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SOCIAL SCIENCES

Diplomatic culture and institutional design: Analyzing sixty years of Antarctic Treaty governance

DANIELA P. SAMPAIO

Abstract: Since 1961 the Antarctic Treaty has been acknowledged internationally as the legitimate forum through which decision-making for the region takes place. Membership growth and the establishment of new conventions are strong indicators of how this international regime has overcome challenges to its functioning, while preserving peace maintenance, scientific cooperation and environmental protection as the main pillars of Antarctic governance. For this special volume of Annals of the Brazilian Academy of Science, this work provides an overview of the Antarctic Treaty Consultative Meetings' operation, highlighting how they established specific diplomatic practices: the progressive introduction of issues, the avoidance of contentious issues, and "watereddown", ambiguous text, all of which have enabled parties to circumvent conflict and reach consensual agreement. Based on analysis of the Antarctic Treaty Database, this work shows the main practices developed through the Antarctic Treaty and concludes that the adaptability of Treaty Parties to manage challenges over the last 60 years will unquestionably continue to underpin the regime.

Key words: Antarctic Treaty, Diplomatic Culture, Institutional Design, Environmental Governance, International Regimes.

INTRODUCTION

The Antarctic Treaty has underpinned the governance of the Antarctic region for almost 60 years. Since 1961, when the Treaty was ratified by its first signatories, practices which take place in Antarctica have been agreed by Parties in Consultative Meetings. Such authorized practices have always attempted to reinforce the goals which the original Parties agreed for the region: peace maintenance, scientific cooperation and environmental protection. The promotion of uncontroversial activities has effectively avoided disputes and assured legitimacy for the Treaty not only for its own members, but also for international society in general. Therefore, the Antarctic Treaty has established an enduring

international regime for the region (Young 2010, Lundgren et al. 2018).

Nevertheless, the regime's endurance becomes unique when the foundation of its governance is observed. As part of international society, Antarctica became increasingly governed by primary institutions of sovereign and territoriality (Buzan 2004, Karmazin 2014)¹ especially when national incursions to the region increased. Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom all claimed sovereign territory in the Antarctic

¹ For more about the expansion of international society and the constitution of regional international societies according to English School, see Watson (1984) and Costa-Buranelli (2014).

region² (Auburn 1982, Beck 1986). However, as human activities have been mostly seasonal and restricted to coastal areas (Auburn 1982, Howkins 2016), the possession and administration of territories have not been considered consistent enough to be tacitly recognized by international society as evidence of national sovereignty. Moreover, Argentina, Chile and the United Kingdom claimed overlapping territories; whilst the United States and the Soviet Union – although acknowledging their claiming rights based on discoveries by their citizens – chose not to recognize any claim, aiming for a more widespread and unrestrained presence in the region (Auburn 1982, Beck 1986).

Faced with this conundrum, the Treaty established a policy of simultaneous nonrecognition and non-denial of Antarctic sovereignty, formalized through Article IV. Article IV safeguards divergent interests, because actors can choose their preferred interpretation from the same legal instrument – a mechanism known as bifocalism (Haward 2012). Hence, actors converged on the goal of peace maintenance in a framework that did not go against their particular sovereignty positions, generating a common will to regulate and circumscribe activities in the region. Treaty Parties agreed on common norms, rules and procedures that guided the behavior of national governments, focusing on practices which did not require authoritative definitions, such as scientific research and environmental protection (Stokke & Vidas 1996). As the arrangement was increasingly perceived as the most suitable for managing the region, cohesion and interdependence also increased

between members (Joyner 1998). However, this accommodation forfeited the Treaty's capacity to respond to authoritative issues around Antarctic practices, creating a legitimate governance founded on a legal void (Wolfrum 2017).

The evolvement of the Antarctic Treaty regime did not take place without significant challenges to its governance. Since the initiation of human incursions to the region, economic exploitation has always been present (Howkins 2016). Seals, whales, krill, toothfish, mineral and biological genetic resources; all these potential assets have generated interest (Vicuña 1988) and, consequently, shaped the development of the Antarctic Treaty regime. According to the Treaty, the exploitation of resources would necessarily involve decisions on property rights, necessitating the establishment of a clear source of authority. In addition, the possibility of economic exploitation has always attracted new actors who might not necessarily abide by the Treaty, risking its dismantlement or its cooptation by another international regime that would better respond to emerging interests. Faced with the possible disruption of the delicate balance of interests achieved by Article IV, the Antarctic Treaty regime has evolved through a punctuated equilibrium process: Treaty Parties resisted making changes to the operation of the Treaty until pressures threatened the existence of the regime as a whole (Young 2010, Lundgren et al. 2018).

Regime theory is helpful in explaining the origins of the Treaty (Peterson 1988, Rothwell 1996) and its institutionalist approach has made important contributions to understanding its endurance (Stokke & Vidas 1996, Joyner 1998, Young 2010). From a historical institutionalist perspective in regime theory, formal and informal procedures shape actors' behavior by providing different levels of certainty with regards to others' behavior. As actors share a common framework

² Identifying the precise dates for each sovereignty claim is quite challenging, as they have been claimed gradually by nation states. In general, literature converges around these dates: Argentina (1925/1937/1943-47); Australia (1933/1936); Chile (1906/1940); France (1924/1933-1938); New Zealand (1923); Norway (1928/1939); and the United Kingdom (1908/1917). For more details see: Auburn (1982) and Beck (1986).

of interpretation of their actions, institutions would define conflict and its results, having path dependence as their main form of change (Hall & Taylor 1996, Mahoney & Thelen 2010). Continuity would thus be punctuated at critical junctures, providing the foundation to the punctuated equilibrium thesis. The Antarctic Treaty has shaped actors' expectations on how they should engage within the region, and it has been able to continue and develop by providing a solution to the sovereignty issue throughout time.

On the other hand, a rational choice approach to institutionalism has been consistently explored by Antarctic literature throughout the years, especially in explaining the creation of the Treaty (Auburn 1982, Beck 1986, Peterson 1988, Rothwell 1996, Jabour & Weber 2008). Rational choice approach explains the emergence of institutions (such as international regimes) by their capacity to reduce transaction costs especially in a context of collective action dilemma, where actors' attempts to obtain their preferred outcome produce a collective suboptimal result (Haggard & Simmons 1987, Hall & Taylor 1996, Hasenclever et al. 2000). Institutions would thus be essential for structuring interactions. fostering information-sharing and enforcement mechanisms, enabling actors to cooperate within a less uncertain playing field. Therefore, when a powerful coalition of actors concluded that Antarctic governance was an urgent issue, they were able to discuss an institutional solution for the region even at the expense of their preferred outcome (sovereignty recognition for some versus Antarctica as a global common for others). Based on rational logic, these actors calculated that they would be worse off if the collective action dilemma of sovereignty in the region was not addressed. And as long as the Treaty is able to effectively manage this issue, the regime will endure.

Nonetheless, a less explored institutional perspective in Antarctic literature is the sociological one. Sociological institutionalism defines institutions not only as formal rules and procedures, but also as symbolic systems and cognitive scripts (Hall & Taylor 1996, Mahoney & Thelen 2010). Therefore, an organization would present specific design features, because these are valued by its members, legitimizing and being legitimized by the latter. Institutional design features in a regime can be summarized by equity in obligations; access to scientific and technical advice: the existence of a secretariat and regular monitoring; availability of reports; and the provision of incentives and sanctions (Weiss & Jacobson 2000). In sociological institutionalism, members' symbolic systems define these institutional design features; and changes come from external forces modifying the system of values shared by actors. In Antarctica, we still do not know precisely which are the Treaty's shared uncodified, informal conventions that define the agreement's institutional design and sustain its endurance internally. However, we do know the Treaty's institutional design and the changes that have taken place over the last 60 years. Literature in global environmental governance has already explored the relationship between institutional design and problem structure (Mitchell 2006); institutional design and international organizations' bureaucracy (Johnson & Urpelainen 2014); and institutional design and state membership (Tallberg et al. 2016, Lall 2017). Nevertheless, the implications of symbolic systems in the design of international institutions have only recently been addressed by research in diplomatic studies (Dittmer & McConnell 2016, Pouliot 2016).

Diplomatic culture is defined by Bull (1977) as the common stock of ideas, values, rhetoric and manners held by official representatives which mediates difference and overcomes

alienation between actors in international negotiations (Dittmer & McConnell 2016). This stock of conventions includes a vast culture and political infrastructure which are translated through diplomatic practices, aiming to reduce the estrangement of such encounters. These diplomatic practices are founded on the established rules of the international agreement, the practical knowledge of representatives and their relational configuration, and the relative political position of their countries, giving place to power-relations and hierarchical configurations among actors (Pouliot 2016). In Antarctica, Consultative Meetings have been the home of encounters where decisions on Antarctic governance are made and its diplomatic culture takes place. Therefore, (i) the paced manner that issues are introduced for discussion; (ii) the choice of themes which are going to be designated for discussion, and (iii) the language precision which is adopted in agreements, have been long-standing Antarctic diplomatic practices. These informal conventions are part of an Antarctic diplomatic culture of controversy avoidance, present throughout the existence of the regime. According to the punctuated equilibrium thesis, these diplomatic practices avoided modifications to the Treaty's institutional design until the point when challenges could compromise the viability of the Treaty as a whole.

Therefore, our research question considers how the association between Antarctic diplomatic culture and the Antarctic Treaty's institutional design enabled the regime's punctuated equilibrium, thus its endurance. The avoidance of controversial issues that could undermine the bifocalism of Article IV has been the core of the regime's diplomatic culture, perpetuated through different diplomatic practices. Hence, our first objective is to understand how Antarctica's diplomatic culture

guided the changes to the Treaty's institutional design, thus enabling the regime's endurance through a punctuated equilibrium. The striking feature of the Treaty's institutional design is its consensus decision-making with strict access participation has been limited to those states that can demonstrate both scientific research and environmental protection commitments. Nevertheless, during the 1970s and 1980s, Parties made important amendments to the regime's operation to avoid potential disruption. The Treaty had to expand its membership and create new conventions via which Antarctic resource management could be delegated. Yet, these institutional changes did not undermine Antarctica's diplomatic culture of controversy avoidance - quite the contrary: they reinforced the Treaty's effectiveness and legitimacy by enabling parties to build a complex institutional framework based on the unanswered question of Antarctica's sovereignty.

Our second objective is to analyze how the Treaty's informal conventions – i.e. its diplomatic practices - translated this diplomatic culture that guided the Treaty's endurance. The first case is the progressive introduction of issues. Through a specific use of the Treaty's institutional design, Parties first inform the meeting of an issue that requires their attention before they bring it to be mandatorily addressed. In this way, Parties can articulate among themselves a specific approach to a problem, before having to formally respond to it. The second case is the preference for uncontroversial issues. Through analysis of the Antarctic Treaty Database, we identified the main themes informed about and then mandatorily discussed in Consultative Meetings from 1961 to 2020. The results show a prevalence of environmental issues and operation of the Treaty as the main themes addressed by the Meeting. in contrast to more controversial ones such as resource management. And the third case is

language precision. Constructive ambiguity is a well-known practice in international agreements, facilitating Parties with different interests to reach a common agreement. A flexible wording of agreements within the Treaty has enabled not only the circumvention of the sovereignty issue but has also been a fundamental instrument to reach consensus on more disputed subjects. Over the last 60 years, the way the Treaty's diplomatic culture has been translated into informal conventions has shielded the Treaty's institutional design and shaped its changes. These arrangements fostered cooperation among members and provided the Treaty with increasing organizational features, transforming it into an actor in itself (Haggard & Simmons 1987, Barkin 2006).

In the next section, I present the methods adopted in this study, detailing the different data collection and analysis. In the following section, I demonstrate how Antarctica's diplomatic culture guided changes to the Treaty's institutional design and reinforced its effectiveness and legitimacy. In the subsequent section, I identify the Antarctic Treaty's informal conventions, analyzing how gradual introduction of subjects, preference for uncontroversial issues and imprecise language has translated into practice the Antarctic diplomatic culture of controversy avoidance. And in the final section, I conclude that the endurance of the Antarctic Treaty regime relies strongly on its diplomatic culture, which has enabled its punctuated equilibrium trajectory: the Treaty's informal conventions shield its institutional design from unnecessary changes until the point that they become unavoidable. And even when changes were undertaken, informal conventions framed the process of change, embedding them into the Antarctic diplomatic culture of controversy avoidance, which guaranteed the regime's endurance.

MATERIALS AND METHODS

In this study, I used both qualitative and quantitative methodological approaches to identify which diplomatic practices have translated Antarctic diplomatic culture and shielded the Treaty's institutional design even during times of change. For the first part of this study, I used literature review to identify the Treaty's main institutional design changes: membership expansion and delegation of resource management to other conventions. And in order to understand how these institutional changes reflected Antarctica's diplomatic culture, I analyzed the Treaty's continued legitimacy and effectiveness despite these changes in three different periods: consolidation (1961-1980); institutional change (1981-2000); and stabilization (2001-2020). Based on the Antarctic Treaty Database (Secretariat 2021b), I ran a frequency analysis, using STATA software, of membership growth throughout the Treaty's lifetime, generating an average growth rate per year. I also conducted a social network analysis, building three different matrices of institutional cooperation between Treaty Members for each of the phases of the regime (consolidation, institutional change and stabilization). I used density measures in order to compare members' proximity (closure patterns) for the three different periods, which is an indicator of their levels of reciprocity and trust within a network (Kilduff & Brass 2010).

In the second part of this study, I undertook a literature review and content analysis of the diaries of Brian Birley Roberts³, identifying

³ Brian Birley Roberts was a polar expert who worked as part of the British Delegation during the preparatory meetings for the Antarctic Treaty in 1959. In his diaries, there are descriptions of the background to the negotiations and meetings during the first decade of the regime's existence. His diaries are available at the archives of the Scott Polar Research Institute, University of Cambridge. Source: https://www.cambridge.org/core/services/aop-cambridge-core/content/view/S0032247400002291.

references to specific diplomatic practices adopted by Parties since the Treaty's early years: gradual introduction of issues (i); preference for uncontroversial issues in discussions (ii): and use of imprecise language in agreements (iii). As a countercheck, I analyzed meeting documents from the Antarctic Treaty Database (Secretariat 2021b) and the final reports of Antarctic Treaty Consultative Meetings, identifying cases of both "gradual introduction of issues" and "use of imprecise language". For the "preference for uncontroversial issues in discussions", I used descriptive statistics, running a frequency analysis of meeting documents from the Antarctic Treaty Database (Secretariat 2021b) through STATA software. As the database already presents documents classified in different categories, I just clustered those thematic categories into groups: institutional, environmental, resource related issues, logistics and science.

DISCUSSION

Institutional design and punctuated changes

The Antarctic Treaty's institutional design was founded on principles of flexibility, decentralization and a paced approach to discussions. According to Article IX of the Antarctic Treaty, agreed at the Washington Conference (The Antarctic Treaty 1959), representatives from the Contracting Parties shall meet in suitable intervals for the exchange of information; for consulting on matters regarding Antarctic principles and interests; and for formulating, considering and recommending to their governments measures related to the use of Antarctica. Since 1961, Antarctica's management has taken place in Consultative Meetings, where governmental and non-governmental actors propose, inform and decide the region's management. Albeit governments' domestic agencies are those

who actually implement agreements (Victor et al. 1998) – their representatives negotiate and set general guidance for Antarctic activities in meetings, responding to external questions and discussing matters which need tackling.

In Consultative Meetings, the decisionmaking process is initiated with the proposition of papers by Parties, observers and experts, who configure different categories of participation. Working papers are those which will be presented for discussion followed by a meeting response. Information papers, on the other hand, provide supporting information for working papers, or present points for discussion when authored by experts and non-Consultative Parties. In contrast to working papers, information papers do not need to be discussed at meetings. Additional paper categories which any member can propose include additional documents and background papers. They are not deemed to be presented, as their main purpose is the formal provision of information and register in the meetings' archives. In case Parties need to consider an issue more thoroughly, they can establish an Intersessional Contact Group (ICG) (Sánchez 2016) and even propose the inclusion of the issue as an agenda item for the next meeting.

Although these specific features of the Treaty's institutional design have not changed much, one of the most significant changes to its operation has been its membership (or equity of obligations). In 1959, the original 12 Contracting Parties established their duties and the conditions for access to the meetings

⁴ There are other categories of papers which are registered at meetings, but not considered in our analysis. These documents generally refer to internal procedures, so are not authored by members, nor have any direct input to discussions. *Final reports, secretariat notes, secretariat papers, other internal, other papers, web working papers,* and *report papers* aim to assist the operation of the meeting, not taking a direct role in the decision-making process.

in Article IX. Representation was only entitled to Contracting Parties that have conducted substantive scientific research activity in Antarctica, evidenced by the dispatch of a scientific expedition and/or by establishing a scientific station therein. Therefore, signing the Treaty was not sufficient to enable participation: scientific engagement was also considered necessary, leading to an exclusive access to decision-making. The primary role of scientific research had important implications. First, as science has provided a point of convergence among different interests in the region since 1948⁵, the original conditions of agreement were able to be preserved, maintaining Antarctica's status quo. Second, the technological, logistical and financial effort involved in dispatching an expedition or in establishing a station would automatically restrict which actors were actually capable of joining Consultative Meetings. As substantive financial investment became a precondition, this directly reduced the number of states aiming to engage in Antarctica. And third, if actors did not present technical and financial conditions for a solo engagement, the only available option was collaborating with those already established in the region. In that way, scientific and logistical cooperation has become crucial to Antarctic activities, reinforcing the leadership of established actors,

who have always worked for the preservation of the Treaty's *modus operandi*.

Despite these access barriers, Antarctic economic resources have always attracted new actors and increased the demand for Treaty membership. Poland (1961), Czechoslovakia (1962), Denmark (1965), the Netherlands (1967), Romania (1971), and Brazil (1975) had already signed the Treaty when Parties began to authorize their participation in 1977⁶. Therefore, in order to accommodate the inevitable entrance of new Members whilst preserving the Treaty's status quo, Parties established membership categories. Keeping substantive scientific research as criteria, Parties entitled to participate in the meetings were categorized as Consultative Parties, whilst those who were only signatories were categorized as non-Consultative Parties. Since 1983⁷, non-Consultative Parties have been allowed to participate in the meetings, but they cannot exercise veto rights in the Treaty's consensual decision-making.

Non-state actors have also received a respective membership category. *Observers* are those advisory bodies whose contributions are considered essential for the Treaty's own decision-making. Parties enabled their participation in meetings even when these specific membership categories had not been previously designated. For instance, the Scientific Committee on Antarctic Research (SCAR)⁸ has been allowed to participate since 1962, but it was

⁵ Chile proposed the Escudero Declaration in 1948 when attempts to solve the sovereignty issue failed. At that time, the US proposed a United Nation Trusteeship which was rejected by all. Subsequently, the US suggested a condominium solution which did not get much support either. Therefore, the Escudero Declaration proposed the suspension of discussions and disputes about sovereignty for five years. Instead, actors needed to prioritize more scientific research and information exchange in the region. The International Geophysical Year in 1957-58 followed the Escudero Declaration solution, where actors agreed to suspend sovereignty discussions for the conduction of free scientific research, providing a trial for a non-conflictive engagement in the region (Beck 1986).

⁶ The I Special Antarctic Treaty Consultative Meeting in 1977 acknowledged Poland as a new Party, followed by the recognition of the Federal Republic of Germany by the III Special Antarctic Treaty Consultative Meeting in 1981.

⁷ The first invitation to non-Consultative Parties to attend Consultative Meetings came in 1983, and it was cemented with Recommendation ATCM-XIII-15 in 1985.

SCAR was created in 1958 in order to continue the coordination of Antarctic scientific research, which was initiated in the 1957-1958 International Geophysical Year (IGY). For more information, see Elzinga & Bohlin (1993), Berkman (2002) and Elzinga (2012).

only in 1985 that the body received formal status as an observer along with the Commission for the Conservation of Antarctic Living Resources (CCAMLR)⁹. And although observers share similar participation rights to Consultative Parties, they cannot exercise a veto in decision-making. Another category ascribed to non-state actors is *experts*. They represent advisory bodies whose contribution are considered necessary for a specific discussion; therefore, attendance is only entitled by invitation to specific meetings. Experts share the same limitations as non-Consultative Parties in decision-making (see Figure 1).

Membership expansion did not undermine the Treaty's striking institutional design of consensus decision-making with strict access. The diplomatic culture of controversy avoidance allowed including new members that would not have access to full participation until they could demonstrate that they internalized the Treaty's core values of peace maintenance, scientific cooperation, and environmental protection, sustaining the regime. We observe the same dynamic with the second remarkable change to the Treaty's institutional design: a diplomatic culture of controversy avoidance led the Treaty Parties to establish parallel conventions for resource management, shielding its consensus decision-making institutional design feature.

The Agreed Measures for the Conservation of Fauna and Flora (1964) was agreed by Parties in the early years of the Treaty and it was an important signal to international society that this regime could address issues beyond sovereignty (Roberts 1961). However, seals were

a specimen of strong economic interest, so their specific conservation could not be included in the Agreed Measures: the challenges in balancing commercial and conservation values would have compromised consensus. Likewise, a separate convention also allowed the possibility of including members from outside the Treaty, reinforcing the effectiveness of this conservation instrument. Therefore, in subsequent meetings, Parties negotiated the Convention for the Conservation of Antarctic Seals (CCAS), which was signed in 1972 and entered into force in 1978. But as commercial harvesting of seals has not taken place in Antarctica since its establishment, this convention has remained inactive in practical terms (Jabour & Haward 2009).

Following the same pattern, discussions for a separate convention for the conservation of marine living resources took place in 1975 in Treaty meetings. Concerns over the growth of krill fishing activities in the Southern Ocean led Parties to follow the CCAS model and negotiate a separate convention that would control the exploitation of resources through ecosystembased management (Constable et al. 2000). In 1980, the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) was agreed by Parties, entering into force in 1982. CCAMLR's institutional growth has been considerable since then and the convention has indeed developed a different membership of the Treaty.10 In the 1980s, CCAS and CCAMLR paved the way for how the Treaty could deal with economic activities in the region, triggering discussions for the establishment of another agreement: the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA).

⁹ The Council of Managers of National Antarctic Programs (COMNAP) represents the third observer to the Antarctic Treaty Consultative Meetings. COMNAP evolved from a permanent SCAR working group on Antarctic logistics, it was founded and gained observer status in 1989. For more information on COMNAP see Retamales & Rogan-Finnemore (2011).

Namibia is a CCAMLR member, but not a Party to the Antarctic Treaty. Neither are the following acceding states: Cook Islands, Mauritius, Panama and Vanuatu. "Convention on the Conservation of Antarctic Marine Living Resources" (Secretariat 2021a).

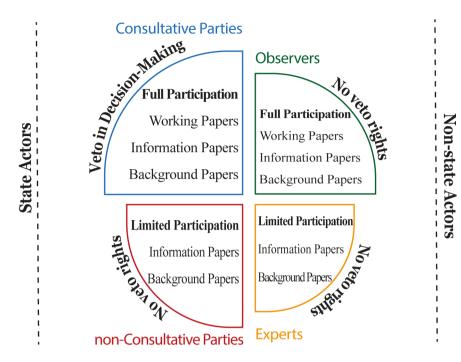


Figure 1. Differences in membership and participation in decision making in the Antarctic Treaty.

In 1982, negotiations were initiated and the prospect of exploiting mineral resources in Antarctica prompted the highest membership growth rate in the Treaty's history (see Figure 2).

From 1978 to 1989, there was an average growth rate of 9% in the number of new Parties, with peaks in 1985 (15%) and 1987 (16%). This period corresponds to the negotiation of the CCAMLR (from 1978 to 1980) and the CRAMRA (from 1982 to 1988). In 1988, CRAMRA was agreed by Treaty Members, but due to the withdrawal of France and Australia in 1989 it has never entered into force (Wolfrum 1991). CRAMRA's failure marked a transition to the most robust period in Antarctica's environmental governance: in 1991, Parties agreed the Protocol on Environmental Protection to the Antarctic Treaty, followed by the establishment of the Committee for Environmental Protection (CEP) in 1998. CEP's role is to provide advice and formulate recommendations to the Antarctic Treaty Consultative Meetings in connection with the implementation of the Protocol.

Membership and the establishment of external instruments that deal with economic activities were the most remarkable changes to the operation of the Antarctic Treaty regime. Participation in decision-making and the need to balance environmental protection and use of resources were challenges from both inside and outside the Treaty regime, prompting membership expansion and the creation of new conventions as institutional responses. Different analyses explained the Antarctic Treaty's endurance through its capacity to be flexible and respond to challenges whilst keeping its normative and structural characteristics intact (Stokke & Vidas 1996, Young 2010). In fact, the diplomatic culture of controversy avoidance is in the background of each institutional change. And by keeping institutional design coherent with its diplomatic culture, the Treaty was able to undertake punctual changes without losing its effectiveness and legitimacy - which is fundamental for an institutional endurance (Young 1999, Raustiala 2000, Bäckstrand & Söderbaum 2018, Dingwerth 2020).

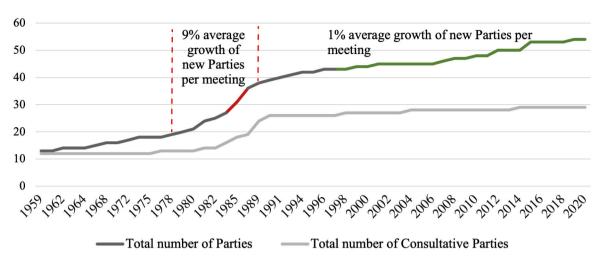


Figure 2. Membership growth of Parties and Consultative Parties in total numbers from 1959 to 2020.

If effectiveness of a regime refers to members' behavioral changes that further the agreement (Victor et al. 1998), the Treaty's capacity to gather actors with conflicting sovereignty interests is a strong indicator of regime effectiveness. Consensus-based decision-making guaranteed that Parties would not have their interests jeopardized, encouraging their progressive engagement with the Treaty. In every Consultative Meeting, Parties reached new agreements which established a reference of behavior for activities within the region. A robust system of recommendations, decisions, measures and resolutions fostered scientific research and environmental protection whilst avoiding controversial issues, which furthered the Antarctic Treaty regime. The regime's scope was gradually expanded during the 1960s and 1970s, including regulations and commons perspectives not only for fauna and flora conservation, but also for a wide spectrum of activities within the operation of national programs such as telecommunication, air safety and, most recently, climate change.

The legitimacy bestowed to the Treaty is another important element of its punctuated equilibrium. A shared belief that particular institutions of a political system are the most appropriate for a society (Lipset 1959, p. 86) founds the legitimacy of a regime and contributes to its continuation. In the case of the Antarctic Treaty, both internal and external actors have conferred legitimacy to the regime. In terms of external legitimacy, international society has never interfered directly with Antarctica's management, and attempts to internationalize its governance have persistently failed (Vicuña 1988, Chaturvedi 2013)¹¹. Actors willing to engage in Antarctica have joined the Treaty, or

¹¹ In 1956 India proposed the peaceful use of Antarctica and pointed that the internationalist rhetoric of science and co-operation was actually a set up for a 'colonial legacy of territorial claims' in the region. India then tried to include the 'Antarctic Question' on the agenda of the United Nations General Assembly (UNGA). However, due to diplomatic pressure from those states already engaged in the region, this attempt was guickly withdrawn. In 1983 the issue was back to the agenda. The Non-Aligned movement, led by Malaysia and Antigua Barbuda, requested that the UNGA delivered a comprehensive report on the 'Question of Antarctica' and they plead that this issue should be broadly considered at a United Nations forum. This new movement showed dissatisfaction from outside actors to the exclusive character of the regime. especially when the exploration of mineral resources in the region was being negotiated exclusively by Treaty actors. The "Antarctic Question" impacted the Antarctic Treaty System, prompting the membership institutional change and a more careful relationship with the international community.

- if non-state actors – they have found ways to work alongside it, embracing the principles upon which the Treaty was agreed. Internally, legitimacy has been granted by the continuous support of Parties to the Treaty. First, there is no record of any member's withdrawal from the agreement; and second, cooperation rates among Parties have grown throughout the years, not only with the addition of new members, but also within their networks.

In order to analyze this indicative legitimacy, i.e. the different patterns of cooperation among Parties over the Treaty's lifetime, I separated its 60 years of force into three different periods: consolidation (1961-1980), which covers 20 years of operation with basically the same cohort of nation states; institutional change (1981-2000), which covers the period of the Treaty's largest membership expansion and normative growth brought by the Environmental Protocol in 1991; and stabilization (2001-2020), which represents low rates of growth and a more systematic operation of the regime based on scientific research and environmental protection. For these three different phases, I identified how Treaty Parties have collaborated with each other during Treaty Meetings¹², proposing discussions together and configurating a social network (see Figure 3). The different sizes of nodes representing Parties reflects how much each one participated in a Consultative meeting in terms of proposing discussions. As we do not know who first proposed the collaboration (the Antarctic Treaty Database only provides information on individual or joint initiatives), I classified these networks as undirect, therefore there are no arrows in the ties between actors as their connection is reciprocated.

In social network analysis, density and centrality measures indicate how integrated a network is, i.e., how fast information can flow through actors and how susceptible they are to social constrains, providing thus good indicators for cooperation levels. Density refers to the sum of all connections between actors (also known as edges), divided by the number of possible connections. The denominator is divided by 2 in order to avoid duplications, because in an undirect network the connection between two actors is reciprocated (Hanneman & Riddle 2005). In a valued network, actors can have stronger connections with some actors more than with others (also known as tie strength). In Treaty meetings, the different strength in connections represent the different occasions in which the same actors collaborated with each other throughout the years. Therefore, to calculate the density of a valued network, I used the ratio of tie strength as the sum of existent connections (m).

$$\frac{m}{(Total edges)/(Total possible edges)} = \frac{n}{\frac{n(n-1)}{2}}$$

In its first two decades (1961-1980), the Antarctic Treaty experienced an intensive period of cooperation (see Figure 3a). For this consolidation phase, I obtained an average density value of 1.350, which shows that connections were 35% more than expected, a reflection of the strength in the ties between actors. Likewise, I identified an average weighted degree of 20.250, which means that Treaty members established an average of 20 cooperative initiatives with each other. On the other hand, degree centrality refers to how a network is centralized, i.e., how some actors concentrate more connections than others. conferring the formers with a central role. In this consolidation phase, the Freeman Degree

¹² I analyzed Working Papers, Information Papers, Background Papers and Additional Information submitted to Antarctic Treaty Consultative Meetings from 1959 to 2020. The data is available at the Antarctic Treat Database (Secretariat 2021b).

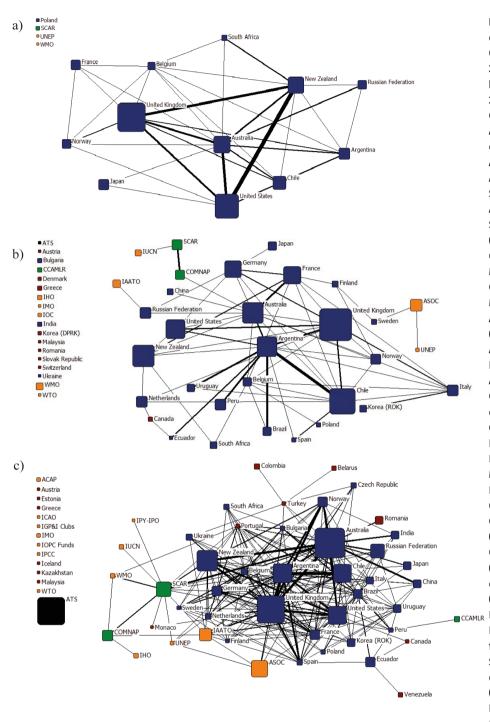


Figure 3. The Antarctic Treaty cooperative network in **Consultative Meetings from** 2001 to 2020. a) 1961-1980; b) 1981-2000 and c) 2001-2020. List of Acronyms for Observers and Experts in ATCMs: ACAP (Agreement on the Conservation of Albatrosses and Petrels); ASOC (Antarctica and Southern Ocean Coalition); **ATS (Antarctic Treaty** Secretariat); CCAMLR (Commission for the **Conservation of Antarctic** Marine Living Resources); **COMNAP** (Council of Managers of National Antarctic Programs); IAATO (International Association of Antarctica Tour Operators); ICAO (International Civil Aviation Organization); IGP&I Clubs (International Group of Protection and Indemnity Clubs); IHO (International Hydrographic Organization); IMO (International Maritime Organization); IOC (Intergovernmental Oceanographic Commission); IOPC (International Oil Pollution Compensation Funds); IPCC (Intergovernmental Panel on Climate Change); IPY-IPO (International Program Office ■ CCAMLR International Polar Year); **IUCN (International Union** for Conservation of Nature); **SCAR (Scientific Committee** on Antarctic Research); UNEP (United Nations Environment Program); WMO (World Meteorological Organization); WTO (World Tourism Organization).

Centrality was 14.49%, which means that not so many actors concentrated the connections between actors, showing that collaboration was relatively distributed among different Parties. Although I identified this strong cooperative, but relatively low centralized network in the first period of Treaty operation, members did not sustain this same pattern in the subsequent decades.

The period from 1981 to 2000 represents intensive years for the Treaty, with a high level of growth in its membership and significant new instruments entering into force and/or being negotiated (CCAMLR, CRAMRA and the Protocol). Consequently, we can expect that a higher number of actors would reduce the density of the network (Hanneman & Riddle 2005, Kilduff & Brass 2010) and this was exactly what happened to Parties' cooperation (see Figure 3b). The density of the network in this period dropped to 14.6% of its capacity (average value 0.146), with members establishing an average of 7 cooperative initiatives with each other (average weighted degree of 7.160). In terms of centrality, the Freeman Degree Centrality was 8.48%, which means that the ingression of new actors reduced even more the centralization of the network in the hands of few actors. These results lead us to conclude that as more actors joined the Treaty in order to participate directly in the negotiations of new instruments, less cooperatively they engaged in terms of their actual capacity to collaborate. On the other hand, the capacity to centralize cooperation also dropped, which means that in a changing institutional environment, actors were not able to take the leadership in a different cooperative network. So, did new members need more time to get familiarized with the Treaty before engaging more cooperatively? Or did the main themes discussed during meetings inspire more individualistic rather than cooperative

behavior? These are questions that require further research on the relationship between cooperative behavior and institutional design changes.

In the last two decades (2001-2020), membership rates stabilized and cooperation between members recovered (see Figure 3c). The density of the network in this period is 62.5% (average value of 0.625) which is four times more than in the previous period, but still significantly lower than in the first two decades of the regime. On the other hand, members engaged in an average of 37 cooperative initiatives with each other, which is higher than any other period in the history of the Treaty. In terms of centrality, Freeman Degree was 9.88%, which is just slightly higher than in the previous phase, but still lower than in the first years of Treaty operation. Therefore, members consolidated their perception of the Antarctic Treaty regime as the most appropriate arrangement for the region's governance, investing more effort in its preservation. As the regime consolidated through the decades, the low centralization of the network shows us that an initial stronger intermediation by few Parties actually gave place to a network in which collaborations by a variety of actors took place.

In this section, I identified the Treaty's main institutional design features, analyzing how a diplomatic culture of controversy avoidance not only shaped the Treaty's operation, but also its main changes, contributing to its effectiveness and legitimacy. The last two decades of the regime showed significant cooperation and low levels of centralization in a much more complex framework when compared to the Treaty's early years – an indicator of its successful endurance. Nevertheless, cooperation has not been the prevalent form of Parties' engagement with Treaty. In the consolidation phase (1961-1980), cooperation represented only 10.4% of

all engagement in Consultative Meetings. In the institutional change phase (1981-2000), this percentage halves to 5.5% of all engagement. Only in the stabilization phase (2001-2020) institutional cooperation recovers and achieves its highest rates (12.9%). Therefore, claims for wider participation and access to Antarctic resources did impact Treaty's legitimacy in terms of engagement, centralization and cooperation density among its members. Nonetheless, results from the Treaty's most recent phase show that Parties promoted institutional design changes coherently with the diplomatic culture of controversy avoidance, enabling the Treaty's punctuated equilibrium.

But how has this diplomatic culture guided the institutional design changes? In the next section, I identify the Treaty's informal conventions which translate its diplomatic culture into practice: gradual introduction of issues, the preference for non-controversial issues and the use of imprecise language in the agreements. Informed by a diplomatic culture of controversy avoidance, Parties' adoption of these informal conventions demonstrates their longstanding concern for keeping as much control as possible over the regime, a characteristic confirmed by their preference for individual engagement (especially during changing times), resulting in an agreement with low autonomy (Lall 2017).

Antarctic diplomatic culture: institutional design and informal conventions

The diplomatic practice of gradual introduction of issues

A diplomatic culture of controversy avoidance is present throughout the Treaty's institutional design, especially with regards its operation. Parties have always preferred a more flexible approach due to fears of a bureaucratization

of the agreement and, consequently, their loss of control: "the success of the Treaty was due in large part to its flexibility and absence of an international type organization which would tend towards politicization and form groups within itself" (Final Report of the Fifteenth Antarctic Treaty Consultative Meeting 1989). Parties have hosted Consultative Meetings according to an alphabetic rotation – an attempt to prevent the influence of political interests on the convener (Hanevold 1971). During its turn as host, each government was responsible for preparing the meeting and for circulating documents and reports to others in advance. With the growth in the number of participants and issues during the 1990s. Parties agreed to establish a secretariat - although this had originally been suggested in the first year of the Treaty's operation (Roberts 1961). The fear of a supranational body concentrating managerial authority upon the region prevented discussions until 1985. Parties only reached a final decision on the establishment of an Antarctic Treaty Secretariat in 2003 (Francioni 2000, Scott 2008).

In addition to a preference for a flexible and weakly autonomous managerial structure, the decision-making process is also vital for translating Antarctica's diplomatic culture of controversy avoidance. Consensus was the foundation of the Treaty's signing and this procedure has been adopted by meetings since then, enabling an "agreement to disagree". Due to the risk of not reaching consensus, especially on disputed issues, this institutional design feature required Parties to introduce new topics via a gradual process. This gradual introduction of discussion topics has given Parties enough time to create alternative ways to tackle problems, finding a middle ground when different perceptions (and interests) have existed. According to Roberts (1978), six years was the time considered necessary to achieve an

agreement. Initially a Party would "air" an item at a meeting, where its adoption for the next meeting's agenda was expected. If successful, the item would be discussed in detail at the following meeting, but it could also be "shelved" if it was not of common interest, regardless of its urgency. If the item reached the agenda on a third subsequent meeting, then it might produce a recommendation.

In order to verify if Robert's observation about the pace for the introduction of issues is actually an informal convention, I selected three crucial case studies (Gerring 2008); one for each phase of the Antarctic regime. Our criterion for choosing a crucial case study was a theme that divided positions, i.e. that would not easily produce consensus among Parties, but a theme that also became a new agenda item and resulted in some sort of decision. Therefore, I observed when the issue was "aired" for the first time; how long it took to become an agenda item; and how many years it took to achieve any form of resolution.

For the regime's first phase I chose mineral activities as our case study, a contentious issue that involved economic interests and different sovereignty positions (Wolfrum 1991). Mineral activities showed up for the first time as an agenda item in 1972 and had a convention approved in 1988, but it has never entered into force due to the withdrawal of France and Australia in 1989. "Antarctic resources - effects of mineral exploration" was included as an agenda item at the ATCM VII in 1972, with working papers from the United Kingdom, Norway, Argentina, Chile, South Africa and France. Following Roberts' analysis, a formal inclusion of such a contentious theme for discussion would have required an informal suggestion at a previous meeting. The final report of ATCM VI in 1970 does not contain any reference to discussions on mineral activities, but the presence of governmental advisors

from "Mineral, Oil and Coal Mining" divisions indicates that delegations were prepared to have discussions about mineral activities in the region. Parties discussed the theme successively and agreed recommendations (five in total) at every meeting from 1972 to 1979. In 1981, another recommendation designated the Special Antarctic Treaty Consultative Meeting (SATCM-IV) as the proper forum for negotiations on a convention for mineral activities in Antarctica. SATCM started in 1982 and ended in 1988 with the approval of a convention.

For the second phase of the regime, I selected liability as our case study which refers to the financial and remediating responsibility of Parties in emergency environmental situations (Lefeber 2000). Liability was included for the first time as a sub-agenda item in the Consultative Meeting XVII in 1992 and was agreed as Annex VI to the Protocol in 2005. From 1992 to 1997, discussions were subordinated to the overall implementation of the Protocol which took place in 1998 – after this year, liability became itself an agenda item. Nevertheless, discussions on liability were actually prior to the Protocol. The first time that the item was "aired" was during the Consultative Meeting XIV in 1987 - as report language in discussions about mineral activities and tourism impact. ¹³ In 1989, Parties agreed a recommendation to discuss a liability regime. During the negotiations for the Protocol in 1991, Parties mentioned the need for a liability regime. However, we can assume that the theme was disputed, as statements from delegations regretted that Article 16 of the Protocol only acknowledged the commitment of

¹³ In the same year, Parties attended the 10th round of negotiations of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA). At this occasion, Uruguay submitted two working papers on liability. Unfortunately, the final report of the meeting is not available, therefore we cannot precise if Uruguay triggered or was triggered by discussions.

Parties to agree proper procedures for liability as a future annex. Indeed, negotiations lasted 13 years and Annex VI is not yet effective, as several Parties who agreed the annex still have not implemented it domestically.

For the third phase of the regime, I chose biological prospecting as our case study to demonstrate how Parties introduced themes in the most modern phase of the regime. As biological and genetic resources have a strong economic component (Herber 2006), Parties have included the theme as an agenda item since Consultative Meeting XXVI in 2003. Nevertheless, biological prospecting was introduced for the first time in 2002 through a working paper submitted by the United Kingdom. Since then, Parties have submitted papers every year, but they have only been able to agree three resolutions (which are not legally binding) in 2005, 2009 and 2013. Negotiations for an international legally binding instrument for biodiversity in areas beyond national jurisdiction (BBNJ) under the United Nations Convention on the Law of the Sea (UNCLOS) have taken plan since 2017 and pressured Treaty Parties to reaffirm its authority over the management of Antarctic biodiversity. Although Parties did not agree on a legally binding instrument, the topic is still alive during meetings.

Therefore, from these case studies from three different periods, we can reflect upon Robert's observation of gradual introduction. "Airing" a theme occurs through different avenues: informal discussions (mineral activities); report language (liability); and working papers (biological prospecting). In every case, the inclusion of the theme as an agenda item was made in the subsequent meeting (for mineral activities and biological prospecting), or in two meetings' time (liability). The timescale of turning a theme into an agenda item and the production of a recommendation or a resolution

varied from the same year (mineral activities) to two years (liability and biological prospecting). But the most remarkable feature in all the three case studies is how long negotiations lasted from agenda item to a legally binding instrument: 16 years (mineral activities); 18 years (liability); and 17 years and counting (biological prospecting).

The diplomatic practice of preference for noncontentious discussions

Negotiations on contentious issues do occur in meetings; however, most discussions involve non-contentious issues. The Antarctic Treaty Database provides the compilation of papers submitted by Parties, observers and experts from 1961 to 2020. Using frequency analysis. I identified the main themes proposed for discussion that required a response from the meeting (working papers); and those submitted for information provision or by other actors outside the Treaty system (information papers). The results provide a portrait of the discussions held in Consultative Meetings and corroborate that institutional aspects and environmental protection are the main concerns of Parties (see Table I).

The issue composition for working papers and information papers presents different distributions. From 1961 to 2020, working papers (N=3,006) represent 70% of the total of information papers (N=4,321), whereas its issue composition is strongly focused on environmental issues, institutional aspects and resource related issues. Environmental issues, for instance, correspond to almost 40% of all papers, a reflection not only of the systematic running of protected and management areas, but also of the Treaty's strong commitment to Antarctica's environmental protection. Institutional issues come second (24.22%), representing discussions mostly on the operation of the Treaty and on the exchange of information among Parties.

Table I. Main categories for information papers and working papers from 1961 to 2020.

Main categories Institutional	Information papers		Working papers	
	1302	30.13%	728	24.22%
Operation of the Antarctic Treaty system	522	12.08%	394	13.11%
Exchange of Information	240	5.55%	103	3.43%
Opening statements	275	6.36%	64	2.13%
Cooperation with Other Organisations	151	3.49%	44	1.46%
Inspections	48	1.11%	45	1.50%
Institutional and legal matters	27	0.62%	34	1.13%
Operation of the CEP	20	0.46%	18	0.60%
CEP Strategy Discussions	16	0.37%	26	0.86%
Environmental	1098	25.41%	1195	39.75%
Management Plans	99	2.29%	357	11.88%
Environmental Protection General	237	5.48%	189	6.29%
Protected Areas General	109	2.52%	199	6.62%
Fauna and Flora General	82	1.90%	107	3.56%
Monitoring and Reporting	151	3.49%	54	1.80%
Other EIA Matters	139	3.22%	50	1.66%
Comprehensive Environ. Evaluations	87	2.01%	52	1.73%
Prevention of marine pollution	31	0.72%	40	1.33%
Non-native Species and Quarantine	63	1.46%	40	1.33%
Human Footprint and wilderness values	30	0.69%	36	1.20%
Specially Protected Species	5	0.12%	26	0.86%
Marine Protected Areas	41	0.95%	23	0.77%
Environmental Domains Analysis	8	0.19%	10	0.33%
State of the Antarctic Environment Re	6	0.14%	9	0.30%
Repair and remediation of environment	10	0.23%	3	0.10%
Themes related to economic exchange	571	13.21%	588	19.56%
Tourism and NG Activities	395	9.14%	264	8.78%
Marine Living Resources	10	0.95%	39	1.30%
Site Guidelines for Visitors	41	0.95%	58	1.93%
Mineral resources	8	0.97%	51	1.70%
Liability	42	0.79%	38	1.26%
Biological prospecting	34	0.19%	19	0.63%
Historic sites and monuments	41	0.23%	119	3.96%
Logistics	516	11.94%	333	11.08%
Operational issues	157	3.63%	200	6.65%
Safety and Operations in Antarctica	216	5.00%	74	2.46%
Search and Rescue	58	1.34%	31	1.03%

Table I. Continuation.

Main categories	Information papers		Working papers	
Emergency report and contingency plan	34	0.79%	23	0.77%
Waste management and disposal	51	1.18%	5	0.17%
Science	834	19.30%	162	5.39%
Science issues	469	10.85%	88	2.93%
Climate Change	115	2.66%	31	1.03%
Educational issues	128	2.96%	13	0.43%
Sub glacial Lakes	16	0.37%	7	0.23%
Marine Acoustics	15	0.35%	7	0.23%
International Polar Year	68	1.57%	5	0.17%
Drilling	23	0.53%	11	0.37%

Operation of the CEP: Operation of the Committee for Environmental Protection; Other EIA Matters: Other Environmental Impact Assessment Matters; Tourism and NG Activities: Tourism and Nongovernmental Activities.

Through these documents, Consultative Parties and observers have defined not only how the Treaty operates – they have also established how the Treaty interacts with outside bodies and how procedures should be updated, or new agreements settled.

Resource related issues (19.56%) represent a third grouping of discussion and the most challenging to produce an outcome. As mentioned previously, working papers are deemed to be presented and a reaction from the Meeting is expected (even if it is just silence). By becoming an agenda item, activities that involve resource use and economic exchange would induce Parties to position themselves and submit working papers individually or collaboratively, steering discussions. Nevertheless, resource related issues only represent one fifth of total working papers, an indication that discussions are done informally or elsewhere, in other forums. Logistics and science come fourth and fifth, with respectively 11.08% and 5.39% of the papers. The lower concentration of working papers on these issues can be explained by the direct involvement of other institutions in their governance. Antarctic logistics are

directly managed by the Council of Managers of National Antarctic Programs (COMNAP), whilst the Scientific Committee on Antarctic Research (SCAR) is in charge of science. Both have an observer status in Consultative Meetings, so they can propose working papers. Nevertheless, this has not been translated into a high volume of discussions, indicating that observers keep their own governance issues separate from the Treaty's decision-making processes.

This portrait is slightly different for information papers. Not only does the volume of documents reflect a much broader participation, but their distribution is also more balanced. Institutional issues come first with 30.13% of documents, a slightly higher proportion compared to working papers. Environmental issues come second with 25.41%, which is quite lower than in working papers. But the biggest difference comes with science issues with 19.30%. This figure corroborates that the limited participation brought by information papers to experts and non-Consultative Parties produce a very different portrait when compared to the one where actors can actually engage in decision-making. Despite of being one of the

Treaty's core value, science is the topic less discussed by working papers, whilst experts are those responsible in keeping science present in meetings through information papers. Fourth, resource related issues represent 13.21% of information papers. As Consultative Parties will steer contentious discussions through working papers, this automatically excludes the direct input from non-state actors such as experts and from non-Consultative Parties, unless they co-author a working paper with an established actor, i.e., a Consultative Party. At the bottom of information papers, we find logistics with 11.94%. Logistics are the remit of those who run scientific expeditions in Antarctica or have a research station, which is not the case of non-Consultative Parties neither of experts.

The lower proportion of environmental issues and the threefold increase in the proportion of science-related documents are explained by the main purpose of information papers: to inform. They are not expected to lead to discussions neither are they necessarily presented during the meetings. Therefore, they do not directly feature in the decision-making process. Instead, they offer an avenue for participation to non-Consultative Parties willing to demonstrate their progress on Antarctic engagement and for experts to provide technical input to discussions. This portrait of discussing papers in Treaty meetings demonstrate how the diplomatic culture of controversy avoidance guided not only the different participation mechanisms, but also the themes that actors bring to discussion.

The diplomatic practice of constructive ambiguity

Besides references to meetings' frequency, Article IX sets out the guiding framework by which Parties should formulate measures to be considered by the meeting, make recommendations to

their governments and subsequently approve measures to become effective. Therefore, from 1961 to 1995, Parties drafted, approved and implemented *recommendations* agreed during Consultative Meetings. These recommendations would become effective – i.e. legally binding – once all Consultative Parties who had first agreed them communicated their domestic implementation. Nevertheless, concerns about the time that recommendations were taking between their year of approval and the year they became effective led to a change in the agreements' procedures.

From 1995, recommendations were divided into three different instruments: measures. decisions and resolutions. A measure refers to "a text which contains provisions intended to be legally binding once it has been approved by all the Antarctic Treaty Consultative Parties". A decision refers to "a decision taken at an Antarctic Treaty Consultative Meeting on an internal organizational matter to be operative at adoption or at such other time as may be specified". And a resolution refers to "a hortatory text adopted at an Antarctic Treaty Consultative Meeting". Therefore, resolutions became instruments with a recommendatory nature: decisions became instruments focused exclusively on internal organization and procedural matters, becoming operative immediately after their adoption; and measures inherited the procedures stated in Article IX, becoming legally binding once approved by all Parties who had first agreed the instrument.

This diversification of instruments helped the Treaty with its speed of responsiveness to issues, as a resolution provides a direction without being mandatory. Nevertheless, in 2002, Parties identified a gap between recommendations and measures that were adopted, but not yet effective (58% that year). Some Parties suggested changes to the rules

of procedures through mechanisms such as "tacit approval". As there was no consensus, Parties directed effort to identifying which recommendations and measures were noneffective. Since the Secretariat was established in 2003, this initial effort from Parties was countered by a more bureaucratized operation of the Treaty: more constant monitoring of those measures and recommendations that were obsolete, superseded or not vet effective (see Figure 4). In the last phase of the Antarctic Treaty, there has been an increased balance between those measures that are approved and those that become effective. These changes are not only due to the efficiency of having a secretariat for the operation of the regime, but also to the measures' main subject: management plans for special areas in Antarctica, which become effective through a more direct mechanism.¹⁴ Nevertheless, the difficulties in balancing approval and making agreements effective indicate that although consensus can be reached, domestic implementation is still a further step before a regime can achieve its full effectiveness.

Domestic implementation of international agreements depends strongly on the language used in final texts (Weiss & Jacobson 2000, Linos & Pegram 2016). Actors' behavior may vary according to the different levels of legalization of an agreement: they can be legally binding or non-legal (obligation); they can present very clear mandates or vague recommendations (precision); and their implementation/enforcement can be direct or delegated to

third parties (delegation) (Abbott et al. 2000). When Parties face strong difficulties in reaching consensus, they often use the so-called "constructive ambiguity" in the drafting of their documents, because ambiguities provide room for different interpretations (Skåre 2000, p. 170). Semi-legalized agreements tend to be a "second-best option", because a weak recommendation still represents a partial convergence in Parties' goals (Linos & Pegram 2016, p. 590), therefore the regime makes incremental progress towards how an issue should be tackled and disagreements may be set aside for later consideration.

Although a highly legalized agreement is more difficult to achieve, its clarity and mandatory character lead Parties to implement it domestically; whilst vague and hortatory agreements will only lead to change if they are not too costly in financial, political and reputational terms for governments. As a result, agreements in firm language tend to address non-controversial issues (because they are easier to agree); whilst issues of substantive importance might be tackled by flexible language, making its implementation harder to monitor and/or enforce (Linos & Pegram 2016). Besides, if a regime combines agreements with varied levels of legalization, Parties might focus only on those that they are constrained to implement and, as a consequence, move away from the recommended ones (Linos & Pegram 2016).

In Antarctica, the adoption of constructive ambiguity as a diplomatic practice is part of its foundation: the convention's text is based on a vague solution to the sovereignty issue. Therefore, I looked for the continuity of this practice in the subsequent phases of the regime, focusing on two legalization attributes: obligation and precision. Recommendations were the only instrument for agreement from 1961 to 1995 and they were legally binding. After

¹⁴ Article 6 of Annex V of the Protocol provides a caveat for the adoption of measures related to Management Plans of "Antarctic Special Protected Areas", "Antarctica Special Managed Areas" and "Historic Sites and Monuments". Once they are approved by the Consultative Parties, measures become effective 90 days after the end of the Meeting, unless a Party contacts the Depositary within this period, soliciting an extension or stating that is unable to approve the respective measure.

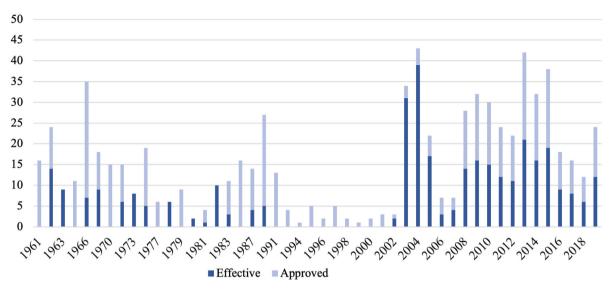


Figure 4. Recommendations and measures approved and made effective in Consultative Meetings from 1961 and 2020.

this period, measures became the legally binding form of agreement in the regime. Therefore, our three examples will be highly legalized in terms of obligation in order to observe variations in their precision. I then chose tourism as the theme, not only because it permeates the three phases of the regime, but because tourism has also generated different positions among Parties (Verbitsky 2013). As an industry, tourism did not receive a specific instrument for its regulation (like marine living resources, for instance). Therefore, discussions have taken place within Consultative Meetings and achieving consensus on recommendations or measures would have been challenging for Parties.

For the consolidation period, I identified the first agreement on tourism in 1966 (Recommendation IV-27) which is still in force in 2021. In general, the main objective of the recommendation is to make governments register tourist and non-governmental expeditions organized in their countries and share the information in advance with other Parties. The preamble paragraph states that tourism "may" prejudice the conduction of scientific research,

conservation of fauna and flora, and the operation of Antarctic stations. The operative paragraph thus recommends that governments "furnish noticed (sic) of the expedition as soon as possible"; "provide on request information as promptly as possible"; and "with(hold) permission unless reasonable assurances are given of compliance to The Treaty". Although this recommendation is effective, it is still vague: it is presented as a possibility that tourism might jeopardize other activities. Moreover, there is no precision about timings - "as soon as possible" and "as promptly as possible" - effectively allowing governments to decide what is the appropriate timing. There is no clarity either about what is actually a "reasonable assurance", therefore how permissions are granted is open to interpretations.

For the institutional change period, I chose Recommendation XVIII-1, which was agreed in 1994 and is the only one from the period still effective in 2021. The main objective of this recommendation is to guarantee that tourism and non-governmental expeditions follow the Guidance for Visitors to the Antarctic. This

document details the appropriate conduct of visitors, ensuring their compliance to the Treaty and to the Environmental Protocol, although with the caveat that visitors are bound by national laws and regulations applicable to Antarctica. This recommendation has two aspects. The text within the guidance is highly precise, with very clear prohibitions. Nonetheless, the primary text of the recommendation is not. The preamble paragraphs recognize the fragility of Antarctic ecosystem, the growth of tourism and the necessity of visitors to have practical guidance on how to "best" prepare their visits. The operative paragraphs recommend governments to "circulate (the guidance) widely and as quickly as possible"; and to "urge those" conducting visits to follow the guidance, if it is "consistent with the relevant provisions of their applicable national law".

This recommendation has several vague points: in the preamble paragraphs, it is not clear which attributes we should use to consider "the best" visit preparation. In the operative paragraphs, how "widely" and "quickly" does the guidance have to be circulated by governments? This can have different interpretations. Moreover, "urge" indicates strong encouragement, not an obligation. As such, the strength of the guidance in terms of precision is dissipated when its legally binding instrument merely strongly recommends governments to follow it. And the caveat that visitors should follow the guidance if it is consistent with their national law allows governments to dismiss points of the guidance that are or become inconsistent with their own legislation.

For the stabilization period, I chose a measure which has not become effective yet. In 2004, Parties approved Measure 4 on insurance and contingency plans for tourism and nongovernmental activities; whose main objective is to make governments ensure that these

activities are carried out in a safe and self-sufficient manner. Like the previous examples, the preamble paragraphs of this measure do not make strong statements: there are concerns about the "potential impact" that tourist and non-governmental activities "may" have on national programs; and there is a "desir(e)" that risks are minimized and that activities are run safely and self-sufficiently. Therefore, these paragraphs present a convergence of perspectives, but as a possibility, not in a resolute form.

On the other hand, the operative paragraphs present stronger instructions in terms of obligation, but still with some vagueness in terms of precision. The measure recommends that Parties "shall require" those organizing and conducting tourist and non-governmental activities demonstrate compliance to "appropriate contingency plans" and to have "sufficient arrangements for health and safety" in place in advance. These plans "shall not" rely on support of others without their "express written agreement". The measure also recommends demonstration of compliance of "adequate insurance or other arrangements" which should be in place to cover search and rescue and health and safety expenses. These operative paragraphs have stronger levels of obligation by stating "shall require" and "shall not rely". They also make a precise condition by referring to a "express written agreement". Nevertheless, we can still identify vagueness in "appropriate plans", "sufficient arrangements" and "adequate insurance", because these are open for interpretation by different governments when they implement this measure. The stronger levels of obligation and precision in this measure (when compared to the previous recommendations) could be one of the factors that explain why out of the 27 governmental implementations necessary to make this

measure effective, in 2021, only 16 have been completed (Victor et al. 1998).

These two recommendations and measure are exemplary of the use of constructive ambiguity as a diplomatic practice within the Antarctic Treaty in different periods of its history. The "watered-down characteristic" resulted in a variation of interpretation about what was being discussed and decided by Consultative Parties. Constructive ambiguity facilitated the achievement of agreements, because such decisions would never contradict Parties' interests. The lowest common denominator turned out to be the main practice making compliance feasible, because adaptable interpretations facilitated recommendations' implementation according to Parties' domestic particularities. As an economic activity, tourism provokes different reactions among Parties and converging diverse perspectives on how to tackle an issue requires years of negotiation, a non-mandatory agreement or more ambiguous wording. Indeed, tourism has more resolutions than measures, recommendations and decisions combined (17 resolutions, 5 recommendations, 4 decisions and 2 measures). Therefore, the preference has been for semi-legalized agreements: resolutions with hortatory text or recommendations with unprecise wording. And the measure which is legally binding and with a more precise wording is still not effective even 17 years after its approval.

CONCLUSIONS

The endurance of the Antarctic Treaty relies strongly on its diplomatic culture of controversy avoidance. The Treaty was able to emerge because the sovereignty issue was purposely avoided during its foundation, paving the way for a diplomatic culture that has shaped the Treaty's institutional design and shielded it

from unnecessary changes. Slow introduction of themes, prevalence of non-contentious issues in discussions and the use of constructive ambiguity in agreements prevented unnecessary disagreements that could have caused disruption and undermined the regime as a whole. By translating its diplomatic culture, these diplomatic practices also enabled the Treaty to remain operating through consensus-based decision-making and flexible autonomous management, which are striking features of its institutional design.

After the regime's consolidation, the possibility of exploiting Antarctic resources attracted new actors who wanted to participate in a Treaty whose membership was closed at that time. The pressures to its legitimacy led to one of its remarkable institutional changes: membership expansion. However, the diplomatic culture of controversy avoidance only allowed the entrance of new members through segmenting them between decision makers and non-decision makers. Different levels of participation were conditioned to governments' engagement with Antarctic scientific research and commitment to its environmental protection - both issues which do not divide actors and actually converge their expectations. Nevertheless, membership expansion did not completely sort out the problem: resource exploitation could trigger clarifications of property and authority within Treaty Parties and disrupt the regime from the inside. Once again, the diplomatic culture of controversy avoidance led to the delegation of Antarctic resource management to other forums. CCAS, CCAMLR, CRAMRA and even the private self-regulation of the International Association of Antarctic Tour Operators were the solution found by Treaty Parties to preserve the regime by outsourcing potential conflict to other decision-making spaces.

Guided by the Treaty's diplomatic culture, membership expansion and delegation of resource management to other forums enabled the Treaty to evolve, preserving its effectiveness and legitimacy. These institutional changes marked a moment of inflection, but they did not represent a deep modification of the Treaty's institutional design: a diplomatic culture of controversy avoidance continued, and an institutional design based on consensus decision-making and flexible autonomous management were preserved. And this has been the Treaty's punctuated equilibrium: the capacity to change without modifying its culture and principal design.

For the last 60 years, without disruption, diplomatic practices have shaped the creation process and the format of recommendations, measures, decisions and resolutions. This normative framework has furthered the Treaty's governance, standardizing actors' conduct in the region in any new activity. Consequently, the regime's scope expanded, going beyond the initial cooperation between national programs in order to facilitate their scientific research. Decade after decade, the Antarctic Treaty included new aspects of human activity into its governing framework, encompassing environmental protection, human impact assessment and global phenomena such as climate change. In terms of legitimacy, new Parties kept joining the Treaty throughout the years and none has withdrawn from the agreement. New rules and new participants did not stop the densification of their cooperative networks: the stabilization phase of the Treaty provides a portrait of highly connected actors in a process of deepening integration of the regime (Victor et al. 1998). Therefore, the punctuated equilibrium thesis is strengthened by the sociological aspect of institutionalism in regime theory. The Treaty's diplomatic culture

has not only enabled the regime to overcome challenges, but it has also led to an integration process that seems to deliver its longevity.

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DANIELA P. SAMPAIO

https://orcid.org/0000-0002-1400-8957

Fakultät für Soziologie, Universität Bielefeld, Universitätsstraße 25, 33615 Bielefeld, Germany The Business School (formerly Cass) City, University of London, 106 Bunhill Row, London EC1Y 8TZ, United Kingdom

Correspondence to: **Dr. Daniela Portella Sampaio** E-mail: danirics@alumni.usp.br, danielaportella@uni-bielefeld.de

