South of South – Australia and its influence in the Antarctic

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Abstract:

This article explores the current relationship Australia has to Antarctica, and provides suggestions for Australia’s future actions in the wake of emerging geopolitical complications in the Antarctic region. Australia’s foreign policy scope almost exclusively looks northwards, but this paper argues that Australia should not be complacent of its interests to the south. The formation of the Antarctic Treaty System and Australia’s role in this process is described, before the modern issues challenging this system of stability are introduced. Prominently, the geographical changes to the region caused by climate change and human interference is cited as having the potential to open Antarctica up to resource competition and militarisation between states invested in the South Pole. This, combined with the growing interest of the tourism industry in the continent, puts the political position of Antarctica as a land purely for peaceful use, and not for sovereign claim or control, under threat. It assesses how these geopolitical issues effect the continent, Australia, and the wider world, as well as presenting suggestions for how Australia should respond to these issues in their efforts to exert diplomatic influence over the South Pole, protect Antarctica’s longevity, and promote peaceful stability in the region.

Keywords:
Antarctic; Australian Foreign Policy; Antarctic Treaty; Antarctic Treaty System; Australian Antarctic Territory (AAT); Antarctic Treaty Consultative Mission; Quasi-sovereignty; Climate Change; Fishing; Tourism.

There are only two continents in the world which lie entirely within the Southern Hemisphere: Australia and Antarctica. Since its early colonial period, Australia has had an evolving interest in the Antarctic region, or ‘our Great Frozen Neighbour.’ Australia’s earliest engagements into the continent were missions of exploration and discovery, fostering Australia’s position in the world as a newly federated state. However, these initiatives,
although highly scientific and symbolic, were also undeniably political efforts by Australia to make sovereign claims to Antarctica’s territory. Historically, Australia’s diplomatic strategy towards Antarctica has consisted of maintaining the pseudo-sovereignty of the Australian Antarctic Territory (AAT) through peaceful yet active engagement in the region. However, today’s Antarctic is not the same as the one put under diplomatic protection in 1959, and the effects of global climate change and the discovery of mineral resources in the region have the potential to further internationalise and militarise the collective diplomatic interests in Antarctica. This paper will begin by outlining the position of Australia within the Antarctic, as well as its poignant role in the formation of the Antarctic Treaty and its associated agreements. Following this, the emerging geopolitical factors in the region will be explored, showing why Antarctica is a valuable resource for Australian and international interests. Finally, the possible challenges for Australia in maintaining leadership in the continent, in both diplomatic and military spheres will be assessed. Ultimately, in order for Australia to retain its current specialised and prominent position in the Antarctic continent, Australia’s policy towards the region must not be negligent, and must aspire to retain the peaceful use of the continent for Treaty signatory states, for the advantages to Australia’s own national interests, as well as for the benefit of the ‘global good’.

**Australia in the Antarctic**

Australia has maintained an active interest and engagement in the Antarctic continent for over a century. The Australian Antarctic Territory (AAT) is the largest claim to the continent, consisting of 5.9 million square kilometres, or 42% of Antarctica’s landmass. Australia’s discovery of the continent by explorers such as Douglas Mawson have constructed the nation’s strong historical ties to the Antarctic, and situated Antarctic exploration as a poignant chapter in Australia’s history. Subsequently, Australia has also played an important role in the diplomatic definition of the land; which is particularly noteworthy considering Australia’s relative ‘youth’ in foreign relations practise compared to the other negotiating states.

The Antarctic Treaty System (ATS) encompasses all documents and international regulations respective to Antarctica, including the Antarctic Treaty itself, which was signed in 1959 by twelve states. These twelve states were scientifically invested in the continent during the International Geophysical Year (IGY), however as of 2016, there are fifty-three parties to the Treaty. The formation of the Treaty in 1959 marked an acknowledgement of the importance of global cooperation and a unique designation of territory purely for scientific and peaceful purposes, classifying the Treaty as one of the ‘most successful international agreements’. Australia played an influential part in negotiating some of the defining features of the Treaty, such as the demilitarising of the continent and its declaration as a nuclear free zone. This move by Australia was born out of Cold War concerns, and a shared anxiety

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3 Australian Antarctic Division, (2016) Australian Antarctic Territory
4 Heretofore referred to as: ‘the Treaty’.
5 Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, UK, US, and the USSR.
6 This was a year of scientific endeavour which lasted from the 1st of July 1957 to the 31st of December 1958.
amongst many nations in the Southern hemisphere that Antarctica might be used as a dumping ground for nuclear waste, or a testing ground for weapons, akin to a Southern Hemisphere equivalent of sites used for these purposes in Kazakhstan.

Australia was also the host country of the first Antarctic Treaty Consultative Mission (ACTM), which now occurs annually and moves between claimant states, providing a forum in which to discuss regulations and guidelines for the management of the area identified by the Treaty. Furthermore, during the 1970s and 1980s, Australia negotiated in the protection and management of living marine resources and mineral resources in Antarctica. In the 1980s, the validity of the Antarctic Treaty was questioned by members of the United Nations General Assembly (UNGA), led by Malaysia, who argued that the territory held immense potential for the common interest of every nation in the world, and the claimant states should act as mere trustees to the continent, allowing the United Nations (UN) to undertake a comprehensive study of Antarctica and become more involved in the region. Australia, alongside the other claimant states to the South Pole, was vocal in opposing these ‘Antarctic Questions’ on the vagueness and uncertainty present in the sovereignty over Antarctica by claimant states, and the notion that the polar environment might not be sufficiently protected under the Antarctic Treaty System (ATS).

In all of these examples, Australia has had to balance its own national interests alongside its commitment to the values and principles upheld by the ATS, by cooperating, but not abandoning the need to adapt and change some of the diplomatic features; for example, Australia has been critiqued in its strong advocacy for environmental protectionism in the region previously. Most poignantly for Australia, the need to maintain the stability and clear structure of the Treaty and its associated documents has remained of paramount importance, given the acknowledgement that the Treaty’s articles are designed in a matter which is beneficial to Australia’s interests, and has stimulated an environment in the region which, so far, is less conducive to competition and conflict.

However, Australia’s strategies to maintain superiority in Antarctica has not been limited to upholding peace and cooperative measures. It has also been active in scientific diplomacy. As claiming sovereignty in the Antarctic is prohibited and the territory is delineated for scientific purposes, then the most credible currency for supremacy in Antarctica is advanced scientific capacity, and Australia has made efforts to provide enhanced technological and scientific resources in the Antarctica. Before 1995, most scientific endeavours conducted by Australia focused on measuring the climate of the South Pole and monitoring the behaviours and protections of marine life. Since 1995, Australia has released a Strategic Plan for the continent on a five-year basis; the most recent report highlights the need for Australia to fill

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11 *Ibid*, (pp.279 – 285)
13 Australian Antarctic Magazine, (2012) *100 Years of Australian Antarctic Science*, Issue 22 (pp.24)
the gaps in knowledge and understanding of the Southern Ocean and Antarctica that became evident during the last International Polar Year (IPY) from 2007–2009. Also, the Australian Government has directed the Antarctic Science Division to focus on meeting the challenges presented by global climate change, monitor and protect natural resource sustainability, conserve the biodiversity of the continent, and mitigate the impacts of human interference on Antarctica.14

included in Australia’s strategic outlook for the icy continent, is the replacement of the ageing icebreaker, the *Aurora Australis*, with a new icebreaker which will be in operation for the next thirty years, complete with a sampling area to capture and analyse marine life, hydrographic scanners capable of mapping the ocean floor, as well as upper atmospheric scanning and weather radar capabilities.15 The vastness of the Southern ocean and the environment’s vulnerability to illegal fishing make Australia’s jurisdiction over the area increasingly important. Currently, Australia’s fishing activity consists of harvesting Patagonian toothfish and mackerel icefish within their EEZ, accumulating to exports worth $50-80 million a year. Antarctic krill is also a future fishing prospect for Australian ships. Under the Convention for the Conservation of Antarctic Marine Living Resources (CAMLR) which operates as both a conservation agreement and a fisheries management treaty,16 one of Australia’s obligations is to prevent, deter and eliminate illegal fishing in the Southern Ocean.17 Not only are Australia’s surveillance interests in the Southern Ocean resources based there, but this environment is key to Australia’s strategic and security interests. Typically, Australia’s border security concerns are concentrated northwards but the southern border would be just as vulnerable, particularly if the area were dominated by the presence of foreign surveillance and military vessels. At present, the capacity of Australia’s maritime surveillance to mitigate these concerns is limited, though this capacity will improve in coming years with the new icebreaker. Thus, maintaining Australia’s sovereignty over the Southern Ocean falls under the scope of Australia’s diplomatic, scientific and strategic interests in the South Pole.

Through a continued diplomatic influence and a strong scientific presence in the continent and its surrounding waters, Australia has maintained a quasi-sovereignty over the vast amount of territory claimed within the AAT, while also establishing itself as an effective leader in the progression of Antarctica’s future. However, Australia must remain vigilant in the maintenance of this role, as emerging geopolitical factors in the region have the potential to destabilise the current diplomatic order of Antarctica.

**Geopolitical Factors**

Antarctica is the highest, driest, windiest and coldest continent in the world, and an extremely desolate and harsh environment, where the only plant life that grows are small mosses and

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15 Australian Antarctic Program (2017) *Breaking Ice*
lichens. Therefore, the important position of this unforgiving landscape within the geopolitical interests of so many nations appears perplexing on the surface level. However, despite the inhospitably of the environment, Antarctica is an immeasurably valuable resource on both a global scale, and for the interests of individual states: for instance, the UK, Chilé and Argentina still maintain competitive and overlapping claims to the continent. What has become clear in recent years is that the rate of global climate change is affecting the environmental resources in Antarctica, threatening some resources and unearthing others.

South of the Antarctic Circle, the icy continent itself and surrounding Southern Ocean exceeds fourteen million square kilometres in landmass, a larger area than Europe. Beneath a four-kilometre-thick sheet of ice, which covers 98% of the continent, lies intricate mountains and valleys. There are known reserves of valuable and desirable mineral resources, such as oil and coal, which exist under the ice, though it should be acknowledged that the specific location of these mineral resources are unknown. Furthermore, the potential recovery of these resources is confounded with challenges, taking into consideration Antarctica’s remoteness, the thickness of the ice shelf, and the danger of drilling in such a volatile and hazardous environment. Currently, the acquisition of coal and oil is much easier through international trade or mining any other landmass on earth. Yet, the ice in Antarctica is melting at a significant rate under the influence of climate change; Antarctica has been losing over a hundred cubic metres of ice each year since 2002. Not only does the ice melt make mineral resources a more viable mining opportunity, provided that access to resources by other means becomes scarce in the future, it also endangers the rest of the world. The West Antarctic Peninsula, in particular, is one of the fastest warming areas in the world, and if the ice sheet in this area were to melt entirely, it is estimated that global sea level would rise by sixty metres, an impact which would be globally palpable, and particularly devastating for many small island states and coastal communities.

In addition to mineral resources, the Antarctic continent is home to approximately 90% of the world’s freshwater resources. The Southern Ocean surrounding Antarctica is typically tempestuous, but contributes greatly to global ocean circulation and plays a vital role in interacting with the deep-water circulation of the Pacific, Atlantic and Indian Oceans. For many claimant states to Antarctica this space has been desirable for whaling, access to fisheries and the research of unique and biodiverse marine life. However, due to both the unique political and physical architectures of the continent’s coastline, delineating a clear Exclusive Economic Zone (EEZ) for a claimant state is a challenge, as the Law of the Sea (LOS) requires a continental shelf from which to begin the EEZ baseline and the temporal nature of ice shelves makes these measures unclear. Argentina, Chilé and Australia have all made unofficial, quasi-claims to a two hundred nautical mile EEZ off the ‘coastline’ of their respective Antarctic territories. Australia should reverse this claim, because if the total area of

the Antarctic EEZ were included in Australia’s EEZ claims, it would almost double Australia’s total maritime area of legal jurisdiction, making it one of the largest jurisdictions on earth.\textsuperscript{23} Also, Australia’s claims in this matter threaten the stability of the ATS. Added to these issues is that this environment is under threat from the danger of overfishing, particularly if the krill population were to deplete, as krill are the primary consumer of the ecosystem.\textsuperscript{24}

Lastly, the Antarctic continent, with its aesthetic natural beauty and diverse wildlife population is a desirable tourist attraction. For a long time, visiting the poles was associated with scientific discovery and exploration, and the notion that they could be viable landscapes for tourism or even habitation was considered laughable. However, drastic changes from a warming climate have made the polar regions, both northern and southern, more accessible; the Arctic is now noted in the strategies of several states as a new trading route, and a fresh opportunity for economic exploitation. Tourism in the Antarctic is an incredibly expensive and high-risk venture, because of the extreme temperatures, rough seas, limited search and rescue capabilities, communication problems, and the general remoteness of the environment. Although the Antarctic is not melting at the same speed or to the same extent as its northern twin, it would be unwise to discount the South Pole’s potential as a ‘last chance’ tourist destination, as currently around thirty thousand tourists visit Antarctica each year.\textsuperscript{25} If this trend was to continue, the contested political nature of Antarctica’s territory would cause complications, and the added impact of cruise vessels or human commodities on the continent and its surrounding oceans would damage the fragile environment of the Antarctic.

**Challenges and Changes**

A combination of emerging geopolitical factors, as well as an intensified internationalisation and militarisation of the Antarctic continent are presenting significant challenges for Australia’s future in the region. Article IV of the Antarctic Treaty states that no activity by any nation in Antarctica shall constitute a basis for asserting sovereignty over territory, which allows the icy continent to remain a unique space for shared international use and cooperation: ‘No new claim, or enlargement of an existing claim to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force.’\textsuperscript{26} However, the words of the Treaty have not necessarily constrained the actions of states in Antarctica entirely. The South Pole is not a continent untouched by commercial exploitation built into the framework of scientific endeavour, despite the fact that the ATS has maintained peace in the territory. Article XII stipulates that the Treaty is open for review and change after a period of thirty years.\textsuperscript{27} In just over three decades from now, the parties to the Treaty will have the capability to review their ban on mining in the continent.\textsuperscript{28} As aforementioned, the opening up of the

\begin{itemize}
\item Griffiths, H. J. (2010) *Antarctic Marine Biodiversity – What Do We Know About the Distribution of Life in the Southern Ocean?* PLoS ONE 5(8), doi: https://doi.org/10.1371/journal.pone.0011683
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\item Abdel-Motaal, D. (2016) *The world is not waiting for 2048, in Antarctica: The Battle for the Seventh Continent*, ABC CLIO LLC, (p. 261)
\end{itemize}
Antarctic as a mining resource is possible; the Antarctic climate is currently changing into a more liveable climate comparable to Greenland, and mining technology is becoming more advanced. However, if viable resource extraction were to occur, it would come at great political cost for all states with an engagement in Antarctica, and at great environmental cost to the planet.

In 2011, The Lowy Institute for International Policy encouraged Australia to begin diplomatic preparations for the 2048 Treaty review, saying that the question of recovering mineral resources from Antarctica will undoubtedly resurface, as well as propositions of a global claim to resource gathering in the continent as stipulated by Malaysia’s ‘Antarctic Questioning’ in the 1980s. Thus, Australia must prepare itself diplomatically to stand unified with the current claimant states and resist any further internationalisation of the continent. Subsequently, if extraction does become a possibility and an accepted norm in the region, Australia must ensure that these practises at least be conducted in ‘the most environmentally friendly way.’

This article argues that Australia must accept the Lowy recommendation but resist the latter. Any further opening of the Antarctic to more nations for a global, unfeated access would be disastrous, and Australia as the state with the most claim to the continent must be a leader in promoting this position to the other major parties in the ATS. Australia should not accept the idea that mining in the Antarctic be conducted with as much ‘environmental friendliness’ as possible. Rather, Australia should not accept the idea of mining in the Antarctic at all.

Several factors need special consideration in the governance of Antarctica. Firstly, the possibility of militarisation in Antarctica will be assessed. Article I of the Treaty prohibits ‘any measures of a military nature’ including building military bases, practising manoeuvres or testing weapons. Despite this, it would be naïve to declare that Antarctica in its current state is entirely demilitarised. For example, on occasion, military personnel are used in scientific missions. In these instances, countries such as New Zealand, the US and Australia comply to Article VII of the Treaty and inform other parties of the presence of these personnel or military equipment. The concern of Australia, is that other states operating in the region, particularly China and India, do not reciprocate their compliance to Article VII.

Following this, when the Treaty was ratified, the international understanding of military capabilities was not as advanced as what exists today, where seemingly peaceful scientific research and development conducted on the continent has the potential to be used for military purposes. Satellite technology and information processing is used for monitoring Antarctica’s climate, and astronomic space research. Similar to the militarisation of outer space, it can be difficult to ascertain the stage in which surveillance and signalling technologies in the Antarctic continent are used for military purposes under the veneer of scientific progress.

It follows that if the Treaty were revised and Antarctica were further internationalised, the activities of states in areas unofficially delineated by claimant states could be perceived as provocative. This then has the potential to ignite unresolved competitive tensions in the region, as well as military-infused displays of power projection, or even direct claims of

29 Ibid, (pp. 261 – 262)
30 Bateman, S. (2013) Is Antarctica Demilitarised? Australian Strategic Policy Institute
sovereignty supported by tactical defensive military measures from states to legitimise those claims. When the Treaty is open for review in the future, it is likely that the particular definitions for what constitutes ‘military measures’ will be raised, particularly as technological surveillance and missile capacities continue to develop.

Secondly, it is of paramount importance that the Antarctic region not be exploited for mining resources. Due to the extreme impacts of climate change exhibited in the North Pole it is even more vital that the South Pole’s volatile environment be protected and preserved, for the good of the entire globe. Antarctic science has brought matters of critical importance into the public sphere, such as the acknowledgement of anthropogenic climate change: in 1985 the existence of a hole in the ozone layer above the Southern Hemisphere caused by man-made chemical emissions was discovered. In addition, the continued study of Antarctic continental ice is imperative, as this ice contains records for changes in the climate and effects on the world ecosystem which date as far back as 800,000 years. Most significantly, Antarctica’s global importance lies in how its natural presence connects with the stability of the rest of the world’s oceanic and atmospheric conditions. As noted above, there is the potential for an exponential sea level rise if the Antarctic ice sheet were to undergo significant melt. Moreover, what should not be ignored is the importance of the Southern Ocean surrounding the continent. The Southern Ocean is the only ocean that encircles the globe without being interrupted by landmasses, and connects to all three major oceanic basins, creating a circulatory system driven by the Antarctic Circumpolar Current (ACC). This current, while being the largest in the world, transfers large amounts of heat and carbon dioxide from the atmosphere, with the world’s atmospheric pressure, wind patterns and air temperatures influenced by the processes occurring in the Southern Ocean.

The mere presence of scientific and tourist expeditions in Antarctica today is already causing problematic issues for the environment, while the concept of an ‘environmentally friendly’ mining regime in the continent is oxymoronic and defies definition. For instance, the environmental effects of mining in the most comparable landscape to the Antarctic, the Arctic, have been unavoidable. Seismic exploration and drilling effect the communication patterns of cetacean marine life such as dolphins and porpoises which threatens their survival and disrupts the ecosystem. There is also a risk that chemicals released from drilling will contaminate the aquatic environment and a combination of freezing temperatures and little sunlight would mean that oil spills dissipate at a slower rate. In the event of an oil spill either in the Arctic or the Antarctic, the capacity of monitoring systems to track the damage, and furthermore, the ability of clean-up and response teams to mitigate the disaster in such a remote and extreme environment are minimal. The processes of mining and extracting resources, in their very essence, are not conducive to environmental ‘friendliness’, particularly for a challenging landscape such as the Antarctic. For the benefit of the world,

33 Ibid.
Australia must use its position of importance in the continent and the ATS to prevent these circumstances from eventuating.

Australia’s affinity and history with Antarctica places it in a vital diplomatic and geostrategic position for the continent’s future. Historically, Australia’s engagement in the South Pole has precipitated from the desire to exert national influence and quasi-sovereignty over the AAT, by demonstrating scientific supremacy and peaceful diplomatic acumen. Yet the capacities of 21st century states, and the Antarctic region itself, have undergone significant changes since the ratification of the Treaty in 1959, and Australia must be prepared for the challenges of global climate change, polar tourism, the possibilities for mining and resource exploitation, and the potential for further internationalisation and militarisation of the icy continent. Therefore, Australia’s policy towards the region must not be negligent of these emerging and ongoing factors, especially in the integral diplomatic milestones to come. Australia’s Antarctic position must reinforce the peaceful preservation of Antarctica’s vital, yet increasingly volatile environment for the benefit of balancing Australia’s national interests and stabilising the world’s climate at large.

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