Introduction: The Problems of Polar History

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Almost 100 years ago, the American Geographical Society (AGS) published an edited volume titled *Problems of Polar Research*, which started with the assumption that much remained to be learned about the Arctic and Antarctica. Edited by the geographer W. L. G. Joerg, an employee of the AGS, the volume contained chapters by many of the leading polar authorities of the day, most of whom were active participants in exploration and science. 'Problems' had a double meaning: the authors referred to inadequacies and gaps in the contemporary state of knowledge, but also to the excitement of the potential for advancing understanding in difficult conditions. The volume sought to inspire its readers to think further and address the challenges. We approached this present volume with a similar view. To examine the history of the polar regions within a single volume is to take on a difficult task that not only brings together different histories and geographies, but also different conceptions of history and geography.

It is easy to take the existence of polar history for granted. To borrow the famous quote attributed to George Mallory about climbing Mount Everest, it often seems like we study polar history simply 'because it's there'. To physical geographers, the north and south geographic poles exist as exceptional geographic entities characterized by extreme seasonal variation in daylight hours. Several countries have polar research institutes, there are polar-themed academic journals, and educational programmes exist in polar studies. In popular consciousness,

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- 1 Joerg, Problems of Polar Research.
- 2 The quote appears in New York Times, "Climbing Mount Everest Is Work for Supermen", 151.

the 'polar regions' frequently connote visions of ice, cold, penguins, and polar bears. These visions are created and reinforced by representations of the Arctic and Antarctic in popular media. If there are polar regions, then surely there is polar history, its contents defined by their connection to specific geographic areas?

Problems start to emerge when we begin to ask questions about whether the polar regions should be regarded as quite the self-evident entities they might first appear. What exactly is the Arctic? What is Antarctica? How are these two regions connected? Adding a historical dimension further complicates our understanding. Who has defined the polar regions? Who benefits when we take the existence of polar history for granted? An important 'insider–outsider' theme permeates the history of the polar regions, especially in relation to the ways in which the Indigenous peoples of the Arctic understand their histories. But while being an insider or an outsider is often starkly binary, there are also times when it seems more of a continuum, especially in Antarctica where nobody is a permanent resident. In the spirit of *Problems of Polar Research*, this volume seeks both to challenge and to enthuse. But where *Problems of Polar Research* served to stabilize a field of inquiry with the weight of scientific gravitas, we hope to prompt critical reflection on whether writing polar history reifies as much as it edifies.

Geographical Definitions

Mallory's quip has become legendary because it affirms that geographical exceptionality creates its own reason. But although Everest gained its exceptional height above sea level from the collision of tectonic plates, it was just as much constructed as exceptional by a cultural context in which value was attributed to conquering high peaks.³ Similarly, the polar regions as a concept have been constructed as exceptional in popular and scientific consciousness. In recent times it has become more common to hear mention of the 'third pole', a term that asserts the commonality of polar and alpine extremes, especially the Himalayas.⁴ There is a pleasing veneer of certainty to the most northerly, the most southerly, and the highest point on the Earth's surface. But certain by what measure? A compass will point to magnetic north and not 'true' north – itself a linguistic distinction that betrays a preference for the permanently rooted over the transitory. The problem is only accentuated by

³ Indeed, even within the Himalayas, local residents attached greater reverence to another mountain – Nanda Devi – while K2 in the Karakorams is widely acknowledged as a sterner test of mountaineering skill.

⁴ See, for example, Synnott, Third Pole.

the difficulty of finding appropriate boundaries for each polar region – let alone boundaries that are symmetrical between north and south.

The provocative title of a book by the geographer Mark Monmonier – *How to Lie with Maps* – captures a deeper truth that a map is an active creation rather than a passive transcription. Consider the polar circles, the areas of the Earth in which there is at least one day a year when the Sun does not rise and one day a year when the Sun does not set, thereby defining the Arctic and Antarctic by their intense seasonality. A cartographically based gaze that demarcates each polar region as half of a logical pair derives its power from a global perspective that minimizes local difference to maximize global descriptive power.

The circles certainly have the benefit of being easy to represent - for cartographers, at least. But using this seasonal boundary in the north can lead to the inclusion of regions that may not fit other common definitions of the polar. Aklavik in the Northwest Territories of Canada, well above the Arctic Circle, has a record summer temperature of 33.9 degrees Celsius, higher than the record for St John's, Newfoundland, over 20 degrees of latitude further south. The Arctic isotherm – a line above which average temperatures in July are below 10 degrees Celsius – produces a rather different and less uniform line from the neat polar circle (Figure 1.1). But is the isotherm any more accurate or authoritative? Certainly it is different, but the choice of the round number ten should prompt reflection on how natural it is. Another frequently used definition for the Arctic is based on the northern treeline. Aklavik is nestled within boreal forest, which, like the great taiga forests that cover much of Siberia, are in stark contrast with the treeless landscapes of Tasiilaq, eastern Greenland which lies below the Arctic Circle, despite featuring both a climate and a suite of fauna that most would regard as stereotypically Arctic.

While a boundary based on average temperature could be applied to the Antarctic, the treeline is an almost entirely useless definition in treeless Antarctica. In contrast to the Arctic, Antarctica's continentality has often informed definitions. But this is complicated by the fact that significant portions of the continent are situated to the north of the Antarctic Circle. Thinking of Antarctica as a continent raises questions about the status of the surrounding islands and constitutes a key reason for the Antarctic Treaty zone being defined as the lands below 60 degrees south rather than simply the continent itself. One of the most interesting recent definitions of Antarctica is the ecosystem

⁵ Monmonier, *How to Lie with Maps*. See also the work of J. Brian Harley, especially Harley ed. Laxton, *New Nature of Maps*.

⁶ Temperature records obtained from Almanac Averages and Extremes at https://climate.weather.gc.ca.



Figure 1.1 The circumpolar north including the Arctic treeline and the 10 degrees Celsius isotherm for July.

definition of the Antarctic Convergence used by the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), which encompasses the whole of the Southern Ocean. But there remains a distinction between the continent and the surrounding islands. When Argentina, Britain, and Chile were actively contesting the sovereignty of the Antarctic Peninsula region in the mid-twentieth century, a 'continental' base was often deemed of more political value than an island base; today's tourists demand a continental landing to 'bag' the continent.⁷ By raising questions about where the land ends and the ocean begins, ice shelves, icebergs, and sea ice further complicate a definition of Antarctica based on continentality.⁸

At a time of rapid climate heating in large parts of both the Arctic and Antarctica, definitions of the polar regions based on any kind of physical

- 7 The geopolitics of Antarctic station building is discussed extensively in Howkins, Frozen Empires. For a discussion of the importance of continental landings in Antarctic tourism, see for example Zlotnicki, "For the Purists!".
- 8 On the history of ice as territory to be owned or conquered in Antarctica, see for instance Dodds, *Ice: Nature and Culture*, especially 114–119.

geographical parameters are undermined by shifting boundaries. While the prospect of trees growing in Antarctica is still (probably) a long way off, climate-driven ecosystem change is allowing plants and other forms of vegetation to grow in places they previously did not. There is something quite poignant in the idea of the polar regions themselves 'shrinking' as a result of climate heating: not only is there less ice or more vegetation, but in a sense less Arctic and less Antarctica as well, in the eyes of both scientists and (in the Arctic) Indigenous communities for whom detailed environmental knowledge may not translate reliably into the future.

It is humans that make the polar. The Canadian geographer Louis-Edmond Hamelin (1923–2020) recognized that in order to hold meaning, the Arctic must be viewed as a human creation. His great contribution was the concept of 'nordicity' (Figure 1.2), an index that combined physical and



Figure 1.2 Louis-Edmond Hamelin's gradations of nordicity in Canada. (Adapted from Hamelin, "Espaces touristiques".)

9 McGeoch et al., "Monitoring Biological Invasion".

human geographical indices, 'valeurs polaires (VAPO)' to express the 'state or level of being polar in the northern hemisphere'. ¹⁰ Climate played a central role in this scheme, as did distance. Hamelin's 'extreme north' dipped south into Manitoba and Saskatchewan, while his more hospitable 'middle north' encompassed Dawson City in Yukon. ¹¹ But communications infrastructure was more important than distance as the crow flies. And temperature was only one factor along with others such as population size, population density, and economic development. 'No development, none foreseen' earned 100 VAPO; being an 'interregional centre with multiple services' and 'heavy investment' earned zero. ¹² Hamelin's scheme lacked the simplicity of demarcations derived from a single cartographically derived variable. But nordicity captured something more important. Instead of boundaries between Arctic and non-Arctic, he saw gradations of more or less Arctic.

While integrating a welcome human dimension into the definition of the Arctic, Hamelin's nordicity is a highly Eurocentric concept. The label of 'no development, none foreseen' presumes the centrality of a set of activities associated with lifeways from further south. It takes little account of whether the sea ice in a particular region might be good for sledging, or whether a region might have a reputation for good hunting at a particular time of the year. Precise definitions of 'the Arctic' can actually be dangerous, implying a misleading uniformity that overlooks the specific factors important to particular communities, and flattening the deep pockets of Indigenous knowledge and attachment to place.

Unsurprisingly, no equivalent concept of australicity has emerged for Antarctica. Practically the entire landmass would be assigned a score of 100 on Hamelin's index, the scattered islands of human presence sustained entirely through resupply from the north. Without Indigenous communities or permanent settlements, the island continent of Antarctica appears a stable artefact in terms of human geography. Yet even here there are questions. Many Antarctic stations are located on islands off the continent's coast. Some, such as Marambio, are adjacent. Others, such as Signy and Orcadas, are halfway to South Georgia – which is not part of the Antarctic Treaty area, but which surely has some degree of australicity based on both physical and human geographies. Moreover, the state or level of being polar in the southern hemisphere is hardly uniform even on the continent itself. Transport and communication infrastructures vary greatly from base to base. And having overwintered on the continent remains a badge of honour that veterans point

¹⁰ Hamelin, Canadian Nordicity, xi. 11 Map X.1, above.

¹² Hamelin, Canadian Nordicity, 21.

to proudly as a fundamental distinction between themselves and those who have merely spent a summer on the continent, or not been there at all.¹³

Political gradations are even clearer in the north. The eight full member states of the Arctic Council – Canada, Denmark (Greenland), Finland, Iceland, Norway, Sweden, Russia, and the United States – share a common privilege of sovereignty over territory north of the Arctic Circle. But in other contexts the term 'Arctic Five' is used, based on having coastlines on the Arctic Ocean, thereby excluding Finland and Sweden, and, perhaps more controversially, Iceland. ¹⁴ Squabbles over who deserves observer status on the Council have echoes of Hamelin's arguments. China has declared itself a 'near-Arctic' state based not on cartographic proximity but on the fact that its political and economic interests make it a stakeholder in the region. ¹⁵ Other states with economies substantially involving maritime commerce, such as Singapore and South Korea, have similarly argued that their interests warrant observer status. Today, thirteen non-Arctic states are recognized as observers. One might ask whether we are headed for a future where every state in the world is Arctic to some degree.

Is this situation replicated in the Antarctic? To a point: notably, Brazil has claimed a kind of Antarctic status by dint of its southern coastline having an uninterrupted oceanic connection to Antarctica, following the 'frontage theory' developed by the political geographer Therezinha de Castro. ¹⁶ Membership of the Antarctic Treaty System (ATS) hinges on a state declaring itself willing to abide by the rules of the system. But there is an important element here, namely that the upper tier of ATS decision-making membership (status as a consultative party) depends upon active participation in Antarctic science. To have a voice at the Antarctic table means being active in Antarctica, wherever that state may be located. Being Antarctic is thus a right that is earned rather than inherited – even if the founding twelve consultative parties earned that status (and the right to define the values of the system) through differing degrees of activity. ¹⁷

¹³ Howkins, "Have You Been There?".

¹⁴ The most striking example is perhaps the 2008 Ilulissat Declaration, in which the Arctic Five asserted that existing legal mechanisms (including the UN Convention on the Law of the Sea) were sufficient to administer the Arctic. The full text is available at www .regieringen.no/globalassets/upload/ud/o8o525_arctic_ocean_conference-_outcome .pdf.

¹⁵ See for instance Dams et al., Presence Before Power.

¹⁶ Cardone, Antarctic Politics of Brazil.

¹⁷ See for instance Hemmings, "Considerable Values in Antarctica". On the implications of this for the legitimacy of the Antarctic Treaty see Yermakova, "Governing Antarctica".

The Power of Practice

Following an argument advanced by Michael Bravo in *North Pole: Nature and Culture*, we wish to make a claim that may strike some readers as bold: that elements of tradition, of lived practice, created the polar more powerfully than a line on a map. Polar history, like the concept of the polar regions, emerged from the desire of individual practitioners to stabilize and legitimize traditions, to give them life and meaning. 'The very idea of seeking the North Pole', writes Bravo, 'so beguiled these explorers that they felt compelled to search for a deeper history of the poles in which their own polar endeavours would make sense.' Those who practised and endorsed 'polar exploration', 'polar geography', and 'polar science' created 'polar history' as the label for their achievements.

Conceptions of Arctic and Antarctic research as linked enterprises date back to at least the nineteenth century. The Earth's two magnetic poles functioned as the focal point for the 'Magnetic Crusade' of the 1830s and 1840s, a quest to construct a magnetic map of the Earth as a whole that was widely associated with the British Empire. 19 Several individuals were involved in both the Arctic and Antarctic during this period, most famously James Clark Ross, who participated in expeditions to both magnetic poles. Later in the century, the first International Polar Year of 1882-83 helped further establish the polar regions as a paired legitimate subject of scientific study, even if its activities were focused almost exclusively on the Arctic.²⁰ When exploration of the Antarctic continent began in earnest from the last years of the nineteenth century, both individuals and techniques travelled from north to south - from the Sámi men who accompanied the Southern Cross expedition in 1899-1901 to the many explorers for whom the poles constituted fungible, if not wholly identical fields of operation. The most well-known example is, of course, Roald Amundsen. Having been on the very first party to overwinter beneath the Antarctic Circle in 1898 in the ship Belgica, he subsequently completed the first traverse of the Northwest Passage and set his sights on being the first to the North Pole, only to be forestalled by the rival claims of the US explorers Robert E. Peary and Frederick A. Cook (the latter having also been one of Amundsen's shipmates on the Belgica). Famously, Amundsen announced his intention to proceed

¹⁸ Bravo, North Pole, 7.

¹⁹ Cawood, "Magnetic Crusade"; Enebakk, "Hansteen's Magnetometer".

²⁰ On the first International Polar Year see Barr and Lüdecke, eds., History of International Polar Years.

instead to the South Pole while at sea, setting up a race with the Briton Robert Falcon Scott – himself a protégé of Sir Clements Markham, an old Arctic hand.²¹

In the wake of the explorers and the scientists came institutions and professional structures. After Scott's death en route back from the Pole, the public collection in memory of this tragedy was so successful that it established the Scott Polar Research Institute (SPRI) in 1920. 22 From the start, SPRI had a mandate to cover both the Arctic and the Antarctic, reflecting Britain's self-image as a global empire capable of ordering and categorizing the rest of the world. In the United States, the AGS programme in geography of the polar regions that emerged later in the 1920s aimed to solidify the scientific foundations of a field – polar exploration – that AGS supremo Isaiah Bowman saw as dominated still by sensationalism.²³ The American Antarctic Society was founded in the United States in 1934 in the wake of Richard Byrd's expeditions, changing its name to the American Polar Society (APS) a year later to expand its pool of potential members among US expeditions in both polar regions.²⁴ With increasing numbers working in both polar regions, logistical skills and technical competence proved just as susceptible to being classified as 'polar' as expertise in specific scientific disciplines. Even when it became clear from the late 1930s that much of the world had entered a warmer period, and glacial recession in both the Arctic and the Antarctic became linked in the minds of physical geographers, the key ties between north and south were human as much as intellectual.²⁵

Definitions of the 'polar regions' as a coherent category have almost always been developed by outsiders to these regions. The polar regions are only 'natural' categories within a worldview that privileges commonalities in climate, geomorphology, or the presence of marine mammals over the specific connections to place denoted by an Indigenous homeland. Consequently, polar institutions have always had a geopolitical function, in

²¹ On Amundsen see most notably Bomann-Larsen, Roald Amundsen; Huntford, Scott and Amundsen.

²² On the early history of SPRI see Roberts, European Antarctic, 78-81.

²³ Joerg spearheaded this initiative despite his knowledge of the Arctic and Antarctic coming entirely from the maps and accounts of others. Wright, "Obituary: W. L. G. Joerg", 486.

²⁴ https://americanpolar.org/about/our-history/. Byrd himself premised Operation *High Jump* – a massive 1947–48 US military exercise in Antarctica – as a means of building capacity in cold-weather warfare, despite the potential theatre being Arctic rather than Antarctic.

²⁵ Roberts, European Antarctic, 105-110; Sörlin, "Narratives and Counter-narratives".

the sense of inscribing nationally inflected meanings upon and attachments to particular spaces. The hard power of projecting logistical capacity was one dimension, but so too was the softer-power mission of the APS and SPRI – to validate a connection with distant spaces, a mission that SPRI founder Frank Debenham regarded as essential for establishing polar exploration as a living tradition. ²⁶

A contrast here might be instructive. There is no *Cambridge History of the Tropical Regions*, despite the tropics being similarly capable of demarcation by climatic parameters and cartographic lines. And indeed, the mere thought feels uncomfortable. We suspect that for many readers it conjures up uncomfortable images of European imperialism and geographies defined by deviations from a temperate norm. And anyway, why would proximity to the Equator be the thing that binds together Rwanda, the Galapagos Islands, and East Timor? An answer lies in Denis Cosgrove's argument for the existence of 'ontological tropics', the (European) intellectual frames through which tropical regions were represented and understood, and which held greatest purchase when the tropics were marked by exotic difference.²⁷ Is it not the same for European visions of the polar regions, spaces constructed as distant in space and culture?²⁸ We suggest that there are similar 'ontological poles' marked by exteriority and otherness, constructed by a gaze that must be distant in order to mark differentiation.

Our claim is that polar history aggregates and indeed magnifies inherent problems with Arctic history or Antarctic history by per definition privileging explorers and scientists – the categories of practitioner for whom the polar regions have meaningful commonalities. The need to identify that which both polar regions have in common necessarily marginalizes that which is particular or unique. Such an approach can erase Indigenous cultures and undermine local ways of knowing. It also tends to overlook histories of work, especially domestic labour. Even the history of logistical operations in the polar regions is substantially skewed toward the heroic – expedition ships, feats of engineering, and epic traverses – rather than the infrastructures that annually support sealifts to northern communities or field operations in Antarctica, routine acts of maintenance rather than spectacles of conquest.²⁹ The fact that the 'polar

²⁶ See Frank Debenham, "The Scott Polar Research Institute", undated draft (1922). SPRI uncatalogued letters (1919–1922), MS Folder 3 'Rough Notes for S.P.R.I. by Frank Debenham (1922).'

²⁷ Cosgrove, "Tropic and Tropicality", 198. 28 See also Pálsson, "Arcticality".

²⁹ We draw inspiration here from the manifesto of The Maintainers, who advocate for a greater focus on the often unseen and unappreciated agents who 'keep our world from falling apart.' See https://themaintainers.org/about-us.

regions' label feels less uncomfortable than the 'tropical regions' attests to the ongoing dominance of explorers and their chroniclers in defining the field, and perhaps also to a lack of sustained critical analysis.

In a sense, our discontent echoes trends in the so-called New Western History of the US west (which at the time of writing is no longer quite so new), which has placed greater emphasis on Indigenous communities, racial minorities, gender and sexuality, and environments – and thus revised the older image of the west as a frontier space where agency rested primarily with white men.³⁰ In replacing process with place, the New Western History reveals that the wildness of the west was constitutive rather than incidental, and that the frontier between civilization and wildness was widely mythologized. It is instructive that the 1945 report by Vannevar Bush that led to the creation of the US National Science Foundation (NSF) was titled *Science: The Endless Frontier*.³¹ Such a framing strengthened the categorization of regions such as the Arctic and Antarctica – both of which have seen extensive NSF activity – not as places to be engaged on their own terms, but spaces of difference to be tamed and conquered through the ongoing process of scientific research.

Much like the American west, both the Arctic and the Antarctic were framed by Europeans as spaces of difference and wildness. Explorers created each region through voyages and expeditions that produced maps and narratives alike; polar geography shaded easily into polar history.³² The authority of the explorer to pronounce on the Arctic or the Antarctic relied on an implicit presumption of otherness, the agency of the explorer contrasted with the stasis of the places encountered, provided that the explorer continued to maintain critical distance from their subjects - bringing the sensibilities of home to the field. Even those who sought to deny that the Arctic was quite as alien as usually thought – most notably the Canadian Vilhjalmur Stefansson – persisted in regarding it as a frontier to be conquered from the south. There was no contradiction between the titles of two of Stefansson's most famous books, The Friendly Arctic and The Northward Course of Empire: the former only emphasized the desirability of getting on with the inevitable business of the latter.³³ Stefansson's views never gained widespread support, but the fact they gained any traction at all was due to his personal experience, which he parlayed into a career as a polar authority with the most

³⁰ Limerick, Legacy of Conquest; White, 'It's Your Misfortune'.

³¹ Bush, Science: The Endless Frontier.

³² We thank Alessandro Antonello for this observation.

³³ Stefansson, Friendly Arctic; Stefansson, Northward Course of Empire.

extensive polar library in North America.³⁴ Stefansson's progression is a telling example of a wider trend, namely that the authority of the explorer to tell a story of polar exploration developed into a wider institutional authority about one (or both) polar regions. The authority of practice – of having lived in the north himself – was the bedrock of an enterprise that grew to encompass an enormous library and a staff who augmented his claim to polar expertise.³⁵

For states with traditions of polar exploration and polar science there was (and is) a clear incentive to perpetuate the polar regions as a category. This is especially the case for states with strong interests in both the Arctic and Antarctica, such as the United States, Russia, Britain, and Norway. The geopolitical value of exploration and science tends to work best when the geopolitics goes unstated, and when the focus remains on the polar practitioners themselves. By designating Antarctica as a 'continent for peace and science', the twelve original signatories of the Antarctic Treaty sought to depoliticize the continent for highly political motives. The fact that the Antarctic Treaty is frequently held up as a model for international governance (and even used as a potential model for Arctic governance) highlights how successful its members have been in keeping the focus on science, and, more recently, environmental protection. When the British Antarctic Survey had to explicitly state its geopolitical value to avoid merger with the National Oceanographic Institute, this might be seen as something of a failure of polar statecraft.³⁶ Asserting the unproblematic existence of the polar as a category is a means of perpetuating a particular form of politics – one that presumes that capacity to investigate and pronounce upon the polar regions is equally an unproblematic way of contributing to global knowledge.

We suggest that this centrality of the polar practitioner extended to the creation of polar history. Arctic and Antarctic exploration alike were a form of spectacle – and like all spectacles, they were meaningless without audience approval.³⁷ Those audiences were located not in the north or the south, but in the more temperate sites from where the expeditions were organized. They were eager for tales of drama, danger, and perhaps even death in the quest to conquer the unknown. When the race for the North and South Poles became

³⁴ On Stefansson see for instance Diubaldo, Stefansson and the Canadian Arctic.

³⁵ Forthcoming work by Tina Adcock will cast valuable light on how Stefansson created and operated his library.

³⁶ See Daniella McCahey, Chapter 13 in this volume.

³⁷ On the performative element, see most notably Robinson, *Coldest Crucible*; on exploration as media spectacle, see Riffenburgh, *Myth of the Explorer*.

linked in the public mind, the concept of the polar explorer became real. And thus was a tradition invented.

Yet expeditions did not automatically become part of a historical tradition. Expeditions became popularized through media coverage and stabilized through official accounts, often in the name of the expedition leader, that recounted the trials and achievements of the venture. Good prose could heighten an expedition's fame – and when that prose became last words, the effect was only magnified. Robert Falcon Scott had already shown a talent for writing in the official volume from his first Antarctic expedition in 1901-04.³⁸ When his body and those of two companions were found in 1913, having died on their return journey from the South Pole, Scott's pathos-filled diary became a relic as much as a historical record.³⁹ Scott became a martyred saint within a secular tradition of polar exploration that perhaps reached its apotheosis in Britain, its path eased by a cultural predisposition to conquest of distant and different lands. Murals on the domed ceilings in the SPRI building commemorated voyages of polar discovery while its library amassed holdings on both polar regions. The Polar Medal recognized British achievement in either the Arctic or the Antarctic (or sometimes both), each in a sense an arena with common properties.

If maps constituted the Arctic and the Antarctic within geography, narratives constituted these regions within history – and that history was largely the province of the practitioners and those who shared their commitment to that tradition. Explorers such as Stefansson and Fridtjof Nansen published historical works about the Arctic that went beyond their own first-hand experiences. Early historians of Antarctic exploration such as Hugh Robert Mill and Bjarne Aagaard took pains to ensure that the explorers endorsed their texts, and often viewed themselves as part of the same milieu to the point of sharing common goals. History could be weaponized as a validation of a nation or an individual's accomplishments, but the sword was double-edged: when Aagaard's third volume on Norwegian hunting and research in the Antarctic failed to please his patron, the whaling baron and patron of exploration Lars Christensen, it resulted in a sudden withdrawal of support. The first works explicitly dedicated to polar history placed

³⁸ This point is recognized more or less universally, although Scott's sternest critic – Roland Huntford – mentioned it almost as a backhanded compliment in *Scott and Amundsen*.

³⁹ On the memorialization of Scott see in particular Jones, Last Great Quest.

⁴⁰ See for instance Stefansson, Unsolved Mysteries; Nansen, In Northern Mists.

⁴¹ Mill, Siege; Aagaard, Fangst og forskning i Sydishavet. 42 Roberts, European Antarctic, 70.

explorers firmly in the role of protagonists upon icy canvases. G. Firth Scott's 1921 Daring Deeds of Polar Explorers: True Stories of Bravery, Resource, Endurance and Adventure at the Poles was an early example of the genre.⁴³ In 1930 Joerg followed Problems of Polar Research with a history of polar aviation.⁴⁴

Over time the institutions of polar research, polar governance, and polar science have also attracted their own historians. But although there is certainly some blurring of boundaries, histories of polar science and governance regimes are not nearly as popular as histories of polar exploration. Drawing, not incidentally, on a British expression, the most obvious reason is that histories of science can lack the 'Boy's Own' excitement of exploration histories. Men around conference tables (and until surprisingly recently they have invariably been men) make less arresting subjects than heroes battling the elements. Polar research projects, and polar scientists, are more interesting and diverse than the public stereotype might suggest. Despite efforts by journalists such as the New York Times reporter Walter Sullivan to translate polar science into popular consciousness during the International Geophysical Year (IGY) of 1957–58, using the metaphor of an 'assault on the unknown', the frontier of knowledge has largely proved less striking than the frontier of cartography. ⁴⁵

Following a small flurry of polar-themed research publications and histories in the 1920s and 1930s, very little work that was explicitly polar was published in the years that followed. Among the rare exceptions was *A History of Polar Exploration* (1960) by Laurence Kirwan, the director and secretary of the Royal Geographical Society. ⁴⁶ Again, the book was a history of exploration and endeavour that focused on acts of geographical conquest. The perspective was of an insider at a body that remained one of the more important patrons of British polar exploration – even if Kirwan himself was an archaeologist of Arabia and northeast Africa. Studies of polar exploration certainly did not disappear during this period, but they tended to focus on one pole or another. This allowed armchair explorers to revel in the details, without worrying too much about overarching context, as narratives of polar exploration continued to be a form of nostalgic escapism.

By the mid-twentieth century, the polar was sufficiently established as a category of analysis that it needed little ongoing support. Cold War geopolitics in both north and south continued to draw strongly on science and exploration, and there were incentives to keep the focus on explorers and

⁴³ Scott, Daring Deeds. 44 Joerg, Brief History. 45 Sullivan, Assault on the Unknown. 46 Kirwan, History of Polar Exploration.

scientists as practitioners, and increasingly on the science itself. Sponsoring states, rather than the heroic individuals, increasingly became the focus in the age of Big Science. As the IGY showed, the polar had helped to provide a foundation for the planetary, with the Earth as a whole increasingly conceived as a set of geophysical systems. In turn, as demonstrated by the prominence of Antarctica in NASA's iconic 1972 'Blue Marble' image, the ability to view the Earth from space in turn reinforced the importance of the polar regions.⁴⁷

In recent years, interest in the polar as a unit for description and analysis has frequently been driven by growing environmental concern. By presenting both the Arctic and Antarctica as vulnerable to climate heating, atmospheric scientists demonstrate both the transferability of their skills and the global scale of the problem. While the consequences of melting ice in the Arctic might be different from the consequences of melting ice in Antarctica, climate-driven ecosystem change threatens environments in both polar regions, the twin canaries in the coal mine of climate change. These global-scale anthropogenic threats are largely driven by activities on regional and local scales in locations closer to the Equator.

But there are concrete dangers to taking a polar perspective on many questions, of both science and institutional politics. A polar perspective must per definition struggle to recognize Indigenous knowledge traditions with deep roots in specific lands and seas. The success of the ATS has on occasion produced calls for some kind of analogous arrangement in the Arctic, which would erase or at least decentre Indigenous authority, even if the arrangement were kept to coordination of science.⁴⁸ Bodies such as the International Arctic Science Committee (IASC) may have drawn loose inspiration from the Antarctic, but they are ultimately bespoke instruments for a particular political and cultural situation. We suspect that Antarctic histories are far more amenable to being classified as polar histories, a label that Arctic-focused historians would be more hesitant to adopt, because it is so much easier to presume a uniform language of description and meaning when thinking first about a continent without its own permanent population.

Like the concept of the tropics, the concept of the polar regions is frequently connected to a global, scientific and often imperial vision of the world. To take a polar perspective is to see from the outside, perhaps even necessarily to minimize differences to see commonalities. This is the problem

⁴⁷ See for instance Poole, Earthrise, especially 120.

⁴⁸ See for instance Bones, "SCAR as Healing Process?"; van der Watt and Roberts, "Voicing Bipolar Futures".

of polar history. It is a serious and, on the surface, perhaps a fatal problem. Why, then, does this volume exist?

The Promise of the Polar

We contend that a new polar history is both possible and desirable. The value of the polar as a frame for scholarship will be a function of the value it can add, either through comparison or contrast – while also recognizing that the polar will often be a complementary rather than an exclusive or even a primary frame for analysis. In certain cases, the frame of the polar serves as a logical frame for a common story – for instance in logistics or the atmospheric sciences – but in very many other cases it provides a foil for local histories, their particularity a constant reminder that between (and within) the Antarctic and the Arctic lie tremendous differences. Imperial and colonial power structures must be recognized as fundamental and not incidental, and historians must ask why certain voices have authority and not others.

The polar was (and is) a category used by particular actors, and asking why they chose to use that category, and how they acted within it, can illuminate cultural as well as scientific worlds. Why has there been a Scott Polar Research Institute since 1920 (and not a Scott Antarctic Research Institute)? Why does France have an organization called Expeditions Polaires Françaises (founded in 1947)? Why did the US National Science Foundation change the name of its Office of Antarctic Programs to an Office of Polar Programs in the late 1960s? In each of these cases following the money, the individuals, and the equipment leads to histories that would be hamstrung without both an Arctic and an Antarctic perspective. But even here we must be attentive to who exactly counts as a practitioner. The singular importance of specific individuals such as Frank Debenham, Paul-Émile Victor, or Richard Byrd must be balanced by histories that recognize the maintenance of polar organizations as a continuous process. This is particularly true of logistics.⁴⁹ The US McMurdo Station in Antarctica employs hundreds of staff to allow a much smaller number of scientists to do their research. Even in Arctic locations with communities that pre-date the research station, such as Utqiagvik (formerly Barrow) in Alaska, there are frequently larger numbers of logistics staff than scientists. Many of these individuals forged careers based

⁴⁹ On the dynamics of an important piece of Canadian research infrastructure – the Polar Continental Shelf Program – see Powell, *Studying Arctic Fields*.

on the transferability of their practical knowledge, and it is not uncommon for support staff to work summer seasons in the Arctic and Antarctica in a single year. We might even think of logistics as the submerged nine-tenths of the iceberg, the scientific programs that make possible the small portion gleaming above the surface.

The promise of histories of polar logistics is tied in part to the polar regions as places of work. Environmental historian Richard White's argument that environments can be known through labour is a reminder both that the human and the non-human are entangled, and also that knowledge of environments is learned through living and working and not simply through studying.⁵⁰ Many of the knowledge traditions that link Arctic and Antarctic research have common roots, especially those from the geophysical sciences. Nonetheless, as historians, sociologists, and anthropologists have long argued, cultures and traditions of knowledge production are locally specific in terms of structure as well as content. This is most clearly the case with Indigenous knowledge of northern environments. Drawing on a study of the Burwash Landing region of the southern Yukon, anthropologist Paul Nadasdy has persuasively argued that traditional environmental knowledge (TEK) as described by non-Indigenous scientists constitutes an attempt to distill singular units of knowledge from a seamless body of learned experience from which isolated data points are not easily extracted.⁵¹ Similar points might be made of Inuit Qaujimajatuqangit (IQ), another body of orally transmitted environmental knowledge that includes cultural and social elements.⁵² This is contextually produced knowledge – how to live and thrive in a manner appropriate for a specific community within a specific environment. Living, working, and knowing are intimately and perhaps inextricably connected. Pondering this connection can also help illuminate the central place of labour in non-Indigenous knowledge production.

Another important factor is the overarching logic of capitalism, and the degree to which it has framed (and does frame) systems of knowledge production. Indigenous Arctic communities have long had extensive trade networks. Nevertheless, capitalism injected new elements into white–Indigenous relations in the Arctic that became permanently changed with more formal processes of colonialism. In the Antarctic, capitalism underpinned two processes of boom and bust: sealing in the nineteenth century and whaling in the twentieth. The peril of the polar perspective is that it can

⁵⁰ See for instance White, "Are You an Environmentalist?".

⁵¹ Nadasdy, Hunters and Bureaucrats.

⁵² See for instance Karetak et al., eds., Inuit Qaujimajatuqangit.

erase Indigenous agency by focusing solely on the common elements in harvesting marine living resources, which by including the Antarctic force a reduction in the relevant variables. But perhaps perspectives from both polar regions can sometimes reveal a common story. Profits from Norwegian Antarctic whaling underwrote mapping in East Greenland, while Britain settled a sovereignty dispute over Bouvet Island in the Southern Ocean in part through extracting a concession from Norway over sovereignty in the High Arctic islands of Canada. The bodies of knowledge developed to regulate commercial whaling emerged in concert with the industry itself, aimed at benefiting the whaler more than the whale. Concepts of sustainability and equilibrium were invoked as early as the 1930s by marine biologists such as Johan Hjort.⁵³ Yet these models of economic units swimming in distant oceans were very different from the locally grounded knowledge of Iñupiat whalers on the Alaskan North Slope, for whom equilibrium was a matter of balance between people and whales rather than between economic inputs and outputs.54

A further complication involves the categories of actors that a particular scale makes visible, and the structural connection between where the historian looks and what (and whom) the historian sees. It is a well-established trope in Arctic and particularly Antarctic history that whalers and sealers travelled further and experienced more than commonly realized, but that the commercial necessity of secrecy precluded their full entry into the pantheon of explorers. Earthly and heavenly (or historical) rewards were thus kept separate. But how much is lost by fetishizing the written record, or indeed by identifying exploration as the primary justification for being remembered? The lived experiences of individuals who came to know the Arctic and the Antarctic through work should not be reduced to a numerically expressed impact upon the destruction of marine mammal populations. Indigenous and non-Indigenous whalers may have hunted the same animals, but they made sense of the environments of which they and the animals were a part in different ways.⁵⁵ While Antarctic expeditions of the Heroic Age are among the most over-documented events in human history, thanks to a profusion of diaries buttressed by logbooks, letters, and official accounts, many of the sealers who worked on the Antarctic islands in the early nineteenth century left few or no written records. Archaeological research of the sort conducted by the South American 'Landscapes in White' project can reveal the ways

⁵³ Burnett, Sounding of the Whale; Roberts, European Antarctic.

⁵⁴ Lowenstein, Ancient Land: Sacred Whale. 55 See in particular Routledge, Do You See Ice?.

these individuals lived and worked, recovering experiences invisible to the textual record.⁵⁶ Local histories challenge the structural invisibility of those who did not leave textual records of their lives and work, even when that work took them to the Antarctic.

Whaling and sealing took both humans and capital far from European and American shores, and distributed products from polar animals to markets around the world. We applaud histories that emphasize the regional and global dimensions of these industries while suggesting that the polar can remain a useful frame of reference by emphasizing capital, labour, and colonialism in contexts still dominated by heroic explorers. These trends have been most fully fleshed out in the Arctic, but as labour historian Ben Maddison has pointed out, this extends even to the sailors and labourers on early voyages of Antarctic exploration, who were more directly exposed to the environments in which they worked than the officers and scientists who produced the artefacts of cartographic knowledge. To place such stories in the same context as narratives of heroic discovery is to challenge the primacy of exploration and explorers, and to undermine the centrality of the explorer to polar history.

Such challenges are warranted given the persistence of exploration as the dominant theme within histories that take a polar rather than a regional perspective – reinforced by a sense that the experience of explorers is so unique and singular that they define as well as star in this tradition. Consider Sir Ranulph Fiennes, whose own career as a professional explorer and adventurer has embraced both geographic poles as well as other extreme environments such as the Himalayas. Having traversed both geographic poles during his 1979–82 Transglobe expedition, Fiennes subsequently crossed Antarctica on foot with the medical doctor Mike Stroud and then turned his hand to history, writing a biography of Robert Falcon Scott that drew heavily on his own experiences of unsupported sledging in Antarctica. Fiennes's target was the revisionist interpretation of Scott as a well-meaning

⁵⁶ Zarankin and Senatore, *Historias*. See also Melisa A. Salerno, M. Jimena Cruz, and Andrés Zarankin, Chapter 17 in this volume.

⁵⁷ Avango et al., "Between Markets and Geo-politics"; Qikiqtani Truth Commission, Official Mind; Demuth, Floating Coast; Tester and Kulchyski, Tammarniit (Mistakes); Bruno, Nature of Soviet Power; Grant, Polar Imperative; Rud, Colonialism in Greenland; Grant, "State, Company, and Community Relations"; Priebe, "Greenland's Future"; Ojala and Nordin, "Mining Sápmi"; Fraser, "T'aih k'ìighe' tth'aih zhit dìidìch'ùh".

⁵⁸ Maddison, Class and Colonialism.

⁵⁹ Of his many published works, see in particular Fiennes *Mad, Bad, and Dangerous to Know* and *To the Ends of the Earth*.

but inadequate amateur – an interpretation championed by the journalist Roland Huntford, whose experience of Nordic skiing made him far from competent in Fiennes's eyes to judge an Antarctic hero. To write about Hell, Fiennes wrote trenchantly, it helps to have been there. ⁶⁰

The image of Antarctica as Hell may be appropriate for an explorer battling a set of elements against which they can measure their courage and competence through feats of travel. To downplay the continent's harshness is to downplay Scott's achievements – not to mention those of Fiennes himself. Hell remains a frontier to be conquered and not a homeland to be lived in. Tropes of this kind are thus deeply unhelpful in understanding the lives of sheep farmers near Narsaq, residential school survivors in the Northwest Territories, or homemakers in Norilsk. But they may yet have value in focusing attention on how concepts of hostility and friendliness have proven surprisingly flexible, particularly in the Arctic. Stefansson's 1913-18 Canadian Arctic Expedition and subsequent attempt to colonize Wrangel Island ended in multiple deaths. Despite having apparently been to Hell, he returned convinced that its fires were cosy, and spent the remainder of his life trying with mixed success to argue that the Arctic was ripe for development and colonization, if only it were done properly. Raymond Priestley, who spent three winters in Antarctica during the Heroic Age – including one in an improvised ice cave - told students at Cambridge in the 1920s that he looked forward to a day when Antarctica featured sanatoria and facilities for tourists.61

Priestley never felt that Antarctica would become colonized and settled in an analogous manner to Stefansson's dream of a Canadianized Arctic. But others, most notably Chile and Argentina, have attempted to make Antarctica a homeland rather than an outpost. Following the birth of the first baby in Antarctica in 1978 to Argentine military parents, Chile responded by having their own births at Antarctic stations and setting up schools to teach the children of the military personnel and other staff serving there. Chile's 'housewives at the end of the world' served a distinctly geopolitical function. The vision in the 1980s, which has not entirely gone away, was to turn the conglomeration of stations and logistics infrastructure surrounding Chile's Villa de las Estrellas station on King George Island into something of an Antarctic version of Longyearbyen, the administrative capital of Svalbard in the Arctic, a town with over 2,000 residents, complete with a kindergarten

⁶⁰ Fiennes, Race to the Pole, xiii. 61 Roberts, "Frozen Field of Dreams", 217.

and a school. The Latin American and Norwegian projects share an important characteristic: an attempt to demonstrate that a polar territory is part of the national geo-body, in the sense used by Thongchai Winichakul – holding a place in the heart of the national community in addition to being represented on its maps. ⁶³ Such a territory cannot by definition be a frontier: it is an integral part of the homeland. Whether the attachment to place experienced by residents of Longyearbyen is analogous to that of Indigenous residents of traditional lands in the Arctic is doubtful (not least because famously neither births nor deaths are supposed to take place on Svalbard). Perhaps this is incidental, given that the real purpose of such communities is to create bonds of belonging in Oslo and Santiago.

The difference between Indigenous homelands and non-Indigenous homes is a real one because the depth of connection is so much greater and more all-embracing in the former. But does this also mean that only the latter can be explorers? The British-Canadian archaeologist and Arctic administrator Graham Rowley recalled being challenged by an Inuk student at Carleton University while teaching a course on the history of exploration in Canada. Seen from Europe, the discoverer of new lands and peoples was an explorer; seen from the lands themselves, he was an 'exotic visitor'. 64 This led Rowley not to abandon the category of the explorer – indeed, his author biography for the chapter described his own feats of exploration around the Eastern Arctic – but rather to expand it so as to include the first settlers in northern North America as agents of exploration and discovery rather than simply occupants of a space. The Inuit were perhaps the greatest of the Arctic explorers, making their homes in new lands and developing and mastering new techniques of travel, to the point where Rowley wondered if Sir John Franklin's famously disastrous expedition might have met a happier fate had they taken an Inuk guide. 65 It was unjust, Rowley felt, for Inuit to be denied their place in the first rank of explorers simply because they made the lands they reached their homes. Does this open the door for a polar history that is more inclusive of Indigenous peoples? Priscilla Wehi and her colleagues have recently used the term 'explorers' to describe the Polynesians who travelled deep in the Southern Ocean as early as the seventh century, possibly even sighting the Antarctic continent.⁶⁶ Their point is to emphasize that Māori should be recognized as part of a larger history of human engagement with

⁶³ Winichakul, Siam Mapped. 64 Rowley, "Original Native Explorers", 40.

⁶⁵ Rowley, "Original Native Explorers", 45. 66 Wehi et al., "Short Scan".

the Antarctic – and as holders of knowledge relevant to understanding and acting within the Antarctic today. They too were explorers.

But the most important message of Rowley's essay is the danger of the Eurocentric 'God' perspective. The view from above is not always better than the view from the ground, even if such a view can be found. One person's unknown frontier is another person's cherished homeland. Even if the category of the explorer were to be broadened to encompass more than just the Europeans who build a historical edifice around that label, it would privilege encounter over habitation. We argue that attention to scale breeds attention to diversity. Histories of the Arctic and Antarctica, especially when written at national or local scales, are often more attuned to nuance and difference, and less inclined to simplistic stories of progress. Master narratives from 'development' to 'conservation' and even 'law and order' are significantly complicated by local histories of Indigenous northern communities. For the peoples of the Arctic, the history of their parts of that region has been understood in ways that are both distinctive and similar to the histories of other parts of the world. Historical understanding is embedded in written texts, oral tradition, practices, and the landscape – all of which vary in form as well as content. Frank Tester and Peter Kulchyski have referred to a totalizing vision through which the Canadian state projected its will upon diverse Arctic communities. ⁶⁷ As historians we must be wary of any analytic framework focused on a specific category of actor into which the diversity of human experience in diverse environments must be fitted. No matter how noble the intent, we suspect that a polar history centred on exploration will remain stuck in that trap.

Histories of actions by governments and companies are increasingly complicated by the more complex realities of how those decisions were resisted (and on some occasions embraced). Local dynamics among Inuit communities coalesced into a regional political action, and ultimately the 1977 creation of the Inuit Circumpolar Council (ICC). ⁶⁸ The view of Svalbard from Oslo and Moscow is one of international power politics, but local histories reveal tensions, from the proliferation of anarcho-syndicalist unions in the early days of coal mining to the contradiction between the official myth of Pyramiden as a communist utopia and the near-veneration that its workers came to accord to non-Soviet consumer culture. ⁶⁹ Something similar might

⁶⁷ This is a theme in both Tester and Kulchyski, *Tammarniit* (*Mistakes*), and Kulchyski and Tester, *Kiumajut* (*Talking Back*).

⁶⁸ Shadian, Politics of Arctic Sovereignty.

⁶⁹ Avango, "Sveagruvan"; Andreassen et al., Persistent Memories.

even be said of Antarctica. Recent scholarship has devoted less attention to exploration, starting to move the history of the continent from being the history of a process to the history of a place. Such a trend is welcome not only for the focus it brings on Antarctica as a space of work and lived experience, in many cases representing in microcosm the overarching political structures of the sponsoring states, including racial and gender discrimination.⁷⁰

Space remains for historical studies that take a regional focus, and these can often benefit from the wider perspectives of the sort offered by a polar framing. The negotiations that led up to the 1973 Agreement on the Conservation of Polar Bears involved both research and diplomacy, the former conducted largely within national frames, but developing into a transnational community of experts who were able to leverage action from their governments. The growing industry of scientific support for polar research, from Cape Chelyuskin and Cambridge Bay to McMurdo and Mawson, has created openings for states with Arctic interests to regard themselves as relevant to the Antarctic through provision of icebreakers or other cold climate technology.⁷¹

Thus we reach a somewhat paradoxical conclusion. The flowering of scholarship in the past two decades on the history of polar spaces has provided rich and important new studies of many aspects of the Arctic and the Antarctic, bringing critical perspectives on everything from Greenlandic/Danish mixed marriages to Antarctic wildlife management; and from energy regimes and environmental history in Beringia to visions of Antarctica as a productive Australian colony.⁷² But we wonder if some historians of the Arctic and the Antarctic might not learn as much from works on the history of high-altitude research or on the emergence of the global climate. ⁷³ The irony of polar history is that often it is done best precisely by not being polar history – by ushering in the era of what Michael Bravo has termed the 'post-polar'. 74

The Chapters

This volume has been commissioned at a historical moment when there is both a renewed interest in the polar regions and an increased awareness of

 ⁷⁰ van Sittert, "'Ironman'"; van der Watt and Swart, "The Whiteness of Antarctica";
McCahey, "'Last Refuge"; Bloom, Gender on Ice.
71 Dahl et al., "Is There Anything Natural?", 326–329.

⁷² Seiding, "'Married to the Daughters"; Antonello, Greening of Antarctica; Demuth, Floating Coast; Hains, Ice and Inland.

⁷³ Heggie, Higher and Colder; Dry, Waters of the World.

⁷⁴ Bravo, "Preface. Legacies of Polar Science".

the problems of linking the Arctic and Antarctica. Climate change and the associated geopolitics of the far north and the far south have created an interest in the Arctic and Antarctica. At the same time, efforts to decentre and decolonize polar history are largely pulling in the opposite direction. In bringing together the thirty-one chapters in this volume on histories of the Arctic and Antarctica, we are challenging in addition to affirming the unity, and even the validity, of polar history. While highlighting this might be seen as an effort to 'have our cake and eat it', we would suggest that exposing these tensions is the most honest, the most exciting, and perhaps the only sustainable way of doing polar history.

We do not claim that this volume decolonizes polar history. As two middle-aged white men with permanent academic positions in northern Europe, our positionality as editors is in many ways identical to that of the scholars we critique and seek to move beyond. Yet we recognize that times have changed, and for the better. Twenty-five years ago, in the late twentieth century, it might still have been possible to aspire to write a comprehensive history of the polar regions. In the early 2020s such an aspiration appears not only almost impossible, but also misplaced. The quality, quantity, and diversity of scholarship on both the Arctic and Antarctic means that any pretence of comprehensive coverage can only be an expression of hubris. We may not be able to decolonize polar history with this volume, but we hope to have destabilized it, opening space for others to build in new directions.

This volume has no rigid definition of the 'polar regions' and instead relies on individual authors to define their subject of study. Our aim has been to assemble a set of chapters that make arguments about an aspect of polar history rather than attempting the futile task of comprehensive coverage. Quite a few chapters make no mention of the polar scale at all. While we as editors made no effort to commission a chapter on the 'Third Pole' of the Himalayas, it is nevertheless interesting that no authors have chosen to highlight this concept despite some tendency to do this in both popular and scientific literature. Relatively few of the authors in this collection would define themselves primarily as historians of the polar regions. Some might be historians of the Arctic, historians of Antarctica, historians of the Soviet Union, or historians of science. Several authors do not identify as historians at all. The perspectives offered in the different chapters do not always fit together neatly, and in fact there are sometimes tensions and disconnects among different chapters.

The volume opens with two chapters that illustrate very different approaches to the history of polar environments. George Angohiatok and

his collaborators use George's description of his life's experiences to draw connections between the arc of a human life and the arc of environmental change in an Arctic region. Martin Siegert and Andrew Fountain centre a different knowledge tradition to paint a picture of how Antarctica came to be known through the earth and environmental sciences. Bjarne Grønnow then considers the great Inuit migrations from eastern Siberia across Beringia and ultimately as far as Greenland. Carl-Gösta Ojala contributes a study of the history of the Sámi people that emphasizes the political power of controlling not only narratives of the past, but the classification of material objects (and even human remains) as cultural property and not simply specimens for research. Jette Arneborg continues with the story of another settlement of Greenland, that of the Norse colonizers whose disappearance remains a source of mystery to the present – but which perhaps detracts from the equally fascinating story of how they lived in a land very different from those they had previously settled. Ryan Tucker Jones, Alexei Kraikovski, and Julia Lajus then describe how Imperial Russia attempted to create an Arctic empire that stretched as far as Alaska.

As the Arctic and Antarctica came into wider consciousness, practitioners began to categorise, map, and claim the polar regions through acts of exploration and 'discovery'. Cornelia Lüdecke and Erki Tammiksaar make the intriguing suggestion that the more interesting historical question is not who discovered Antarctica, but how it came to be defined as a continent in the first place, given its icy character. Russell Potter explores how and why the disappearance of Sir John Franklin has attained such cultural resonance, including in the northern communities near where his expedition was lost. Stephanie Barczewski focuses on the cultural importance of the 'Heroic Age' of Antarctic exploration as a phenomenon that has come to symbolize the history of the region for many. Elizabeth Leane follows with a chapter on historical fiction and biography as literary forms of representing and in some cases cementing polar knowledge. Richard Powell uses the history of Arctic geography and anthropology as a means of exploring how ideas about the peoples of the Arctic and their cultures have changed through time. Daniella McCahey makes a case for refocusing the history of the British Empire in the polar regions away from land and toward the seas. Janice Cavell explores the history of Canadian sovereignty claims over its High Arctic islands and the role those claims have played in both domestic and international political projects. Roald Berg offers a detailed explanation both of how the archipelago of Spitsbergen became the Norwegian territory of Svalbard, and of the tensions between national and international dimensions.

Ordering and exploiting frequently accompanied and followed exploration and discovery, as polar practitioners sought to make sense of what they were doing. Bjørn Basberg and Louwrens Hacquebord consider the long and diverse history of commercial whaling in both the Arctic and Antarctic, making a case for both connections and important differences. Melisa Salerno, Jimena Cruz, and Andrés Zarankin continue with an important examination of how archaeological fieldwork, combined with close study of written records, can illuminate the lives of the first Antarctic sealers. Henrik Knudsen, Arn Keeling, and John Sandlos analyse the history of mining in the Arctic – an industry that has touched many corners of the circumpolar north and continues to have important consequences today. Andy Bruno and Ekaterina Kalemeneva make an important argument for regarding the Soviet-era Arctic less as a monolithic expression of central ideology and more as a series of practices and projects that reflected negotiation with local conditions as well as individual initiative. Jens Heinrich argues that the political history of modern Greenland is one of a progression from Danish domination to Greenlandic autonomy, while emphasizing the agency of Indigenous Greenlanders in choosing the options they have in the past felt offered best prospects for improving their lives. Stephen Bocking and Pey-Yi Chu also take up links between militaries, states, and environmental knowledge-making in the Cold War. Klaus Dodds explores two of the defining events in the modern history of Antarctica - the International Geophysical Year and the Antarctic Treaty negotiations. Matt Farish uses the lens of militarization to explore the first century of United States rule over Alaska, while Phil Wight similarly uses a military perspective to shed new light on the history of Alaskan resource development and politics since World War II.

The final set of essays offer different perspectives, all of which highlight, in different ways, the promise of the polar. Mark Nuttall charts the history of both national and international Indigenous political movements in the Arctic, showing how Indigenous voices have created spaces within a range of political structures. Alessandro Antonello and Justiina Dahl explore the history of environmental management as both concept and practice in the Arctic and Antarctic. Pablo Fontana examines the history of Latin America and Antarctica as a story of competition but also on occasion cooperation. Dolly Jørgensen foregrounds animal history and considers another way through which humans sought to manipulate Arctic environments, through moving muskoxen between and within northern regions. Hayley Brazier and Mark Carey examine the many meanings of ice in the polar regions in both

past and present. Jackie Price, Rebecca Mearns, and Emilie Cameron offer a thought-provoking and original set of thoughts on how the history of Arctic spaces is made, and what meaning it holds as elements in their lives today. Liza Piper and Lize-Marié Hansen van der Watt conclude the volume with a reflection on the state of polar history today – and where it might go in the future.

The American theologian Reinhold Niebuhr wrote a famous book titled *The Irony of American History* in which he questioned the role of virtue in the history of the United States.⁷⁵ By trying too hard to do good, he argues, the country has too often ended up doing harm. A similar sense of irony can be found in the history of the polar regions. The irony here is perhaps even more fundamental: the best way to do polar history is to *not* do polar history, and instead to rely on the individually crafted parts adding up to a whole that, if not coherent, is at least illuminating. Polar history only makes sense as a collection of historical studies of individual places and themes that correspond to our conception of the polar regions. It is possible that this will be the first and last *Cambridge History of the Polar Regions*, but there is nevertheless, we believe, real value in the exercise.

Bibliography

- Aagaard, Bjarne, Fangst og forskning i Sydishavet (Sandefjord: Commander Chr. Christensen's Whaling Museum, 1930; 1934).
- Andreassen, Elin, Hein Björck, and Bjørnar Olsen, *Persistent Memories: Pyramiden A Soviet Mining Town in the High Arctic* (Trondheim: Tapir, 2010).
- Antonello, Alessandro, *The Greening of Antarctica: Assembling an International Environment* (New York: Oxford University Press, 2019).
- Avango, Dag, "Sveagruvan: svensk gruvhantering mellan industry, diplomati och geovetenskap", PhD diss. (KTH Royal Institute of Technology, 2005).
- Avango, Dag, Louwrens Hacquebord, Ypie Aalders, et al., "Between Markets and Geo-politics: Natural Resource Exploitation on Spitsbergen from 1600 to the Present Day", *Polar Record* 47 (2011): 29–39, https://doi.org/10.1017/S0032247410000069.
- Barr, Susan, and Cornelia Lüdecke, eds., *The History of the International Polar Years (IPYs)* (Heidelberg: Springer, 2010).
- Bloom, Lisa, *Gender on Ice: American Ideologies of Polar Expeditions* (Minneapolis: University of Minnesota Press, 1993).
- Bones, Stian, "SCAR as a Healing Process? Reflections on Science and Politics in the Cold War and Beyond: The Case of Norway", in Peder Roberts, Lize-Marié van der Watt, and Adrian Howkins, eds., *Antarctica and the Humanities* (New York: Palgrave Macmillan, 2016), pp. 231–249.

75 Niebuhr, Irony of American History.

- Bravo, Michael, North Pole: Nature and Culture (London: Reaktion Books, 2019).
- Bravo, Michael, "Preface. Legacies of Polar Science," in Jessica Shadian and Monica Tennberg, eds., Legacies and Change in Polar Sciences. Historical, Legal and Political Reflections on the International Polar Year (Farnham: Ashgate, 2009), pp. 13–16.
- Bruno, Andy, *The Nature of Soviet Power: An Arctic Environmental History* (Cambridge: Cambridge University Press, 2017).
- Burnett, D. Graham, The Sounding of the Whale: Science and Cetaceans in the Twentieth Century (Chicago: University of Chicago Press, 2012).
- Bush, Vannevar, Science: The Endless Frontier: A Report to the President (Washington, DC: National Science Foundation, 1945).
- Cardone, Ignacio Javier, The Antarctic Politics of Brazil: Where the Tropic Meets the Pole (Cham: Springer International, 2021).
- Cawood, John, "The Magnetic Crusade: Science and Politics in Early Victorian Britain", *Isis* 70 (1979): 492–518.
- Cosgrove, Denis, "Tropic and Tropicality", in Felix Driver and Luciana Martins, eds., Tropical Visions in an Age of Empire (Chicago: University of Chicago Press, 2005), pp. 197–216.
- Dahl, Justiina, Peder Roberts, and Lize-Marié van der Watt, "Is There Anything Natural About the Polar?", *Polar Record* 55 (2019): 326–329.
- Dams, Ties, Louise van Schaik, and Adája Stoetman, Presence Before Power: China's Arctic Strategy in Iceland and Greenland (The Hague: Clingendael Institute, 2018).
- Demuth, Bathsheba, Floating Coast: An Environmental History of Beringia (New York: W. W. Norton, 2019).
- Diubaldo, Richard, Stefansson and the Canadian Arctic (Montreal: McGill-Queen's University Press, 1999).
- Dodds, Klaus, Ice: Nature and Culture (London: Reaktion Books, 2018).
- Dry, Sarah, Waters of the World: The Story of the Scientists Who Unravelled the Mysteries of Our Seas, Glaciers, and Atmosphere and Made Our Planet Whole (Scribe, 2019).
- Enebakk, Vidar, "Hansteen's Magnetometer and the Origin of the Magnetic Crusade", British Journal of the History of Science 47 (2014): 587–608.
- Fiennes, Ranulph, *Mad, Bad, and Dangerous to Know* (London: Hodder and Stoughton, 2008). Fiennes, Ranulph, *Race to the Pole: Tragedy, Heroism and Scott's Antarctic Quest* (New York: Hyperion, 2004).
- Fiennes, Ranulph, To the Ends of the Earth (London: Hodder and Stoughton, 1983).
- Fraser, Crystal, "T'aih k'iighe' tth'aih zhit dìidìch'uh (By Strength, We Are Still Here): Indigenous Northerners Confronting Hierarchies of Power at Day and Residential Schools in Nanhkak Thak (the Inuvik Region, Northwest Territories), 1959–1982", PhD diss. (University of Alberta, 2019).
- Grant, Heather, "State, Company, and Community Relations at the Polaris Mine (Nunavut)", Études/Inuit/Studies 37 (2013): 37–57.
- Grant, Shelagh, Polar Imperative: A History of Arctic Sovereignty in North America (Vancouver: Douglas & McIntyre, 2010).
- Hains, Brigid, *The Ice and the Inland: Mawson, Flynn and the Myth of the Frontier* (Melbourne: University of Melbourne Press, 2002).
- Hamelin, Louis-Edmond, Canadian Nordicity: It's Your North Too, trans. William Barr (Montreal: Harvest House, 1979).

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- Hamelin, Louis-Edmond, "Espaces touristiques en pays froides", Teoros 18 (1999): 4-9.
- Harley, J. Brian, ed. Paul Laxton, *The New Nature of Maps: Essays in the History of Cartography* (Baltimore: Johns Hopkins University Press, 2001).
- Heggie, Vanessa, Higher and Colder: A History of Extreme Physiology and Exploration (Chicago: University of Chicago Press, 2020).
- Hemmings, Alan, "Considerable Values in Antarctica", Polar Journal 2 (2012): 139-156.
- Howkins, Adrian, Frozen Empires: An Environmental History of the Antarctic Peninsula (Oxford: Oxford University Press, 2017).
- Howkins, Adrian, "Have You Been There? Some Thoughts on (Not) Visiting Antarctica", Environmental History 15 (2010): 514–519.
- Huntford, Roland, Scott and Amundsen (London: Hodder and Stoughton) 1979.
- Joerg, W. L. G., A Brief History of Polar Exploration Since the Introduction of Flying, American Geographical Society Special Publication II (New York: American Geographical Society, 1930).
- Joerg, W. L. G., Problems of Polar Research: A Series of Papers by 31 Authors (New York: American Geographical Society, 1928).
- Jones, Max, The Last Great Quest: Captain Scott's Antarctic Sacrifice (Oxford: Oxford University Press, 2003).
- Karetak, Joe, Frank Tester, and Shirley Tagalik, eds., *Inuit Qaujimajatuqangit: What Inuit Have Always Known to Be True* (Black Point, Nova Scotia: Fernwood, 2017).
- Kirwan, Laurence, A History of Polar Exploration (New York: W. W. Norton, 1960).
- Kulchyski, Peter and Frank Tester, Kiumajut (Talking Back): Game Management and Inuit Rights 1900–1970 (Vancouver: University of British Columbia Press, 2007).
- Limerick, Patricia Nelson, *The Legacy of Conquest: The Unbroken Past of the American West* (New York: Norton, 1987).
- Llanos, Nelson, "Housewives at the End of the World: Chilean Women Living in Antarctica, 1984–1986", *Polar Journal* 9 (2019): 358–370.
- Lowenstein, Tom, Ancient Land: Sacred Whale: The Inuit Hunt and Its Rituals (New York: Farrar, Straus and Giroux, 1993).
- Maddison, Ben, Class and Colonialism in Antarctic Exploration, 1750–1920 (London: Pickering and Chatto, 2014).
- McCahey, Daniella, "The Last Refuge of Male Chauvinism': Print Culture, Masculinity, and the British Antarctic Survey (1960–1996)", Gender, Place and Culture (2021), https://doi.org/10.1080/0966369X.2021.1873746.
- McGeoch, Melodie, Justine D. Shaw, Aleks Terauds, and Jennifer E. Lee, "Monitoring Biological Invasion Across the Broader Antarctic: A Baseline and Indicator Framework", *Global Environmental Change* 32 (2015): 108–125.
- Mill, Hugh Robert, The Siege of the South Pole: The Story of Antarctic Exploration (London: Alston Rivers, 1905).
- Monmonier, Mark, *How to Lie with Maps*, 3rd edition (Chicago: University of Chicago Press, 2018).
- Nadasdy, Paul, Hunters and Bureaucrats: Power, Knowledge, and Aboriginal–State Relations in the Southwest Yukon (Vancouver: University of British Columbia Press, 2003).
- Nansen, Fridtjof, In Northern Mists: Arctic Exploration in Early Times (London: Heinemann, 1911).

- New York Times, "Climbing Mount Everest Is Work for Supermen", New York Times (18 March 1923).
- Niebuhr, Reinhold, *The Irony of American History* (New York: Charles Scribner's Sons, 1952).
- Ojala, Carl-Gösta and Jonas M. Nordin, "Mining Sápmi: Colonial Histories, Sámi Archaeology, and the Exploitation of Natural Resources in Northern Sweden", Arctic Anthropology 52 (2015): 6–21.
- Pálsson, Gisli, "Arcticality: Gender, Race, and Geography in the Writings of Vilhjalmur Stefansson", in Michael Bravo and Sverker Sörlin, eds., Narrating the Arctic: A Cultural History of Nordic Scientific Practices (Canton, MA: Science History Publications, 2002), pp. 275–308.
- Poole, Robert, Earthrise: How Man First Saw the Earth (New Haven: Yale University Press, 2008).
- Priebe, Janina, "Greenland's Future: Narratives of Natural Resource Development in the 1900s until the 1960s", PhD diss. (Umeå University, 2017).
- Qikiqtani Truth Commission, *The Official Mind of Canadian Colonialism* (Iqaluit: Inhabit Media, 2014).
- Riffenburgh, Beau, The Myth of the Explorer: The Press, Sensationalism, and Geographical Discovery (New York: Belhaven, 1993).
- Roberts, Peder, "A Frozen Field of Dreams: The Construction of Antarctic Science in Norway, Sweden, and the British World, 1912–1952", PhD diss. (Stanford University, 2010), p. 217.
- Roberts, Peder, The European Antarctic: Science and Strategy in Scandinavia and the British Empire (New York: Palgrave Macmillan, 2011).
- Robinson, Michael, *The Coldest Crucible: Arctic Exploration and American Culture* (Chicago: University of Chicago Press, 2006).
- Rowley, Graham, "The Original Native Explorers of the Arctic", in Walter O. Kupsch and Shirley Milligan, eds., *Living Explorers of the Canadian Arctic: The Historic Symposium of Arctic Scientists, Explorers, and Adventurers, Toronto 1978* (Outcrop: Yellowknife, 1986), pp. 40–46.
- Rud, Søren, Colonialism in Greenland: Tradition, Governance, and Legacy (Cham: Springer, 2017).
- Scott, G. Firth, Daring Deeds of Polar Explorers: True Stories of Bravery, Resource, Endurance and Adventure at the Poles (Philadelphia: J. B. Lippincott, 1922).
- Seiding, Inge, "'Married to the Daughters of the Country': Intimacy and Intermarriage in Northern Greenland ca. 1750 to 1850", PhD diss. (Ilisimitusarfik University of Greenland, 2013).
- Shadian, Jessica, The Politics of Arctic Sovereignty: Oil, Ice, and Inuit Governance (Oxford: Routledge, 2014).
- Sörlin, Sverker, "Narratives and Counter-narratives of Climate Change: North Atlantic Glaciology and Meteorology, c. 1930–1955", *Journal of Historical Geography* 35 (2009): 237–255.
- Stefansson, Vilhjalmur, The Friendly Arctic: The Story of Five Years in Polar Regions (New York: Macmillan, 1921).
- Stefansson, Vilhjalmur, *The Northward Course of Empire* (New York: Harcourt, Brace and Company, 1922).

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- Stefansson, Vilhjalmur, Unsolved Mysteries of the Arctic (London: Harrap, 1939).
- Sullivan, Walter, Assault on the Unknown: The International Geophysical Year (London: Hodder and Stoughton, 1962).
- Synnott, Mark, The Third Pole: My Everest Climb to Find the Truth about Mallory and Irvine (London: Headline, 2021).
- Tester, Frank and Peter Kulchyski, *Tammarniit (Mistakes): Inuit Relocation in the Eastern Arctic* 1939–1963 (Vancouver: University of British Columbia Press, 1994).
- van der Watt, Lize-Marié and Peder Roberts, "Voicing Bipolar Futures: The Antarctic Treaty System and Arctic Governance in Historical Perspective", in Nina Wormbs, ed., *Competing Arctic Futures: Historical and Contemporary Perspectives* (Cham: Palgrave Macmillan, 2018), pp. 139–164.
- van der Watt, Lize-Marié and Sandra Swart, "The Whiteness of Antarctica", in Peder Roberts, Lize-Marié van der Watt, and Adrian Howkins, eds., *Antarctica and the Humanities* (Basingstoke: Palgrave Macmillan, 2016), pp. 125–156.
- van Sittert, Lance, "'Ironman': Joseph Daniels and the White History of South Africa's Deep South", *Polar Record* 51 (2015): 501–512.
- Wehi, Priscilla M., Nigel J. Scott, Jacinta Beckwith, et al., "A Short Scan of Māori Journeys to Antarctica", *Journal of the Royal Society of New Zealand* (2021), https://doi.org/10.1080/03036758.2021.1917633.
- White, Richard, "Are You an Environmentalist or Do You Work for a Living?": Work and Nature in William Cronon, ed., *Uncommon Ground: Toward Reinventing Nature* (New York: W. W. Norton, 1995), pp. 171–185.
- White, Richard, 'It's Your Misfortune and None of My Own': A New History of the American West (Norman: University of Oklahoma Press, 1991).
- Winichakul, Thongchai, Siam Mapped: A History of the Geo-body of a Nation (Honolulu: University of Hawaii Press, 1994).
- Wright, John K., "Obituary: W. L. G. Joerg 1885–1952", Geographical Review 42 (July 1952): 482–488
- Yermakova, Yelena, "Governing Antarctica: Assessing the Legitimacy of the Antarctic Treaty System", PhD diss. (University of Oslo, 2021).
- Zarankin, Andrés and M. Ximena Senatore, *Historias de un pasado en blanco: Arqueología histórica antártica* (Belo Horizonte: Argumentum, 2007).
- Zlotnicki, Anna, "For the Purists! Our Continental Landing!", www.adventure-life.com/ant arctica/stories/deep-south-small-ship-antarctica-expedition/for-the-purists-our-continen tal-landing.