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Book Review

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The scramble for the Poles: the geopolitics of the Antarctic and Arctic

K. Dodds & M. Nuttall
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The title of this book incorporates the metaphorical term 'scramble'. As a concept it evokes associations with a past era in global history but also signals a dynamic perspective emphasizing interconnectivities between the Poles and world economic and political centres. Of course today is very different, and the 'drivers' of the processes of 'opening' the Arctic and Antarctic involve many more actors and new technologies than did the second wave of land-grabbing imperialism in Africa 130 years ago. Scientific knowledge no longer links only to the classical geographer's two-dimensional 'topographical' mapping activities or the mineralogist's surveys of mineral wealth. Now we also see three-dimensional 'vertical' mappings and 'volumetric' visualizations of offshore riches locked away in continental shelves, under the seabed and under the ice. Such knowledge informs international and regional legal regimes as well as environmental protection measures intended to regulate moves from exploration to exploitation. This is one of the book's major themes.

The book has seven chapters. Throughout most of them the focus moves back and forth between the past and recent events in a narrative that also continually alternates between Arctic and Antarctic. Snapshots of comparisons between the regions clarify commonalities and differences in an analysis that goes much deeper than one usually finds in the geographical and social science literature on polar matters. The emphasis is on geopolitics, the role of knowledge, values, legal regimes, natural resources and social justice.

Roughly one-third of the text concerns the Antarctic and two-thirds the Arctic, which is a reasonable balance given that the latter region has an immensely longer human history. It is inhabited, the annals of this history are full of injustice to aboriginal peoples whose voices in some areas are now finally influencing modes of governance; resource mapping and conflict around large-scale extraction and exploitation projects abound, memories of vast environmental degradation in the past live on and fears of more to come are tangible. The Arctic is simply where the bulk of the political action is taking place, and it attracts the greater portion of speculation and media hype. Apart from a presentation of rich empirical detail of trends at the Poles the book also introduces a number of novel analytical concepts and, moreover on another level, pursues a reflexive meta-theoretical discussion regarding multiple 'framings' of the Arctic and Antarctic; framings advocated by key players whose lenses tend to be shaped in line with mutually divergent and sometimes convergent stakeholder interests and actions.

The tone of the book and its approach is set in the Preface by using former Canadian Prime Minister Stephen Harper's posturing in connection with the discovery of the wreck of the *HMS Erebus* from the Franklin expedition. It was one of the two ships that set sail from England in 1845 in a search for the Northwest Passage; officially declared missing the disappearance of the expeditioners became a mystery that haunted later explorers and scholars for many years. In September 2014 an expedition linking the Government of Canada and public, private and non-profit organizations finally succeeded where others had failed. Success hinged on the use of both state-of-the-art technology and 19th century Inuit oral testimony. Stephen Harper captured the historic moment by posing in front of television cameras while pointing to a vague image of the hull lying off the coast of King William Island (also known as Qikiqtaq), 11 m below the surface of what Canada holds to be its inland waters, a principle contested by the USA and other countries that insist the Passage is an international strait.

Dodds and Nuttall point to the paradoxical in Harper's use of events long past in a British history of empire when Canada did not even exist or was even conceived as a nation, whereas the substantive historical continuity was actually preserved in the oral witnessing and memory practices in Inuit communities. In other words the long-standing presence of the Inuit remains 'the most evocative expression of Canada's sovereignty'. One might add to this the irony that the same Harper six years earlier apologized on behalf of the government for a past history of forcefully uprooting aboriginal children by putting them in a church-run, government-funded residential school system with the primary objectives of removing and isolating them from the influence of their families, traditions and cultures, and to forcibly assimilate them into the dominant culture. In 2014, the Truth and Reconciliation Commission as it was called (started in 2008) was just in the process of wrapping up its extensive and comprehensive rounds of aboriginal witnessing that testified to the dislocation, trauma and harm arising from

this grand-scale socio-cultural lobotomy. Fortunately for Harper the system did not impact an Inuit child who was inspired by his great grandmother's storytelling, Louie Kamookak from the hamlet of Gjoa Haven on King William Island. As a 20-year-old he became an amateur historian and spent 30 years collecting oral histories about encounters with men of the Franklin expedition and their remains or artefacts from Inuit elders and comparing them to the journals of subsequent expeditions. He came up with a theory of where the ships might be found, one that eventually gave the Parks Canada explorers a much better idea of where to start looking.

Intellectually the book's analysis is situated in 'critical geopolitics', a field that has emerged during the past 15 years and is now well-established, with influences coming from a variety of different disciplines but without forming a consensual canon of precepts (Dodds *et al.* 2013). There are, however, a number of distinctive characteristics in the approach. Firstly, a move away from a state-centric view of geopolitics, and recognition of non-state actors like multinational corporations, environmental and other non-government organizations (NGOs), and Arctic indigenous communities. Secondly, subjective factors are considered, including the role of individuals and interplay of everyday events. The focus is on sites, agents, contexts and change. Apart from the material and resource dimensions, which are central to competition and rivalry between actors, the cultural dimension is also taken up. Concepts, imagery and visions attending the various actors' behaviour are seen as significant elements (also called 'scripts' and 'scripting') in promotional and legitimization strategies geared to boost multiple, often mutually contradictory 'futures'. Some of the discussion of developments and multifaceted tensions in the Arctic is based on interesting critical anthropological work, much of it detailing the northern Canadian context and issues.

Issues like global climate warming and environmental protection are seen as tightly interwoven with prospects of economic exploitation at the Poles. Regulative regimes and governance forums are arenas where tensions, conflicts and (geo)political rivalries get played out. Computer-aided thinking and 'the politics of verticality' and 'vertical geopolitics' also enter into the picture, interlaced as the authors argue, in a bundle of geographical-political-legal techniques for exercising control over subterranean resources, monitoring passageways, surveying what lays within landscapes and seascapes, probing the ice-filled waters of the Arctic, carrying out remote-sensing surveys of polar ice sheets and seeking to understand the bedrock, and identifying Antarctic subglacial aquatic environments using radar and subsurface measurements. The motivation for such activities was, and is, always varied and multifaceted, including paranoia, curiosity, greed, safety, hope and altruism.

The book's thematic structure is motivated by its analytical approach, so there is considerable overlap between the various chapters. Apart from reviewing the gist of the empirical substance I wish particularly to highlight a number of valuable concepts introduced by the authors. Given the readership of the present journal, the empirical dimensions I will highlight mainly concern the Antarctic but will include also a few instructive observations on the Arctic as a forerunner region (compare Winther & Njaastad 2012).

Much of the first chapter is devoted to dispelling the myth of the Poles as frontiers or peripheries beyond the reach or rhythms of mainstream societies. The concept of scrambling is clarified. It is used to capture not only the traditional notion of nations gearing up to repartition and between them try to regulate their respective influences over future resource realms. There is also the other dimension, the crucial role of ideas and imaginations, the symbolics (one might say) of positioning and posturing, opinion building and various actors' mobilization of events of the past in their efforts to construct potentially alternative futures. Our attention is drawn to a complex politics of memory, identities and ignorance, what gets 'inscribed' and, by default, ignored in contending future scenarios. This second sense of 'scrambling' includes agendas evolved in a co-production of scientific knowledge and social-epistemics of open-ended signals and uncertainties regarding what the future(s) may bring; scenarios some see as promises others view as threats to their own interests, to the environment or to local indigenous livelihoods and lifestyles.

At issue today are 'scrambles' over knowledge about gas and oil reserves below the Arctic seabed, marine resources, control over shipping routes, efficacy of new technologies coming on line, all this and more in a time of global warming, melting sea ice, and retreating glaciers in the Polar North. The behaviour of the Arctic rim states is also influenced by the influx of comparatively new global actors on the scene and imagery picked up and hyped in contemporary news media. One example is the impact of the Russian titanium flag-planting act at the sea-bottom below the geographical North Pole. Another is the 'rise of the East' as China, Japan, South Korea and Singapore push their ways, in practice and rhetorically, into the Arctic region. Dodds and Nuttall look behind the headlines and speculations to tease out longer term trends ignored and obscured by media noise and partisan Western-oriented scholarship. This also goes for the Antarctic. Thus they provide us with a much more complex, evidence-based and nuanced picture of the various players and their 'scripts'. They point to historically earlier periods when the Poles were imagined as exceptional and frontier-like to justify extraordinary actions to explore and cash in on their riches, particularly in the Arctic, and they document how today powerful

metaphors and what are called 'imaginaries' likewise convey similar promises of fantastic opportunities. But now those metaphors are also turned against would-be exploiters. Advocates of environmental protection and stronger regulatory mechanisms on the other hand also invoke the notion of the exceptional, the image of pristine wilderness qualities and so on to try and stop unbridled exploitation. The tension between these two ideal typical 'scriptings' of the future, their workings and implications are examined and illustrated in considerable detail.

Chapter 2 introduces a number of novel concepts to pinpoint six distinctive but overlapping driving forces that have contributed to shaping and 'remaking' the Polar Regions. Historically there is the significance of hunting, fishing, as well as demographic movements, the fur trade with its classical grand trading companies established in the far North, and sealing and whaling operations in the South, the latter spurring the first claims to territorial sovereignty in Antarctica; scientific exploration and stations under national flags established to manifest presence on the part of nation states. These and related activities as drivers generated networks and flows of people, monies, ideas, technologies and influence in a form referred to as globalization. The multifaceted nature of this process has taken on new forms in our own era; how the process generates debates, negotiations and protests is nicely captured in the chapter, although it would be useful to distinguish its specific neoliberal capitalist and expertise driven character in our time after the demise of the Cold War by additionally introducing the concept of a 'globalized privatization regime' used by critical economic historians to characterize the new power-and-expertise nexus inherent in the current mode of production of scientific knowledge that has become so central (Mirowski 2011).

The second driver is called 'securitization', a concept used to understand the measures taken by countries and other agents to secure actual and potential economic footholds and the taking of precautions, plus use of expert knowledge and new technologies to try and predict threats, risks and dangers relating to polar-based resources. Examples are mostly taken from the Arctic where military and borderland policing activities have also increased, but also taken up is Australia's promotion of a whale sanctuary in concert with environmental NGOs to halt Japanese whaling in waters along part of the Antarctic. This mode of enhanced vigilance and environmental security in the latter case, it is noted, is intended to strengthen Australia's status as a claimant state within Antarctica.

'Legalization' refers to a further driver on the polar scene. The concept is used to describe and explain the workings of international legal regimes and how the Arctic and Antarctic have become increasingly embedded in these. A primary example is the United Nations Convention on the Law of the Sea (UNCLOS) and its relationship to sovereign rights over extended portions of continental shelves. Like securitization, legalization entails double-edged implications; this is most evident in the Arctic as the Convention's Article 234 on the rights of coastal states permits these to impose stringent measures to ensure higher standards of shipping safety and environmental protection, a provision Canada, for example, uses to justify stronger control of Arctic shipping through its sovereign waters (read Northwest Passage).

A fourth driver, 'polarization' appears in socio-political and institutional landscapes, particularly in the Arctic where economic development is polarized. Interventions and campaigns of environmental groups, like Greenpeace, supporting environmental protection clash with corporate business interests in many places while local communities may be of two minds. Environmental groups are seen to act as lightning rods for conflicts and disputes over how the Arctic is imagined and should be managed. The Antarctic and Southern Ocean Coalition (ASOC) and other NGOs perform a similar function in the southern polar latitudes. States, corporations and regional organizations are all caught up in this polarizing of strategic alignments.

Then there is Nature herself. The global warming process, in which the Polar Regions play crucial roles providing early warnings from scientific studies and the experiences of Arctic indigenous peoples. Scientific predictions of the crossing of 'thresholds' and references to 'tipping points' signal possibilities of systemic geophysical and ecological shifts in the Arctic and Antarctic. Predictions tie into calculations of probabilities, risks, uncertainties and graphical representations of possible future scenarios regarding still greater 'disturbance'. The key concept here is 'perturbation'. Dodds and Nuttall use it to include not only ecological/physical disturbance (fate of sea ice, permafrost, stability of polar ice sheets) but also 'a broader sense of unsettlement' including socio-political ones like forced migration (Arctic) and the uptake of research-based evidence as anticipatory intelligence in national and intergovernmental decision-making. Here the authors present a brief informative digest of the science that has led to the prominence of the two Polar Regions in the debates over ongoing anthropogenically enhanced climate warming.

Finally, they introduce a sixth concept, 'amplification' referring to i) a shift and acceleration of geophysical changes outside normal, ii) impacts generating second order effects in marine and terrestrial environments, and iii) the creation of unwarranted hope, fear or anxiety regarding the future risks for the Polar Regions. In a later chapter polarizations and socio-psychological amplification are linked to a phenomenon called 'Polar Orientalism'. It is

seen to emerge around discussion and opinion pieces on current events in the Arctic as well as the Antarctic (see below). Taken together the various concepts introduced contribute analytical depth to an understanding of the dynamics of change and political/managerial reconfigurations in the Polar Regions.

Chapter 3 goes on to make a pitch for the volumetric perspective in geopolitical analysis. In its introductory section we are reminded how science fiction, literary and filmic representations of the Polar Regions trade on popular fascination with what may lurk underneath all the Antarctic ice and snow. In polar memoirs, stories are many of how the materiality of snow and ice as 'non-human agents' can resist and frustrate the best made plans of humans; encounters with the same material 'bodiness' of the Antarctic ('the radically non-human and shifting ontology of ice itself', Glasberg 2012) reminds modern scientists that more sophisticated technology does not eliminate dangers. It is further argued that conventional notions of geopolitics only consider territory and what is on and passes over the surface of oceans or closely underneath, but fail to recognize what much of the geoscience produced by military-industrial-academic complexes has been and is about, the volumetric dimension. Most recently a lot of work and investments have been expended in measuring up polar seabeds North and South, and in the Arctic more specifically to evaluate energy reserves beneath. This knowledge submitted by states to the Commission on the Limits of the Continental Shelf (CLCS, under the auspices of UNCLOS) entails a volumetric perspective wherein a legally constructed continental shelf replaces the geophysical one. The translation trick hinges on a somewhat complicated formula involving distance, depth and sediment analysis explained in the text. The authors indicate that the formula, embedded as it is in policy considerations, is attended by interpretative flexibility that may still generate controversies that will have to be settled through existing international conflict resolution mechanisms.

In a more purely scientific vein there is the sizing up of the Antarctic ice sheet with three-dimensional mapping and visualization of the mountain landscapes buried in ice and valleys that run deeper than previously known, as well as mappings of subglacial aquatic environments. The Antarctic is no longer a pole-apart, new knowledge ties the continent more tightly into an understanding of the Earth's tectonic, climatic and environmental histories. These are some of the questions discussed against the backdrop of the histories of earlier phases in polar research, such as the seismic bedrock profile studies conducted during the Norwegian-British-Swedish Expedition traverse from Maudheim Station in 1951 over the inland ice, and later Antarctic and Arctic surveys embedded in the geopolitics of the Cold War. Thus we also get historical snapshots of early bedrock profile studies during the 1957/58 International Geophysical Year in the Antarctic and of subsequent projects in the Arctic that involved carving into the Greenland ice sheet, projects like Iceworm (tunnelling for placement of mobile nuclear missile launch sites) and Camp Century (run for some years as an under-the-ice station housing researchers, heated and lighted by a small nuclear reactor).

Chapter 4 reviews the experience of governing the Arctic and Antarctic. The focus is largely historical, recounting the treaties, conventions and rules successively constructed in various intergovernmental negotiations which reflect the uneven power relations between participating nations. Increasing attention to environmental protection and, more recently, weakening of the sway traditionally held by countries like the US, Great Britain, Australia and New Zealand are other factors noted. A number of astute observations are made, e.g. the importance of upholding a distinction between government and governance as two different processes and analytical (frequently conflated) concepts. Properly understood, the former refers to the situation earlier when decision-making issued from specific kinds of nation state politicking and public agencies that enjoyed privileged powers. Governance on the other hand entails orchestrating an array of many actors, both state-centred and non-state actors, like corporations seeking to reap economic profits. Additionally, in good governance, leaders and their policy advisers are called upon to factor in cooperation with civil society NGOs and communities that may be primarily motivated by different logics, like the precautionary principle respecting environment or (in the Arctic) aboriginal rights and restorative justice. The multiplication of actors with 'voice' allegedly reduces the earlier somewhat more privileged status of scientific expertise in resource management and conservation policies. Consequently, so the argument goes, challenges to the effectiveness and legitimacy of slow-moving consensus-based regimes multiply and reach a higher pitch (are amplified). A case in point is the Antarctic Treaty System (ATS) where the Treaty's Consultative Parties 'argue more explicitly than before, about fisheries science, conservation policies, environmental restrictions, base location, biological prospecting and resource-led futures', and in the Arctic reckoning must be held with indigenous knowledge and interests.

The section on the Antarctic recapitulates the familiar story of the genesis of the ATS and its transformations due to combinations of external and internal pressures. Currently the authors see signs of claimant-country chauvinism, the trend they call Polar Orientalism, i.e. a scepticism that homes in on Chinese and Russian long-term strategic plans in Antarctica which pundits brand as

essentially resource opportunistic (as if the interests of the US and claimant countries are always innocent and altruistic). India, China and South Korea, regarding Antarctic as a global commons and wishing to expand their presence on the continent, harbour suspicions that some veteran members of the ATS are pushing environmental concerns partly to thwart those ambitions. It is argued (also by the two authors) that implementation of the Madrid Protocol on environmental protection apart from enhancing the ATS co-produces an interesting collateral consequence, *viz*., tacit protection of claimant states' assertions of sovereignty over territories.

The remainder of the chapter deals with governance systems in the Arctic where national and regional arrangements within countries vary considerably and geopolitical preconditions for top-level intergovernmental cooperation only appeared a few years before the collapse of the Soviet Union and the official end of the Cold War, a turn signalled in Soviet president Mikhail Gorbachev's Murmansk speech in 1987. Nine years later eight Arctic countries, five of them coastal states, established the Arctic Council. We are taken on a very informative *tour d'horizon* of the circumpolar North describing conditions in and conflicts between various countries prior to and during the Cold War and its aftermath. Northern Canada, northern Alaska, Russia's Yamal Peninsula plus other places and their offshore reaches again pass in review. The recent flow of events in Greenland on the political and economic scenes, and concomitant division roused in popular opinion for and against large-scale transnationally financed extractive projects, and the prospects of a new round of uranium mining, forms the subject of an in-depth case study. The counter imagery fed by long-standing local mistrust and memories of roughshod treatment of indigenous peoples' homelands and their physical environments form the other trope taken up.

In Chapter 5 the fault lines in the Arctic are further articulated and it is argued that ghosts from the past still haunt the contemporary discourse of reinventing and reimagining polar futures. The narrative spun out in this chapter moves back and forth between past and present to illustrate how the drivers of globalization now are framing the Arctic as a special hydrocarbon frontier. The chapter lists and discusses the intricacies and significance of many of these agreements with detailed exemplifications from Canada roughly up to the time of the creation of Nunavut 1999. This is fascinating reading, but one has to look carefully to learn that the granting of subsurface mineral rights to local indigenous communities is actually limited to comparatively small areas within treaty territories, and they do not extend into seabeds. Here I would have liked to have seen more attention to the Canadian government's 'Northern Strategy' launched in 2009. Its implications for military securitization are amply discussed but not its scientific leg for speeding up globalized privatization; I am thinking of the programme for Geo-Mapping for Energy and Minerals (GEM, only mentioned in passing in a later chapter), and its important role as a spearhead for business intelligence and a lever for attracting private transnational capital to open up the far North for extensive large-scale offshore seabed exploitation projects (compare Medalye & Foster 2012).

While the Arctic is seen as a space of recent acceleration of mutually countervailing yet intertwined trends, the Antarctic is by comparison a space of a deferred or delayed resource frontier; another option noted as a possibility is that the continent 'becomes a more secretive resource frontier, a place where remoteness and commercial sensitivities combine well to evade others who seek to monitor, to survey and ultimately to manage'.

Chapter 6, 'Opening up the Poles', returns to the theme of an emergent Polar Orientialism. It is shown that this stereotypical view prevalent in mass media representations, and even infecting the perspectives of some scholarly commentators on polar affairs, obscures and ignores important geographical and historiographical facts. Ideas in popular culture resonate with the eurocentrically biased theories of a couple of late 19th and early 20th century writers on geopolitics, writers that Dodds and Nuttall cite in several chapters. Sceptics' comments on the role East Asian countries' scientific activities and station building both on Svalbard and Antarctica are also interpreted as expressions of Polar Orientalism, 'an imaginative geography' that (as already indicated) counts Indian, Chinese and South Korean Antarctic activities as suspicious.

It is shown that this stereotypical view obscures and ignores important geographical and historiographical facts. First of all there is a part of Asia east of the Urals that stretches into the Arctic even if it is usually referred to as Siberia and the Russian Far East. Secondly, what is frequently ignored is that historically Central and East Asian peoples actually have a long history of their own of trade and commerce with Arctic regions and its peoples including and via 'Russian Alaska' before the US purchase. Chinese immigrants to North America gave rise to Chinaphobia and the development of the idea that the Chinese were the alien 'other' and a threat to Western civilization.

They also show how the upsurge of Western media reporting on China and other East Asian economic powers now mimics earlier historical images and prejudices. This appears in media and even scholarly speculations on China's northward gaze, her interest in the Northern Sea Route (NSR), investments in Iceland and in Greenland's rare minerals. Further speculations in the same vein concern China's entry into the Arctic Council as observer together with other East Asian countries that are also interested in the opening of the

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Arctic and the NSR made possible by diminishing sea ice. The chapter documents evidence of such popular geopolitical scripting in the West and diplomatic footwork and tensions in the Arctic Council that reflect current geopolitical reconfigurations and responses to the fact that East Indian states are reimagining themselves as proximate to the Arctic.

For their own part, when it comes to the Antarctic, Dodds and Nuttall, point out how a Chinese icebreaker (*Xue Long – Snow Dragon*) can actually help the international scientific community as illustrated by the rescue of an ice-bound Russian vessel (*Akademik Shokalskiy*), and the new Korean polar research vessel *Araon* which has already helped Swedish researchers in Antarctica and Canadian and US scientists in the Arctic.

The final chapter deals with the complexity of coming to grips with the strain climate change puts on Arctic communities, illustrated by several examples. Calls for action beget reaction, in some cases non-action by governments on stricter regulatory measures or effective community consultation, in other cases demands for alternative actions to prepare for and develop new skills, like cold climate engineering, to cope with future changes. The single Antarctic example pinpoints once more the mounting pressures confronting consensus-based decision-making within the ATS. The case concerns controversy around Australia's and New Zealand's attempts to establish marine protected areas (MPAs) in the Ross Sea. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), in its struggle to balance conservation measures with 'rational use' of living resources, is partly paralyzed. Obviously the concept of 'rational use' lends itself to considerable interpretative flexibility in science-based modelling of marine resources, particularly when China and Russia harbour suspicions that claimant states are pushing conservation measures to bolster their own sovereignty interests. Various aspects of this controversy are discussed and the conclusion seems to be that there will be more not fewer such tensions and conflicts within the ATS as time goes on.

Because of its thematic structure the narrative throughout the book continuously shifts in focus between past and present, which makes for a fair amount of repetition. This has advantages and disadvantages, increasing empirical descriptions and nuanced analysis of trends on the one hand, but sometimes exasperating the reader who might prefer a more straightforward plot. Overall the book is an important contribution that succeeds in disrupting taken-for-granted assumptions, simplifications and hasty assumptions about the Polar Regions. It challenges us to look more closely at a number of deep-reaching drivers including climate change, globalization, securitization and technoscience, as well as the cultural dimension, the many metaphors and imaginaries that continually intertwine with these and evoke strong emotions around competing agendas and 'scripts' in the dynamics of local and global polar politics.

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