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Consultative Party Status and Alternative Governance Systems in the Antarctic

Nicole Calder-Steele	Student ID 53811301
Kathy Hogarth	Student ID 13537116
Nicky McArthur	Student ID 55859062
Lesley McTurk	Student ID 41708030

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ABSTRACT

Concerns about contemporary challenges have raised questions about the ability of the Antarctic Treaty System to effectively regulate and manage Antarctica and the Southern Ocean. The increased human activity on the continent, and the protection of its fragile environment from degradation and the exploitation of resources is the focus of this paper. The Antarctic Treaty System consists a complex array of bodies that aim to ensure the sustainability of Antarctica. The Antarctic Treaty's primary aims are peace and science and it has a proud history of achievement, but it must remain fit for purpose. The difficulty of operating within its system is demonstrated through the case studies of extended continental shelf claims in Antarctica and bioprospecting. This paper argues that it is time for the Consultative Parties to address the core complexities of the Antarctic Treaty: the issue of sovereignty claims, the paradigm for governance, consensus decision making and to acknowledge the political nature of the governance regime. It is proposed that, in order to overcome these issues, a new deal is needed. This could be achieved through an assessment of the governance structure of the Antarctic Treaty System by Consultative Parties in order to make improvements and increase its effectiveness and efficiency. Regular "Meetings of Parties" at a Ministerial level, facilitated by the Scientific Committee on Antarctic Research, would see an increase of the effectiveness of the regime, underpinned by scientific research. The collapse of the Antarctic Treaty System, without a suitable alternative, would likely see a "free for all" to its resources by self-interested states.

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1. INTRODUCTION

1.1 The Antarctic Treaty – Background

The 1959 Antarctic Treaty and its subsequent development into the Antarctic Treaty System (ATS) is the primary governing regime for the Antarctic region. It sits within a framework of international law, and the International Court of Justice governs adherence to it. The Treaty was unprecedented in embodying the spirit of international co-operation, and has been remarkably effective for over 50 years, providing political stability and establishing science as the primary activity in Antarctica. (Averbuck 2012; Herber 2007)

The 1950s were contentious politically due to the claims of sovereignty by seven nations to areas in Antarctica, and the potential military value it held for the Cold War superpowers (the United States (US) and the Soviet Union). The Antarctic Treaty emerged after fierce negotiations over territorial claims, nuclear testing and the role of non-claimant states. Dodds (2012: 50) argues that the US-led scientific diplomacy that constructed the Antarctic Treaty actually secured US dominance and Soviet interests in the midst of the Cold War and colonial geopolitics. This is in contrast to a more benign interpretation that sees Antarctica as saved from the politics of the day by using a vision of peace and science to gain consensus about its governance, and ignores the decades prior to the Antarctic Treaty.

1.2 History - the claiming phase

The United Kingdom issued a defined claim to the Antarctic in 1908 via Letters Patent (revised in 1917). It consolidated imperial control via a range of mechanisms and procedures: legal, political and scientific. New Zealand's administration of the Ross Dependency began in 1923 and Australia's claim on the Australian Antarctic Territory also resulted from the British interest in Antarctica. In 1924 the French claim of Adélie Land was made (to be later recognised by Britain, Australia and New Zealand). Also in that year the US emphasised an "open-door" policy for the Antarctic, unrestricted by any territorial claims.

Two competing visions emerged for Antarctica: territorial versus open access. Territorial claiming continued throughout the following decades: by Norway (1939), Argentina (1940) and Chile (1943). German and Japanese hopes of claims were ended by their defeat in World War II. The US position of not making a claim and their approach of devising new roles and rules, in order to record their presence, strongly influenced the future politics of Antarctica (Dodds 2012: 54).

By 1951 there was growing agitation around various overlapping claims. Antarctica was promoted within public culture of Chile, Argentina and Britain as "part of their national experience, either as integral territory or as a staging

ground for national interests and values” (Dodds 2012: 55) to reinforce their claims.

In 1955 the International Court of Justice was approached by Britain and asked to recognise its title to sovereignty over those of Argentina and Chile. No judgement was made as Chile and Argentina both rejected the need to have their claims tested in this way.

The late 1940s and 1950s also saw the US interests gaining momentum, exploring governance options with the seven claimant states. They were motivated by protection of their right of access to the continent and the Southern Ocean; concerned about the impasse in the positions of Britain, Argentina and Chile; and wanted to obliquely discourage Soviet interest in the Antarctic.

The International Geophysical Year (IGY 1957-8) followed earlier International Polar Years. The first in 1882-3 effectively opened up Antarctica for the heroic era of exploration. Sir Clements Markham, President of the Royal Geographical Society, worked doggedly to encourage polar exploration, especially British involvement, which culminated in the British Antarctic Expedition of 1902-3 led by Captain Scott (Fiennes 2004).

1.3 History – the negotiating phase

The IGY (1957-8) took a step that was to be important to globalism: it viewed Antarctica as “an essential component of the Earth’s geophysical condition” (Dodds 2012:57). Fifty years later we know that Antarctica is “like the canary in a coal mine for what’s coming for the rest of the planet” (Qiu 2012: 881). Changes in the complex interplay between air, sea and ice in Antarctica can have far reaching ramifications for the world. The ideology of globalism that has emerged over the decades since the treaty was signed defines the world as the operating sphere, with states fitting into this paradigm.

This emergent global paradigm for envisioning Antarctica and how it might be governed was socialised through the preparation for the IGY, and some “ground rules” were established. These separated sovereignty issues from scientific investigation, giving claimant states no special rights in the context of international scientific research. So it was that the IGY created a new and compelling precedent: science as a powerful mechanism for international co-operation. In turn this led to the scientific-diplomatic model for the future governance of Antarctica where, by agreement, science and sovereignty issues are kept separate.

Concerns by various claimant states remained throughout these negotiations, but the articulation of a bigger vision than sovereign rights for Antarctica enabled the “bitter pill” to be swallowed:

“Polar science offered a powerful platform for geopolitical advantage ... Big science provided opportunities for both colonialization / sovereignty games, and paradoxically perhaps, shared ownership.” (Dodds 2012:57)

The Antarctic Treaty was signed on 1st December 1959. Negotiations had not been smooth and sovereignty was only one stumbling block. Others included the demilitarisation of Antarctica, nuclear testing, rights of inspection of member stations and research bases, enforcement, and resource issues related to mining and fishing. Article IV was key to the negotiations. It stipulated that claimant states were not asked to renounce their claims, and that no activities under the Treaty would constitute a basis for asserting a claim. The separation between science and sovereignty was enshrined in the Treaty itself. It also allowed the US to operate unfettered in Antarctic, without engaging in the politics of sovereignty. They had effectively “secured the right to go anywhere and everywhere” (Dodds 2012: 68).

2. ACHIEVEMENTS AND CHALLENGES

2.1 The Antarctic Treaty System today

The Antarctic Treaty Consultative Parties (ATCPs) have worked over the last 50 years to strengthen the original treaty and deepen its institutional architecture. This has been achieved through the additions to its governance structure negotiated under Article IX. (Appendix 1 refers.)

Over the decades these instruments, conventions and annexes have supplemented the Antarctic Treaty to address conservation, resource management and environmental protection. The “constellation of agreements” which has evolved comprises the ATS: the Treaty itself, the Convention for the Conservation of the Antarctic Seals (1972), the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) (1980), the Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol, 1991) and their subsidiary arrangements. Together their aim is to conserve, preserve and protect the Antarctic terrestrial and marine environments (Dodds 2012: 70).

2.2 The Antarctic Treaty - achievements

Flexibility and resilience are the hallmarks of a system of governance that has changed markedly during its lifetime. The very fact that the Antarctic Treaty was negotiated was itself a remarkable feat at the time, and the longevity of the ATS is certainly an achievement. Hillary Clinton said that “[t]he genius of the Antarctic Treaty lies in its relevance today” (Dodds 2012: 70), but critics are increasingly questioning its performance and ability to adequately address contemporary challenges (Hemmings 2009; Herber 2007; Dodds 2010). Hemmings’ (2009: 69) view of the achievement of the ATS is that “[o]ur successes were possible because the challenges were limited”.

The separation of sovereignty issues from the aims of peace and science has been key to the success of the Antarctic Treaty, with the ability of states to collaborate

and progress scientific research. Resource and territorial sovereignty issues have been given a sharper profile since claims have re-entered the picture as assertions to ownership of parts of the Extended Continental Shelf (ECS). This raises the question of how much longer the separation of sovereignty and science can be maintained. Access to resource rights are at the heart of this.

Dodds (2012: 69 - 71) explains the success of the ATS through features such as the consensus requirement (under Article IX), its core activity of peace and science, its demilitarization, its example of “good governance” through the respect and accountability of the parties, and the strengthening of the original Antarctic Treaty through evolving instruments. The very existence of a system of regional governance of Antarctica, now in place for over 50 years, has meant that it could be drawn on to resolve contentious issues when they arose. It also provides the basis for any reform considered necessary.

Trends in the evolving ATS have also strengthened it over the decades. The additional legal instruments that have supplemented the Antarctic Treaty have enhanced its authority *vis à vis* the environment (Dodds 2012: 73). Institutional development has occurred, above and beyond the role of the Scientific Committee on Antarctic Research (SCAR). The expanded membership, complexity and scope of Antarctic-related activities has been supported since 2001 with a Secretariat.

The increasing membership of the ATS, from the original 12, to 28 Consultative Parties and 20 Non-Consultative Parties is more representative of the wider international community. It now accounts for around 70% of the global population.

Lastly, legal and political developments outside Antarctica have not stopped since the Antarctic Treaty came into force, and these have had to be embraced by member states. Conventions addressing climate change, maritime law and commerce are examples. Non-state organisations have also been accommodated within the ATS (e.g. Council of Managers of National Antarctic Programmes (COMNAP), and representatives of environmental movements). There are also potential disadvantages to some of these developments, such as the size of membership diluting the original spirit and aims of the Antarctic Treaty. This can give rise to tensions between claimant and non-claimant states, and between states and non-government organisations.

The Antarctic Treaty has endured because there are still tangible benefits for the original parties. It has enabled a positive story to be told about the unsolvable problem of competing sovereign claims. It has changed during its lifetime, becoming flexible enough to accommodate new members and deal with emerging issues as they have arisen. It has also allowed competing positions to coexist (Dodds 2012: 86-87). These are all significant achievements.

2.3 Contemporary challenges

There is a range of issues that may pose a challenge to the ATS governance regime in achieving its aims. This is in spite of its success of the ATS over the past 50 years. The economic activities of Antarctic science, fishing and tourism pose challenges for this governance system if the resources of Antarctica are to be preserved for future generations (Herber 2007: 3). Recently there has been less willingness to negotiate new protocols around issues of increasing concern (Dodds 2012: 71).

Human activity

The region has been changed by a range of circumstances and developments and faces a number of contemporary challenges in a variety of political, scientific, commercial, cultural and environmental contexts.

Environmental degradation is of primary concern due to increased human presence on the continent from scientific research and tourism. The increase in scientific research is having an impact on both terrestrial and marine ecosystems.

Antarctica is well established within the global tourism market, but the capacity of the ATS to regulate tour operators is limited and there is no regulation embedded into the ATS to manage tourism effectively. There is an increasing risk of environmental damage from vessels operating in the Ross Sea and Peninsula regions.

CCAMLR provides a mechanism by which the signatories attempt to manage and regulate commercial fishing in Antarctic Treaty region. Commercial fishing in the Southern Ocean is “a threat to the entire Antarctic marine ecosystem” (Herber 2007: 48). Over the last two decades, illegal, unregulated and unreported (IUU) fishing has grown in scale and geographical scope.

Despite the Protocol on Environmental Protection prohibiting all forms of mining and mineral exploitation, this is still a concern, and linked to sovereignty claims and national interests of states.

Bioprospecting is the exploration of microorganisms, plants, and animals for genetic and biochemical resources of commercial value (Herber 2007: 45). Recent interest in this resource highlights the interplay between pure science and science for commercial gain. Science is subject to regulation under the ATS while bioprospecting is not.

Issues within the ATS regime

There are elements internal to the Antarctic governance regime itself that may inhibit achievement of its aims and pose a threat to the ATS in fulfilling its role as a political stabilizer. The growing membership and dilution from the original mind-set, increased involvement in commercial activities by states and the

progression of sovereignty claims, including to the Extended Continental Shelf (ECS), all challenge the current governance regime. The consensus model means decision-making is slow. It also creates difficulties due to the real and potential tensions between claimant states and non-claimant states, ATCPs and non ATCPs, and states and non-state organisations. This tends to mean that political agendas drive issues, not good ideas and scientific data. It also leads to a loss of urgency around many issues.

Instruments within the ATS are not always consistent, operating independently of one another. Areas of jurisdiction of the Antarctic Treaty and the various instruments often differ. Similarly reconciling international regimes such as the Antarctic Treaty with the United Nations Convention on the Law of the Sea (UNCLOS) will, in the meantime, continue to test the current regime.

The required consensus spans cultural, scientific and legal areas. This can be difficult to achieve with varying motivations for Consultative Party membership and national and commercial interests. Clashes of different cultural values and traditions are inevitable with new member states, who often articulate different views of Antarctica than that of the claimant states (Dodds 2012: 84).

Whether the ATS can deal with a changing world has been reflected in recent issues related to bioprospecting and tourism. These failed to achieve consensus around new protocols, begging consideration of the risk of what might be lost if the ATS is changed too radically. The collapse of the ATS could lead to a breakdown of cooperation among states with interests in Antarctica and loss of environmental protection. A free-for-all would likely occur with the loss of protection the ATS gives through the freezing of sovereignty of claims, regulation of the marine resources in the Southern Ocean, reducing IUU fishing, and more. This risk should not prevent the striving for improvements to the Antarctic governance regime, so it remains fit to address contemporary challenges, just as the Antarctic Treaty was when originally conceived.

The greatest governance challenge facing Antarctica is globally-driven climate change. Global weather and climate operate in an interrelated way with Antarctica's environmental processes. This is another reason the Antarctic governance regime needs to be both regional (specific to Antarctica as an exceptional place) and global (protecting Antarctica's unique resources and environment, involving the international community, and influencing activity elsewhere in the world that affects Antarctica).

2.4 Case Studies

CASE STUDY I

The Australian Extended Continental Shelf (ECS)

On 24 May 2012 Australia made the Seas and Submerged Lands (Limits of Continental Shelf) Proclamation, that defines the outer limits of Australia's continental shelf. The proclamation describes the 11 million square kilometres of seabed over which Australia can exercise exclusive rights to seabed resources. The area of ECS so defined is greater than the land mass of Australia. Australia was able to make this proclamation because it had fulfilled its obligations under UNCLOS. Two areas of Australia's ECS extend south of 60° into the Antarctic Treaty area. The largest of these areas is the ECS arising from the Territory of Heard Island and McDonald Islands between Australia and South Africa. The other is from Macquarie Island between Tasmania and Antarctica.

The very assertion of the ECS in Antarctica raises concerns about the long term commitment of Australia to the Madrid Protocol, as claiming rights to a continental shelf is in essence a claim to a resource right (Hemmings and Stephens 2010). For this reason it can be argued that an Australian Antarctic Territory ECS would not be a new claim or enlargement of an existing claim but simply an additional area of shelf accruing by virtue of developments of the law of the sea.

Although Australia's claims to maritime zones may have complied with international legal obligations and may eventually be held as legitimate, most significantly Australia has potentially disturbed the delicate compromise created by Article IV of the Antarctic Treaty. This forces the issue of Antarctic sovereignty into the limelight, and how it is to be managed in a way that is consistent with the ATS. The issue of resource rights is pressing especially in regards to the issue of bioprospecting and complicates the ATS approach, posing wider political challenges (Hemming and Stephens 2010). The mere fact that some Antarctic claimants are seeking to secure resource rights raises significant challenges for strategic interests in the greater Antarctic region.

CASE STUDY II

Bioprospecting

Bioprospectors have been drawn to the Antarctic because its extreme environment has led to the evolution of a range of physiological adaptations (Jabour-Green and Nicol 2003). Antarctic biological resources are seen as potentially rich sources of raw materials for pharmaceutical and other industries. The interplay between public science and private commercial interest is a matter of ongoing debate in many areas of biological research. The influence of commercialisation on scientific research cannot be ignored.

The dilemma in the Antarctic context is that science is subject to management by the ATS while bioprospecting is not (Herber 2007). As bioprospecting is an activity with potentially both environmental and resource implications, the Antarctic Treaty parties need to determine a more comprehensive policy position, if not a regulatory framework.

The Antarctic Treaty and associated agreements have little to say specifically on bioprospecting activities within the Treaty area. Consequently, Antarctic bioprospecting has elicited much debate within the Antarctic community. Key issues include benefit sharing between Antarctic Treaty parties, the free availability of scientific data originating in Antarctica, the potential environmental impacts, and how governments develop equitable benefit sharing arrangements and keep up with relevant policy developments.

It is also attracting attention in international law because there is a lack of clarity in the interplay between sovereign rights over biological resources and intellectual property rights in inventions developed from those resources. Since activities are already being undertaken, patents have been filed and products developed, and there is increasing tension between Parties to come to a consensus on this issue. The situation is even more complex where sovereign rights are disputed or absent such as in Antarctica (Jabour-Green and Nicol 2003).

Access, ownership and sharing of the benefits of resource exploitation are regulated by UNCLOS. Neither the Antarctic Treaty nor UNCLOS provides specific guidance for regulating bioprospecting, other than by linking together some of the fundamental principles contained within these instruments, such as conservation and rational management.

This region is in the administrative custody of the ATS but the status of Antarctic resources is legally unclear. Other international regimes also have application, including the Agreement on Trade-Related Aspects of Intellectual Property, the Convention on Biological Diversity and UNCLOS.

Further research is required to provide a solid basis for considering this complex and pressing issue. It encompasses scientific and commercial interests, environmental concerns, ethics and equity, and considerations relating to international law and policy. It also raises the question of the adequacy of the ATS to manage bioprospecting.

2.5 Comment on the case studies

The case studies demonstrate the conflicts among the various instruments both within and beyond the ATS, which sits within a framework of international treaties and law. However, the respective jurisdictions and mandates are not well defined. The growth of the ATS, reacting to the emerging needs of the past 50 years, means effective interfaces are required between the ATCM, other

Treaty System branches and international bodies. This lack of alignment poses a high risk to the effective operation of the governance regime in Antarctica and the Southern Ocean.

The Information Paper 16 presented by New Zealand at the 35th Antarctic Treaty Consultative Meeting (ATCM) rated the interface between the ATCM and CCAMLR, COMNAP and SCAR as a relatively high risk issue within the ATS. This paper also highlighted the risk from lack of co-ordination with other bodies outside the ATS, which can undermine the legitimacy of governance.

The bioprospecting case study is an example of the tension between scientific priority within the ATS, and the commercial imperatives supported by international instruments. Bioprospecting is a problem with universal application. It cannot be covered by the Antarctic Treaty because the Convention on Biological Diversity (1992), an international legally binding treaty, can only be signed by sovereign states and cannot be part of another treaty system. As Antarctica is not a sovereign state this cannot apply. In addition, the US has not signed the original Convention on Biological Diversity.

While the ATS possesses several institutions that could be adapted to management and regulation of the bioprospecting resource, no such regime has been established to date. Whether bioprospecting in Antarctica is a national or a global public good is a moot question in the face of multinational economic and political realities of today's world. A largely unregulated open access approach is now most likely to prevail (Herber 2006).

The ECS also illustrates how the ATS conflicts with international legal obligations. Australia has laid claim to part of the ECS. This may be interpreted as questioning Australia's commitment to the Antarctic Treaty, which has frozen claims, and raised the fear that Australia is bringing a claim in through the back door.

UNCLOS regulates registering of claims to the ECS. This is a problem for the Antarctic Treaty, not CCAMLR, because much of the area under claim or potential claim is within that covered by the Antarctic Treaty regulations. The marine realm (including only parts of the ECS) is the province of CCAMLR, to which the Parties to the Antarctic Treaty have effectively outsourced this accountability. Tensions have recently been created by the approach Argentina and Australia have taken, as described in the first case study. New Zealand, France, Chile and the United Kingdom, on the other hand, have been more reserved and only sought to preserve their rights, at this stage.

Despite these jurisdictional issues there are strengths of connection between CCAMLR and the Antarctic Treaty. In this regard it is helpful that Antarctic Treaty representatives attend CCAMLR meetings and vice versa. This creates a flow of information between the officers and allows both the Antarctic Treaty and CCAMLR to stay in step, discussing problems of mutual interest.

3. DISCUSSION

3.1 The need for change to the ATS

Greater attention to the challenges facing Antarctica needs to occur by the wider international community. Today's geopolitical landscape is dramatically different from the 1950s. Profound strategic changes in global circumstances have occurred since the Antarctic Treaty was envisioned and negotiated. It was predicated on the constraints of its time (the Cold War context, the unresolved sovereignty claims, limited involvement by states in Antarctica, and the limited context of international law and institutions that address international and global issues). Today the Kyoto Protocol and UNCLOS are examples of responses to international and global issues. The Kyoto Protocol is also an example of science, economics and politics operating together within the same regime.

Since the 1950s technology has improved and is widely available, making operating in Antarctica more manageable. The public profile of Antarctica has paradoxically been improved by scientific research and tourism. All this has led to a greatly increased level of activity in Antarctica (Hemmings 2009: 59).

The ATS was last substantively updated 17 years ago. Hemmings (2009: 56) notes it now appears reluctant to develop new instruments or even legally binding mechanisms within existing instruments. Since the adoption of the Madrid Protocol in 1991 there has been relatively little activity in developing standards and regulation. The case study on bioprospecting is illustrative.

The ATS consensus decision making model has led to "low level *status quo* management and not much else" (Hemmings 2009: 62). The addition of specific instruments that are without prejudice to all other instruments has created an unwieldy system with internal inconsistencies, and this makes application difficult in practice.

The initial vision for the Antarctic Treaty was based on the exceptionalism of Antarctica: a unique place which demanded a governance system reflecting a regional approach. Antarctica is bounded as an entity and could be treated differently from elsewhere. Since then, an emerging globalism inherent in the Antarctic Treaty has seen the Antarctic environment as an "engine of the global atmosphere and oceanic commons", and its critical role emphasised in the welfare of all humankind (Herber 2007: 62).

Today there are new definitions of globalism emerging. Hemmings (2009: 69) argues that "... if globalism denies us the capacity to treat any place differently, if anything that can be done can now be done in Antarctica too, with no special claims allowed, then we shall destroy it". However, that sort of globalism is surely just another form of regionalism. A truly global perspective, which put the world as an operating system with the interests of all states at the centre of decision making, would allow for parts of the world, as required, to be treated in ways necessary to support global goals. This is in fact in line with the "new

deliberative exceptionalism” advocated by Hemmings (2009: 71), which would operate at a political level to resolve the significant issues faced in Antarctica today.

Today it is the ATS as a whole which operates as the governance system, not just the Antarctic Treaty. The lack of a forum to address the overarching ATS and its various instruments means there is no accountability for effective governance at that level.

3.2 Effective operation of the Antarctic Treaty System

Improvements to governance regimes are generally more effective and long-lasting if they come from within. Good governance bodies regularly review themselves for effectiveness. Approaching change by working from inside the ATS will be essential to success, and certainly if consensus is to be achieved.

Effective operation of the ATS is already on the agenda of the ATCM. New Zealand presented a Working Paper at the 35th ATCM in Hobart in 2012, on “Prioritisation of Issues in an ATCM Multi-Year Strategic Work Plan” (New Zealand Working Paper 2012). This clearly articulated the series of pressures the Antarctic Treaty area is facing, including the impact of increased human activity and changes to the world’s climate. The paper noted the demand for urgent and rigorous attention and challenged the Antarctic Treaty’s growing membership with proving itself capable of responding to these pressures. It proposed the development of a prioritised strategic work plan with a risk-based methodology common in the corporate world, to allow early attention to those issues which pose a greater or more urgent risk.

The Working Paper grouped the issues demanding attention of the Antarctic Treaty Parties in three categories: effective protection of the changing Antarctic environment, effective protection of human activities in Antarctica, and effective operation of the ATS. The approach advocated working within the ATS to improve coordination, communication and compliance among bodies, rather than wider changes to the ATS itself.

Responses to the Working Paper from various member states were generally positive, but cautious. Benefits were noted such as the idea of a strategic vision, preparation for a substantive and constructive debate, and identifying principles or criteria to guide collective consideration of and agreement on priorities. On a more cautionary note, the importance of maintaining consensus on the selection of issues for discussion was also raised.

Support for such a plan had first been obtained in 2009, and three years later the decision was made to develop a draft Plan for consideration at the 36th ATCM (in 2013). This illustrates the challenges of working within the ATS, with its requirement of consensus decision making resulting in a lengthy process.

3.3 Politics and science

The Antarctic Treaty is a political not a practical forum, and works within the political reality that what we can do is constrained by what we can persuade people to allow us to do. The requirement for consensus and the political agendas of consultative parties means the Antarctic Treaty cannot implement ideas quickly, with laggards ensuring the pace is that of the slowest member.

Within the practical operation of the ATS, science adds meat to the bones of political relationships and is used as a currency for reaching agreement, through the facilitation and support of SCAR. The science system has also been an entry point for countries to enter Antarctica by setting up research bases. Science diplomacy, using the *lingua franca* of science with the emerging Asian interests such as Korea, has also been effective.

The scientific community provides ways of crossings cultural boundaries. This is increasingly important as new member states to the Antarctic Treaty bring different cultural traditions. Scientists can operate outside national parameters. For instance they agree on peer review at an international level, consistency of standards for evaluations and “best endeavours” and ethical standards for research, thereby “smuggling in good practice”.

Despite this constructive role of science and scientists within the overall operation of the ATS, the gap between political and scientific interests needs to be bridged if agendas are to reflect priority issues. Whether the structure and mechanisms of the ATS are adequate to defend Antarctic interests today needs to be on the ATCM agenda. This will mean raising the ante on the political front.

Baslar (1998: 255) argues that the ATS does not guarantee the rights of future generations “the destiny of whom is in the hands of the politicians of a limited number of the Antarctic Treaty Consultative Parties”. He believes we need a regime where legally, not morally, binding provisions protect the rights of mankind (which includes the “good” of Antarctica). However, legal regimes remain the product of politicians, of governments passing legislation and agreeing to international treaties or other regimes.

A new forum within the ATS is needed that operates at a political level, supported by science, and charged with proposing the set of shared principles under which Antarctica could be governed. This could begin with the periodic “Meetings of Parties” at Ministerial level, as advocated by Hemmings (2009: 71). It would need to be formalized and a mandate given to prioritise and address the key issues that the governance regime for the Antarctic Treaty area faces.

There are three key issues that hinder the evolution of more appropriate governance arrangements, and require political will to effect change. These are the status of sovereignty claims, an agreed paradigm for governance and consensus decision-making.

3.4 Sovereignty Claims

The first issue is that of claims: “the contested sovereignty of the region remains a haunting presence”. (Dodds 2010:115) This Gordian knot needs an Alexandrian solution: **one likely to be found in a different worldview**, in elegance and diplomacy rather than force. Claims to sovereignty are effectively frozen by Article IV of the Antarctic Treaty. These can be seen as a relic of the imperial age, or legitimate expressions of real interest in territories linked with a country (geographically and / or culturally).

Hemmings (2009: 70) talks of the need to abandon sovereignty delusions in Antarctica before more appropriate governance arrangements will emerge. This will require decisions to relinquish these claims by claimant states at a national level. States will inevitably need to be convinced that what they are giving up in terms of a sovereign claim will be bettered by the alternative on offer. Jabour and Weber (2008: 27) note that sovereignty and sovereign rights are not displaced easily, but point out that “resources and areas may be used and enjoyed while maintaining an indifference to existing or exerted territorial and/or marine claims”. This is effectively how the Antarctic Treaty has allowed the progress of science and co-operation, through the preservation of sovereign rights.

Chillingly, Jabour and Weber (2008: 27) foresee a scenario where in the absence of such arrangements “the self-interest of States is manifest”. Any change to the ATS must deal with the sovereignty issue in concert with current state practices and management initiatives. They conclude that “cutting the Gordian knot of polar sovereignty is both risky and premature in the absence of suitable alternative”. The “better alternative” is likely to arise from a different world view, one that is seen to protect or promote national interests at least as well as current arrangement of “frozen claims”.

3.5 The paradigm for Antarctica’s governance

The second issue is the governance paradigm for Antarctica. If we move beyond the idea of sovereign rights to territory, is Antarctica to be a global commons or the common heritage of mankind? Is it a public good, or should it be a World Park? Alternative concepts are discussed below and have very different implications both for its governance and the way Antarctica’s challenges are responded to. That there is not a shared view on the governance paradigm hinders progress on important issues.

(i) *Sovereignty oriented*

Currently segmented among seven claimant states, the very fact that these claims are not able to be progressed while the Antarctic Treaty remains in force effectively deems this an “unsolid, impracticable model” (Baslar 1998: 255). The non-universal nature of the Antarctic Treaty is one reason it has been “considered as undemocratic, unfair, unjust and morally wrong” (Baslar 1998: 256).

The ideas of common sovereignty, or joint sovereignty as a collective or co-operative, are also not practicable owing to conflicting national interests over the sharing of the benefits of Antarctica.

(ii) *Internationalist*

- (a) United Nations (UN) trusteeship of Antarctica for all peoples of the planet has been suggested (Baslar 1998: 257). The UN regime was first advocated in the early decades of the 20th century, and “suggested the participation of all states in the exploitation of the earth of Antarctica” (Baslar 1998: 257). (Appendix 2 refers.) It would necessarily require the renunciation of all claims to Antarctica in favour of a UN agency model. Tensions around these positions were managed in the Antarctic Treaty negotiations by the effective freezing of all sovereign claims, without prejudice to their future validity beyond the Treaty.

A vexed question with a UN regime is who would administer it. Would it be individual countries, such as the ATCPs, an international body, or the whole international community? An international approach may be impractical and inefficient in practice.

The assumption by the ATCPs that they have the right to administer Antarctica outside the UN umbrella has been challenged. (Baslar 1998). The admittance of environmental pressure groups and others as observers has partly mitigated such criticism. Calls for wider representation in Antarctica’s governance and administration continue.

- (b) A World Park has been advocated. In 1975 New Zealand endorsed the scheme of a park for world-wide conservation, albeit within the ATS, which would require (and justify) renouncing all claims to sovereignty. In 1986 Greenpeace proposed something similar, based on the concept of the common heritage, and which also sat within the ATS.

A World Park refers to a unique regime specifically devised for Antarctica that preserves the living and non-living natural resources, and environment of Antarctica in its present state (Baslar 1998: 259). Effectively it is a nature reserve to preserve the environment and its ecosystems for the benefit of present and future generations. The ATCPs would act as global trustees on behalf of the international community.

This concept is quite similar to elements of the ATS, and especially the Madrid Protocol (1991), which designates Antarctica as a natural reserve dedicated to peace and science. However, it would require change in the attitude of the ATCPs to one that embraced Antarctica as providing a public good.

- (c) The common heritage of mankind concept gives equal access to the resources of Antarctica on a sustainable basis, and an equal sharing of its benefits (mining, krill, water, *et cetera*). This is motivated by the common

interest of mankind and involves intergenerational trade-offs, between the interests of those of the present and future.

The common heritage of mankind can be interpreted differently, for example "developing countries interpreted it as 'common ownership' (as in *res communes*) and socialist states as "common access" (Baslar 1998: 349). Baslar concludes that the common heritage of mankind as a theoretical framework should be based on the stewardship ethic and public trust doctrine, and is not to do with the Roman law concept of *res* (thing). It has already crept into the body of international law and appears in the Moon Treaty (1979) and UNCLOS. It constitutes "an abstract principle addressing general but not specific obligations with respect to the utilization of global commons beyond national jurisdiction" (Baslar 1998: 349). This would be problematic in the governance of Antarctica with the need for specific regulatory bodies, protocols and so on to manage access to and protect its resources.

- (d) The concept of Antarctica as a global commons is gaining favour. It was defined as such by the World Commission on Environment and Development. This was premised on Antarctica being the integral driving force behind global weather and climate that affect the whole planet. Global commons refers to "a region, or group of valued resources, protected from exploitation in the interests of the global population and future generations" (Jabour and Weber 2008).

The absence of sovereign rights in Antarctica enables governance by an international treaty regime, utilising the wilderness value of Antarctica and the "common heritage of mankind" principle (Herber 2007: 26 - 34). The global commons concept is broader than the common heritage of mankind, with the activities of peace and science also providing benefits that transcend the boundaries of nations (Herber 2007: 21).

There is a conflict between Antarctica as a global commons and it being a common heritage for all mankind. The common heritage concept is one in which Antarctica and its resources can be used by all states, akin to a common property resource with open access. It does not necessarily include the protection and preservation of its special role, or for future generations to enjoy (for example in driving the world's climate, or sustaining ecosystems that are dependent on it). Those ideas are implied by a commons, where the resource is protected and maintained. A commons also is broader and can include such things as knowledge, culture and heritage values.

Herber (2007:43) sees the primary goal of the ATS today as preserving the globally strategic atmospheric, oceanic, and wilderness commons resources of the continent. The interest of all mankind in a global commons gives everyone the right to be represented in its governance.

The term "tragedy of the commons" was coined by Hardin (1968) and describes the result of behaviour of individuals acting in their own best self interests and

ignoring what is best for the whole group. Like the parable of Hardin's pasture that was "open to all", Antarctica conceived as a commons, without an appropriate governance regime preventing overuse of its resources, risks the unintentional tragedy of the destruction of the common area.

"Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit - in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own interest in a society that believes in the freedom of the commons."
(Hardin 1968: 1244)

The definitions of these concepts in the literature (in particular the common heritage of mankind and global commons) are far from clear. This suggests they are essentially contested concepts (Gallie 1956). Jabour (2010: 19) notes that the doctrines of global commons and common heritage of mankind can be inferred from the rhetoric of the Treaty and its subsequent legal instruments through which the use of resources are managed. However, she notes that the ATS does not support either in practice because "activities such as fishing and bioprospecting already return an exclusive reward for effort, with no benefit-sharing arrangements".

The concepts of the common heritage of mankind and global commons also sit within a political framework of international treaties and law. This is why the interdependencies between bodies, their jurisdictions and mandates is relevant here, and greater alignment is needed. This applies to bodies within the ATS itself, and between those within the ATS and other international regimes (e.g. UNCLOS also applies in the Southern Ocean).

In fact it is the very availability of such international law that could be used to provide access and benefit sharing to the international community, rather than using the ATS for such a purpose. This would discharge CCAMLR from this responsibility. With respect to bioprospecting, Herber (2006) notes how the UNCLOS provides both national rights to exclusive economic zones (the 200 nautical mile limit) and a global public good connotation for deep seabed mineral resources, with a related potential application to bioprospecting in the deep seabed.

3.6 Consensus decision-making

The third key issue is the consensus principle as the *modus operandi* for decision-making within the ATS.

Article IX of the Antarctic Treaty, stipulating consensus decision making, was a politically necessary lynchpin in the Treaty negotiations to achieve agreement on sovereignty claims. To date, the stability of the Antarctic Treaty has relied heavily on its existence. It has the benefit of ensuring equitable and democratic involvement due to giving each state one vote, effectively the power of veto. It also contributes to trust-building and creates ownership of outcomes, thus encouraging commitment. However, the system is time consuming (it can be

glacially slow) and reluctant parties can block collective measures, leading to sub-optimal solutions and political compromise (Brockett, Lindsay, Schezer and Wilson 2005). Increasing membership and dilution of the original values and spirit of the Antarctic Treaty pose a further risk in achieving consensus.

Upholding the Antarctic Treaty may be at the cost of effective environmental protection and other challenges. Bioprospecting, tourism and IUU fishing are increasingly putting pressure on the ATS for effective responses. The proposal to create a blacklist of IUU fishing vessels was vetoed by Russia, one of the nations participating in IUU activity (Herber 2007: 53). A majority based voting system may be better suited to maintain an ability to act, especially where urgency is required. Any move away from a consensus based system relies on the sovereignty conundrum being resolved (Brockett et al 2005).

A criticism made of the consensus decision-making model is that non-ATCPs are under no moral or legal obligation to accept the agreements concluded at ATCMs, so any moratorium on mining, for instance, may well be difficult to enforce. This applies also to the CCAMLR management regime, and IUU fishing. Worse, Baslar (1998) fears the Protocol could be amended by consensus within the ATS to legitimate mineral exploitation.

Alternative models for decision making could include a vote for certain agreed items (as per the UN regime), a weighting system (some votes count more than others), a population based system, and an interests-based system (a proxy could be scientific research produced).

Each has risks and would be difficult to achieve through consensus among Consultative Parties, but alternatives or a mix of them need to be explored. There is a growing push for greater representation of the international community in Antarctica's administration, reflecting the various internationalist paradigms for its governance (UN Trusteeship, World Park, common heritage of mankind and global commons).

3.7 Recommendations

The fact that Antarctica is unlike other nations and has no sovereign decision-making government, means the regulatory options available to the ATS are more restricted. Potential policy instruments such as fees, taxes, subsidies and quotas are not available (Herber 2007: 57).

Improvements within the ATS policy framework have not been the focus of this paper, but are an important response to many of the contemporary challenges raised. They are necessary adjuncts to the structural changes in the existing ATS which are proposed and which following Herber (2007: 58), embrace the concept of Antarctica as a subset of global attitudes and policies.

The following recommendations are proposed:

- That a new body within the ATS be established, similar to CCAMLR but with a specific mandate to regulate and manage bioprospecting
- That regular meetings are established of Parties at a Ministerial level to recognise the political nature of the ATS and its agenda setting process. These should be supported by SCAR to ensure the political nature of discussions is informed by the latest scientific data and research.
- That Consultative Parties conduct a governance review of the wider ATS to assess its effectiveness in addressing and resolving contemporary challenges in Antarctica. The Terms of Reference of this Review must include:
 - The issue of current sovereignty claims
 - The paradigm under which Antarctica is to be governed
 - Alternative systems to the current consensus decision-making model to improve the efficiency of governance
- That alignment is made in the jurisdictions and mandates of the bodies within the ATS, and between the ATS and other international regimes.

4. CONCLUSION

There is a growing imperative for change. The ATS must be an adaptable and flexible enough system to respond to contemporary challenges, just as the Consultative Parties did in the 1950s in negotiating the original Treaty. A governance review would lead to a more efficient and effective system. However, there is a real risk of too radical a change leading to a breakdown of cooperation, loss of environmental protection and a likely “free for all” in Antarctica.

Recommendations have been proposed that the Consultative parties review and update the ATS. The issues of sovereignty claims, the agreed governance paradigm and the way decisions are made all need to be addressed, and this will require a “new deal” to be put on the table. A solution as elegant as that of the 1950s which enabled the Antarctic Treaty to be agreed is needed. This is so it remains fit for purpose for another fifty years, and that the administration and governance of this unique continent and its surrounding ocean continues to serve the interests of all nations and all generations.

REFERENCES

- Antarctica New Zealand website www.antarcticanz.govt.nz/
- Averbuck, A., (2012): Antarctica. Lonely Planet Publications Pty Ltd.
- Baslar, K. (1998): The Concept of the Common Heritage of Mankind in International Law. Kluwer Law International. The Netherlands.
- Brockett, D., Clarke, L., Lindsay, M., Schezer, J. and Wilson, B. (2005): Concensus in the Antarctic Treaty System: Does a consensus voting system make good sense today within the Antarctic Treaty System? Unpublished paper. Graduate Certificate in Antarctic Studies, University of Canterbury.
- Dodds, K. (2010): Governing Antarctica: contemporary challenges and the enduring legacy of the 1959 Antarctic Treaty. *Global Policy*. 1(1): 108 – 115.
- Dodds, K. (2012): The Antarctic a very short introduction. Oxford University Press. Oxford, United Kingdom.
- Fiennes, R., Sir. (2004). Captain scott. London: Coronet.
- Gallie, W. B., (1956): Essentially contested concepts. *Proceedings of the Aristotelian Society. New Series. Vol 56.*
- Hardin, G. (1968). The tragedy of the commons. *Science* 162 (3859): 1243-1248.
- Hemmings, A. D., (2009): From the new geopolitics of resources to nanotechnology: emerging challenges of globalism in Antarctica. *The yearbook of Polar Law. Martinus Nijhoff, Boston: 55 – 72.*
- Hemmings, A. D. and Stephens, T. (2010): Australia's extended continental shelf: What Implications for Antarctic Governance. *Polar Record*, 46 (239): 312-327.
- Herber, B. P., (2006): Bioprospecting in Antarctica: the search for a policy regime. *Polar Record* 42 (221): 139–146 (2006).
- Herber, B. P., (2007): Protecting the Antarctic Commons: Problems of Economic Efficiency. Udall Center for Studies in Public Policy, The University of Arizona.
- Jabour, J. A. and Nicol, D., (2003): Bioprospecting in areas outside national jurisdiction: Antarctica and the Southern Oceans. *Melbourne Journal of International Law*, 4, (1) pp. 76-111.
- Jabour, J. A. and Weber, M., (2008): Is it time to cut the Gordian knot of polar sovereignty? *Review of European Community and International Environmental Law*, 17, (1) pp. 27-40.

Jabour, J. A. (2010): Biological prospecting: the ethics of exclusive reward from Antarctic activity, *Ethics in Science and Environmental Politics*, 10, (1) pp. 19-29.

New Zealand Working Paper 47 (2012): Prioritisation of Issues in an ATCM Multi-Year Strategic Work Plan. Agenda Item 7. Antarctic Treaty Consultative Meeting XXXV. Hobart.

New Zealand Information Paper 16 (2012): Prioritisation of ATCM Issues: Illustrative Table. Agenda Item 7. Antarctic Treaty Consultative Meeting XXXV. Hobart.

Qiu, J. (2012): Winds of change. *Science*. Vol 338: 879-881

APPENDIX 1

Background information on the Antarctic Treaty System

1. Headings of the Articles in the Antarctic Treaty:

Preamble	
Article I	Peaceful purposes
Article II	Freedom of scientific investigation
Article III	International scientific cooperation
Article IV	Territorial sovereignty
Article V	Nuclear activity
Article VI	Geographical coverage
Article VII	Inspections
Article VIII	Jurisdiction
Article IX	Treaty Meetings
Article X	Activities contrary to the Treaty
Article XI	Disputes between Parties
Article XII	Modification and duration
Article XIII	Ratification and entry into force
Article XIV	Deposition

2. List of the Legal Instruments Supplementing the Antarctic Treaty:

- Agreed Measures for the Conservation of the Antarctic Fauna and Flora (1964) (superceded)
- Convention for the Conservation of Antarctic Seals (1972)
- Convention for the Conservation of Marine Living Resources (CCAMLR) (1980). CCAMLR was established by international convention with the objective of conserving Antarctic marine life in the Southern Ocean, through its responsibility for resource management
- Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol, 1991)

(Herber 2007: 13)

3. **The Antarctic Treaty Consultative Meetings (ATCM)**

The three observers to the ATCM are:

- CCAMLR Commission for the Conservation of Antarctic Marine Living Resources (1980)
- COMNAP Council of Managers of National Antarctica Programmes. 28 Consultative Party members are each represented by the Manager of their National Antarctic Programmes.
- SCAR The Scientific Committee on Antarctic Research initiates, develops and co-ordinates independent scientific research which it provides to the Antarctic Treaty Consultative Parties.

4. **Protocol on Environmental Protection (also known as the Madrid Protocol)**

The Protocol on Environmental Protection (1991) provides for comprehensive protection of the Antarctic environment and dependent and associated ecosystems through specific annexes on marine pollution, fauna and flora, environmental impact assessments, waste management and protected areas. It also prohibits all activities relating to mining except for scientific purposes.

The Committee for Environmental Protection (CEP) was established by Article 11 of the Protocol on Environmental Protection. The Committee's functions are *"to provide advice and formulate recommendations to the Parties in connection with the implementation of this Protocol, including the operation of its Annexes, for consideration at Antarctic Treaty Consultative Meetings"*.

The Committee consists of representatives of the Parties to the Protocol on Environmental Protection, and normally meets once a year in conjunction with the ATCM. CEP meetings are also attended by various experts and observers. The business of the CEP is facilitated by work conducted by Parties between meetings in intersessional contact groups (Antarctica New Zealand website www.antarcticanz.govt.nz/).

APPENDIX 2

The United Nations governance model

The UN was established in 1945 by 51 countries committed to preserving peace through international cooperation and collective security. The UN Charter has four purposes:

1. to maintain international peace and security;
2. to develop friendly relations among nations;
3. to cooperate in solving international problems and in promoting respect for human rights;
4. to be a centre for harmonizing the actions of nations.

Today, nearly every nation in the world belongs to the UN, and membership totals 193 countries. All member states are represented in the General Assembly, a "parliament of nations" which meets regularly to consider the key issues such as international peace and security.

Each Member State has one vote. Admitting new members and the UN budget are decided by two-thirds majority. Other matters are decided by simple majority, although in recent years a special effort has been made to reach decisions through consensus, rather than by taking a formal vote.

The General Assembly cannot force action by any state. The UN is not a world government and it does not make laws, but its recommendations are nevertheless persuasive, in that they represent world opinion and have moral authority of the community of nations. The International Court of Justice, which also governs adherence to the Antarctic Treaty, decides disputes between states, based on the voluntary participation of the states concerned.

APPENDIX 3

List of acronyms used

ATCM	Antarctic Treaty Consultative Meeting
ATCP	Antarctic Treaty Consultative Party
ATS	Antarctic Treaty System
CCAMLR	Conservation of Antarctic Marine Living Resources
COMNAP	Council of Managers of National Antarctic Programmes
ECS	Extended Continental Shelf
IGY	International Geophysical Year
IUU	Illegal, unregulated and unreported
SCAR	Scientific Committee on Antarctic Research
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
US	United States