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Is there anything natural about the polar?

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Research Article

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Abstract

Are similarities of temperature, snow and ice cover, and (certain) marine mammals sufficient to warrant both polar regions being considered a single object of study or governance? We argue that their treatment as a unit is an invitation to examine the motivations behind the choice to be polar rather than Arctic or Antarctic. For individuals such as James Clerk Ross or Roald Amundsen, logistical requirements and analogous goals facilitated careers spanning both the Arctic and the Antarctic. This trend continued through the 20th century as individual scientists studying phenomena such as glaciers, sea ice, or aurora defined their research as "polar" in nature. Organisations such as the Scott Polar Research Institute and Norwegian Polar Institute could draw on traditions of national exploration in both polar regions, while the Arctic and Antarctic Research Institute in St. Petersburg gained its southern mandate with the importance of the International Geophysical Year. By comparison, neither the Arctic Institute in Copenhagen nor the Argentine Antarctic Institute felt any need to become polar. The creation of polar identity is ultimately a matter of geopolitics, of the value states see in instruments and symbols that speak to polar rather than Arctic or Antarctic interests. In cases such as Finland's icebreaker industry, a technological capability justified Antarctic interest even without any national research tradition. We conclude by asking whether there is anything more natural about the polar regions than there is about the concept of a "tripolar" world in which the high alpine regions form a natural unit along with the Arctic and Antarctic.

Introduction

The polar regions are frequently grouped together in cultural artefacts, from atlases to children's puzzles and popular natural histories such as the widely seen BBC series "Frozen Planet." The origin of the word Antarctic, from the ancient Greek ant-arktos (literally "anti-Arctic") strengthens this sense, as does the term "polar" itself, from *polos* that referred both to a earth's rotational axis and the northern point where this met a celestial sphere (Leane & Miles, 2017). Researchers frequently use the collective term, polar, in the present. This is not only the case in Anglophone research but also used in political and scientific discourse in the Nordic countries and Germany. While not universal, it is nevertheless a prevalent notion in the west.

The Arctic is an ocean surrounded by lands, having permanent communities, including Indigenous people, and with a fauna including muskoxen, polar bears and mosquitoes. The Antarctic is a continent surrounded by ocean populated mainly by a rotating cast of scientists and support staff, amongst a fauna dominated by penguins and nematodes. Are the linguistic connections, similarities of temperature, snow and ice cover and (certain) marine mammals sufficient to warrant both polar regions being considered a single object for study or governance? How does the audience, activity and intended outcome relate to the terminologies used? What role do state actors and institutions play in these constructions, and does their usage lead to specific path dependencies making some representations and actions natural and other unthinkable? We argue that what is frequently termed the bipolar perspective has less to do with physical geography and more to do with the norms, values and ideals of societies from which artefacts and people originate. Our intention is not to dismiss the scientific or logistical reasons behind some disciplinary studies of the polar regions (Howkins, 2015). Rather, our aim is to show how conceptions of empire or "natural" areas of influence and possession in national and international politics have played an important role in the making of the polar regions as a unitary geopolitical concept. Our examples include individual researchers and explorers, institutions charged with supporting bipolar research and promoting it as legitimate and finally the states from whom the funds for polar research so often come.

Individuals

The career of the British mariner James Clark Ross is notable for its embrace of both Arctic and Antarctic work. Having first sailed north with his uncle John Ross in 1818, he eventually made four Arctic voyages, including locating the North Magnetic Pole in 1831. Ross then charted large

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parts of the Antarctic coastline in a quest to locate the South Magnetic Pole during 1839–1843 (Savours, 1962). These feats established Ross's professional career in addition to his historical legacy. He was able to do so thanks to an overarching program that gave his travels significance – the "Magnetic Crusade," a quest to collect magnetic observations from around the globe in which the magnetic poles held great importance (Cawood, 1979) – but also due to his expertise in icy waters. If the former point speaks to the place of both Arctic and Antarctic environments within a single research context, the second speaks to a more specific identity as an expert in a particular set of conditions that might be encountered at either end of the earth. His career path was made possible by the relevance of polar spaces to the wider goals of the British scientific and naval establishments.

Almost 60 years after Ross set sail for the Antarctic, the Norwegian Roald Amundsen joined an expedition under the Belgian flag that ultimately became the first to spend a winter below the Antarctic Circle. Amundsen would make his name as an explorer of both the Arctic and the Antarctic. Like Ross, he drew upon both logistical commonalities and a national context within which polar activities held meaning (Friedman, 2004a). Amundsen returned to Antarctica largely because his initial goal of reaching the north pole had already been taken. The specific skills of Arctic travel and living, from skiing to working dog teams, were sufficiently transferable that expertise in the north could underpin success in the south.

Moreover, the construction of polar exploration as a distinctly Norwegian strength made the Antarctic a logical space to project national vitality. The perception that Antarctica was the distant scene of a race for national glory encouraged individuals from countries with no Antarctic history, such as Sweden and Japan, to take an interest in Antarctic exploration.

Well into the 20th century, individuals such as Jean-Baptiste Charcot, Richard Byrd, Olaf Holtedahl and more achieved success through working in both the Arctic and the Antarctic. Logistics continued to be important, but so too were research agendas. Holtedahl's geomorphological studies, for example, could draw upon data from both the northern and southern polar regions, while the marine biologist Sidney Harmer drew ominous parallels between the collapsed Greenland whale fishery and its flourishing Antarctic counterpart. Glaciologists and geologists could draw equally strong links between high latitudes and high altitudes. Young men from the University of Oxford formed the backbone of both Arctic and Himalayan expeditions in the early 1920s, and the Swedish geographer Hans Ahlmann's research interests followed glacier motion from the mountains of inland Norway to the high Arctic and finally to Antarctica (Roberts, 2011). The narrative of polar exploration (and heroism) through bipolar accomplishments has persisted into the present, with examples such as the American explorer Ann Bancroft, the first woman to cross the ice to both the north and the south pole (in 1986 and 1992, respectively).

Yet, Australians such as Douglas Mawson and T.W. Edgeworth David spared barely a thought for the Arctic. Neither did Danish travelers in Greenland nor Canadian travelers in the Northwest Territories feel a need to look south. It is interesting to ponder whether the presence in both Greenland and northern Canada of Indigenous populations with specific expertise in Arctic living and travelling played a role in localising such knowledge and rendering it more place specific. Consider the reactions of Greenland Inuit to a film about the Antarctic shown by the British explorer Wally Herbert, revealing a "barren" land they found "strange" and "weird" (Auburn, 1972, p. 31).

Institutions

The conception of the polar regions as a single space for research became legitimised through the organisation of bodies with polar rather than Arctic or Antarctic mandates. A particularly good example was the Scott Polar Research Institute (SPRI), founded in 1920 to memorialise an Antarctic hero within the broader context of both polar regions. Its ambition to cover both Arctic and Antarctic matters was reflected in the founding of the *Polar Record*. Sponsorship of smaller Arctic expeditions provided valuable training for the men who revived Britain's Antarctic exploration tradition in 1934–1937. Efforts to bring explorers from different nations together had earlier led to the International Polar Commission, whose lack of success owed much to bad timing (founded in 1913), and perhaps also its insistence on the primacy of science rather than feats of exploration (Elzinga, 2004).

But for much of its early history, SPRI was an outlier. Denmark had state and non-state organs dedicated to research and administration in Greenland without a hint of Antarctic interest. Soviet polar activity had a similarly exclusive northern focus. State-sponsored Norwegian enterprise focused almost exclusively on the Arctic. The most interesting exception concerned the whaling industry. By the 1930s, Antarctic whaling was a valuable source of money and also prestige, through the discovery of Antarctic land. Individual magnates such as Lars Christensen depicted themselves as bearers of Norwegian nationalism in both the Arctic and the Antarctic, with Christensen even redirecting materiel from his Antarctic voyages to the controversial occupation of Myggbukta in East Greenland (Roberts, 2011). Yet, these gestures remained associated with individuals rather than institutions, acts of opportunism that did not even reflect a shared economic base, given the dismal prospects for Arctic whaling compared with the Antarctic.

Matters began to change after 1945. The new Norwegian Polar Institute, founded in 1948, had an Antarctic expedition as one of its first major tasks – itself a product of Norway's history of Antarctic exploration (and whaling), which had led to a territorial claim in 1939. Driven by the need to participate in the International Geophysical Year (IGY) (1957–1958), the Arctic Research Institute in Leningrad became the Arctic and Antarctic Research Institute and from 1955 coordinated Soviet activities in the far south. The Arctic Institute of North America (AINA), a non-government body established in 1944 to stimulate Canadian and USA interest in northern research and development, found that its combination of low overhead rates and experience in Arctic regions made it an attractive contractor for the US Antarctic program. Lucrative contracts flowed in first for administration, and later for recruitment, training, logistics and even operating Antarctic bases, to the point where senior figures argued for a name change to the Polar Institute of North America (AINA, 1958). In both cases, an institution founded initially with a regional mandate – Siberia and the Northern Sea Route, and Arctic North America – expanded its horizons as the USA and USSR began to regard themselves as global superpowers.

Other organisations continued to happily retain an exclusively Arctic or Antarctic focus. Australia, Chile and Argentina participated in the Antarctic leg of the IGY without any sense that this made them logical Arctic operators. Perhaps it is significant that new institutions with specifically polar mandates, such as the Byrd Polar Research Center at Ohio State University, could draw on both a specific history of engagement at both poles (personified by Byrd) and a set of research questions – notably in glaciology – that made Arctic and

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Antarctic field work components of a single puzzle. In some cases that expertise also transferred to alpine questions, such as when AINA successfully lobbied the US government to support environmental research in the St. Elias Mountains on the Alaska–Canada border for its potential to act as an analogue for Himalayan conditions (AINA, 1967).

Governments

Since 1945, Arctic and Antarctic research has increasingly become a state priority. These years have also seen the expansion of superpower rivalry to the Antarctic, with both the USA and the USSR pushing a new form of geopolitical power projection based on the magnitude of their activity rather than on territorial claims. These dynamics found expression in the logic of the IGY during which even countries such as Norway enrolled Arctic assets in a political decision to establish an Antarctic station despite a tepid reaction from the research community (Friedman, 2004b).

Many states also developed enduring organs charged with polar matters. Brian Roberts of SPRI worked part time at the British Foreign Office as an adviser on both Arctic and Antarctic issues after the Second World War. A distinction should nevertheless be drawn between active state interest and a more passive acquiescence to international agreements. Australia, Canada, India, New Zealand and South Africa became early signatories to the Svalbard Treaty simply through their status as members of the British Empire. Conversely, Denmark became a signatory to the Antarctic Treaty in 1965, but at least in the early years Antarctic Treaty System (ATS) documents sent to the Danish state appear to have been passed on to the Greenland Ministry and filed away without comment, if their location in the Ministry's archives is any guide.

During the 1970s and 1980s, the Antarctic Treaty System faced – and survived – a global crisis of legitimacy in the context of decolonisation, the United Nations Law of the Sea (UNCLOS) negotiations and debates over Antarctic mineral exploitation (Dodds, 2010). Between 1983 and 1990, 11 states joined the ATS for a revealingly wide range of reasons. India, whose 1956 attempt to raise the question of Antarctica at the UN faltered because Chilean and Argentinean opposition prevented the consolidation of an anti-imperial coalition (Howkins, 2008), acceded to the Treaty in 1983 and was granted consultative status in less than a month. It also prompted more regional governance bodies to take notice. Upon recommendation from the Nordic Council, for example, ministries organised regular meetings on "polar issues" from 1985 until the early 1990s (Finnish Ministry of Foreign Affairs, 1989; The Nordic Council, 1988, p. 31).

Other states privileged economic motivations, especially in the case of states and companies that have technological expertise in one polar area and wish to expand to the other. The Finnish Antarctic Research Programme was established in 1988 following five years of governmental discussions on Antarctica's value to the country. The Ministry of Trade and Industry, and not the research community, led these discussions (Finnish Ministry of Trade and Industry, 1987). The Ministry considered Antarctic research to be of sufficiently large volume that it "offered most Finnish companies specialized in cold weather technology interesting opportunities," that could be enhanced when the exploitation of natural resources became economically and politically feasible (Finnish Ministry of Trade and Industry, 1986–1987). Thus, the primary justification for applying for consultative status in 1989 was the Finnish cold weather industry in the Baltic Sea and Lapland regions, expertise that was seen as transferrable – and sellable – to Antarctica (Finnish Ministry of Foreign Affairs, 1989). Similarly, in recent years, Canada (which joined the ATS in 1988) has made efforts to use Arctic and sub-Arctic expertise as a justification for increased engagement in the Antarctic. Polar Knowledge Canada, a federal research organisation, was established in 2015 with the explicit goal of "strengthening Canadian leadership in polar science and technology, and promoting the development and distribution of knowledge of other circumpolar regions, including Antarctica" (Polar Knowledge Canada, 2019). Part of its mission involves producing Antarctic science, through environmental protection strategies. But much like in the Finnish case, significant benefits could accrue also from supporting the expansion of Canadian companies with strengths ranging from air support (notably Kenn Borek Air) to drone technologies and remote operations capability in cold regions.

Conclusions

This commentary explored the construction of bi-polarity by individual explorers and scientists, and through institutions and governments, analysing how it has been connected to political and social aims and goals. One of the commonalities has been that the organisations with an explicitly bipolar mandate are almost exclusively located in the Northern hemisphere. Britain and France strove to build global empires in the 19th century; the USA and the USSR articulated global power in the 20th century. Smaller European states such as Norway and Finland had traditions of commercial and political power far from their own borders within the rules of an imperial system. This international society of states faced a crisis of legitimacy in the 1970s and 1980s, with decolonised countries finding their role and voice on the global scene – including the polar regions. Today, it is China and India that have taken the strongest steps to establish their presence in both polar regions, reflecting their ambitions of global influence and a new international social order.

One might doubt whether the rubric of the bipolar is any more natural than that of the tripolar (see for instance Huettmann, 2012), or even the multipolar. In Ancient Greece, the poles were regarded as celestial bodies and the link between the poles and outer space has been articulated in a variety of ways in the years since (Leane & Miles, 2017; Robinson, 1999). The examples we have used are also connected to international negotiations and institutions illustrating the linkages between science, technology and society. The UNCLOS negotiations loomed large in the background of the negotiations of many polar agreements, including the Agreement on the Conservation of Polar Bears (1973) and the Convention on the Conservation of Antarctic Marine Living Resources (Antonello, 2019).

To be "polar" is to strategically articulate a geopolitical vision. Quoted in a Swiss media account of a major Arctic and Antarctic research conference in 2018, held in Davos, glaciologist Michael Zemp argued that climate change provides a compelling reason to link research in mountains and polar regions (Misicka, 2018). He thus legitimised both the connections between alpine, Arctic and Antarctic research and the involvement of Switzerland as an alpine nation as a central part of that project. Zemp's argument neatly captures the constructed nature of such categorisations – and their essentially geopolitical character, a unit inasmuch as it is politically and socially useful.

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References

Antonello, A. (2019). *The greening of Antarctica: assembling an international environment*. Oxford: Oxford University Press.

Arctic Institute of North America (1967). *Minutes of Executive Committee meeting*, 14 October 1967. Ottawa: Libraries and Archives Canada MG28 I79, box 194.

Arctic Institute of North America (1958). *Minutes of Board of Governors meeting*, 5 December 1958. Ottawa: Libraries and Archives Canada MG28 I79, box 193.

Auburn, F. M. (1972). *The Ross Dependency*. Dordrecht: Martinus Nijhoff.

Cawood, J. (1979). The Magnetic Crusade: science and politics in early Victorian Britain. *Isis*, *70*(4), 492–518.

Dodds, K. (2010). Governing Antarctica: contemporary challenges and the enduring legacy of the 1959 Antarctic Treaty. *Global Policy 1*(1), 108–115.

Elzinga, A. (2004). Otto Nordenskjöld's quest to internationalize south-polar research. In A. Elzinga, T. Nordin, D. Turner, & U. Wråkberg (Eds.), *Antarctic challenges: historical and current perspectives on Otto Nordenskjöld's Antarctic expedition* (pp. 262–290). Gothenburg: Royal Society of Arts and Sciences.

Finnish Ministry of Foreign Affairs (1989). *Antarktiset alueet, Suomen Etelämantereeseen kohdistuva tutkimustoiminta*. Helsinki: Archives of the Finnish Ministry of Foreign Affairs, Signum 13.4. Antarctic regions, Finland's Antarctic research.

Finnish Ministry of Trade and Industry (1986–1987) *Kauppa- ja teollisuusministeriön työryhmä- ja toimikuntaraportteja (KTMA) (1986–1987)*. Helsinki: National Archives, UCC 25, MTI working groups documents (1986–1987).

Finnish Ministry of Trade and Industry (1987) *Aims of the Antarctic activities of Finland*. Helsinki, 25 September 1987.

Friedman, R. M. (2004a). Nansenismen. In E.-A. Drivenes & H. D. Jølle (Eds.) *Norsk polarhistorie 2: vitenskapene* (pp. 107–174). Oslo: Gyldendal.

Friedman, R. M. (2004b). Å spise kirsebær med de store. In E.-A. Drivenes & H. D. Jølle (Eds.) *Norsk polarhistorie 2: vitenskapene* (pp. 331–420). Oslo: Gyldendal.

Howkins, A. (2008). Defending polar empire: opposition to India's proposal to raise the 'Antarctic Question' at the United Nations in 1956. *Polar Record 44*(1), 35–44.

Howkins, A. (2015). *The polar regions: an environmental history*. Cambridge: Polity.

Huettmann, F. (Ed.) (2012). *Protection of the three poles*. Tokyo: Springer.

Leane, E. & Miles, G. (2017). The poles as planetary places. *The Polar Journal 7*(2), 270–286.

Misicka, S. (2018). 'How the Alps inform polar pesearch', 24 June 2018. Retrieved from https://www.swissinfo.ch/eng/polar2018_how-the-alps-inform-polar-research/44208586.

Polar Knowledge Canada (2019). Polar Knowledge Canada. Retrieved from https://www.canada.ca/en/polar-knowledge.html.

Roberts, P. (2011). *The European Antarctic: science and strategy in Scandinavia and the British Empire*. New York: Palgrave Macmillan.

Robinson, K. S. (1999). *Antarctica*. New York: Bantam.

Savours, A. (1962). Sir James Clark Ross, 1800–1862. *Geographical Journal*, *128*(3), 325–327.

The Nordic Council (1988). *Nordiska rådets verksamhet 1971–1986, Översikt över rådets rekommendationer och yttranden*. Oslo: Graphic Systems.

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