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Legitimacy of the Antarctic Treaty System: is it time for a reform?

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ABSTRACT

The Antarctic Treaty System (ATS) has governed the Antarctic for the last six decades ensuring it to be a place of peace and scientific cooperation. Like any institution, the ATS exists in order to solve collective action problems through coordination and the creation of norms. But how do we know if a particular institution is the right one to solve a specific problem or address issues regarding the governance of a region? And when is it time to replace or reform such an institution? To answer these questions, we need an account of institutional legitimacy. An assessment of the legitimacy of the ATS is necessary in order to determine whether it is worthy of being empowered through support, or if it is time to reform some aspects of it. Building on the account of legitimacy of global governance institutions proposed by Buchanan and Keohane, the paper assesses the legitimacy of the ATS and argues that it is time to reform some components of it. Specifically, the paper assesses the legitimacy of the ATS based on the following criteria: minimal moral acceptability; comparative benefit; institutional integrity; and accountability. The paper highlights the ATS' shortcomings based on these criteria and suggests reforms that will strengthen the legitimacy of the ATS

KEYWORDS

Antarctic Treaty System; legitimacy; international institutions; Antarctic; global governance

Introduction

Six decades after its inception, is the Antarctic regime still worthy of support? Considering that twenty-five years has passed since the last major work on the legitimacy of the Antarctic regime was published, while at the same time the Antarctic has experienced the biggest growth in human activity, it is important to assess the legitimacy of the regime from a 2021 vantage point.¹ An assessment of the legitimacy of the regime is necessary in order to determine whether it is worthy of support and whether it is time to

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¹Stokke and Vidas, *Governing the Antarctic: The Effectiveness and Legitimacy of the Antarctic Treaty System*. The work edited by political scientist Olav Schram Stokke and international law expert Davor Vidas is an extremely valuable resource for those interested in the legitimacy of the ATS, however my analysis of the ATS reflects on the recent developments in the Antarctic region. Additionally, my analysis offers a different framework, which highlights several aspects distinctive of those discussed by Stokke and Vidas, albeit the applicability component of their work corresponds to parts of Buchanan and Keohane's standard (comparative benefit) I rely on.

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reform some aspects of the institution. The goal of this paper is to highlight the shortcomings of the Antarctic Treaty System (ATS) against the standard of legitimacy and to suggest reforms that will strengthen the legitimacy of the ATS.

Most of the discussion on legitimacy in political philosophy has been about state legitimacy, with legitimacy understood as justified political authority. Justified political authority entails a right to rule, to issue commands, and to enforce them using coercive power.² International institutions, unlike states, generally do not have coercive power and do not claim the same level of authority as states.³ The fundamental difference is that states have enforcement powers and a monopoly of force within a specified territory, while international institutions have limited enforcement mechanisms.⁴ The state-centred conceptions of legitimacy, therefore, are too demanding for an understanding of legitimacy beyond the state.⁵

International institutions are a relatively new phenomenon compared to nation-states and the literature on legitimacy on the international level is still growing.⁶ From this literature, the account of global governance institutions by political philosopher Allen Buchanan and international relations scholar Robert Keohane is fitting for a discussion of the legitimacy of the ATS.⁷ It focuses on *the moral reasons to support* institutions. I am interested in exploring the standards that an institution such as the ATS should meet in order to *be worthy of support*.

According to Buchanan and Keohane, the legitimacy of global governance institutions is 'the right to rule, understood to mean both that institutional agents are morally justified in making rules and attempting to secure compliance with them and that people subject to those rules have moral, content-independent reasons to follow them and/or not interfere with others' compliance with them.'⁸ Buchanan and Keohane's standard of legitimacy for global governance institutions consists of three criteria: *the minimal moral acceptability criterion* requires that an institution does not violate basic human rights; *the comparative benefit criterion* is an instrumental criterion according to which there are reasons to support an institution if it provides benefits otherwise not obtainable; *the institutional integrity criterion* seeks that there is a match between an institution's performance on the one hand, and the institution's professed goals and procedures, on the other hand. Additionally, it requires that the procedures of the institution reflect the goals. Buchanan and Keohane also stress the importance of the institution's accountability and transparency.⁹

²For an overview of political legitimacy see Peter, "Political Legitimacy."

³In political science and philosophy, institutions are defined as 'a set of rules, norms, principles, expectations, and procedures' and are identified with regimes in the international relations literature. On this see Pavel, *Divided Sovereignty: International Institutions and the Limits of State Authority*, xix. I use the terms institutions and regimes interchangeably throughout the paper.

⁴Mearsheimer, "The False Promise of International Institutions."

⁵See footnote 11 in Buchanan and Keohane, "The Legitimacy of Global Governance Institutions."

⁶This is a somewhat representative sample of the discourse on the legitimacy beyond the state: On the legitimacy of public international law, see Tasioulas, "The Legitimacy of International Law"; on the legitimacy of international institutions, Christiano, "Democratic Legitimacy and International Institutions"; on the legitimacy of international environmental law, see Bodansky, "The Legitimacy of International Governance: A Coming Challenge for International Environmental Law?"; on the legitimacy of international courts, see Follesdal, "Survey Article: The Legitimacy of International Courts"; on the legitimacy of rules and compliance Franck, *The Power of Legitimacy Among Nations*.

⁷Buchanan and Keohane, "The Legitimacy of Global Governance Institutions."

⁸Ibid.

⁹Ibid.

To assess legitimacy of the ATS I apply their standard with some modifications. First, I propose using the UN tool of Results-Based Management (RBM) as an additional measure of the comparative benefit criterion. The reason behind using the UN tool is the lack of any tangible measurements for the comparative benefit criterion that Buchanan and Keohane propose. Assessing whether benefits are obtainable without the institution or through an institutional alternative as Buchanan and Keohane suggest rests on too many uncertainties. Measured counterfactually, any assessment of whether the benefits are obtainable will be biased towards the status quo. Furthermore, since approaches incorporating estimates of what would have occurred in the absence of the regime are methodologically and empirically demanding, I propose a simpler and a more readily applicable approach: measuring the institution's provision of benefits, the outcomes it has achieved, compared to the situation before the institution was created. While institutional integrity is about what the institution has promised and whether it has kept its promises, comparative benefit is about the broader outcomes that result from the institution's existence. Second, although Buchanan and Keohane do not explicitly call accountability a criterion, I suggest including accountability in the standard for institutional legitimacy to assess the ATS. In fact, in his later works, Buchanan does list accountability as a criterion.¹⁰ Accountability criterion consists of the three components that Buchanan and Keohane stress the importance of: transparency, contestability and revisability. Without transparency we cannot judge how accountable the institution is. Contestability reflects whether the institution is open to external fundamental criticism. Revisability complements contestability, as it acts as a response to any criticism voiced under contestation.

Before proceeding, an explanation of the ATS is in order. In addition to the Antarctic Treaty (hereinafter 'Treaty'), the ATS includes: The Convention for the Conservation of Antarctic Seals, the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), the Protocol on Environmental Protection (hereinafter 'Madrid Protocol' or 'Protocol') and the measures, decisions, and resolutions adopted under them. Protocol, Article 1e defines the ATS as 'The Antarctic Treaty, the measures in effect under that Treaty, its associated separate international instruments in force and the measures in effect under those instruments.' Article IV of the Treaty froze the territorial claims of Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom. These states are referred to as claimants. The Treaty was signed by Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the Soviet Union, the United Kingdom and the United States in Washington on 1 December 1959 and entered into force on 23 June 1961.¹¹ The original twelve signatories, unconditionally, are Consultative Parties (CPs) (i.e., they participate in the decision-making, which is mostly done during the Antarctic Treaty Consultative Meetings (ATCM) where decisions are made based on consensus), while the states that accede to the Treaty gain consultative status after and for the duration of meeting the requirement of substantial scientific research activity according to Article IX of the Treaty. Throughout the paper I mention 'members of the ATS,' by which I refer to signatories to the Antarctic Treaty for the most part. All CPs and most of non-CPs to the Treaty are signatories to the

¹⁰Buchanan, *The Heart of Human Rights*.

¹¹Text in United Nations Treaty Series, vol. 402, The Antarctic Treaty.

Protocol. Additionally, there is a great overlap between signatories to the Treaty and the CCAMLR. The only two states that are signatories to the Treaty and have consultative status but are not signatories to the CCAMLR are Czechia and Ecuador. The signatories to the CCAMLR but not to the Treaty are Namibia and the EU. The acceding states to the CCAMLR that are not signatories to the Treaty are Cook Islands, Mauritius, Panama, Vanuatu. Furthermore, CCAMLR's structure reflects the Antarctic Treaty in two ways: it functions based on consensus decision-making and it is a two-tier system based on the criterion of substantial interest. Acceding states, just like non-CPs to the Treaty, do not take part in decision-making. The Treaty's two-tier system set the precedent for the CCAMLR negotiators to follow.¹²

Building on the account of legitimacy of global governance institutions proposed by Buchanan and Keohane, I assess the legitimacy of the ATS and argue that it is time to reform some components of the system. The standard consists of the following criteria¹³

- (1) *The minimal moral acceptability criterion* requires that the institution avoids violation of most widely recognised basic human rights.
- (2) *The comparative benefit criterion* requires that the institution provides benefits otherwise not obtainable (to the extent that it is possible to measure this provision), measured using the RBM tools.
- (3) *The institutional integrity criterion* requires that the institution's goals are in alliance with its actual performance (*what* the institution manages to achieve) and procedures (*how* the institution seeks to achieve them).
- (4) *The accountability criterion* requires that the institution is transparent, and open to external contestation and revisability.

Legitimacy of the ATS

Minimal moral acceptability

The minimal moral acceptability criterion requires that institutions do not violate basic human rights: the right to physical security, the right to subsistence, and the right to liberty. The ATS does not violate any of these rights. However, in the future scenario of

¹²See Gulland, "The Antarctic Treaty System as a Resource Management Mechanism: Living Resources" and Shibata, "Japan and 100 Years of Antarctic Legal Order: Any Lessons for the Arctic?"

¹³Buchanan and Keohane's account omits a discussion of the importance of origins – how the institutions came to be – even though in later writings, Buchanan includes origins, see Buchanan, "Institutional Legitimacy"; Buchanan, *The Heart of Human Rights*. Origins in many ways determine the design of the institutions that follows, by reflecting the power relations of the actors involved and by locking in the power asymmetries through institutionalisation, see Hanrieder, "The Path-Dependent Design of International Organizations: Federalism in the World Health Organization." The ATS is a case in point and demonstrates how the origins, i.e., the power-imbalance of the states involved and the privileged position of the original twelve signatories affected the ATS's design. Hemmings, for example, refers to the founder effect in describing the ATS, according to which the factors at play during the creation of the system resonate through the lifetime of the system, see Hemmings, "Considerable Values in Antarctica." Additionally, in Antarctic humanities literature there exists a rich discourse on the unjust beginning of the regime and its unfair procedures, see for example: Dodds, "Post-Colonial Antarctica: An Emerging Engagement"; Hemmings, "Re-Justifying the Antarctic Treaty System for the 21st Century: Rights, Expectations and Global Equity"; Howkins, "Appropriating Space: Antarctic Imperialism and the Mentality of Settler Colonialism"; Mancilla, "Decolonising Antarctica"; Scott, "Ingenious and Innocuous? Article IV of the Antarctic Treaty as Imperialism." The origins and the unfairness of the institutional design of the ATS is an important topic for the discussion of the ATS' legitimacy, however for the purposes of this paper I limit the discussion to the standard from Buchanan and Keohane's account for global governance institutions.

the Antarctic resources becoming last resort, the ATS might find itself in a position where it has to ensure access to fishing stocks, freshwater reserves, and space for climate refugees to not violate the right to subsistence.¹⁴ There is a potential need for better regulation, especially in the case of fishing and icebergs due to some dynamics within CCAMLR related to the use of the term ‘rational use’ for fishing stocks and lack of regulation of iceberg harvesting.¹⁵ This is a hypothetical foresight, but it is important to mention these concerns considering the growing interest in Antarctic resources. As it stands, though, the ATS meets the minimal moral acceptability criterion.

Comparative benefit: ATS as a relic of the Cold War

The comparative benefit criterion assesses whether the institution provides benefits otherwise not obtainable. If there is a feasible institutional alternative to obtain greater benefits that meets the minimal moral acceptability criterion, and a transition would not be too costly, legitimacy is called into question, if the transition does not happen.¹⁶

In assessing the ATS in relation to the comparative benefit criterion we should ask: Does the ATS provide benefits that cannot be obtained otherwise? And does it do so at greater levels than an alternative would do? The three main benefits that the ATS is designed to provide are peace, freedom of scientific investigation, and environmental protection.

Can these benefits be obtained without the ATS? The UN seems to be an obvious contender, but the transition, at least as an immediate step, would be too costly considering the claimants’ interests. There is no current *feasible* institutional alternative. Measured counterfactually, it is impossible to say what would have happened without the ATS; perhaps the territorial claimants would have secured their territories, or perhaps the continent would have become administrated by the UN and recognised as the heritage of all humankind, or maybe it would have become a place of unregulated scramble over the resources. Comparing the outcome to the latter scenario indubitably makes the ATS seem like a success, but if we compare the ATS to the alternative of an international regime such as the UN, the ATS does not necessarily fare as well.

The problem with this criterion is that assessing whether an institution provides benefits otherwise not obtainable, entails comparing the current situation with any other situation that would have obtained the benefits. This implies comparing the institution in question to *no institution* in place and to an *alternative institutional*

¹⁴While I keep the discussion in this section to a minimum due to the word limit and only briefly mention some hypotheticals, there is some thought-provoking literature on the future scenarios in Antarctica.

For a discussion on future Antarctic scenarios see Frame, “Towards an Antarctic Scenarios Integrated Framework.” The discussion about the Southern Ocean being a protein bank to tap into dates back to 1970s, see Shapley, “Antarctic Problems: Tiny Krill to Usher in New Resource Era.” On the issue of freshwater and iceberg harvesting, see: Jabour, “The Worth of Water: Designing a Legal Regime to Regulated Iceberg Harvesting”; Hult and Ostrander, “Antarctic Icebergs as a Global Fresh Water Resource.” For an overview of bioprospecting in Antarctica, see Lohan and Johnson, “Bioprospecting in Antarctica.” For the developments in tourism management see Liggett et al., “From Frozen Continent to Tourism Hotspot? Five Decades of Antarctic Tourism Development and Management, and a Glimpse into the Future.” On the Antarctic as a refuge for environmental migrants, see Abdel-Motaal, *Antarctica: The Battle for the Seventh Continent*.

¹⁵See Jacquet et al., “Rational Use” in Antarctic Waters.” Ice is a mineral under the Treaty, and therefore there is no regulation for iceberg harvesting. Additionally, the status of ice shelves once they break up is ambiguous, see Jabour, “The Worth of Water: Designing a Legal Regime to Regulated Iceberg Harvesting.”

¹⁶Buchanan and Keohane, “The Legitimacy of Global Governance Institutions.”

arrangement. While for the former we need to ask whether the benefits are obtainable without the institution, we need to ask for the latter if there is a feasible alternative arrangement to obtain greater benefits. Both are status-quo biased and comparing to ‘no institution’ situation involves too many uncertainties. How good is our judgment about the ATS if it is biased in such a way?

Additionally, assessing the performance of the institution based on the comparative benefit criterion lacks any tangible measurements. We can, however, measure the benefits provided compared to the situation before the institution was created. So instead of using the comparative benefit criterion to assess whether benefits are obtainable otherwise, we can use it to assess the institution in relation to the benchmark of what the situation was prior to the institution’s existence. When we talk about institutions providing benefits, the language and the tools of the RBM used by the UN can be useful considering their focus on results.¹⁷ To help measure the benefits provided by institutions, I suggest relying on the RBM matrix.

The RBM evaluates an institution by looking at its outputs, outcomes, and the baseline in relation to which we can measure the results achieved. Outputs are the direct and specific benefits and services that an institution provides, and they lead to outcomes, which are more wide reaching and relate to *changes in behaviour among actors* involved. If we view the ATS through the RBM framework, we can measure what the institution has achieved by comparing the current situation to how things were before the ATS existed. The benefits of peace, freedom of scientific investigation, and environmental protection reflect the goals of the ATS, and I discuss them in the next section in relation to the criterion of institutional integrity. But what about outcomes that were not explicitly laid out as goals of the ATS but that are nevertheless a result of the institution’s output?

The main outcome of the ATS is that no country owns any part of Antarctica.¹⁸ Setting aside the discussions on territorial claims resulted in there being no sovereign in the Antarctic. While seen as an achievement to be celebrated by some, the reality is that Article IV did not solve the issue of territorial claims, but only set it aside. As seen in [Table 1](#), the output, the direct and specific benefit that the ATS provided, was freezing of the claims. It resulted in an outcome, i.e., a wide-reaching impact, *no sovereign in Antarctica*. The outcome, however, is not much different from the baseline, which was *no sovereign in Antarctica*.

How valuable is this outcome? When the Treaty was signed, freezing the claims was the only way to protect the interests of the claimants and to avoid conflict.¹⁹ A novel solution then, driven by fear of confrontation between the United States and the USSR

Table 1. The ATS via the results-based management.

Output	Outcome	Baseline
<ul style="list-style-type: none"> • Art. IV: Freezing the claims and no new claims (Modus vivendi) 	<ul style="list-style-type: none"> • No sovereign • The question of “who owns Antarctica” is not resolved 	<ul style="list-style-type: none"> • No sovereign • Claims actively contested

¹⁷United Nations Development Group, “Results-Based Management Handbook.”

¹⁸Although this might be contested by claimant states.

¹⁹Elliott, “Regime Building: The Antarctic Treaty System.”

and claimants potentially losing influence in the region, it served as an immediate benefit for a select few states. However, six decades later it is apparent that this 'benefit' is not really a benefit for the rest of the international community. Fundamentally, Article IV did not solve much, but rather just delayed addressing the important questions. The output was a *modus vivendi* on the issue of territorial claims, a temporary agreement pending final settlement. The outcome is not much different from the baseline, because the output defers the issue of who owns the Antarctic. Thus, viewing the ATS through the prism of the RBM highlights that the regime went from being a novel solution to becoming a relic of the Cold War.

Avoiding conflict between the two superpowers towards the end of the 1950s was not a small achievement, but today the Antarctic region is a place that attracts an increasing number and variety of actors engaged in activities unforeseen at the time the Treaty was signed. Not addressing the question of territorial claims undermines the regime's ability to deliver on the promises it has made, which leads me to the next section.

Institutional integrity: procedures as obstacles to meeting the goals

The institutional integrity criterion requires that an institution performs in accordance with its goals, and that its procedures are appropriately designed to achieve those goals. Therefore, the institutional criterion requires that the goals of the ATS are in alliance with its actual performance (*what* the ATS manages to achieve) and procedures (*how* the ATS seeks to achieve them).

The ATS's founding pillars were peace and science, and the environmental protection was strengthened in the 1990s as a result of the Protocol. First, peace on the continent was the main goal that the system professed to achieve. The Antarctic Treaty starts with: 'Recognizing that it is in the interest of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.'²⁰ The regime ensured that the continent would be free of military conflict and denuclearised. Considering the period of tensions during the Cold War, this was a remarkable achievement. Second, the Treaty is committed to the freedom of scientific investigation on the continent and international cooperation reflective of international collaboration during the 1957–1958 International Geophysical Year. Research conducted in the Antarctic presents an enormous benefit to humanity as it facilitates our knowledge in the geosciences, life sciences and physical sciences. Scientific programmes in the Antarctic are crucial to our understanding of global climatic changes by studying the ozone layer, as are ice and sedimentary records to understand past climatic changes.²¹ Lastly, since the establishment of the Protocol, which was the culminating point of discussions about environmental protection that had been long ongoing, environmental protection became another formal goal that the ATS was meant to achieve. Article 2 of the Protocol states: 'The Parties commit themselves to the comprehensive protection of the Antarctic environment and dependent and associated

²⁰Antarctic Treaty.

²¹See the webpage of SCAR (Scientific Committee on Antarctic Research), <https://www.scar.org/>.

ecosystems and hereby designate Antarctica as a natural reserve, devoted to peace and science.²² The ATS has achieved these goals to an extent, but some of the procedures are the reason for the ATS's failure in ensuring that the goals are fully met.

Peace under pressure

Although the Antarctic has been devoted to peaceful purposes since the beginning of the ATS, to say that it has not been an object of international discord would be to dismiss the attempts made to contest the exclusive nature of the regime from the very beginning.²³ Even though 'the Question of Antarctica' was removed from the annual General Assembly in 2005, the ATS remained mostly a developed world system which effectively excludes 145 nations.²⁴ Antarctic expert Alan Hemmings suggests that the regime is due for a serious structural update in light of increasing activities in the region and a wider group of actors: over the past decade and a half the region has transformed from being a place of science where national Antarctic programmes played the key role, to a region that attracts diverse groups of actors and where commercial activities such as tourism have become the norm. And yet, the regime has not been responsive to these transformations.²⁵ Hemmings argues that the ATS's 'apparent calm disguises significant ecological and geopolitical instability,' and it is time to transition to a collectively managed regional system open to wide participation in order to reflect that Antarctica is of global interest.

Furthermore, the COVID-19 pandemic amplified existing tensions on the international arena; Chinese and Russian ongoing activities in Antarctica amidst the crisis are viewed with increased scepticism in the Western media.²⁶ Meanwhile, the United States-led international order is being questioned and it is unclear what the near future holds for the Antarctic.²⁷ This sows some doubt about the future resilience of the system and ability to maintain peace.

Dual purpose of science

It has been argued that Antarctic science is embedded in geopolitics: 'It is a way in which nation states have maintained a presence on the continent, dominated affairs and collected geo-strategic intelligence.'²⁸ Aant Elzinga, sociologist and philosopher of science, points to the fact that science serves a dual function in Antarctica and its symbolic value sometimes trumps its scientific value. Since doing science is an entry ticket into the ATS CPs club, and therefore a currency of the decision-making authority, he argues that states sometimes pursue research projects that may be far less than optimal from a scientific point of view.²⁹ Antarctic expert Anne-Marie Brady also notes that some states prioritise investments that maintain their presence in the region rather than high-level scientific research.³⁰ The reality is that scientists are not always free to follow their scientific agendas and that the freedom to conduct scientific investigations is in practice often limited by state interests.

²²Madrid Protocol.

²³In 1956 and 1958 India suggested that Antarctica should be placed under the UN management.

²⁴Brady, "Opinion: Democratising Antarctic Governance."

²⁵Hemmings, "From the New Geopolitics of Resources to Nanotechnology: Emerging Challenges of Globalism in Antarctica."

²⁶Feiger and Wilson, "The Countries Taking Advantage of Antarctica During the Pandemic."

²⁷Blackwill and Wright, "The End of World Order and American Foreign Policy."

²⁸Naylor et al., "Science, Geopolitics and the Governance of Antarctica," 143.

²⁹Elzinga, "Origin and Limitations of the Antarctic Treaty."

³⁰Brady, "Opinion: Democratising Antarctic Governance."

For the same reasons, the international cooperation in Antarctica is constrained by state agendas. As research bases contribute to a state's demonstration of presence, not many states are keen on establishing international research stations. Elzinga suggests that the introduction of international stations would be a necessary step towards a more robust internationalisation of the regime.³¹ A decade ago, when writing on this issue, Hemmings pointed to the fact that out of 110 current main facilities in the Antarctic Treaty area, there were only two joint stations, and both involved only two states.³² Furthermore, instances of joint facilities disproportionately involved claimant states. The current situation is not much different: out of 112 facilities there are four that have two states operating.³³ Moreover, a higher number of stations per state does not correlate to higher scientific output. In fact, according to a 2012 assessment of Antarctic research, New Zealand was one of the top producers of Antarctic scientific papers while having only one base.³⁴ For the ATS's fulfilment of its formal commitment to international cooperation, a transition towards a more integrated international infrastructure is needed.

Inadequate environmental protection

Although deemed successful in the past, the ATS faces new challenges to ensuring environmental protection in light of climate change and increased activities in the region. The 2019 Intergovernmental Panel on Climate Change (IPCC) Special Report on the Ocean and Cryosphere in a Changing Climate stressed the importance of appropriate global climate policies: 'The polar regions will be profoundly different in future compared with today, and the degree and nature of that difference will depend strongly on the rate and magnitude of global climatic change. This will challenge adaptation responses regionally and worldwide.'³⁵

First, the goal of environmental protection is undermined by the actions of signatories to the Antarctic Treaty and the Madrid Protocol domestically. The top five global emitters of carbon dioxide are all states that also have consultative status within the ATS.³⁶ It is the domestic actions of the major ATS players that have a devastating impact on the Antarctic: 'The West Antarctic Ice Shelf is threatened by Australian coal, Russian gas, and United States oil.'³⁷ The failure to connect the dots between domestic emissions and the impact they have on the Antarctic Ice Sheet (AIS), or the blatant refusal to acknowledge this connection, is a major problem for some CPs to act on their promises to protect the Antarctic environment. The AIS melting has further global consequences: It is the main contributor to global sea level rise and is estimated to contribute to more than a metre of sea level rise by 2100 if emissions are not reduced.³⁸ In a scenario with low carbon emissions, it is projected that by 2100, land that is currently occupied by 190 million people globally will be below annual flood levels, and in a high carbon

³¹There are, of course, other ways to international cooperation, but there are no obvious reasons not to have international (but fewer) stations, especially considering that fewer stations might be beneficial for the environmental protection.

³²Hemmings, "Why Did We Get an International Space Station before an International Antarctic Station?"

³³See the data on Antarctic Facilities on COMNAP website, <https://www.comnap.aq/antarctic-information/>. The data updated 6 May 2020.

³⁴Dudenev and Walton, "Leadership in Politics and Science within the Antarctic Treaty."

³⁵Meredith et al., "Polar Regions," 206.

³⁶<https://www.ucsusa.org/resources/each-countrys-share-co2-emissions>. This is total emissions, not per capita.

³⁷Roberts, "Does the Science Criterion Rest on Thin Ice?" 4.

³⁸DeConto and Pollard, "Contribution of Antarctica to Past and Future Sea-Level Rise."

emissions scenario the number increases to 630 million.³⁹ This is the number of people *currently* occupying lands that are under threat of flooding. The procedures about the rules of consultative status in the ATS should ensure that those states whose actions are detrimental to Antarctica be excluded from having consultative status, at least probationally until they change their actions.

Second, meeting the goal of environmental protection calls for joint efforts with other international climate frameworks. The 2019 IPCC report stated that the capacity of polar region's regimes to respond to climate change, although strengthened recently, is currently not sufficient to address existing risks and uncertainties. Current legal and policy frameworks provide for a fragmented system of governance and are not adequately equipped to respond to climate change in an integrated and precautionary way.⁴⁰ International law and polar regions expert Donald Rothwell stressed the importance of a closer relation between the ATS and the UN, stating that a higher degree of collaboration with the UN system would help with the global acceptance of the ATS and bolster its legitimacy.⁴¹ International law expert Akiho Shibata argues that in its early stages the ATS defended its exclusivity and resisted interventions from the UN, and although the regime has opened up to cooperation with outside actors, the relationship of the ATS with other international regimes is still 'fundamentally based on a mutual non-interference policy.'⁴² The International Union for Conservation of Nature advisor Harlan Cohen, for instance, advocated for amending the Rules of Procedures to reflect that observers and invited experts are welcome at all sessions of the Consultative Meetings.⁴³ Some steps in the right direction are being made; the Final Report of the 2019 ATCM includes the Multi-year Strategic Work Plan that calls for 'a general analysis of relationship between the ATS and other relevant international legal frameworks' and the identification of 'opportunities for collaboration as well as capacity-building in science, particularly in relation to climate change.'⁴⁴ The ATS should work in synchrony with other actors of the global legal and institutional frameworks on effective adaptation and mitigation policies and strengthen its engagement with the UN.⁴⁵

Third, inadequate regulation and the lack of enforcement mechanisms regarding the activities in the Antarctic is another obstacle to ensuring robust environmental protection. The ATS does not have a comprehensive management plan to regulate tourist activities. Regulation rather occurs under a mix of the Protocol requirements, Resolutions, Measures and specially protected areas.⁴⁶ There is no formal monitoring, and participation in the International Association of Antarctica Tour Operators (IAATO), the association of tour operators that promotes environmentally responsible

³⁹Kulp and Strauss, "New Elevation Data Triple Estimates of Global Vulnerability to Sea-Level Rise and Coastal Flooding."

⁴⁰Meredith et al., "Polar Regions," 208.

⁴¹Rothwell, "UNEP and the Antarctic Treaty System."

⁴²Shibata, "Japan and 100 Years of Antarctic Legal Order: Any Lessons for the Arctic?" 50.

⁴³Cohen, "Public Participation in Antarctica: The Role of Nongovernmental and Intergovernmental Organizations."

⁴⁴42nd ATCM, Final Report, 320, 317.

⁴⁵One might argue that the ATS is coordinating its work on climate change policies by relying on the scientific knowledge provided by the Antarctic Environments Portal (AEP). However, the Portal's purpose is to provide independent scientific advice on the Antarctic and activities on the continent, *not outside* of Antarctica. Furthermore, the AEP is not an external global actor, it is located within the ATS institutional bubble. It is managed by the SCAR and funded by some of the ATS parties, for the information see the AEP website, <https://environments.aq/about/>

⁴⁶There are just two Measures relating to tourism: M4(2004) and M15 (2009) – but neither is yet in force.

tourism in Antarctica, is voluntary.⁴⁷ When it comes to human activities on the continent, unless something is explicitly prohibited it is allowed. This is the result of what Antarctic expert Kees Bastmeijer calls a system of decision-making by non-decision-making.⁴⁸ The first edition of *Polar Perspectives* by the Wilson Center Polar Institute, published amidst the COVID-19 pandemic, suggests that the pause in tourism due to the global health crisis should be a turning point from ‘reactively managing visitors to proactively regulating them.’⁴⁹

Fourth, consensus-based decision-making and unresolved sovereignty are impediments to effective environmental protection. A recent assessment study of Antarctica’s biodiversity showed that less than a third of the continent is free from human interference. To secure biodiversity, the study highlighted the importance of expanding Antarctica’s specially protected areas (ASPAs).⁵⁰ Over the last decade only one new area was designated as ASPA, and since the 1980s there has been a decline overall in designating areas as protected. In sixty eight percent of protected areas, ASPAs are less than a square kilometre.⁵¹ Recent difficulties in light of the opposition from China and Russia in coming to an agreement on establishing Marine Protected Areas (MPAs) highlight how consensus decision-making gives veto power to any state, and as a result, leads to failure to establish much needed protected areas.⁵² The regime is ‘at the mercy of geopolitics’ when individual countries can veto measures that the majority wishes to adopt.⁵³ The difficulty related to establishing protected areas is a case in point of how the unresolved question of sovereignty is an issue. In 2015 France expressed its frustration with Russian resistance to agree on marine protected areas: ‘All CCAMLR Members *except one* have a shared vision of our collective responsibility, [...] the conservation of the marine resources of the Southern Ocean.’⁵⁴ But as long as the question of sovereignty is not resolved, an attempt by claimants to establish protected areas might be viewed as, in the words of Russian polar expert Lukin, a ‘peculiar mechanism of expansion of their territorial claims in Antarctica.’⁵⁵ A transition to a system of majority rule to decide on the issues of protected area will ensure a more efficient process, and addressing the sovereignty question will help with the doubts some states have about the real reasons behind establishing protected areas.

These flaws in the system raise doubts about the long-term ability of the ATS to meet the goals it was designed to achieve. If the institution’s performance is suboptimal and there are steps that the institution could take to compensate for the shortcomings and it does not, it casts doubt on the degree of the institution’s commitment to providing those benefits. In relation to the institutional integrity criterion, the ATS’s performance is suboptimal due to the shortcomings of its procedures. In the next section I discuss to what extent the ATS is open to fundamental criticism and the revision.

⁴⁷Christian, “Using International Guidelines to Improve Tourism Management in Antarctica.”

⁴⁸Bastmeijer, “Strategic Approaches to Antarctic Protection”; Bastmeijer, “Introduction: The Madrid Protocol 1998–2018. The Need to Address “the Success Syndrome.””

⁴⁹Carey, “Is It Time for a Paradigm Shift in How Antarctic Tourism Is Controlled?”

⁵⁰Leihy et al., “Antarctica’s Wilderness Fails to Capture Continent’s Biodiversity.”

⁵¹Hughes, “Antarctic Protected Areas and Climate Change.”

⁵²Harvey, “Once Again, New Antarctic Reserves Fail to Win Backing.”

⁵³“Reform the Antarctic Treaty.”

⁵⁴See footnote 80 in Vanstappen and Wouters, “The EU and the Antarctic: Strange Bedfellows?” 281

⁵⁵Lukin, “Russia’s Current Antarctic Policy,” 217. Lukin points to the fact that territorial claimants designated 68% of all declared Antarctic Specially Protected Areas.

Accountability: ATS is still a collective hegemony

The accountability criterion consists of three main aspects: transparency, which enables access to the information essential to evaluating the institution; contestability, which allows for a platform to voice criticism of the institution; and revisability, a complementary aspect to contestability, which is meaningless unless there is an adequate institutional response to the criticism.

Unless we have available information, we cannot assess whether an institution meets the standard of legitimacy or not, so transparency is essential to accountability. Thus, we should expect the policies and procedures of the ATS to be publicly available. Shibata points to the fact that the ATS has increased its accountability by making its documents publicly available, starting in 1983.⁵⁶ The ATS website has a vast library of various sources of information ranging from working papers submitted in preparation for ATCMs to the results of the meetings. The documents discuss agendas for the upcoming meetings, the meetings minutes, the reports on the activity in the Antarctic, agreed upon measures, final reports of the meetings, etc. However, for the general public access to some documents requires filling out request forms, and some documents are password protected until after the ATCM.⁵⁷ The ATS does not deal with sensitive information such as security, military or intelligence related to the region, so there are really no good reasons to have any obstacles to information access. Additionally, the public can access, albeit sometimes with limits, what happens before the meetings and what happens as a result of the meetings, and a summary of them. Still, the process of decision-making and how some actions come to be decided upon is not available to the public. Similar to other international regimes, a lot of decision-making is done behind closed doors.⁵⁸ Diplomatic channels such as bilateral discussions and negotiations are done privately, and therefore it is hard to assess their accountability. Some defend the secretiveness of the ATS negotiations and meetings, referring to it as being generally accepted and usually practiced in many international negotiations.⁵⁹ Furthermore, the informal nature of consultations among the Parties arguably contribute to the success of the ATS.⁶⁰ Yet, not all international treaties proclaim to exist in the interest of all humankind. For the ATS to be truly transparent, in addition to having the entire database easily and publicly accessible, the representatives of the CPs should minimise informal communication to ensure that the reasons behind decisions made are transparent.

The Antarctic regime was contested from the very early stages. In 1956 India proposed to include the question of Antarctica in the UN General Assembly's agenda. The most vocal criticism came from developing states, led by Malaysia during the 1980s and early 1990s, who criticised the exclusiveness of the regime: "The days when the rich nations of the world can take for themselves whatever territory and resources that they have access to are over."⁶¹ The Question of Antarctica was brought to the UN General Assembly in

⁵⁶Shibata, "Japan and 100 Years of Antarctic Legal Order: Any Lessons for the Arctic?" 37.

⁵⁷See the database section on the websites of the ATS and CCAMLR. Also, on this issue see: Cohen, "Public Participation in Antarctica: The Role of Nongovernmental and Intergovernmental Organizations." In contrast, for example, the International Seabed Authority has internal documents available, <https://www.isa.org/jm/about-isa>.

⁵⁸Dodds and Hemmings, "Antarctic Diplomacy in a Time of Pandemic," 3. The authors describe the ATS as procedural face-to-face meetings relying to an extent on 'corridor talk.'

⁵⁹Jørgensen-Dahl, "The Legitimacy of the ATS," 293.

⁶⁰Stokke and Vidas, *Governing the Antarctic: The Effectiveness and Legitimacy of the Antarctic Treaty System*, 47.

⁶¹UNGA, 37th session, 132.

1983, the main platform to contest the ‘rich man’s club,’ and remained a regular topic until 2005.⁶² It is no surprise that external critique coincided with discussions of mineral exploitation and potential resource benefits. The Question of Antarctica generated international debate about what the future holds for the region. However, the criticism subsided once the Protocol was signed. While in the 1990s all of the developing countries who were not part of the ATS supported a motion on The Question of Antarctica, the will to contest the regime declined after the signing of the Protocol.⁶³ Malaysia joined the ATS in 2011, and is working on meeting the requirements for consultative status. Other former critics of the regime either fell silent long ago such as Indonesia, Nigeria, and Kenya, or engaged with the regime and gained consultative status like China and India.⁶⁴

Revisability of the regime shows the extent to which those who are in charge of the institution consider the criticism of it. Essentially, it is a response to contestation. What was the ATS’s response to criticism in the 1980s? Although the ATS responded by making its documents public, allowing non-CPs to attend the ATCM as observers, and allowing non-state actors to attend meetings, the regime was not fundamentally changed. It maintained a two-tier system, in which only those states that meet the criterion of scientific research activity have a voice when it comes to decision-making.

The two-tier system is illustrated by lack of participation and contestation. At the ATCM Non-CPs can request the floor and argue for certain issues but are denied standing to take part in the decision-making process. Their impact, if any at all, is limited. It is reasonable to expect that CPs attend because their opinions matter during the decision-making and to expect a lower attendance from non-CPs. Indeed, there has been no case of CPs not being present at ATCM since 1983, whereas non-presence of non-CPs is numerous.⁶⁵

The Rules of Procedures do not reflect that non-CPs are always invited, instead Rule 3 states ‘each non-Consultative Party which *has been invited* [...]’ and Rule 27, regarding what non-Consultative Parties may do during the meetings, states ‘*if invited to attend a Consultative Meeting.*’⁶⁶ Why would states spend money and time to attend meetings where they effectively have no decision-making power? While the ATS has opened up as a result of the criticism of the 1980s, it still remains a ‘collective hegemony’ that reinforces some states to remain ‘second class citizens’ as China has pointed out.⁶⁷

As for non-state actors, since 1983 they are permitted to attend ATCMs as experts. However, as polar and legal expert Jill Barrett notes, the actors that do participate tend to be strong advocates of the ATS, whereas those NGOs that advocate for alternative systems such as the UN or UNESCO have ‘petered out.’⁶⁸ As discussed previously in the context of institutional integrity, the relationship between the ATS and the UN has been one of non-interference, allowing the ATS to maintain its exclusivity.

⁶²Beck, “The United Nations and Antarctica, 2005 : The End of the “ Question of Antarctica ”?”

⁶³Brady, “Opinion: Democratising Antarctic Governance,” 455.

⁶⁴Ibid.

⁶⁵The data of attendance is taken from ATCM reports. It is important to note that Malaysia attended as a Guest from 2002 until 2012. Additionally, as noted by the reviewer of this article, sometimes a Consultative Party makes no substantive contribution to the meeting and is only represented by diplomats from local embassy.

⁶⁶Secretariat of the Antarctic Treaty, *Rules of Procedure of the Antarctic Treaty Consultative Meeting and the Committee for Environmental Protection*. On the issue see Cohen, “Public Participation in Antarctica: The Role of Nongovernmental and Intergovernmental Organizations.”

⁶⁷Brady, *China as a Polar Great Power*, 198.

⁶⁸Barrett, “International Governance of the Antarctic – Participation, Transparency and Legitimacy,” 161.

Hemmings writes that since the 1990s there has been a hiatus for regime development, while the Antarctic has simultaneously experienced the biggest growth in human activity. As a result, the ATS now faces a backlog of issues that needs to be addressed.⁶⁹ Brady notes that the decline in the will to contest the regime is the outcome of the end of the Cold War.⁷⁰ According to her it is harder for the developing world to challenge the regime in a unipolar world. I, however, want to point to the fact that the will to contest the regime diminished after signing of the Protocol. This correlation is interesting because it points to the central issue of decision-making in the regime: States want to participate in the regime when there is a potential of economic benefits. This is important to note because with the tourism industry growing in the region and becoming one of the main resources, as well as the mining ban possibly being up for a revision, the hiatus might soon be over. Contestability is a channel to voice criticism, which is essential for those who might disagree with the outcome of decisions. With prospects of increasing economic activity in the region and most states not being part of the regime, the possibility of another wave of contestation arising in the near future is likely. Another possibility is that some states outside the ATS might simply act on their own, disregarding the ATS entirely. It is actually in the ATS's members interests to encourage wider participation. To quote Barrett: "To safeguard Antarctica against major risks of the future, such as a surge in unregulated activities by non-State actors from States outside the ATS, or Treaty Parties deciding to leave the Treaty or Protocol, more States need to be attracted into the ATS, especially from Africa and the Middle East which are particularly underrepresented."⁷¹ In the concluding section I suggest some steps that can be made to transition to wider participation.

Concluding remarks: a reforms sketch

I started this paper by stating that an account of legitimacy is needed to assess whether the ATS is worthy of support and to know when it is time to reform it. Appraising the ATS against the criteria discussed above suggests that it is indeed time to reform some aspects of the ATS. In this concluding section I sketch out potential reforms that would help the ATS to transition towards stronger legitimacy.

Since it is conditions outside of Antarctica that threaten it the most, and not what happens in Antarctica, those states that are the biggest contributors to climate change and do not change their domestic policies to meet global requirements such as the Paris Agreement should not be allowed to participate in decision-making in the ATS. A pause in their consultative status for a probationary period might incentivise to act according with the global climate goals and therefore align the procedures with the goal of the environmental protection. This might prove difficult in practice and the proposal is rather an ideal goal to aim for.

⁶⁹Hemmings, "From the New Geopolitics of Resources to Nanotechnology: Emerging Challenges of Globalism in Antarctica," 63.

⁷⁰Brady, "Opinion: Democratising Antarctic Governance."

⁷¹Barrett, "International Governance of the Antarctic – Participation, Transparency and Legitimacy,"161.

A higher degree of collaboration with the UN is necessary to ensure that the ATS adequately acts on its promises of environmental protection. This requires a move from the current mutual non-interference policy towards more synchronised efforts. A first feasible step in this direction would be to include in the Rules of Procedures that observers and experts are always invited to all ATCMs sessions per Cohen's suggestion.⁷²

To better manage tourism, Bastmeijer suggests a potential solution in establishing a commission for Antarctic tourism that would make decisions based on majority voting to avoid the slow and ineffective process of consensus.⁷³ Additionally, membership in IAATO may be a requirement for tour operators active in Antarctica.

Decision-making by consensus rule should be, at least for some issues, replaced by majority vote to avoid making decisions by non-decisions that lead to suboptimal environmental protection. This is likely to be the most difficult change due to political feasibility constraints; after all, consensus is required to abandon consensus.⁷⁴

For better accountability the Rules of Procedures should reflect that non-CPs are always invited to the ATCMs and all documents be easily accessible to public.

Dropping the science activity requirement as an entry ticket to the decision-making club will contribute to freedom of scientific investigation, as there would be no grounds for a dual use of science.

Lastly, peace on the continent rests on a system that excludes the majority of states from the governance of the Antarctic. The exclusiveness of the regime has been contested since the very beginning of the ATS and this contestation might increase in intensity considering the growing and increasingly diverse activity in the region. This calls for the question: Should not the ATS transition towards a more inclusive and representative regime in order to better reflect the international community's interest in the region?

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⁷²Cohen, "Public Participation in Antarctica: The Role of Nongovernmental and Intergovernmental Organizations."

⁷³Bastmeijer, "Strategic Approaches to Antarctic Protection."

⁷⁴The transition might seem unfeasible simply due to the fact that this very transition would require a consensus agreement. Brady, however, compares the current ATS to the early stages of the EU, which was at first consensus-based as well, but later changed to majority rule because consensus-based voting prevented change. See Brady, "Opinion: Democratising Antarctic Governance." Lastly, this reform should be viewed as what philosopher John Rawls calls a realistic utopia, a global order that does not exist yet, but is achievable. For an overview see Young, "Realistic Utopia."

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