

In defence of our realm

The year 2010 marks the centenary of Roald Amundsen and Robert Falcon Scott setting off on their differently fated expeditions to reach the South Pole. The polar regions still capture the imagination. When I first visited the Arctic in 1990 it was the trip of a lifetime, but I have been back every year since—nowadays more like once every couple of months. Similarly, my first trip to Antarctica last year has only kindled my fervour to go there again (and again). The polar regions have a magnetic hold over me, although I am far from alone in succumbing to this obsession.

The poles have long been a symbol for humanity striving towards knowing what is yet unknown, and harnessing its power. The metaphor was most famously used by Mary Shelley in her iconic novel *Frankenstein* (1818), but in recent times the science of the polar regions has entered human consciousness globally. The alarming instability of the polar climate and resulting vulnerability of the ice-caps has become the compelling evidence of the greenhouse effect. Both the ice itself and its animal inhabitants have become emblematic of the global challenge to arrest climate disruption before it destroys us. The Arctic and Antarctic are now recognized as the bellwethers of climate disruption; the canary in the cage that is not merely fragile and beautiful in its own right, but also the harbinger of far greater calamities ahead.

Making the scientific case that climate change is happening in real time would not have been possible without the work conducted inside the polar regions. Last year I visited Ukraine's Vernadsky Research Base on the Antarctic Peninsula, formerly the British Faraday Station. In addition to housing reputedly 'the best bar in Antarctica,' it is also credited as the place where the ozone hole was discovered in 1984. That alarming finding led to the first global initiative to change public policy. Its successful implementation has been an inspiration to all those involved in the much tougher struggle to curb greenhouse gas emissions.

Practically irrefutable scientific data warning of a looming disaster can, indeed, lead to political change, even on a world-wide scale to the extent of affecting everyone's daily lives.

Polar science would not be possible—or would be far more problematic—were it not for the fact that access to and activity inside the polar regions is restricted by international conventions. In the Arctic, the international Law of the Sea affords some protection. In Antarctica, human activity and the rights and obligations of states are regulated by the Antarctic Treaty (1961). The signatories, including all of the nations that previously claimed slices of Antarctic territory based on little more than explorers' whims, agreed to set aside such claims—which were neither recognized nor withdrawn—in favour of an international regime that would facilitate scientific research based on cooperation. *De facto* sovereignty over the White Continent and its surrounding ocean thus rests not with any state, military alliance or international organization. Instead, it is ours. Antarctica belongs collectively to the world's scientists. We alone have the right to use it, provided that we respect each other's access, apply our findings to purely non-military purposes and permit others to visit, hindered only by the stringent demands of environmental protection.

A little closer to home for most of us, the Arctic is now under more tangible threats. Scientists are not its only inhabitants. We share it with its much-loved carnivores, marine mammals and the Inuit, Saami and other hunters and gatherers who eke a precarious and largely traditional livelihood from its natural production. Long before the present century there was only one real city in the Arctic, the port of Murmansk. Nowadays it has a string of rivals boasting tourism and academia as their main activities. Coal has been mined in Svalbard for more than a century. The pan-Arctic nations are now engaged in an unseemly struggle to capture and exploit the Arctic's other

mineral resources, many of which remain hypothetical but potentially very valuable. With prospecting comes the inevitable desecration of the environment and creeping militarization in its wake. Some commentators liken the scramble for Arctic supremacy to the Great Game of the nineteenth century, when the Russian, British and other Eurasian empires competed for control of the Caucasus and Southwest/Central Asia.

Given the importance of the Arctic to the overall health of the planet, its status as a bellwether of climate change and the need for Arctic science to maintain active surveillance and gather new knowledge, it is time for us to reassert our sovereignty over the region. The armies, navies, corporations and governments that challenge us will not give in easily. We will need to recruit the force of public opinion just to open the question, let alone resolve it in our favour. But even if we cannot achieve anything as visionary as the Antarctic Treaty in the North, we must try nonetheless.

The fact that we are already an international fraternity operating without any treaty or organizational structure gives us both an advantage and a disadvantage. We have no armed forces to call upon. We have no means to resist legalistic arguments favouring national and corporate rights in the Arctic, other than the flimsy institutions of the indigenous peoples—plus the toothless Arctic Council already dominated by Washington, Moscow, Ottawa and Copenhagen. Yet this is also our strength. The world's scientists are universally respected custodians of the planet and our common future. We are beholden to nothing and to nobody. Our only duty is to uncover the truth and speak it. The Great Game spawned almost two centuries of intermittent and still inconclusive war in Afghanistan. We have history on our side too.

Howy Jacobs

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