctic Discourses', University of Tromsø. Available at: http://uit.no/ansatte/organisasjon/artikkel?p_menu=28714&p_document _id=242164&p_lang=2&p_dimension_id=88183 (Accessed: 28 November 2012).
- Liggett, D. & Hemmings, A.D. eds. (2013) 'Exploring Linkages between Environmental Management and Value Systems: The Case of Antarctica', in *Proceedings of the workshop: Exploring Linkages between Environmental Management and Value Systems: The Case of Antarctica.* Gateway Antarctica Special Publication Series. Exploring Linkages between Environmental Management and Value Systems: The Case of Antarctica, 5th December 2011. University of Canterbury, Christchurch, New Zealand: University of Canterbury. Available at: http://antarcticahasseg.com/projects/values-project/ (Accessed: 28 October 2016).
- Livingstone, D. (2003) *Putting science in its place: Geographies of Scientific Knowledge*, Chigago: University of Chicago Press.
- Loftus, A. (2012) *Everyday Environmentalism: Creating an Urban Political Ecology*, Minneapolis: University of Minnesota Press.
- Lorimer, J. (2008) 'Counting Corncrakes: The Affective Science of the UK Corncrake Census', *Social Studies of Science*, 38(3), pp.377–405.
- Lorimer, J. (2015) *Wildlife in the Anthropocene: Conservation after nature,* Minneapolis: University of Minnesota Press.
- Lorimer, J. & Driessen, C. (2014) 'Wild experiments at the Oostvaardersplassen: rethinking environmentalism in the Anthropocene', *Transactions of the Institute of British Geographers*, 39(2), pp.169–181.
- Lowenthal, D. (2006) 'Natural and Cultural Heritage', in K. Olwig & D. Lowenthal, eds. *The nature of cultural heritage, and the culture of natural heritage—northern perspectives on a contested patrimony*. Abingdon: Routledge, pp. 79–90.
- Lynch, M. (2000) 'Against Reflexivity as an Academic Virtue and Source of Privileged Knowledge', *Theory, Culture & Society*, 17(3), pp.26–54.
- MacCannell, D. (1999) *The Tourist: A New Theory of the Leisure Class* 3rd ed., California: University of California Press.
- MacDonald, F. (2013) 'The ruins of Erskine Beveridge', *Transactions of the Institute of British Geographers*, p.n/a-n/a.
- Marcus, G. (2013) 'The Theory of Affective Intelligence and Liberal Politics', in N. Demertzis, ed. *Emotions in Politics: The Affect Dimension in Political Tension*. Basingstoke: Palgrave Macmillan, pp. 17–38.

- Marx, K. (2010) Karl Marx, Frederick Engels Volume 35, Karl Marx Capital Volume 1., London: Lawrence & Wishart Electric Book.
- Mason, K. (2015) 'Participatory Action Research: Coproduction, Governance and Care', *Geography Compass*, 9(9), pp.497–507.
- Mason, R. (2002) 'Assessing Values in Conservation Planning: Methodological Issues and Choices', in M. de la Torre, ed. Assessing the Values of Cultural Heritage. Los Angeles: The Getty Conservation Institute, pp. 5–30. Available at: http://www.getty.edu/conservation/publications_resources/pdf_publicat ions/values_cultural_heritage.html (Accessed: 24 September 2013).
- Massey, D. (2003) 'Imagining the Field', in *Using Social Theory: Thinking Through Research*. London: Sage, pp. 71–88.
- McEwan, C. & Goodman, M.K. (2010) 'Place Geography and the Ethics of Care: Introductory Remarks on the Geographies of Ethics, Responsibility and Care', *Ethics, Place & Environment*, 13(2), pp.103–112.
- McFarlane, C. & Anderson, B. (2011) 'Thinking with assemblage', Area, 43(2), pp.162–164.
- McGhee, R. (2006) *The Last Imaginary Place: A Human History of the Arctic World*, Oxford: Oxford University Press.
- McKibben, B. (1989) The End of Nature, New York: Random House.
- McShane, K. (2007) 'Why Environmental Ethics Shouldn't Give Up on Intrinsic Value', *Environmental Ethics*, 29(1), pp.43–61.
- McShane, K. (2011) 'Neosentimentalism and Environmental Ethics', *Environmental Ethics*, 33(Spring), pp.5–23.
- McShane, K. (2012) 'Some Challenges for Narrative Accounts of Value', *Ethics & the Environment*, 17(1), pp.45–69.
- Merriman, P. (2014) 'Rethinking Mobile Methods', Mobilities, 9(2), pp.167–187.
- Miller, D. (2008) 'The uses of value', *Geoforum*, 39(3), pp.1122–1132.
- Milligan, C. & Wiles, J. (2010) 'Landscapes of care', *Progress in Human Geography*, 34(6), pp.736–754.
- Ministry of Climate and Environment (2004) *Living with our Cultural Heritage, Report No. 16 to the Storting (2004-2005)*, Norwegian Ministry of Climate and the Environment. Available at: https://www.regjeringen.no/en/dokumenter/report-no.-16-to-thestorting-2004-2005/id406291/ (Accessed: 3 July 2015).

- Ministry of Climate and Environment (2014) 'Regulations relating to large nature conservation areas and bird reserves in Svalbard as established in 1973', *Government.no*. Available at: http://www.regjeringen.no/en/dokumenter/regulation-natureconsrevation-areas-bird-reserves-svalbard/id2355095/ (Accessed: 25 March 2015).
- Ministry of Environment (2001) 'Svalbard Environmental Protection Act', Available at: http://www.regjeringen.no/en/doc/laws/Acts/svalbardenvironmental-protection-act.html?id=173945 (Accessed: 19 December 2013).
- Ministry of Foreign Affairs (2007) 'The Norwegian Government's Strategy for the High North', *032191-220013*. Available at: http://www.regjeringen.no/en/dokumenter/strategy-for-the-highnorth/id448697/ (Accessed: 29 December 2014).
- Ministry of Foreign Affairs (2014) 'Norway's Arctic Policy for 2014 and beyond a Summary', *Government.no*. Available at: http://www.regjeringen.no/en/dokumenter/report_summary/id2076191/ (Accessed: 7 January 2015).
- Mitchell, D. (2003) 'Dead labor and the Political Economy of Landscape: California Living, California Dying', in *Handbook of Cultural Geography*. London: Sage Publications.
- Mol, A. & Law, J. (2005) 'Guest Editorial Boundary variations: an introduction', Environment and Planning D: Society and Space, 23(5), pp.637 – 642.
- Moran, J. (2004) 'History, memory and the everyday', *Rethinking History*, 8(1), pp.51–68.
- Morton, N. (1980) 'The politics of non-renewable resource development in Greenland, North Norway and Svalbard', *Polar Record*, 20(126), pp.215–230.
- Moser, S. (2008) 'Personality: a new positionality?', *Area*, 40(3), pp.383–392.
- Muniesa, F. & Helgesson, C.-F. (2013) 'For What It's Worth: An Introduction to Valuation Studies', *Valuation Studies*, 1(1), pp.1–10.
- Mydland, L. & Grahn, W. (2012) 'Identifying heritage values in local communities', *International Journal of Heritage Studies*, 18(6), pp.564– 587.
- Myers, J.P. & Reichert, J., S. (1997) 'Perspectives on Nature's Services', in *Nature's Services: Societal Dependence on Natural Ecosystems*. Washington DC: Greenwood, pp. xvii-xx.

- Nagar, R. (2014) Muddying the Waters: Coauthoring Feminisms across Scholarship and Activism, Champaign, Illinois: University of Illinois Press. Available at: http://www.press.uillinois.edu/books/catalog/95pys8db9780252038792. html (Accessed: 7 June 2016).
- Nagar, R. (2016) 'A Conversation with Prof Richa Nagar: Politics and Ethics of Academic Research', Global Politics Research Group Seminar, 12th May, Department of International Politics, Aberystwyth University.
- Nairn, K., Munro, J. & Smith, A.B. (2005) 'A counter-narrative of a 'failed' interview', *Qualitative Research*, 5(2), pp.221–244.
- NASA (Undated) 'Snow Pit Procedures', Available at: www.nasa.gov/pdf/186123main_SnowPitProcedures.pdf (Accessed: 18 December 2016).
- Navaro-Yashin, Y. (2009) 'Affective spaces, melancholic objects: ruination and the production of anthropological knowledge', *Journal of the Royal Anthropological Institute*, 15(1), pp.1–18.
- Negro, G., Kocak, O. & Hsu, G. (2010) 'Research on categories in the sociology of organizations', *Research in the Sociology of Organizations*, 31, pp.3–35.
- NIKU (2015) 'Cultural Heritage in Polar Regions (CULPOL)', Norwegian Institute for Cultural Heritage Research. Available at: http://www.niku.no/en/research/research_projects/Cultural+Heritage+i n+Polar+Regions+(CULPOL).9UFRrY4L.ips (Accessed: 24 June 2015).
- Nilsen, T. (2014) 'Russia's Arctic culture heritage sites get protection', *Barents Observer*. Available at: http://barentsobserver.com/en/arctic/2014/10/russias-arctic-culture-heritage-sites-get-protection-28-10 (Accessed: 5 October 2015).
- Nodding, N. (1984) *Caring: A Feminine Approach to Ethics and Moral Education*, Berkeley: University of California Press.
- Norgaard, K.M. (2011) *Living in Denial: Climate Change, Emotions and Everyday Life,* Massachusetts: MIT Press.
- Norum, R. (2016) 'Barentsburg and Beyond: Coal, Science, Tourism, and the Geopolitical Imaginaries of Svalbard's 'New North", in G. Huggan & L. Jensen, eds. Postcolonial Perspectives on the European High North: Unscrambling the Arctic. London: Palgrave Macmillan, pp. 31–65.
- Norwegian Environment Agency (2016) 'The polar regions', *Environment.no*. Available at: http://www.miljostatus.no/goals/6.-the-polar-regions/ (Accessed: 29 March 2016).

- Norwegian Ministry of Justice and the Police (2010) *Report No.22 to the Storting: Svalbard*, Norwegian Ministry of Justice and the Police. Available at: http://www.regjeringen.no/en/dep/jd/documents-andpublications/reports-to-the-storting-white-papers/reports-to-thestorting/2008-2009/Report-No-22-2008-2009-to-the-Storting.html?id=599814 (Accessed: 25 August 2014).
- Norwegian Ministry of Justice and the Police (2016) *Report to the Storting 32* (2015-2016), Norwegian Ministry of Justice and the Police. Oslo. Available at: https://www.regjeringen.no/no/dokumenter/meld.-st.-32-20152016/id2499962/?ch=1&q= (Accessed: 25 September 2016).
- Noy, C. (2011) 'The Aesthetics of Qualitative (Re)search: Performing Ethnography at a Heritage Museum', *Qualitative Inquiry*, 17(10), pp.917– 929.
- NPI (2015a) 'State of the Environment Norway : The polar regions', *State of the Environment*. Available at: http://www.environment.no/Goals-and-indicators/Goals-and-indicators/Polar-regions/ (Accessed: 25 June 2015).
- NPI (2015b) 'Svalbard Ptarmigan bag', MOSJ Environmental Monitoring of Svalbard and Jan Mayen. Available at: http://www.mosj.no/en/influence/hunting-trapping/svalbardptarmigan-bag.html (Accessed: 30 October 2015).
- Nye, J. (2006) 'Think Again: Soft Power', *Foreign Policy*. Available at: https://foreignpolicy.com/2006/02/23/think-again-soft-power/ (Accessed: 19 May 2016).
- Nyseth, T. & Viken, A. (2016) 'Communities of practice in the management of an Arctic environment: monitoring knowledge as complementary to scientific knowledge and the precautionary principle?', *Polar Record*, 52(1), pp.66–75.
- Olson, J. (2015) 'Doubts about Intrinsic Value', in I. Hirose & J. Olson, eds. *The Oxford Handbook of Value Theory*. Oxford: Oxford University Press, pp. 44–59.
- Olssen, M. & Peters, M.A. (2005) 'Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism', *Journal of Education Policy*, 20(3), pp.313–345.
- Ostergren, D.M. (2001) 'A cross-national comparison of protected natural area systems in Russia and the Baltic States: diverging systems ten years after the fall of the Soviet Union', in *Crossing Boundaries in Park Management: Proceedings of the 11th Conference on Research and Resource Management.* The 2001 George Wright Society Conference. Hancock, Michigan: The George Wright Society. Available at: www.georgewright.org/360sterg.pdf (Accessed: 9 December 2014).

- Ostergren, D.M. & Hollenhorst, S.J. (1999) 'Convergence in protected area policy: A comparison of the Russian zapovednik and American wilderness systems', *Society & Natural Resources*, 12(4), pp.293–313.
- Owens, S., Petts, J. & Bulkeley, H. (2006) 'Boundary Work: Knowledge, Policy, and the Urban Environment', *Environment and Planning C: Government and Policy*, 24(5), pp.633–643.
- Oxford English Dictionary (2016) 'Definition of humble in English', Oxford Living Dictionaries: English. Available at: https://en.oxforddictionaries.com/definition/humble (Accessed: 6 October 2016).
- Paglia, E. (2013) 'Geopolitics, science and an idealistic Arctic community: a reflection', *Mistra Arctic Futures in a Global Context*. Available at: http://www.arcticfutures.se/?p=916 (Accessed: 15 October 2013).
- Pain, R., Kesby, M. & Askins, K. (2011) 'Geographies of impact: power, participation and potential', *Area*, 43(2), pp.183–188.
- Painter, J. (2010) 'Rethinking Territory', Antipode, 42(5), pp.1090-1118.
- Palm, E. (2015a) 'Tourism almost as important as coal for Russians', Svalbardposten. Available at: http://svalbardposten.no/index.php?page=vis_nyhet&NyhetID=6593 (Accessed: 17 September 2016).
- Palm, E. (2015b) 'UNIS director stepping down: The university is preparing for a lengthy search', *Svalbardposten*. Available at: http://svalbardposten.no/index.php?page=vis_nyhet&NyhetID=6521 (Accessed: 11 February 2016).
- Pálsson, G. (2013) 'Situating nature: Ruins of modernity as náttúruperlur', *Tourist Studies*, 13(2), pp.172–188.
- Papoulias, C. & Callard, F. (2010) 'Biology's Gift: Interrogating the Turn to Affect', *Body & Society*, 16(1), pp.29–56.
- Parenti, C. (2015) 'The 2013 ANTIPODE AAG Lecture The Environment Making State: Territory, Nature, and Value', *Antipode*, 47(4), pp.829–848.
- Parsons, G. (2015) 'Why Should We Save Nature's Hidden Gems?', *Journal of Applied Philosophy*, 32(1), pp.98–110.
- Parsons, K. (2010) 'Understanding Significance', in Conference Report: Understanding Significance. The IHBC North West Branch Day Conference. Liverpool Medical Institute: The Institute of Historic Building Conservation. Available at: http://www.ihbc.org.uk/branches_files/nwest/docs/Understanding_Signi ficance.pdf (Accessed: 16 April 2015).

- Participatory Geographies Research Group (2012) 'Communifesto for Fuller Geographies: Towards Mutual Security', Available at: https://antipodefoundation.org/2012/10/15/symposium-on-theparticipatory-geographies-research-groups-communifesto-for-fullergeographies-towards-mutual-security/ (Accessed: 19 December 2016).
- Pashkevich, A. & Stjernström, O. (2014) 'Making Russian Arctic accessible for tourists: analysis of the institutional barriers', *Polar Geography*, 37(2), pp.137–156.
- Patel, R. (2011) The Value of Nothing: How to Reshape Society and Redefine Democracy, London: Portobello. Available at: http://rajpatel.org/2009/10/27/the-value-of-nothing/ (Accessed: 12 February 2014).
- Pederson, T. (2008) *Conflict and Order in Svalbard Waters*. PhD. Tromsø: University of Tromsø.
- Pederson, T. (2009) 'Norway's rule on Svalbard: tightening the grip on the Arctic islands', *Polar Record*, 45(233), pp.147–152.
- Pendlebury, J. (2013) 'Conservation values, the authorised heritage discourse and the conservation-planning assemblage', *International Journal of Heritage Studies*, 19(7), pp.709–727.
- Peters, K. (2012) 'Manipulating Material Hydro-Worlds: Rethinking Human and More-Than-Human Relationality through Offshore Radio Piracy', *Environment and Planning A*, 44(5), pp.1241–1254.
- Peters, K. & Turner, J. (2014) 'Fixed-term and temporary: teaching fellows, tactics, and the negoiation of contingent labour in the UK higher education system.', *Environment and Planning A*, 46(10), pp.2317–2331.
- Pettersen, T. (2014) 'Norway stops Chinese tycoon's bid on Svalbard', Barentsobserver. Available at: http://barentsobserver.com/en/arctic/2014/05/norway-stops-chinesetycoons-bid-svalbard-23-05 (Accessed: 25 September 2016).
- Phillips, R. (2010) 'The impact agenda and geographies of curiosity', *Transactions of the Institute of British Geographers*, 35(4), pp.447–452.
- Picard, D. (2015) 'White magic: An anthropological perspective on value in Antarctic tourism', *Tourist Studies*, 15(3), pp.300–315.
- Pile, S. (2010) 'Emotions and affect in recent human geography', *Transactions of the Institute of British Geographers*, 35(1), pp.5–20.
- Pillow, W. (2003) 'Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research', *International Journal of Qualitative Studies in Education*, 16(2), pp.175–196.

- Pink, S. (2007) Doing Visual Ethnography: Images Media and Representation in Research 2nd ed., London: Sage.
- Plets, G. (2015) 'Ethno-nationalism, asymmetric federalism and Soviet perceptions of the past: (World) heritage activism in the Russian Federation', *Journal of Social Archaelogy*, 15(1), pp.67–93.
- Polar Cruises (2016) 'Arctic Photography: Facts and FAQS', *Polar Cruises*. Available at: http://www.polarcruises.com/polar-info/arctic-info/arctic-photography-facts-and-faqs (Accessed: 11 October 2016).
- Polar Regions Department & Simmons, M. (2013) 'Adapting To Change: UK policy towards the Arctic', Available at: https://www.gov.uk/government/publications/adapting-to-change-ukpolicy-towards-the-arctic (Accessed: 29 September 2016).
- Pollini, J. (2013) 'Bruno Latour and the Ontological Dissolution of Nature in the Social Sciences: A Critical Review', *Environmental Values*, 22(1), pp.25– 42.
- Polonsky, R. (2003) 'Letter from Barentsburg', *Times Literary Supplement*, 257(June), p.15.
- Popke, J. (2006) 'Geography and Ethics: Everyday Mediations Through Care and Consumption', *Progress in Human Geography*, 30(4), pp.504–512.
- Powell, R.B. et al. (2012) 'From awe to satisfaction: immediate affective responses to the Antarctic tourism experience', *Polar Record*, 48(02), pp.145–156.
- Powell, R.B., Kellert, S.R. & Ham, S.H. (2008) 'Antarctic tourists: ambassadors or consumers?', *Polar Record*, 44(03), pp.233–241.
- Probst, B. (2015) 'The Eye Regards Itself: Benefits and Challenges of Reflexivity in Qualitative Social Work Research', *Social Work Research*, 39(1), pp.37– 48.
- Pryke, M., Rose, G. & Whatmore, S. (2003) Using Social Theory: Thinking Through Research, London: Sage.
- Pusca, A. (2010) 'Industrial and Human Ruins of Postcommunist Europe', *Space and Culture*, 13(3), pp.239–255.
- Qvenild, M. (2014) 'Wanted and Unwanted Nature: Landscape Development at Fornebu, Norway', *Journal of Environmental Policy & Planning*, 16(2), pp.183–200.
- Qvenild, M., Setten, G. & Skår, M. (2014) 'Politicising plants: dwelling and 'alien invasiveness' in domestic gardens', Norsk Geografisk Tidsskrift -Norwegian Journal of Geography, 68(1), pp.22–33.

- Radovanovic, M. (2011) Science and Society: behind the scenes : Exploring the science-society dynamic in Longyearbyen, Svalbard. MSc. Oslo: Universitetet i Oslo. Available at: https://www.duo.uio.no//handle/123456789/32625 (Accessed: 21 February 2013).
- Raz, J. (2001) 'The Practice of Value', in *Tanner Lectures on Human Values*. Berkeley, University of California. Available at: http://intelligenceispower.com/Important%20Emails%20Sent%20attachments/The%20Practice%20of%20Value.pdf (Accessed: 29 August 2013).
- Reimann, S., Kallenborn, R. & Schmidbauer, N. (2009) 'Severe Aromatic Hydrocarbon Pollution in the Arctic Town of Longyearbyen (Svalbard) Caused by Snowmobile Emissions', *Environmental Science & Technology*, 43(13), pp.4791–4795.
- Reymert, P.K. (1979) 'Cultural Monuments on Svalbard', *Polar Record*, 19(121), pp.337–342.
- Ricoeur, P. (2004) *Memory, History, Forgetting*, London: The University of Chigago Press.
- Rincon, P. (2006) "Monster' fossil find in Arctic', *BBC News*. Available at: http://news.bbc.co.uk/1/hi/sci/tech/5403570.stm (Accessed: 25 June 2015).
- Robbins, P. & Moore, S.A. (2013) 'Ecological anxiety disorder: diagnosing the politics of the Anthropocene', *Cultural Geographies*, 20(1), pp.3–19.
- Roberts, P. (2016) 'Geopolitics and research priorities past and present', Available at: https://www.sei-international.org/events/details/539-arcticfutures--past-and-present (Accessed: 1 June 2016).
- Roberts, P. & Paglia, E. (2016a) 'Science as national belonging: The construction of Svalbard as a Norwegian space', *Social Studies of Science*, Online. Available at: http://journals.sagepub.com/doi/full/10.1177/0306312716639153 (Accessed 19 September 2016).
- Robertson, M.M. & Wainwright, J.D. (2013) 'The Value of Nature to the State', Annals of the Association of American Geographers, 103(4), pp.890–905.
- Robin, L. et al. (2014) 'Three galleries of the Anthropocene', *The Anthropocene Review*, 1(3), pp.207–224.
- Robinson, J.G. (2011) 'Ethical pluralism, pragmatism, and sustainability in conservation practice', *Biological Conservation*, 144(3), pp.958–965.

- Robinson, M.F. (2006) *The Coldest Crucible: Arctic Exploration and American Culture*, Chigago: Chigago University Press.
- Roeser, S. & Pesch, U. (2016) 'An Emotional Deliberation Approach to Risk', Science, Technology & Human Values, 41(2), pp.274–297.
- Rogers, A. et al. (2014) 'Intervention: The Impact Agenda and Human Geography in UK Higher Education', *ACME: An International Journal for Critical Geographies*, 13(1), pp.1–9.
- Rolston, H. (2005) 'F/actual Knowing: Putting Facts and Values in Place', *Ethics* & the Environment, 10(2), pp.137–174.
- Rønnow-Rasmussen, T. (2015) 'Intrinsic and Extrinsic Value', in I. Hirose & Olson, eds. *The Oxford Handbook of Value Theory*. Oxford: Oxford University Press, pp. 29–43.
- Rorty, R. (1982) *Consequences of Pragmatism* 1st ed., University of Minnesota Press. Available at: https://www.marxists.org/reference/subject/philosophy/works/us/rorty. htm (Accessed: 24 November 2014).
- Rose, G. (1997) 'Situating knowledges: positionality, reflexivities and other tactics', *Progress in Human Geography*, 21(3), pp.305–320.
- Rose, G. (2016) Visual Methodologies: An Introduction to Researching with Visual Materials 4th ed., London: Sage Publishing.
- Rose, M. (2016) 'A Place for Other Stories: Authorship and Evidence in Experimental Times', *GeoHumanities*, 2(1), pp.132–148.
- Rosner, V. (2009) 'Gender and Polar Studies: Mapping the Terrain', *Signs*, 34(3), pp.489–494.
- Roura, R. (2009) 'The Polar Cultural Heritage as a Tourism Attraction: A Case Study of the Airship Mooring Mast at Ny-Ålesund, Svalbard', *Téoros*, 28(1), pp.29–38.
- Roura, R. (2011) The Footprint of Polar Tourism: Tourist Behaviour at Cultural Heritage Sites in Antarctica and Svalbard, Barkhuis.
- Routledge, P. & Derickson, K.D. (2015) 'Situated solidarities and the practice of scholar-activism', *Environment and Planning D: Society and Space*, 33(3), pp.391–407.
- Sabbatini, M. (2015a) "It is too late to wave their fists after a fight: Russian official banned by Norway defiant after North Pole visit', *Ice People*. Available at: http://icepeople.net/2015/04/21/it-is-too-late-to-wave-their-fists-after-a-fight-russian-official-banned-by-norway-defiant-after-north-pole-visit/ (Accessed: 25 September 2016).

- Sabbatini, M. (2015b) 'Taking out the trash: Rubbish hut coming down 'soon' despite pleas from former haters of art project', *Ice People*. Available at: http://icepeople.net/2015/07/24/taking-out-the-trash-rubbish-hut-coming-down-soon-despite-pleas-from-former-haters-of-art-project/ (Accessed: 14 November 2015).
- Sabbatini, M. (2015c) 'Trashed! The 'rubbish hut' is no more although its frame and cabin may be recycled', *Ice People*. Available at: http://icepeople.net/2015/10/25/trashed-the-rubbish-hut-is-no-morealthough-its-frame-and-cabin-may-be-recycled/ (Accessed: 14 November 2015).
- Saldana, J. (2009) *The Coding Manual for Qualitative Researchers* 1st edition., Los Angeles, California: Sage Publications Ltd.
- Salo, A.K. (2013) 'Russian students cleaning up Soviet mess in the Arctic', Barents Observer. Available at: http://barentsobserver.com/en/nature/2013/11/russian-studentscleaning-soviet-mess-arctic-28-11 (Accessed: 17 December 2014).
- Sandbrook, C. et al. (2011) 'Value Plurality among Conservation Professionals', *Conservation Biology*, 25(2), pp.285–294.
- Sandbrook, C. & Adams, B. (2015) 'Separate yet connected: the spatial paradox of conservation', *Thinking like a human*. Available at: http://thinkinglikeahuman.com/2015/04/10/separate-yet-connected-thespatial-paradox-of-conservation/ (Accessed: 14 April 2015).
- Sandbrook, C.G., Fisher, J.A. & Vira, B. (2013) 'What do conservationists think about markets?', *Geoforum*, 50, pp.232–240.
- Sander-Staudt, M. 'Care Ethics', *Internet Encyclopedia of Philosophy*. Available at: http://www.iep.utm.edu/care-eth/#SSH1cii (Accessed: 13 October 2015).
- Sandodden, I.S., Yri, H.T. & Solli, H. (2013) *Kulturminneplan for Svalbard 2013 2023 [Plan for the management of cultural heritage in Svalbard from 2013 to 2023.]*, Sysselmannen på Svalbard [Governor of Svalbard].
- Sarkki, S. et al. (2015) 'Adding 'iterativity' to the credibility, relevance, legitimacy: A novel scheme to highlight dynamic aspects of science– policy interfaces', *Environmental Science & Policy*, 54, pp.505–512.
- Satterfield, T. (2002) 'Numbness and Sensitivity in the Elicitation of Environmental Values', in M. de la Torre, ed. Assessing the Values of Cultural Heritage. Los Angeles: The Getty Conservation Institute, pp. 77– 100. Available at: http://www.getty.edu/conservation/publications_resources/pdf_publicat

ions/values_cultural_heritage.html (Accessed: 24 September 2013).

- Saville, S.J. (2008) 'Playing with fear: parkour and the mobility of emotion', *Social & Cultural Geography*, 9(8), pp.891–914.
- Saville, S.J. (2009) *Playing Towards Contact: Doing Parkour, Bike Trials and Capoeira*'. PhD thesis. Aberystwyth: University of Wales, Aberystwyth.
- Sazhenova, A. (2011) 'Russia ready to boost Arctic tourism', *Barentsobserver*. Available at: http://barentsobserver.com/en/arctic/russia-ready-boostarctic-tourism (Accessed: 5 October 2015).
- Schmidtz, D. (2015) 'Value in Nature', in I. Hirose & J. Olson, eds. *The Oxford Handbook of Value Theory*. Oxford: Oxford University Press, pp. 381–398.
- Schönle, A. (2006) 'Ruins and History: Observations on Russian Approaches to Destruction and Decay', *Slavic Review*, 65(4), pp.649–669.
- Schumacher, E.. (1975) Small is Beautiful: Economics as if People Mattered, Harper& Row.
- Schwartz, S.H. (1992) 'Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries', in Mark P. Zanna, ed. Advances in Experimental Social Psychology. Academic Press, pp. 1–65.
- Setten, G. & Brown, K.M. (2009) 'Moral Landscapes', R. Kitchin & N. Thrift, eds. International Encyclopedia of Human Geography, 7, pp.191–195.
- Shalyov, A. (2013) 'Svalbard's experience for Russian Arctic?', Barentsobserver. Available at: http://barentsobserver.com/en/arctic/2013/04/svalbardsexperience-russian-arctic-23-04 (Accessed: 5 October 2015).
- Shoard, M. (1982) 'The lure of the moors', in *Valued Environments*. London: George Allen & Unwin, pp. 55–73.
- Simonsen, K. (2007) 'Practice, Spatiality and Embodied Emotions: An Outline of a Geography of Practice', *Human Affairs*, 17(2), pp.168–181.
- Sinevaara-Niskanen, H. (2015) 'Vocabularies for human development: Arctic politics and the power of knowledge', *Polar Record*, 51(02), pp.191–200.
- Skeggs, B. (2004) 'Exchange, value and affect: Bourdieu and 'the self', *The Sociological Review*, 52, pp.75–95.
- Skeggs, B. (2014) 'Values beyond value? Is anything beyond the logic of capital?', *The British Journal of Sociology*, 65(1), pp.1–20.
- Skeggs, B. (2015) 'Introduction: stratification or exploitation, dispossession and devaluation?', *The Sociological Review*, 63(2), pp.205–222.

- Slocum, R. (2004) 'Polar bears and energy-efficient lightbulbs: strategies to bring climate change home', *Environment and Planning D: Society and Space*, 22, pp.413–438.
- Smith, D. (2000) *Moral Geographies: Ethics in a world of difference*, Edinburgh: Edinburgh University Press.
- Smith, L. (2006) Uses of Heritage New Ed edition., New York: Routledge.
- Smith, L. (2012) 'Discourses of heritage: Implications for archaelogical community practice', *Nuevo Mundo Mundos Nuevos*. Available at: nuevomundo.revues.org/64148 (Accessed: 8 September 2015).
- Smith, N. (2009) 'Nature as Accumulation Strategy', Socialist Register, 43. Available at: http://socialistregister.com/index.php/srv/article/view/5856 (Accessed: 31 October 2014).
- Sörlin, S. (1998) 'Monument and Memory: Landscape Imagery and the Articulation of Territory', *World Views: Environment, Culture, Religion*, 2(3), pp.269–279.
- Spash, C.L. (2008) 'How much is that ecosystem in the window? The one with the bio-diverse trail', *Environmental Values*, 17(2), pp.259–284.
- Speed, J.D.M. et al. (2012) 'Natural and cultural heritage in mountain landscapes: towards an integrated valuation', *International Journal of Biodiversity Science Ecosystem Services & Management*, 8(4, Sp. Iss. SI), pp.313–320.
- Spencer, D.C. & Walby, K. (2013) 'Neo-tribalism, epistemic cultures, and the emotions of scientific knowledge construction', *Emotion, Space and Society*, 7, pp.54–61.
- Springer, S. (2014) 'Why a Radical Geography Must Be Anarchist', *Dialogies in Human Geography*, 4(3), pp.249–270.
- Staalesen, A. (2015) 'Future of Svalbard on government's table', *BarentsObserver*. Available at: http://barentsobserver.com/en/arctic/2015/01/futuresvalbard-governments-table-30-01 (Accessed: 8 July 2016).
- Stange, R. (2014) 'Svalbard environmental protection act updated', *Spitsbergen* | *Svalbard*. Available at: http://www.spitsbergen-svalbard.com/2014/01/28/svalbard-environmental-protection-act-updated.html (Accessed: 25 June 2015).
- Stark, D. (2009) The Sense of Dissonance: Accounts of Worth in Economic Life, Princeton, N.J: Princeton University Press.
- Stark, D. (2017) 'For What it's Worth', Research in the Sociology of Organizations, 52, pp.383-397.

- Starkov, V.F. (2005) 'Methods of Russian Heritage Site Dating on the Spitsbergen Archipelago', *Acta Borealia*, 22(1), pp.63–78.
- Statens Vegvesen [NPRA] (2014) 'Sikrer tjenester på Svalbard', *Norwegian Public Roads Administration*. Available at: http://www.vegvesen.no/Om+Statens+vegvesen/Presse/Nyheter/Nasjona lt/sikrer-tjenester-p%C3%A5-svalbard (Accessed: 21 May 2015).
- Statistics Norway (2016a) 'Industry Statistics for Svalbard, 2015', *ssb.no*. Available at: http://www.ssb.no/en/virksomheter-foretak-ogregnskap/statistikker/sts/aar/2016-07-29 (Accessed: 15 September 2016).
- Statistics Norway (2016b) 'Population of Svalbard, 1 January 2016', ssb.no. Available at: http://www.ssb.no/en/befolkning/statistikker/befsvalbard/halvaar/2016-04-07 (Accessed: 13 September 2016).
- Steinberg, P., Bruskotter, J.T. & Gerhardt, H. (2014) *Contesting the Arctic: rethinking politics in the Circumpolar North*, London: IBTauris.
- Steinberg, P. & Peters, K. (2015) 'Wet Ontologies, Fluid Spaces: Giving Depth to Volume through Oceanic Thinking', *Environment and Planning D: Society* and Space. Available at: http://journals.sagepub.com/doi/abs/10.1068/d14148p?id=d14148p (Accessed: 17 December 2016).
- Steinberg, P.E. (2013) 'Of other seas: metaphors and materialities in maritime regions', *Atlantic Studies*, 10(2), pp.156–169.
- Steinberg, P.E. & Dodds, K. (2013) 'The Arctic Council after Kiruna', *Polar Record*, 51(1), pp.108-111.
- Strangleman, T. (2013) "Smokestack Nostalgia," "Ruin Porn" or Working-Class Obituary: The Role and Meaning of Deindustrial Representation", *International Labor and Working-Class History*, 84(Special Issue-1), pp.23–37.
- Strathern, M. (1992) *Reproducing the Future*, Manchester: Manchester University Press.
- Sullivan, S. (2009) 'Green capitalism, and the cultural poverty of constructing nature as service provider', *Radical Anthropology*, 3, pp.18–27.
- Sullivan, S. (2013) 'Banking Nature? The Spectacular Financialisation of Environmental Conservation', *Antipode*, 45(1), pp.198–217.
- Svoboda, T. (2011) 'Why there is No Evidence for the Intrinsic Value of Non-Humans', *Ethics & the Environment*, 16(2), pp.25–36.

Sysselmannen på Svalbard (2010) *Svalbard: Experience Svalbard on Nature's own terms* 5th ed., Longyearbyen, Svalbard: Sysselmannen på Svalbard.

Sysselmannen på Svalbard (2015) *Management Plan for Nordaust-Svalbard and Søraust-Svalbard Nature Reserves, 2015 - 2023*, Longyearbyen, Svalbard: Sysselmannen på Svalbard [Governor of Svalbard]. Available at: http://sysselmannen.no/Documents/Sysselmannen_dok/Milj%c3%b8ver n/Forvaltningsplaner/Forvaltningsplan%20for%20Nordaust-Svalbard%20og%20S%c3%b8raust-Svalbard%20naturreservater%202015-2023.pdf (Accessed: 30 March 2016).

- Takacs, D. (1996) *The idea of biodiversity: philosophies of paradise*, Baltimore/ London: The John Hopkins University Press.
- Tarde, G. (1902) Psychologie économique, Paris: Félix Alcan.
- Taylor, P. (2005) Beyond conservation : a wildland strategy / Peter Taylor., London: Earthscan.
- Temple, B. & Edwards, R. (2002) 'Interpreters/Translators and Cross-Language Research: Reflexivity and Border Crossings', International Journal of Qualitative Methods, 1(2), pp.1–12.
- Thomson, B. (1978) Lot's Wife and the Venus of Milo: Conflicting Attitudes to the Cultural Heritage in Modern Russia, Cambridge University Press.
- Thrift, N. (2004a) 'Intensities of Feeling: Towards a Spatial Politics of Affect', Geografiska Annaler: Series B, Human Geography, 86(1), pp.57–78.
- Thrift, N. (2004b) 'Summoning Life', in P. Cloke, M. Goodwin, & P. Crang, eds. Envisioning Human Geographies. London: E.Arnold, pp. 81–103. Thrift, N. (2005) 'From born to made: technology, biology and space', Transactions of the Institute of British Geographers, 30(4), pp.463–476.
- Till, K.E. (2012) 'Wounded cities: Memory-work and a place-based ethics of care', *Political Geography*, 31(1), pp.3–14.
- Tilley, L. & Woodthorpe, K. (2011) 'Is it the end for anonymity as we know it? A critical examination of the ethical principle of anonymity in the context of 21st century demands on the qualitative researcher', *Qualitative Research*, 11(2), pp.197–212.
- Timothy, D.J. (2010) 'Contested Place and the Legitimization of Sovereignty through Tourism in Polar Regions', in M. C. Hall & J. Saarinen, eds. *Tourism and Change in Polar Regions: Climate, Environments and Experiences.* Oxon: Routledge, pp. 288–300.

- de la Torre, M. (2002) Assessing the Values of Cultural Heritage: Research Report, Los Angeles: The Getty Conservation Institute. Available at: http://www.getty.edu/conservation/publications_resources/pdf_publicat ions/values_cultural_heritage.html (Accessed: 24 September 2013).
- Treffny, R. & Beilin, R. (2011) 'Gaining Legitimacy and Losing Trust: Stakeholder Participation in Ecological Risk Assessment for Marine Protected Area Management', *Environmental Values*, 20(3), pp.417–438.
- Trumbull, N.S. (2012) 'Urban Pulse—Claiming 'The Right to the City': Architectural Preservation in St. Petersburg as Cultural and Political Catalyst', *Urban Geography*, 33(7), pp.1000–1007.
- Trust Arctikugol (2013) 'Pyramida (Пирамида)', *Trust Arctikugol*. Available at: http://www.arcticugol.ru/index.php/rudniki/piramida (Accessed: 10 December 2013).
- Tsivka, J., Tkachenko, A. & Starkov, V. (2001) *Glacial Eldorado: Spitsbergen*, Moscow: Penta.
- TUBS (2011) Norway on the globe (Svabard special) (Europe centred), Available at: https://commons.wikimedia.org/w/index.php?curid=15156280 (Accessed: 17 December 2016).
- Tunbridge, J.. & Ashworth, G.. (1996) *Dissonant heritage: the management of the past as a resource in conflict*, Chichester: John Wiley and Sons.
- Tveitereid, S. (2014) 'Ingen eier noen vidder [No one owns some plateaus]', *Harvest*. Available at: http://harvest.as/artikkel/ingen-eier-noen-vidder (Accessed: 10 December 2014).
- Umbreit, A. (2013) Svalbard (Sptisbergen) with Franz Josef Land and Jan Mayen: the Bradt Travel Guide 5th ed., Chalford St Peter, UK: Bradt Travel Guides.
- Underdal, A. (2000) 'Science and Politics: The anatomy of an uneasy partnership', in S. Andresen et al., eds. *Science and Politics in International Environmental Regimes*. Manchester: Manchester University Press, pp. 1–21.
- UNESCO (2015) 'Svalbard Archipelago', *UNESCO World Heritage Centre*. Available at: http://whc.unesco.org/en/tentativelists/5161/ (Accessed: 24 June 2015).
- Vainio, A. (2013) 'Beyond research ethics: anonymity as 'ontology', 'analysis' and 'independence'', *Qualitative Research*, 13(6), pp.685–698.
- Vannini, P. (2015) 'Non-representational ethnography: new ways of animating lifeworlds', *Cultural Geographies*, 22(2), pp.317–327.

- Vatin, F. (2013) 'Valuation as Evaluating and Valorizing', *Valuation Studies*, 1(1), pp. 31–50.
- Viken, A. (2006) 'Svalbard, Norway', in G. Baldacchino, ed. Extreme Tourism: Lessons from the World's Cold Water Islands. Oxford: Elsevier, pp. 129– 142.
- Viken, A. (2011) 'Tourism, research, and governance on Svalbard: a symbiotic relationship', *Polar Record*, 47(243), pp.335–347.
- Viken, A. & Jørgensen, F. (1998) 'Tourism on Svalbard', *Polar Record*, 34(189), pp.123–128.
- Vistad, O.I. & Vorkinn, M. (2012) 'The Wilderness Purism Construct Experiences from Norway with a simplified version of the purism scale', *Forest Policy and Economics*, 19, pp.39–47.
- Walter, N. (2014) 'From values to narrative: a new foundation for the conservation of historic buildings', *International Journal of Heritage Studies*, 20(6), pp.634–650.
- Wassmann, P. & Caeyers, R. (2013) *Svalbard Life*, Trondheim: Akademika Publishing.
- Watson, C. (2009) 'The `impossible vanity': uses and abuses of empathy in qualitative inquiry', *Qualitative Research*, 9(1), pp.105–117.
- Ween, G. & Abram, S. (2012) 'The Norwegian Trekking Association: Trekking as Constituting the Nation', *Landscape Research*, 37(2), pp.155–171.
- Weisburger, A. (2011) 'The Shadow of Historic Polar Exploration on Contemporary Arctic Affairs', *The Arctic Institute - Center for Circumpolar Security Studies*. Available at: http://www.thearcticinstitute.org/2011/12/shadow-of-historic-polarexploration-on.html (Accessed: 28 November 2012).
- Wells, L. (2011) Land Matters: Landscape Photography, Culture and Identity, London; New York: I.B. Tauris.
- West, M.H. & Maxted, A.P. (2000) 'An assessment of tundra degradation resulting from the presence of a field camp in Kongsfjorden, Svalbard', *Polar Record*, 36(198), pp.203–210.
- West, P. (2008a) 'Tourism as Science and Science as Tourism: Environment, Society, Self, and Other in Papua New Guinea', *Current Anthropology*, 49(4), pp.597–626.

- West, P. (2008b) 'Tourism as Science and Science as Tourism: Environment, Society, Self, and Other in Papua New Guinea', *Current Anthropology*, 49(4), pp.597–626.
- Whatmore, S. (2002) *Hybrid Geographies: natures, cultures, spaces*, London: Sage.
- Whatmore, S. (2003) 'Generating Materials', in *Using Social Theory: Thinking Through Research*. London: Sage, pp. 89–104.
- Whatmore, S. (2006) 'Materialist returns: practising cultural geography in and for a more-than-human world', *Cultural Geographies*, 13(4), pp.600–609.
- Whatmore, S. (2013) 'Earthly Powers and Affective Environments: An Ontological Politics of Flood Risk', *Theory, Culture & Society*, 30(7–8), pp.33–50.
- Whitehead, A.. (1985) *Science and the Modern World (Lowell Lectures 1925)*, London: Free Association Books.
- Whitehead, M., Jones, R. & Pykett, J. (2011) 'Governing irrationality, or a more than rational government? Reflections on the rescientisation of decision making in British public policy', *Environment and Planning A*, 43(12), pp.2819 – 2837.
- Whitney, K. (2013) 'Tangled up in knots: An emotional ecology of field science', *Emotion, Space and Society*, 6, pp.100–107.
- Whitson, R. (2011) 'Negotiating Place and Value: Geographies of Waste and Scavenging in Buenos Aires', *Antipode*, 43(4), pp.1404–1433.
- Wiederhold, A. (2014) 'Conducting fieldwork at and away from home: shifting researcher positionality with mobile interviewing methods', *Qualitative Research*, 15(5), pp.1–16.
- Wiles, J.L., Rosenberg, M.W. & Kearns, R.A. (2005) 'Narrative analysis as a strategy for understanding interview talk in geographic research', Area, 37(1), pp.89–99.
- Williamson, D.L. et al. (2011) 'Interpreter-facilitated cross-language interviews: a research note', *Qualitative Research*, 11(4), pp.381–394.
- Wogan, P. (2004) 'Deep Hanging Out: Reflections on Fieldwork and Multisited Andean Ethnography', *Identities*, 11(1), pp.129–139.
- Wojciuk, A., Michalek, M. & Stormowska, M. (2015) 'Education as a source and tool of soft power in international relations', *European Political Science*, 14(3), pp.298–317.

- Woodyer, T. & Geoghegan, H. (2013) '(Re)Enchanting Geography? The Nature of Being Critical and the Character of Critique in Human Geography'. *Progress in Human Geography*, 37 (2), pp.195–214.
- Wylie, J. (2007) Landscape, London: Routledge.
- Wynne-Jones, S. (2010) *Negotiating Neoliberalism: Engaging Ecosystem Services*. PhD. Aberystwyth: Aberystwyth University.
- Wynne-Jones, S. (2012) 'Negotiating neoliberalism: Conservationists' role in the development of payments for ecosystem services', *Geoforum*, 43(6), pp.1035–1044.
- Wynne-Jones, S. (2014) "Reading for difference' with payments for ecosystem services in Wales', *Critical Policy Studies*, 8(2), pp.148–164.
- Ylvisåker, L.N. (2014) 'Becomes garbage if nobody will have it', *Svalbardposten*. Available at: http://svalbardposten.no/index.php?page=vis_nyhet&NyhetID=5020 (Accessed: 14 November 2015).
- Young, G. (1978) 'Norway's Strategic Arctic Islands', *National Geographic Magazine*, 154(2), pp.267–283.
- Young, J.C. et al. (2014) 'Improving the science-policy dialogue to meet the challenges of biodiversity conservation: having conversations rather than talking at one-another', *Biodiversity and Conservation*, 23(2), pp.387–404.
- Yusoff, K. (2010) 'Biopolitical Economies and the Political Aesthetics of Climate Change', *Theory, Culture & Society*, 27(2–3), pp.73–99.
- Yusoff, K. (2011) 'The Valuation of Nature: The Natural Choice White Paper', *Radical Philosophy*, 170(Nov/Dec), pp.2–7.
- Yusoff, K. (2013) 'Insensible worlds: postrelational ethics, indeterminacy and the (k)nots of relating', *Environment and Planning D: Society and Space*, 31(2), pp.208 – 226.
- Zhirov, V.. (2013) *The Study of Flora and Vegetation of Pyramiden Settlement and its Vicinity*, Apatity: Russian Academy of Science. Available at: https://www.forskningsradet.no/servlet/Satellite?blobcol=urldata&blobh eader=application%2Fpdf&blobheadernamel=Content-Disposition&blobheadervaluel=+attachment%3B+filename%3D%22Vedl egg3.pdf%22&blobkey=id&blobtable=MungoBlobs&blobwhere=12745052 51516&ssbinary=true. (Accessed: 6 November 2016).