



The implied border mechanisms of Antarctica

Arguing the case for an Antarctic borderscape

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Abstract

Antarctica is arguably the only geographical territory left on Earth without political borders. Narratives of peace, science and environmental protection in the Antarctic Treaty System drive a collective governance system that avoids border discourse even though physical boundaries exist. This article fills a gap in Antarctic research by exploring the question 'What borderwork is evident in the Antarctic Treaty System in relation to the construction and maintenance of its physical boundaries?' through a study of a gateway to Antarctica—New Zealand. Borderscaping and borderwork concepts are used to examine territoriality in Antarctica. Enacted narrative analysis reveals effects of strategic narrative on practices, showing the Antarctic Treaty system has created an 'implied' border system that lacks some of the capabilities of an acknowledged border system. The article argues that understanding the full reach of the absences on practices and attitudes in this Antarctic system is important for the continent's ongoing security and for border theory. It concludes that more needs to be known about the subtle effects on the many actors in this implied borderscape. Such further research will add to knowledge about Antarctic practices and governance and borderscaping theory.

Keywords: Antarctica, borderscaping, borderwork, enacted narrative

Introduction

Governed by a collective of 54 signatory countries with a policy of access to all, Antarctica is arguably the only geographical territory left on Earth without political borders. However, both geographically and politically, the picture of Antarctic borders is not straightforward, and warrants attention. Geographically, the moving sea ice and ice sheets create a dynamic intersection of sea and not-sea that challenges geographic definitions of 'territory' (Murray 2005). Politically, the presence of historical claims on the continent, as well as multiple expressions of sovereignty more generally, denotes political interests that are inevitably 'bordered'. The nature of collective Antarctic governance obscures the extent to which borders exist and are acted out in Antarctic governance.

There is a gap in Antarctic literature about the collective aspects of Antarctic borders—what there is focuses on the geopolitical nature of claims (Heininen & Zebich-Knos 2012). There is also a gap in border studies research into collective borders, excepting those of the European Union. Antarctic governance is unique in its history of avoiding violence and questions of sovereignty, and thus territory and national identity (Dodds 2017; Keane n.d.). It has done so through constructing a system where the collective aims of the Antarctic Treaty have primacy and in which there is a distinct absence of the discourse of borders (Nicklin 2019b).

This article explores the question 'What borderwork is evident in the Antarctic Treaty System in relation to the construction and maintenance of its physical boundaries?' through a case study of New Zealand as one of the gateways to

Antarctica. It argues that the unique narratives operating in the Antarctic have observable effects, played out through a bespoke system for managing border-like processes. This bespoke system rubs up against narratives driving the global system of trade and travel and related border management policies and practices. The article argues that the Antarctic Treaty System operates an 'implied' border system. It argues for the importance for future Antarctic security of further research into effects of an absence of overt border narratives in the broader landscape of border-like practices. Exploring what 'is not' in this landscape could add a new element to the concept of borderscaping.

The article is structured as follows. After a background on Antarctic governance, borderscaping and borderwork concepts are used to examine territoriality as it relates to Antarctica. The next section examines the relationship between state border narratives and Antarctic narratives, raising questions about their different effects. The methodology section outlines the case study, involving documents and observations of processes from New Zealand, supplemented by materials from Argentina and the Secretariat of the Antarctic Treaty. The analysis is built around three type of narrative effects – narrative translation, intersecting narratives and absent narratives. From this analysis, implications for the future of Antarctic security are discussed. The article concludes that more needs to be known about the subtle effects on the many actors in what is an implied border landscape. Such further research will add to knowledge about Antarctic practices and governance and borderscaping theory.

Antarctica is hard to get to and is 'owned' by no state. Instead, it is governed by a collective of participating states. This collective was established by the Antarctic Treaty ("the Treaty") by 12 foundation signatories, coming into effect in 1959 (ATCM 2017). There are now 53 signatory states, 29 of which have stations on the continent, peopled by scientists and support staff from Europe, the American hemisphere, Asia and Australasia (Secretariat of the Antarctic Treaty 2020b, 2020b).

Prior to 1959, seven states had laid claim to portions of the continent, three of which overlapped. The Antarctic Treaty effectively froze all claims, allowing them to remain, but providing them with no egitimacy in international law

(ATCM 2017). Maps of Antarctica, as in Figure 1 below, often show the seven claims as pieces of a pie, including the single unclaimed portion, Marie Byrd Land. These lines on the map are notional only, with no physical representations on the continent such as border fences or associated controls on the continent (Prescott & Triggs 2008).

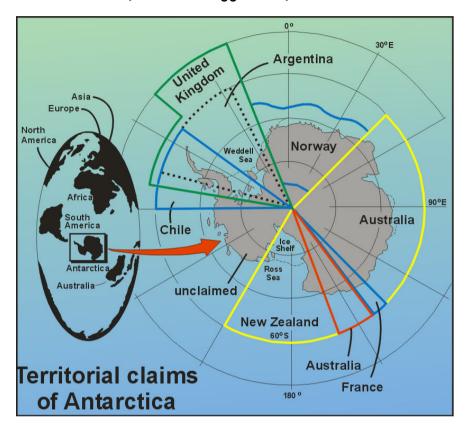


Figure 1

The seven claims are represented as wedges, based on the details of made by the claimant states. The oval to the left shows the orientation of Antarctica to the nearest states.

Viewed at http://www.atsummit50.org/session/the_antarctic_treaty-1.html

There is no presence of 'border' in the Antarctic Treaty System, which is a collection of conventions and protocols that sit under the Antarctic Treaty, collectively governed by the states with scientific programmes on the continent (ATCM 2017). These states are known as 'consultative parties' and are the decision-makers at the annual Antarctic Treaty Consultative Meeting (Secretariat of the Antarctic Treaty 2020a). Even though collective governance

overrides the claimant countries' interests, there are continued tensions between non-claimant and claimant states. For example, non-claimant states block any measures in the Treaty System that might afford privilege to claimant states (Bray 2016; Hemmings 2017). From this, it can be inferred that use of border terminology is avoided because of its historical association with state territory and the potential for claimant privilege. The next section will explore this association.

Border theory and the Antarctic situation

Up to the 1990s, the field of border studies was dominated by the geographical and political aspects of territorial control and state security (Johnson et al. 2011; Newman 2006; Paasi 2011; D. Wastl-Walter 2016). Since the 1990s, border studies have been influenced by constructivist and post-structuralist concepts of space, relationality, multiplicity and contingency that go beyond state security, involving many different actors (Brambilla et al. 2016; Massey 2009; Nicklin 2015). Border studies have blossomed with concepts. Borders have been characterized as boundaries, borderlands (Newman 2006; Wastl-Walter 2016), frontiers (Walters 2004), border landscapes (Rumley & Minghi 2015); they can have qualities such as border-ness (Cassidy, Yuval-Davis, & Wemyss 2018) and borderity (Konrad et al. 2018; Szary & Giraut 2015), border assemblages (Sohn 2016), the border suture (Salter 2012); they can be performative, as in bordering (Newman 2006), borderscaping (Brambilla 2015; Rumley & Minghi 2015), borderization (Wilson & Donnan 2012), debordering, and re-bordering (Cassidy et al. 2018; Konrad et al. 2018); they can be constitutive from multiple perspectives, as in "seeing like a border" and borderwork (Rumford 2014); and they can be narratives, as in boundary narratives (Newman & Paasi 1998), border stories (Nicklin 2015), border biographies (Wilson & Donnan 2012), border imaginaries (Konrad et al. 2018).

Two of these concepts, borderscaping and borderwork, hold promise for the examination of Antarctic border practices, insofar as they exist. Borderscaping encompasses a multidimensional and performative view of borders. It includes but incorporates more than process. Actors' experiences, discourses, political interests and aesthetics are part of the picture (Brambilla et al. 2016). This

multidimensionalty lends itself to the multi-state, multi-location nature of Antarctica's border practices, as described shortly. Borderwork is about constructing and maintaining boundaries, not just from a state perspective, but from the perspective of ordinary people (Rumford 2014).

Despite the expansion of ideas populating border studies, the relationship between states and their control of territory is still dominant. Politically, the term "territorialisation" describes the actions states take to exert control over a geographic area or areas (Sack 1983). The term also has a social meaning derived from Deleuze and Guattari, of relevance to the Antarctic in that it relates to the process an entity (rather than specifically a state) undertakes to hold itself stable in the midst of change (Sohn 2016). Cassidy et al (2018) describe this latter type of territorialisation as: 'processes of territoriality that involve the borderwork of the construction and maintenance of boundaries' (Cassidy et al. 2018, p. 173). It is this 'borderwork' to which this article now turns its attention. What borderwork is evident in the Antarctic Treaty System in relation to the construction and maintenance of its physical boundaries?

In international law, a state can take control of a territory that is terra nullius—owned by no-one and, by implication, without indigenous populations (Collis 2017). Prior to 1959, Antarctica was such a territory. The physical characteristics and dangerous environment of Antarctica meant that even after claims were made, the claimant states were not able to populate and control their slice of Antarctica in the way states could control other colonies. This meant that Antarctica has never had migrants or asylum seekers seeking refuge; it has never had commercial trade occurring on its shores. Any smugglers are likely to be biological hitchhikers rather than humans. This makes consideration of borders in the Antarctic context outside many of the normal considerations covered in existing border theories, and in part explains why no specific research has been conducted on collective governance of Antarctic borders up to this point.

Because of the continued existence of the seven territorial claims, Antarctica is not completely free of traditional considerations of territoriality. It has been bordered through these claims and de-bordered by the Treaty, such that at the state level, Antarctica's claimant borders exist in a Schrödinger's Cat world of

being alive and not alive at the same time (Kramer 2013). In addition, Antarctica is a long way from the main trade and travel routes. As such, movements to and from Antarctica are primarily channelled through the five countries closest to the continent.² People travelling to Antarctica from outside these five states need to cross these states' borders to get to Antarctica. Four of these states are claimant states – Argentina, Australia, New Zealand and Chile. The fifth state is South Africa. The territorial role and thus the border controls of these states is barely visible in the Antarctic Treaty System, such that their status as 'Gateways to Antarctica' is used but not officially endorsed (for example, Argentine Republic 2018; Russian Federation 2016; South Africa 2017). One likely reason is the political sensitivity associated with claimant states and the power that gateways as points of control might give them (Hall 2015).

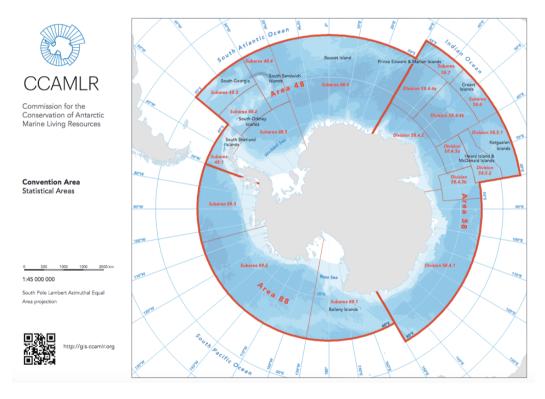


Figure 2

The map shows the three broad CCAMLR areas—48, 58 and 88—and the 18 sub-areas encircling the Antarctic continent. These areas could be considered somewhat equivalent to state Extended Economic Zones allowed by UNCLOS, especially as they appear similar to the claimant areas of Figure 1.3

The ocean surrounding Antarctica is another aspect of Antarctic territoriality. For state signatories of the United Nations Convention on the Law of the Sea (UNCLOS), their maritime territories can be as important as their land, particularly for island nations. In Antarctica, there are no maritime territories as such, not even for claimant countries.⁴ Even so, there is a kind of maritime governance in the form of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). This Commission is a part of the Antarctic Treaty System and comprises 30 signatory states, supported by a secretariat in Hobart, Australia (CCAMLR 2018). The Commission enacts the Convention for the Conservation of Antarctic Marine Living Resources, which includes regulating commercial catches of marine wildlife and monitoring the location and health of species in the areas shown in Figure 2 (CCAMLR 2019). The word 'border' is absent in this environment also.

In this very different environment, concepts commonly associated with borders such as belonging/not belonging and inside/outside raise questions such as 'belonging to what?' and 'what demarcates 'inside/outside'?'. What is the borderwork being acted out? Narratives provide a doorway into the Antarctic border landscape.

Border narratives, Antarctica and the rest of the world

The use of narrative in the social sciences involves interpreting, making sense of and articulating actors' experiences of the world (Reissman 1993; Yanow 2000). It encompasses but is also more multifaceted than storytelling (Hyvärinen, Hatavara, & Hydén 2013). For example, narratives have observable effects. These effects are a product of how actors relate to and interact with one another (Law 2002). In other words, narratives are performative – they both drive and are revealed out of the practices of actors. Mark Salter articulates the geopolitical aspects of performative narrative in relation to borders: 'governments, citizens, and other agents perform the border, by which I mean that they enact and resist the dominant geopolitical narratives of statecraft as they cross, or are prevented from crossing, borders' (Johnson et al. 2011, p.66). Salter refers specifically to geopolitical narratives, but borders are places of multiple actors and multiple narratives that intersect and impact on one another (Nicklin 2015, 2019a).

States deliver narratives through priorities that are translated into their border policies and practices. Understanding these relationships is important for identifying equivalent practices enacted in Antarctica. Arguably the most significant narratives driving state border activities and practices are those arising from policies related to global free trade and mass international travel. There are two dominant narratives - economic and security. The economic narrative is enacted through the General Agreement on Tariffs and Trade (GATT) of 1958 and subsequent agreements. Its aims of predictable trading conditions and fairness through eliminating discrimination and removing trade barriers changed border practices (European Office of the United Nations 1947). Customs and guarantine functions were framed as border-related trade barriers. Signatory states progressively reconfigured their customs and quarantine functions to support the evolving international trading system through increasing the speed of processing, reducing costs of compliance for traders, integrating into supply chains and coordinating services across different border agencies (World Customs Organization 2008). The global economic narrative was augmented in 2007 when the first World Economic Forum Travel and Tourism Competitiveness Report recognised the contribution of travel and tourism to the global economy (World Economic Forum 2007). Consistent with trade-related border practices, the focus was on increasing the ease of movement for travellers, but also maintaining security.

Maintaining security is the second narrative. The terrorist attacks of 11 September 2001 brought to prominence a global narrative about security against terrorism. This narrative was embedded into existing border practices for the movements of both goods and people through United Nations Security Council Resolution 1373 (UNSCR 2001; World Customs Organization 2008). It changed the nature of border practices and emphasised international cooperation and exchange of information and intelligence. These economic and security narratives are played out daily at the border by signatories to the WTO and other international organisations in bilateral, regional and global contexts (Nicklin 2015).

Alongside these global border narratives are specific sovereign border narratives that reflect nuanced differences in economic and security conditions. These nuances can be seen in national priorities and bordering structures and

practices. For example, in New Zealand, there is a dedicated biosecurity function located at the border to manage biosecurity risks from international movements of goods and people.

Antarctic narratives are qualitatively different. Article 1 of the Antarctic Treaty establishes the continent as a place of peace and science for all (ATCM 2017). This founding principle was augmented by the 1991 Environmental Protocol, which gives primacy to the environment (ATCM 1991). These narratives of peace, science and environment have been translated into national and ATCM documents (Ministry of Foreign Affairs and Trade 2005; Secretariat of the Antarctic Treaty 2017), but the biggest effect is the enacting of the continued peace, science and environmental protection through the collective, consensus governance of the Antarctic Treaty System. An additional narrative that arises from human presence in the very challenging physical environment of the Antarctic Is about human safety, as evidenced in the COMNAP visitors' guide (Council of Managers of National Antarctic Programs 1993).

From this discussion, it is evident that Antarctic Treaty System narratives drive different behaviours than state bordering narratives. The former drive collective peace, science and environmental protection practices, with a follow-on concern about human safety; the latter drive state economic and security practices. This suggests that if there are collective Antarctic border practices, they will be qualitatively different from state border practices.

Economic interests are not completely absent from Antarctic discussions and policies, but economic narratives exist in individual state documents about Antarctica, not in Antarctic collective documents. For example, tourism is seen as a valuable economic benefit to some member states and therefore part of their justification for investment in Antarctica (such as Antarctica New Zealand 2019b). The potential access to Antarctic minerals is a stated interest of other states (Brady 2017). Even commercial fishing regulated and monitored by CCAMLR does not involve collective economic interests.

This discussion, showing different narratives at play in state border systems and Antarctic governance points to several implications. First, the absence of Antarctic border narratives implies an absence of border actions, but this may not be the case. Practices that are either not connected with a border narrative,

or emerge out of another narrative, could still indicate border presence. For example, practices that emerge out of the environmental narrative may not be recognized as border practices but may mimic them. Second, what happens when state border narratives are enacted proximate to Antarctica processes, given the absence of border narratives in the Antarctic Treaty System? Third, does an absence of narratives result in an absence of effects or not?

Methodology

A comparison of border practices in New Zealand, representing state interests, and equivalent Antarctic Treaty System collective governance practices is used to examine the implications discussed above, with additional data from Argentina and the Secretariat of the Antarctic Treaty (the Secretariat), gained during a visit there in 2019, to clarify some aspects of Antarctic practices. New Zealand is a valuable comparator as it has both a collective and a sovereign interest in Antarctica and is one of the five main gateways to Antarctica. It is a foundation member of the Antarctic Treaty System, represented at ATCM by representatives from the Ministry of Foreign Affairs and Trade (MFAT) and Antarctica New Zealand, the two state agencies responsible for New Zealand's engagement with Antarctica (New Zealand Ministry of Foreign Affairs and Trade n.d.). Since 1923, New Zealand has maintained a claim over the Ross Dependency, a sector known in the Antarctic Treaty System as 'the Ross Sea area'.

Christchurch is the primary point of departure for scientific programmes, logistics support and cruise departures. Christchurch City has invested significant effort and finance in promoting the city as an Antarctic Gateway City through its Antarctic Gateway Strategy and International Antarctic Gateway Centre, where visitors can get a quasi-Antarctic experience (ChristchurchNZ 2017). Antarctica New Zealand, the state's operational arm of its Antarctic infrastructure, manages logistics to and from Antarctica from its base near Christchurch International Airport. It works closely with many actors – scientists, logistics providers, other states' scientific programmes, tourism companies and state agencies, including border agencies. The University of Canterbury in Christchurch hosts the Secretariat for the Council of Managers of National Antarctic Programmes (COMNAP) (COMNAP n.d.).

Italy, the Republic of South Korea, the United States and Germany use Christchurch as a logistics base to support their Antarctic scientific programmes (ChristchurchNZ 2017). This location provides easy access to their bases in the Ross Sea area. Christchurch is also the base for the Joint Logistics Pool which the New Zealand Defence Force operates with the United States and Italy (New Zealand Defence Force n.d.). In addition, Antarctica New Zealand has provided support for China, who is building a new station on Inexpressible Island in the Ross Sea area (Antarctica New Zealand 2019a).

New Zealand has three main agencies responsible for border management – New Zealand Customs Service, which is the only agency dedicated to managing border movements, Biosecurity New Zealand, a division of the Ministry for Primary Industries, responsible for managing quarantine and biosecurity risks to New Zealand, and Immigration New Zealand, a division of the Ministry for Innovation, Business and Employment, responsible for managing legal immigration and mitigating the risks of illegal immigration. Together with Ministry for Transport, these agencies comprise the border sector (New Zealand Customs Service 2017b). These responsibilities include managing New Zealand's large maritime border, assisted by the New Zealand Defence Force for maritime intelligence, patrol and surveillance, and Maritime New Zealand for safety at sea and oil spills.

Empirical data was gathered from fieldwork in Christchurch, New Zealand. Informal discussions to identify Antarctic and state border processes were held with officials from New Zealand Customs Service, Immigration New Zealand and Antarctica New Zealand in Christchurch and from the Secretariat and Antarctic Affairs division of Argentina's Ministry of Foreign Affairs. Argentina hosts the Secretariat and is also a claimant and gateway state.

Data analysis used the concept of enacted narrative to trace the connections between narrative and action – in other words, tracing how the different narratives discussed above are being acted out in practices. The connections in the case study were identified through an examination of official documents and observations of processes. In this case, the documents provided evidence of both stabilised processes in the form of guidelines and application forms, and emerging processes in the form of papers discussed at ATCM meetings.

From these documents and observations, it has been possible to analyse the three types of effects identified above – the effects of translation, the effects of state border and Antarctic operational systems coming into contact with each other, and effects of absent narratives. Implications are then drawn from this analysis for both theory and practice. This approach necessitated unpacking elements of state border processes in order to identify comparability with Antarctic processes.

While some attention is given to the maritime zones surrounding Antarctica, the primary focus for this article is the continent itself. Practices relating to tourism operators are not examined in detail, although the basic requirements outlined in the case study apply to them. Further research is needed to fully examine both Antarctic maritime and tourism border-like practices.

Analysis of the narrative effects

Effects from narratives translated into practices

In this section, the similarities and differences between the Antarctic Treaty System and New Zealand's state border system are examined to show whether Antarctic has border practices and if these practices are a translation of Antarctic narratives. Antarctic Treaty System environmental and safety narratives can be seen in the guidelines for non-governmental visitors to Antarctica issued by the Ministry of Foreign Affairs and Trade (MFAT) and in the activities overseen by Antarctica New Zealand (Antarctica New Zealand 2019b; Ministry of Foreign Affairs and Trade 2005). MFAT guidelines echo the Antarctic Treaty System requirements and are supported by practices overseen by Antarctica New Zealand (ATCM 2017; ATCM XXXIX 2016). These practices are primarily focused on movements of goods, people and craft going to Antarctica.

Two border-like principles are visible in the MFAT guidelines and practices. The first is knowledge about who and what is entering and exiting a territory. For a sovereign state, the information collected by border agencies provides a comprehensive picture of border movements at any given time. This compulsory information is used for a range of purposes, including trade and travel statistics, trade facilitation, risk management and revenue collection (New Zealand

Customs Service 2015). These uses provide governments with assurance that national budget and policy settings are being developed from an accurate baseline.

In Antarctica, Article VII provides the basis for an equivalent level of information about who and what is going to, staying on and leaving Antarctica (ATCM 2017). Article VII also empowers consultative members to undertake voluntary inspections of other members' bases. As well as providing transparency about consultative members' activities on the continent, the information provided enables the ATCM to monitor volumes and activities such as of tourists (International Association of Antarctica Tour Operators 2019).

The second principle is advance information. State border agencies require advance information about impending arrival or departure to help manage both logistics and risk (New Zealand Customs Service 2015). For Antarctica, it can be inferred that Article VII and the associated Information Exchange requirements provide transparency—effectively, 'no surprises' (ATCM XXXIX 2016).

The border-like process for people movements to Antarctica begins with an application to MFAT to go to the continent. The process applies to individuals and groups, including tourism operators. This application is to ensure the purpose for travel is consistent with Antarctic objectives of peace, science and environmental protection. Applications need to be submitted at least three months before intended travel—a form of advance information (New Zealand Ministry of Foreign Affairs and Trade n.d.). After approval, the person going to Antarctica works with Antarctica New Zealand to prepare for their sojourn on the continent and on the logistics of getting there and back (Antarctica New Zealand n.d.-d). Logistics include being specific about every site to be visited on the continent and the justification for doing so. At some point during this process, MFAT posts the information about the visit on the Antarctic Treaty System Information Exchange database, which is then available to all consultative parties.⁵

Days before departure, Antarctica New Zealand enters the flight details of upcoming flights into the New Zealand Customs Service computer system through a remote terminal. At the time of departure, Antarctica New Zealand

checks that all people boarding the plane are entitled to board, collects departure cards from passengers and runs a security dog across their hand luggage, and gives passengers a biosecurity briefing. The departure cards and a general declaration of crew on the flight are then submitted to New Zealand Customs. These activities are all comparable with, if less intensive than, state border processes.

The practices described above are somewhat similar to those of people movements between one state and another, thereby implying the presence of some kind of border. Advance information is the cornerstone of modern border management, enabling risk assessment and profiling. While profiling is not undertaken in the Antarctic process, the application to MFAT is a form of risk assessment, to ensure activities to be conducted on the continent are consistent with the Antarctic Treaty. The checks on leaving New Zealand are much lighter touch than state border agencies and are focused on the predominant Antarctic risks – environmental and human safety. The return of waste from Antarctica to New Zealand is treated by Biosecurity New Zealand similarly to a required import (Antarctica New Zealand 2015).

The New Zealand Defence Force conducts naval patrols in the Southern Ocean as part of its contribution to CCAMLR, monitoring these waters for illegal, unregulated or unreported fishing. Its patrols occur in the two zones in the Ross Sea area. These patrols are an integral part of New Zealand's maritime security patrol and surveillance programme (New Zealand Government 2018). They are in a sense an extension of New Zealand's border security, although the language used in official documents is carefully constructed to reflect Antarctic Treaty System norms (Ministry of Defence 2019, p. 9).

This section has demonstrated the presence of an implicit Antarctic border system through applying principles underpinning state border practices to identify equivalent Antarctic Treaty System practices. By avoiding state border narratives, the border-like nature of Antarctic practices is under-developed and has to be sought out. For example, state border policies and practices rely on analysis of the information they collect to meet economic and security objectives; the Secretariat distributes but does not analyse or monitor advance information, implying an absence of collective border risk. One effect of this

implicit border system is an absence of knowledge about the dynamics of movements to and from Antarctica within and across the five gateways.

When border and Antarctic narratives intersect

This section examines where and how border and Antarctic narratives intersect in the respective practices related to movements to and from Antarctica. The Ross Dependency is defined in New Zealand law as part of New Zealand territory (New Zealand Government 2017). The Immigration Act 2009 uses this definition, while the Customs and Excise Act 2018 is silent on New Zealand territory. For most foreign nationals, the status of the Ross Dependency is irrelevant to the Antarctic Treaty System. Immigration New Zealand has created a special Antarctic Traveller Visitor Visa that lasts for 12 months (Immigration New Zealand n.d.). It recognises these travellers as merely transiting through New Zealand on their way to Antarctica. The unique nature of the Antarctic environment greatly reduces normal immigration risks, such as overstaying or criminal behaviour. Antarctic-bound passengers are therefore classified as low risk. If any subsequent work is to be done in New Zealand, Antarctic travellers need to apply for a New Zealand work visa.

New Zealand also uses its border agencies to conduct checks on movements to and from Antarctica. This researcher observed New Zealand Customs Service officials checking the identity documents of passengers and names and date of birth of crew returning to New Zealand from the list they were given by Antarctica New Zealand. Air crew filled out a yellow arrival card; New Zealanders used a drivers' licence; foreigners who were not crew or in the military needed a passport. Customs officers had no information on whether passengers arrived in Antarctica from some other gateway. There was therefore no ability for border officials to reconcile departure and arrival information as they do for state border movements.

New Zealand Customs Service gets notification of vessel arrivals from Antarctica but without the normal manifest information they get for arrivals to New Zealand from elsewhere in the world. Because of the high trust environment, the lack of advance information does not seem to be a significant problem, even though customs officers are used to being information rich. Once a year, the cargo vessel Green Wave II takes back to the United States all the

human-created waste from McMurdo Base, transiting through Lyttleton Port in Christchurch (GlobalSecurity.org 2020). This fulfills the Antarctic Treaty System requirement to leave no waste on the continent. For goods going to Antarctica on the Green Wave II, Antarctica New Zealand submits a Cargo Export Report to New Zealand Customs Service, which issues a Customs Export Delivery Order. When the Green Wave II returns to New Zealand at the end of the season, it brings back bulk waste and goods that are no longer needed on the continent. Antarctica New Zealand is required to submit import entries for these returning goods. Most originate from New Zealand, but for those that came from outside New Zealand and are being returned to New Zealand from Antarctica for on-selling, Goods and Services Tax is payable (an example is earth moving equipment). For goods destined for the United States, New Zealand is treated as a transit point, requiring no involvement of the New Zealand Customs Service.

Biosecurity controls for Antarctica include but extend beyond movements to and from Antarctica. Border-like permits and checks are an integral part of Antarctic operations, and are not separated from other controls such as safety (Antarctica New Zealand n.d.-d; Ministry of Foreign Affairs and Trade 2005). Biosecurity New Zealand carries out checks at the New Zealand border against travellers and goods returning from Antarctica. At the point of aircraft departure for or arrival from Antarctica, biosecurity checks carried out are the same as those for commercial flights. An Antarctica New Zealand official advised that before departure to Antarctica, passengers are required to undertake an e-learning module on how to manage biosecurity risks while on the continent, including when moving from one location to another. Biosecurity dogs are used to check passengers and mail for biosecurity hazards going to Antarctica and Biosecurity New Zealand officials inspect the plane on arrival back into New Zealand.

The intersection of state border and Antarctic processes has two distinct phases – moving to and returning from Antarctica. The former is primarily about risks to Antarctica; the latter is primarily about risks to New Zealand. For all movements to Antarctica, New Zealand is a transit point. In state border processes, information is collected on transit passengers and goods to check for risks, and mechanisms are in place to separate incoming and outgoing

movements to mitigate the risk of illegal activities.7 For Antarctica, much less border information is collected, as discussed above. Foreign passengers and goods arrive into and then move out of the state port and airport environments and transit into the Antarctic environment, where Antarctic border-like processes are undertaken. New Zealanders and New Zealand-sourced goods moving to and from Antarctica are subject to only the Antarctic processes. For both groups, these processes are about protecting the Antarctic environment, and ensuring the safety of personnel when they get to the continent. The return from Antarctica involves state border checks, along with the sole Antarcticarelated checks on goods returning on Green Wave II. The only intersection points between the state border and the Antarctic border-like systems are for entry into New Zealand from elsewhere, and on return from Antarctica. This light touch depends on a high degree of trust between state border agencies and those agencies responsible for the New Zealand Antarctic Programme. As such, border agencies are in a unique situation of working with imperfect information that is not provided in advance. One inference is that New Zealand's state border system has recognised Antarctic narratives, and therefore Antarctic processes, as different and has adapted its processes accordingly.

Effects from an absence of border narratives

This section teases out some of the effects from the Antarctic Treaty System treating border-like risks as isolated events. The first consideration is what effect the absence of analysis of the advance information provided by participating states through the information exchange process might have on responses to issues and risks arising from movements to and from Antarctica.

In state systems, enacting economic and security narratives includes systems to manage risks to respective state objectives. These risks arise from the movements of people, goods and craft across borders. While risks are identified individually, the system is set up to manage them as a whole, so that it can respond effectively to any number of risks, such as breaches of regulations, smuggling of illicit drugs or other contraband, and revenue fraud. If a new risk arises, the system already exists to manage it (World Customs Organization n.d.). Given the lack of this type of capability in the Antarctic

Treaty System, it could be expected that, with the exception of biosecurity, Antarctic border-like responses are developed on a case by case basis, as issues arise.

Two specific border-related risks have been the subject of discussions at the ATCM: lone wolf travelers who do not follow the Antarctic Treaty advance information requirements and are therefore unauthorized arrivals that can, and do, result in expensive search and rescue operations, and the increasing pressure on the Antarctic environment from growing numbers of tourists. These two issues, along with safety at sea, are topics in the Operations and Tourism working group of the ATCM (Secretariat of the Antarctic Treaty 2020a). In other words, they are discussed in the absence of a narrative about a collective system of border-like movements to and from Antarctica.

In the state, these issues are dealt with as a part of a border management system. In that system in New Zealand, clearing, monitoring and risk assessing the movement of small craft and cruise ships is part of the everyday responsibility of the New Zealand Customs Service. Unauthorised arrivals are subject to the law enforcement powers of customs officers, and the risks are assessed through intelligence and targeting practices. Increasing tourism in general is already being managed by state border agencies as fastmoving, high volumes put pressure on their ability to risk assess and clear passengers in both air and sea modes (New Zealand Customs Service 2017a).

New Zealand border officials have also noted that they have no prior visibility of people travelling to and from Antarctica, nor of passengers transferring from one location to another, and there appear to be no regular checks for illicit drugs being taken to Antarctica. These are not big problems at the moment, but they could become so in the future if there is an incident associated with these gaps, or if the known risk situation changes. A customs-related risk is the lack of training of border officials about the requirements of the Antarctic Treaty System. A specific matter requiring customs expertise is the clearance of heritage items being taken from Antarctica. There are strict requirements for these.8

The discussion above has identified that an absence of border narratives has resulted in an absence of a collective border risk management system and

related enforcement mechanisms. At some point it may become necessary to address the movements of goods, people and craft more holistically in the Antarctic Treaty System. Other academic literature has questioned the resilience of Antarctic governance for managing strategic future risks (Abdel-Motaal 2016; Brady 2017; Ferrada 2018; Hemmings 2017). Increasing numbers of stations on the continent with longer habitation will more closely mimic societies elsewhere; smuggling of firearms and other goods forbidden on the continent could become an issue under such a scenario. As developing transport technologies enable longer flights, there could be more access points to Antarctica. Will access to Antarctica be harder to control under such changes?

Implications for the future of Antarctic security

The case study has revealed the driving narratives of the state border and Antarctic border-like systems shape their practices. State border systems designed for efficient mass movement of goods and people derive from global economic and sovereign risk narratives, with exceptions being identified through advance information, intelligence, and targeting interventions. By comparison, the Antarctic border-like system has been designed to enact the narrative set up by the Antarctic Treaty and to manage the risks from the dangerous physical environment on the continent. Its processes for science and logistics activities therefore take into account the care and the time needed to plan an expedition, and the seasonal drivers that limit access to certain times of year and conditions on the continent.

Both systems are predicated on high levels of compliance. However, they manage compliance differently. State border systems use large data sets, structured programmes, detailed analysis and global networks to identify risks, check compliance and identify non-compliers; they establish programmes for trusted traders, who have to meet specific standards; they require global networks and are an integral part of a range of international and bilateral agreements (World Bank et al. 2010; World Customs Organization 2008). Similar to state border systems, the Antarctic border-like system is built on the principle of voluntary compliance. There are specific reporting requirements for people operating on the continent and for accessing the continent but no

collective mechanisms for enforcing compliance or sanctioning non-compliance. Such actions are left to the states whose nationals have not complied. Networks exist between ATCM and COMNAP officials and within specific science programmes but there is no pan-border network as with state border mechanisms. Swanson, Liggett, & Roldan (2015) argue for greater gateway port controls because of these problems with the current system.

For a governance system dealing with a single continent, Antarctica's border-like system is very distributed. No central authority in the Antarctic Treaty System processes all applications to go to Antarctica. Each consultative party manages the applications of its own nationals and locally produced goods to go to the continent. The gateways are a distributed funnel or, rather, a set of five funnels that manage the logistics and therefore the biosecurity risks, but even there, different consultative parties' programmes have their own arrangements. Some share resources, as with the United States and New Zealand. The arrangements between the two countries are enabled by a Memorandum of Understanding whereby the United States uses New Zealand as a transit point to Antarctica (New Zealand Government & United States Government 1958).

Better understanding the effects of an absence of overt border narratives for Antarctica is important for a number of reasons. Antarctica is no longer isolated from the rest of the world. It is intimately linked to human adaptation to climate change. This link is being given increasing prominence in mainstream media; the effects of commercial tourism activities are more and more evident in governance reports (Netherlands & United Kingdom 2019). As commercial activity increases in and around Antarctica, it can be expected that the Antarctic Treaty System will come into closer contact with the global trade and travel system. The effects of that can be predicted by extrapolating from state border activities. It may be that current mechanisms for access to the continent become too slow in an environment that requires faster port turnarounds. It may be that the absence of collective enforcement in the Antarctic Treaty System becomes inadequate to deal with criminal behaviour, for example, if unauthorized vessels from nationals of a non-Treaty signatory state land on Antarctica and embark on criminal activity.

Conclusions

This article has examined the effects of contested borders in the unique context of Antarctica. It has used enacted narrative analysis to compare the processes and systems used by the global trade and travel system with Antarctic Treaty System for managing flows of people and goods to and from Antarctica. It has shown that while borders are not referred to directly within the Antarctic Treaty System, borders are implied through the border-like system set up to enact Article VII of the Antarctic Treaty. These borders are implied because they can only be seen through the practices. State border mechanisms are an integral part of the fast-moving environment of mass movements of people and goods around the globe; the Antarctic Treaty System's border-like system is only barely visible, logistically slow moving and, while technically open to all, the cost of getting to Antarctica is high and therefore available to relatively few.

Recognising that borders and border practices do exist within the Antarctic Treaty System is important. While not explicit, they do have effects. As with the United Nations and other global governance bodies, the collectivity of the Antarctic Treaty System is enacted through individual state sovereign interests. National interests are most evident in the seven territorial claims over Antarctica, and the presence of these claims affects the operation of the Antarctic Treaty System. This article has shown how this System is bordered by the Antarctic Treaty narrative. The ATCM and COMNAP are the primary communities that act out this narrative, of which collective borders are a part, and while the border landscape is devoid of the violence of some borders its performance is complex and its effects subtle. These elements alone demand a deeper examination, particularly given the successful maintenance of peace in a unique geopolitical environment.

At the global level, the Antarctic Treaty System has created a community of 'us' and 'other' built around a particular strategic narrative and set of values (Goff 2000). The Antarctic community, comprising the consultative parties and their national Antarctic bodies, CCAMLR, the scientists and logistic support mechanisms, and to some extent the Antarctic tour operators, seem to adhere to the norms and values established in the Antarctic Treaty. The proof of this is in the relative absence of significant breaches of Antarctic Treaty System

regulations and the collaborative nature of many research programmes. Anne-Marie Brady (2017) identified that China has not reported on some military presence at one of its bases, but there is no publicly available data on whether it was raised at any ATCM. While there are no prohibitions on who can be involved in the Antarctic Treaty System, there are procedural and political barriers to involvement. States have to have the capability and political will to be involved. With only 53 signatory states, and only 29 of those with science programmes on the continent, the political and practical reality is that Antarctica is not a place for all. In other words, Antarctica is in practice a bordered community. At the local level, Antarctic Treaty System practices reveal collective borders that are implicit rather than explicit. Enacted narrative analysis has been shown to be useful for revealing these implicit borders. More in-depth research with a wider number of actors is needed to further illuminate the current findings.

This analysis has also drawn a picture of extended 'border work'. There are multiple actors in the Antarctic border-like system – not only the official national bodies each consultative party uses to manage their participation in the Antarctic Treaty System, but the scientists, logistics operators, infrastructure and transport providers, border agencies, tourism operators and support people, including military. In New Zealand, artists, journalists, politicians, students and tourists also visit the continent (Antarctica New Zealand n.d.-a). There are also non-human actors such as supply ships, aircraft, and the weather, all of which have effects on border-like processes and practices. For Christchurch, the networks expand out into the city community, with its International Antarctic Centre and Antarctic Gateway Strategy that aims to involve the city more widely in the Antarctic narrative (ChristchurchNZ 2017). These city aspects do not touch on Antarctic borders directly, but by marketing Christchurch as an Antarctic destination, they do so indirectly, including encouraging tourism both to Christchurch and on Antarctic cruises leaving from New Zealand. There are also bordered areas and practices for people on the continent itself, such as Specially Protected Areas and Specially Managed Areas (Antarctica New Zealand n.d.-c). This picture is a border landscape, the scope of which is only partly revealed in this article. Further research is needed to explore the full nature and extent of the implicit borders in the Antarctic Treaty System. The

concept of borderscaping could be a useful frame with which to reveal this border-like environment of Antarctica in more detail.

Borderscaping explores 'what is'; the opportunity in the Antarctic environment is also to explore 'what is not'. The most significant 'is not', with implications for broader issues facing global governance, is the absence of conflict and territorial disputes commonly associated with borders. The presence of tensions or conflicts exist but in the case study the opposite dominates, in terms of the trust that drives the intersection of state border and Antarctic border-like systems. However, as outlined earlier, political tensions and sensitivities have shaped the design of the Antarctic border-like processes, resulting in potential risks and gaps that cannot easily be bridged. Another 'is not' is the absence of a permanent 'normal society' on the continent with its associated cultural, political and economic activities. All resources for human habitation have to be shipped on to the continent; all cultural and legal aspects of life on the continent are also shipped in from the consultative parties participating in science programmes and their associated logistics. The third 'is not' is the minimal presence of economic activity in the Antarctic environment. Aside from tourism and commercial fishing, most Antarctic activity is devoid of economic profit objectives. These absences indicate an Antarctic borderscape is likely to be qualitatively different from other borderscapes.

It will therefore be a test of the borderscaping concept to apply it to borders that are not acknowledged and are even actively avoided. For example, can borderscaping reveal hidden tensions and struggles associated with border-like policies and practices? if so, what relationship do those tensions and struggles have with the absence of border narratives in the Antarctic Treaty System? What relationship do the struggles have with threats and risks to Antarctica? Paasi (2013) notes the significance of examining practices such as foreign policy that may be distant from but related to producing border mechanisms. Further research using the borderscaping concept could usefully draw out the tensions and struggles as experienced by border and border-like actors. As stated by Mezzadra & Neilson (2013, p. 13): "Mobilizing the concept of the borderscape allows us to highlight the conflictual determination of the border, the tensions and struggles that play a decisive role in its constitution". At a broader level, by being applied to an implicit border environment, can

borderscaping provide new insights on the identity of the Antarctic Treaty System community and on collective governance? More research is needed to answer these questions. Engaging with the Antarctic 'border' through the concept of borderscaping would provide a much richer picture of the actors and systems and their relationship with continued peace and security of the continent and its surrounding oceans. Such information could also help inform the collective governance of other global commons, such as outer space.

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Notes

¹ There has been significant academic commentary on the legal aspects of the Treaty and the claims, but little expressly on borders.

² An additional route is via the Falkland Islands (Hall 2015)

³ Source: CCAMLR, last updated October 2017: www.ccamlr.org/node/86816)

⁴ Australia unsuccessfully claimed an Extended Economic Zone for its claim in 1994—the US objected (Bray 2016; Haward & Cooper 2014; Prescott & Triggs 2008)

⁵ Informal discussion with members of the Antarctic Treaty Secretariat.

⁶ Source: New Zealand Customs Service and Antarctica New Zealand officials

⁷ Researcher personal knowledge from over 17 years in the New Zealand Customs Service.

⁸ Sources: New Zealand Customs Service and Argentinian Antarctic Affairs officials

For example, https://news.sky.com/story/climate-crisis-how-antarctica-could-unleash-hell-in-just-a-few-short-decades-11889776; https://www.opb.org/news/article/wheeler-decades-11889776;

oregon-coast-town-antartica-melting-glaciers-sea-level-rise/;
https://www.theguardian.com/world/2019/dec/28/submarine-to-explore-why-antarctic-glacier-is-melting-so-quickly