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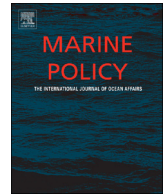


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China's changing position towards marine protected areas in the Southern Ocean: Implications for future Antarctic governance

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ABSTRACT

The paper first briefly describes the negotiation process of Marine Protected Areas (MPAs) in the Southern Ocean. Then it examines China's changing position towards the establishment of a Ross Sea MPA, as proposed by the United States and New Zealand in the Commission for Conservation of Antarctic Marine Living Resources. Finally, the paper explores how China's position towards or against Southern Ocean MPAs implies China's future role in Antarctic governance.

1. Introduction

Antarctica is re-emerging, as compared to the exploration age at the beginning of 20th Century, at the forefront of global affairs and public imagination [50]. Technology is making Antarctica more accessible and resource scarcity elsewhere is making some countries, like China, look south. As a major and growing industrial power, China is no doubt interested in the resource-rich Antarctic. To date, China has undertaken 34 national Antarctic expeditions and runs four research stations in Antarctica with a fifth station under construction ([65,49]). Chinese krill fishing in Antarctica has grown significantly since 2009, reaching over 65,000 t in 2016 ([26]; Fig. 1).

The Antarctic Treaty System (ATS) is an extensive and continually evolving regime that governs Antarctica and the Southern Ocean [38]. The ATS comprises the 1959 Antarctic Treaty and its 1991 Environmental Protocol (Madrid Protocol), the 1972 Convention on the Conservation of Antarctic Seals, and the 1980 Convention on the Conservation of Antarctic Marine Living Resources (CAMLRL Convention). Being an area beyond national jurisdiction, the Southern Ocean is also subject to the United Nations Convention on the Law of the Sea (UNCLOS). Further, additional international instruments have emerged during the lifetime of the ATS, which intersect and overlap with both the ATS and UNCLOS [60]. These instruments include, for example the Convention on Biological Diversity, the International Convention for

the Regulation of Whaling, and International Maritime Organization's International Code for Ships Operating in Polar Waters (Polar Code).

The ATS is one of the most celebrated successes of contemporary international law and diplomacy [62]. However, the politics of Antarctica continue to be influenced by the changing interests and capacities of different nation State actors [64]. This is particularly true of the post-Cold War era, in which rising powers – countries with significant economies – seek to expand their influence abroad while pressing to reform global governance [1]. Because of the rapid and profound redistribution of power in the international system writ large in the last half-century, rising nation States are using their power to advance their interests within the international legal system [8]. In its 13th Five Year Plan (2016–2020), the Chinese Government clearly stated its intentions to actively participate more in governance regimes in ‘Strategic New Frontiers’, including cyber security, deep seabed, Polar Regions and outer space.¹ Although China has been generally supportive of the current Antarctic governance regime,² China is becoming increasingly assertive in pursuing its national economic interests in Antarctic affairs while also recognizing the Antarctic as a space for international diplomacy.

A prominent example is China's evolving position towards the establishment of marine protected areas (MPAs) in the Southern Ocean within the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLRL), the management body that gives effect to the

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¹ The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China (2016–2020), *Central Compilation and Translation Press* (Translated by Compilation and Translation Bureau, Central Committee of the Communist Party of China). < <http://en.ndrc.gov.cn/newsrelease/201612/P020161207645765233498.pdf> > accessed 28 November 2017.

² China became a contracting party to the Antarctic Treaty in 1983. China also ratified the Madrid Protocol in 1998 and the CAMLRL Convention in 2007. See, Secretariat of the Antarctic Treaty, Parties < http://www.ats.aq/devAS/ats_parties.aspx?lang=e > accessed 26 December 2017.

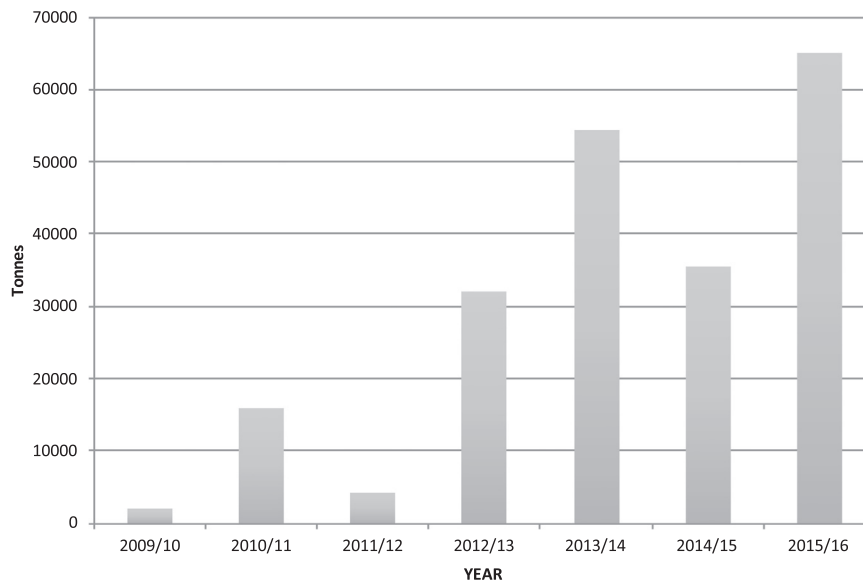


Fig. 1. China's Antarctic krill catch over time. China's Antarctic krill (*Euphausia superba*) catch in the CCAMLR area (Fig. 2) over time (data from [26]).

CAMLR Convention. In 2011, the United States and New Zealand brought scenarios for a MPA in the Ross Sea region to the CCAMLR annual meeting [19]. In 2012, when a Ross Sea MPA was formally proposed and negotiated at the CCAMLR annual meeting, China was one of the most vocal States in expressing its concerns against MPA proposals [3]. In 2014, the Chinese delegation formally laid out the reasons for its opposition. A year later, Chinese delegates once again looked set to block the issue as they did in 2014, posing a series of questions about the proposed MPAs: including how could MPAs allow rational use of marine living resources? How could they facilitate scientific research? How would they be monitored and regulated, and how long would the protections last? Nevertheless, China suddenly supported the Ross Sea proposal at the end of the 2015 CCAMLR meeting [22], paving the way for the establishment of Ross Sea MPA in 2016 [24]. Meanwhile, China still has concerns regarding the MPA proposal in East Antarctic, initiated by the European Union (EU), France and Australia [25].

This paper first briefly describe the negotiation process of MPAs in the Southern Ocean. Then it examines reasons behind China's changing position towards the establishment of a Ross Sea MPA. Finally, the paper explores how China's position towards or against Southern Ocean MPAs implies China's future role in Antarctic governance.

2. Negotiations on the establishment of a Ross Sea MPA

CCAMLR, comprised of 24 States plus the EU, is the management body charged with conserving Southern Ocean ecosystems under the ATS. Under the CAMLR Convention, CCAMLR has the explicit objective to conserve marine living resources Convention on the Conservation of Marine Living Resources, 1980, Article II). While conservation includes “rational use,” the CAMLR Convention demands that CCAMLR employs a science-based precautionary and ecosystem-based management approach (Convention on the Conservation of Marine Living Resources, 1980; [40,45,46,39]). In doing so CCAMLR is arguably a leader in managing marine living resources [43,30]. MPAs are an increasingly popular tool for conserving biodiversity and management fisheries [35,44] and have always been incorporated into the CAMLR Convention (CAMLR Convention 1980, Article IX.2 g). Discussions regarding Southern Ocean MPAs commenced in CCAMLR in the mid to late 1990s [3]. Then in 2002, CCAMLR committed to designating a network of Southern Ocean MPAs [15] in accordance with global targets set by a number of international institutions [36].

Working towards this goal, after a series of scientific workshops, CCAMLR adopted the world's first international (*i.e.*, high seas) MPA in 2009, protecting 94,000 km² south of the South Orkney Islands [16]. In 2011, CCAMLR adopted a management framework to guide the MPA process [18]. Also in 2011, scenarios for a Ross Sea and East Antarctic MPAs came to CCAMLR's Scientific Committee, which subsequently endorsed the science behind both the proposals [52]. In 2012, at the CCAMLR annual meeting, formal proposals for MPAs in the Ross Sea (proposed by New Zealand and the United States) and the East Antarctic (proposed by Australia, France and the European Union) came under negotiation [20]. While these MPAs were not adopted in 2012, CCAMLR agreed to an unprecedented intercessional meeting to be held in July of 2013 dedicated to discussing the two MPA proposals [5]. While the MPAs were still not adopted during this intercessional meeting, support among CCAMLR Member States was building with the majority supporting the two proposals [3].

By the close of the 2014 CCAMLR annual meeting, only Russia and China opposed the Ross Sea MPA [3]. By the close of the 2015 meeting, China supported the Ross Sea MPA [3] with Russia joining them in 2016 when the MPA was finally adopted by full consensus of CCAMLR [23]. The Ross Sea MPA, now in force as of December 2017, is not only the world's first large scale high seas MPA, it is the largest MPA in the world. Notably, China still opposes the long-standing East Antarctic MPA proposal in CCAMLR waters [25].

3. Exploring China's changing position towards the Ross Sea MPA

3.1. China's changing position

China is the newest Member to CCAMLR, only joining in 2007, more than five years after MPA discussions commenced. China missed the first two CCAMLR MPA science workshops in 2005 and 2007, while sending one individual to [18] MPA workshop [3]. In 2009, during negotiations over the South Orkney Islands Southern Shelf MPA, representatives from China voiced three points: 1. That CCAMLR MPAs should be established case-by-case rather than setting precedent; 2. That MPAs should meet the objectives of Article II of the CAMLR Convention and should not compromise rational use; 3. That CCAMLR should invite a legal study into the impact of Southern Ocean MPAs on UNCLOS [17]. Despite voicing these concerns, China did not block consensus and the South Orkney Islands Southern Shelf MPA was subsequently adopted in 2009 [16].

In 2011, during discussions over potential MPAs in the Ross Sea and East Antarctic, Chinese delegates reiterated their concerns over impacts on rational use and pushed for more science, particularly in the East Antarctic [19,52]. In 2012, during CCAMLR's Scientific Committee meeting, Chinese representatives along with those from Russia began voicing that there may be no need for MPAs in CCAMLR waters, questioning the threats posed to the area, and noting CCAMLR's success in conserving marine living resources through other measures [53]. During the 2013 intersessional meeting, this trend continued, with China continuing to raise concerns over needing a threat analysis to assess the need for MPAs [54].

By the close of the 2013 CCAMLR annual meeting, there was almost consensus for the East Antarctic and Ross Sea MPA proposals to advance to the stage of legal drafting of the Conservation Measure, which would lead to adoption [3]. However, representatives from China and Russia voiced that the MPA proposals were not ready for drafting [3]. Despite not reaching consensus, the Commission Chair tried to push the MPAs to drafting group, in violation of CCAMLR's rules of procedure [3]. All Member States voiced their disapproval of violating consensus, an essential foundational rule of the Commission required by the CAMLR Convention ([3]; CAMLR Convention, 1980; [14]). However, China voiced the strongest concern with this breach in process, making repeated interventions [3].

During the 2014 annual meeting, Chinese delegates emphasized their position that there is no need for MPAs in the CCAMLR area in general due to the lack of threat and strong management measures which already exist in the CCAMLR area. Chinese delegates further asserted their view that MPAs should not interfere with CCAMLR States' right to fish ([21]). Towards the close of MPA negotiations in 2014, they reiterated [21]:

“The Contracting Parties enjoy the right to conduct harvesting activities within the Convention Area... the current MPA proposals, while trying to set restrictions on harvesting activities, do not provide sufficient evidence as to whether or to what extent those harvesting activities may affect the objective and principles of the Convention...we must establish, based on scientific evidence, the existence of a threat of serious or irreversible damage to Antarctic marine living resources.”

Coming into the 2015 CCAMLR annual meeting, Chinese delegates continued to voice their concerns over MPAs. These concerns included: restrictions on fishing, the lack of a need or threat warranting MPAs, and other legal and scientific concerns [22]. Chinese delegates also advocated for having a limited duration of no longer than 20 years [22]. In the midst of what seemed like a deadlock, in the final morning of the meeting, the United States and New Zealand delegates introduced a revised version of the Ross Sea MPA with a new fishing zone that was a direct concession to China. The krill fishing zone (KRZ) spanned ~322,000 km² (Fig. 2) of the area just west of the Ross Sea. Another notable change in the revised Ross Sea MPA proposal was an expiration date. The language on duration in the proposed MPA changed to state that the MPA would expire after a set duration unless there was consensus to continue [2]. This sets a new precedent in the ATS writ large where all conservation agreements are currently written needing consensus to expire or cease, rather than consensus to continue. The United States and New Zealand noted that this revision was “to meet the concerns of a particular Member...We want to thank China for its constructive approach...and spirit of cooperation” [22].

The KRZ was actually partly formed from the United States' original 2012 Ross Sea MPA proposal, which contained a Western Zone, designed to support krill research [29]. The rationale was that historically this area was where the United States expected the largest krill stocks to be in the Ross Sea area, so that if Member States wanted to pursue krill research fishing, this would be the appropriate place. Notably though, there was minimal historic krill fishing in the Ross Sea region, nor have any States shown interest in pursuing krill research fishing or

commercial fishing in the area.

At the close of the 2015 CCAMLR annual meeting, the Chinese delegation formally thanked the United States and New Zealand for the revised proposal, appreciating their “endeavors to accommodate” [22]. They indicated that the revised proposal reflects China's concerns with MPAs being consistent with the objectives and principles of the Convention, established without prejudice to research, in reflection of rational use, with an operational research and monitoring plan, designated for a reasonable period of time, and extended by consensus only [22]. China noted that it supported the revised proposal and would work with Member States in coming days to consider the proposal [22]. The Commission also agreed for krill fishing to be permitted in the toothfish fishing zone, despite this being a critical breeding area for Adélie and Emperor penguins [2,4].

In 2016, with Russia as the final Member to join in consensus, CCAMLR adopted a Ross Sea MPA [23]. While the Chinese delegation agreed to the Ross Sea MPA in 2016, they continued to oppose the East Antarctic MPA. Their concerns, raised previously, centered around issues of wanting more clarity on the MPA in terms of what will be prohibited and where, the period of designation, and interference with fishing [24,25]. In 2016, Germany and the EU also introduced a new proposal for a Weddell Sea MPA. During CCAMLR's Scientific Committee meeting, Chinese delegates raised similar concerns [55].

3.2. Reasons behind

There are three key reasons that may explain China's shifting position on the Ross Sea MPA: China's late arrival to international governance regimes; global fishing interests; and China's shifting role in international diplomacy. Each of these reasons is detailed below.

3.2.1. Latecomer to international governance regimes

China is a latecomer to the current global governance regime. Since the Communist Party of China (CPC) took power of Mainland China in 1949, the CPC government to large extent had been isolated from the western world over three decades. It was not until 1978, when Deng Xiaoping adopted the open door policy, that China embraced current international system. Therefore, it has been a learning process for China to engage with international organizations and has taken time for China to develop the necessary diplomatic and scientific expertise to effectively negotiate in this space.

The Antarctic Treaty was signed in 1959, and as such China had little influence on the development of the ATS and many other existing international regimes before 1980s. China initially became party to the Antarctic Treaty in 1984 as part of a process to re-engage with international regimes. China launched its first Antarctic expedition in early 1980 and Chinese authority recognizes 1980–2000 as the “warming-up” period for Chinese Antarctic research [57]. Between 2001 and 2015 was the “booming” phase for China's involvement in the Polar Regions, in particular Antarctica. From 2001–2016, China has invested in total RMB 310/ USD 47 million on Antarctic research, which is 18 times more than that of 1985 – 2000 period [57]. When it comes to fisheries issues in the Southern Ocean, China only became a party to the CAMLR Convention in 2007 with the motivation to delist four Chinese flagged fishing vessels in the CCAMLR Non-Contracting Party Illegal, Unreported and Unregulated Fishing list [63]. The Chinese government had to take time to overcome a mistrust of regimes they did not help design or were not early signatories to.

3.2.2. Global fishing interests

As the world's second-largest economy and largest fishing nation [31], China has global fishing interests, including in the waters off Antarctica. Due to overfishing and marine pollution, fishery resources in marine areas under China's jurisdiction have largely been depleted [34]. As UNCLOS entered into force globally in 1994 (with China's ratification in 1996), it put further restrictions on China's domestic

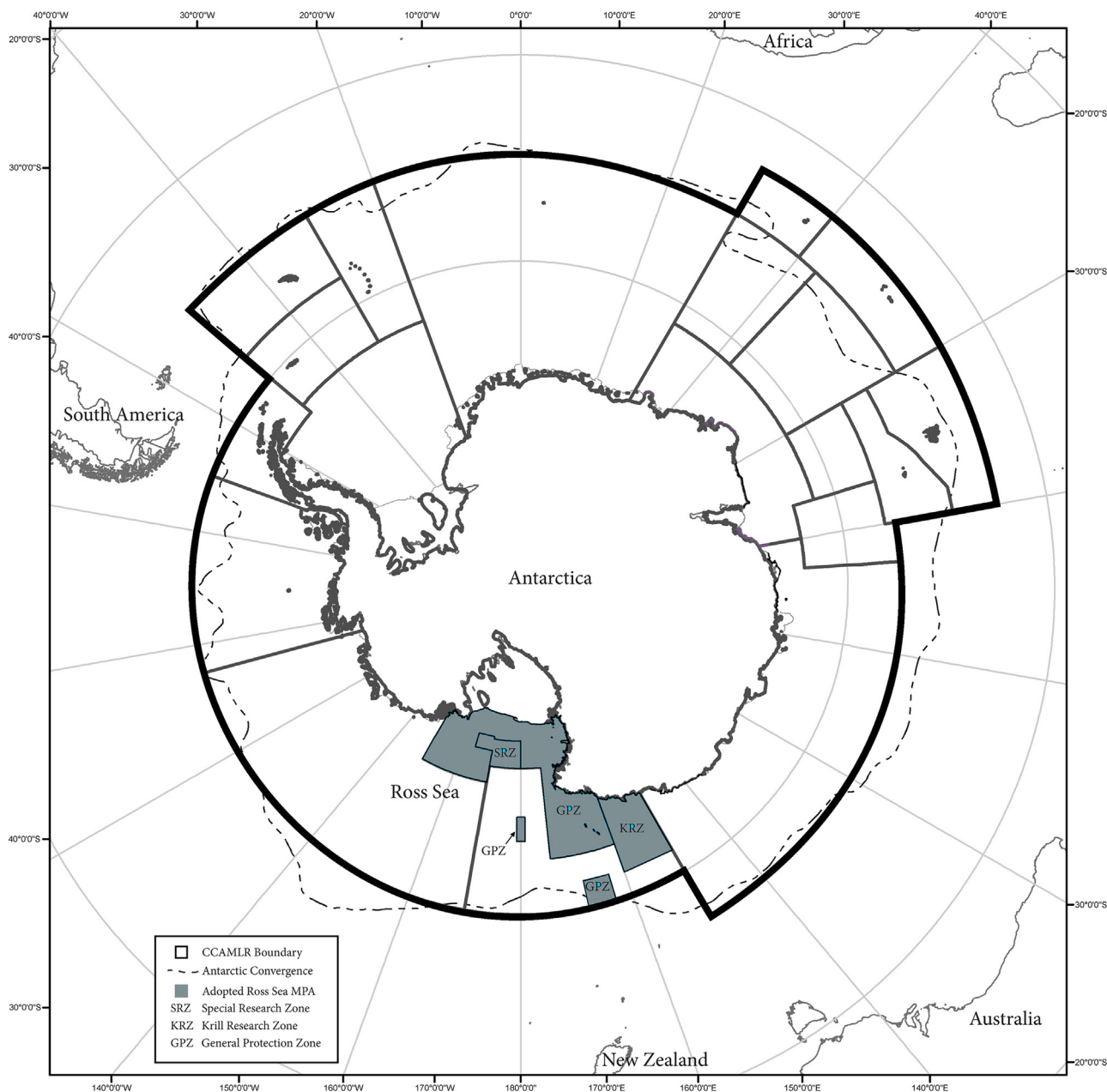


Fig. 2. Ross Sea Marine Protected Area (MPA; in blue) adopted by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) in 2016, coming into force in 2017. CCAMLR Area represented by black lined boundary. The SRZ refers to the “special research zone” which will be the focus of toothfish research fishing in the MPA. The KRZ refers to the “krill research zone” which will be the focus of krill research fishing in the MPA. The KRZ was not part of the original Ross Sea MPA, but was added to the proposal in 2015.

fishing industry because UNCLOS established a new regime of 200 nautical miles exclusive economic zone (EEZ) for coastal States that can restrict other countries’ access to marine living resources (Part V, UNCLOS). After ratifying UNCLOS, China subsequently negotiated bilateral fisheries agreements with neighbouring countries South Korea, Japan, and Vietnam, e.g., 2001 Fisheries Agreement between P. R. China and the Republic of Korea, that came into effect in the early 2000s. According to these agreements, many traditional fishing grounds for Chinese fishermen, e.g., in the Gulf of Tokin and East China Sea, are under jurisdiction of China’s neighbouring countries, which significantly limits Chinese commercial fishing activities in those areas [47].

The combination of domestic resource depletion and China’s implementation of UNCLOS has pushed the expansion of China’s distant water fishing industry (DWF). In 1985, China started fishing in West

Africa and quickly expanded its presence around the globe. Today, China has emerged as a major DWF State, which now operates in the EEZs of more than 40 countries as well as high sea portions of the Pacific, Indian Ocean and Atlantic [42]. While global fisheries are declining [31], Chinese DWF continues to grow. From 2012–2014, the number of Chinese DWF vessels grew from 1830 to 2460, ten times more than the size of the US fleet [37]. Alongside the size of the fleet fuel subsidies from Chinese government to DWF also grew from RMB 281 million in 2006 to RMB 2.68 billion in 2011 [37]. China’s Ministry of Agriculture estimated that high seas fishing accounted for 65% of China’s marine capture fisheries in 2014 [9].

Against this backdrop, Chinese DWF extends to Antarctica. China Fisheries Bureau adopted its policy paper for developing DWF in 2012 stating [33]:

“Because there is still potential for further krill fishing in Antarctica, China should actively explore/exploit Antarctic marine living resources under the framework of CCAMLR, with particular focus on krill resources. It should conduct further research on Antarctic marine living resources survey and polar fishing technology. China aims to have better idea about fishery resources in the region, expand fishing activities, and try to make profit by developing market for krill products. The Chinese government encourages Chinese fishing enterprises to either buy or build krill fishing vessels, so as to commercialize Antarctic krill fishing as soon as possible.”

This largely explains China's initial concerns over proposed no-take zones in the Ross Sea MPA proposal and insistence for krill research fishing zones and limited duration MPAs. Further, China may have been concerned about setting precedent for other Southern Ocean MPAs, including MPAs planning currently underway around the Antarctic Peninsula – the area of the Southern Ocean that supports CCAMLR Member States' (including China) main krill fishing grounds.

China continues to explore opportunities to expand DWF in Antarctic waters. For example, in the 2016/2017 fishing season, a Chinese krill fishing vessel was sent to the East Antarctic, where no fisheries occurred since the mid-1990s [56]. Interests in expanding krill fisheries in this region may, in part, explain China's continued resistance to the East Antarctic MPA proposal. But also, as a space where sovereignty is suspended under the Antarctic Treaty, the Southern Ocean continues to be a shared commons. Fishing can be used as a means to occupy space in this global commons, meeting geopolitical as well economic goals by asserting power and securing future access. Thus, a new Chinese krill fishing effort in the East Antarctic that initiated in 2017 may be worth more in terms of geopolitics than it is in terms of money.

On the other hand, China's expanding global DWF interests are increasingly accompanied with high diplomatic and political costs. For example, 20 Chinese fishermen were jailed for up to four years in Ecuador in 2017, for illegally fishing in the Galapagos National Park, where they were caught with 6600 sharks [51], resulting in diplomatic tensions between China and Ecuador. Similarly, illegal fishing of Chinese vessels in waters of several countries, such as Argentina [28], South Korea [32] and Indonesia [6], have resulted in further tensions. As China works to protect and promote its fishing access, it must also be mindful of maintaining and building multi-lateral diplomacy.

3.2.3. International diplomacy

After engaging with the international system for more than four decades, especially since Xi Jinping took office as the President of the People's Republic of China in 2012, China's role in international diplomacy has shifted from one of a low-key follower to that of an active player. With its growing economic power, more than ever before, China seems willing to contribute to addressing global challenges. China has been advancing the Belt and Road Initiative since 2013, which intends to construct a Silk Road Economic Belt and Maritime Silk Road to connect Asia, Europe and Africa [58]. Moreover, in the environmental sphere, China ratified the Paris Climate Agreement during the 2016 G20 Summit in Hangzhou, which is highly symbolic of China's willingness to play an important role in tackling global environmental issues such as climate change. China's 13th Five Year Plan (2016–20) clearly states that the nation would like to take a more active role in shaping global ocean governance. Moreover, in January 2017, Chinese President Xi Jinping gave a speech “Establishing Common Future for Humankind” at the United Nations Office in Geneva where he emphasized that the deep seabed, Polar Regions, outer space and the Internet are “Strategic New Frontiers” for international cooperation [11,12]. Chinese diplomacy in these fields has also increased noticeably in recent years. For example, China started hosting the World Internet Conference (Wuzhen Summit) since 2014, which is a major platform for exerting Chinese diplomacy on cyber issues.³ However, being more

“active” might also be interpreted as being more vocal and may in part explain China's significant activity in vocally opposing MPAs during CCAMLR negotiations.

In recent years, the international community has pushed for greater efforts towards marine conservation, and this has extended to the high seas. Since 2015, the United Nations has been working towards developing a legally binding instrument under UNCLOS for conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction [36]. Simultaneously, negotiations on the regulation of fishing in the high seas portion of the central Arctic Ocean [41] have been ongoing as well as discussions about the Ross Sea and the East Antarctic MPAs. In the Northeast Atlantic, OSPAR has already established a network of high sea MPAs.⁴ Thus, MPAs and high seas conservation has become a tool for international diplomacy.

While China's Antarctic fishing so far accounts for only a very small share of its global catch (less than 2%),⁵ these fisheries are highly symbolic because Antarctic fishing showcases China's quest for freedom in the high seas. Further, China's more vocal involvement in CCAMLR may be indicative of its leadership in developing governance regimes for “strategic new frontiers”. As a rising power, China will not act as a quiet follower, and/or face constraints or bans on its activities at a time when its rising status gives it access to places like the high seas, the ocean floor, the poles, and outer space. This partly explains why China was originally against the proposal of the Ross MPA and the restrictions it might place on their Antarctic fisheries development both in practice and principle. However, China came to support the revised proposal perhaps in an effort to enhance diplomatic relations between the United States (a Ross Sea MPA proponent) and China. For example, prior to the 2015 annual CCAMLR meeting, President Xi Jinping visited the United States and engaged in discussions with President Barack Obama about a Ross Sea MPA [63]. And the results from the 8th Round of China-US Strategic and Economic Dialogue in June 2016 suggested that China and the United States are willing to work together in establishing the Ross MPA within CCAMLR [13].

4. China's future role in Antarctic governance

Given China's changing positions on the Ross Sea MPA, the next question is: what does a rising China mean for future Antarctic governance? The relative power of States and the policy goals that each is pursuing necessarily influence the content of international law and its implementation [61]. The States that determine the international law-making agenda and the allocation of resources to law-making play a crucial role [7]. The Antarctic Treaty can be seen as part of global arrangement between two super-powers – the United States and the Soviet Union after the Second World War. Since then, however, the world has witnessed significant geopolitical change, not least the rise of China.

China's scientific capacity in the Polar Regions has improved rapidly. In the 13th Five-Year Plan of the National Economic and Social Development of China (2016–2020), a major program exploring the Polar Regions was announced (Xue Long Tan Ji). In 2016, China's first fixed wing aircraft “Xue Ying 601” was put in service. This greatly enhanced the logistical capacity of Chinese Antarctic expeditions [57]. China has also started the construction of a second icebreaker (Snow Dragon 2), which is planned to be ready for sailing in 2019 [66]. This growing scientific capacity will help China better understand Antarctica and strengthen the Chinese presence in the region, while supporting

³ World Internet Conference, Wuzhen Summit, < <http://www.wuzhenwic.org> > Accessed 26 December 2017.

⁴ OSPAR Commission, MPAs in areas beyond national jurisdiction, < <https://www.ospar.org/work-areas/bdc/marine-protected-areas/mpas-in-areas-beyond-national-jurisdiction> > Accessed 26 December 2017.

⁵ ~65,000 t caught in the Antarctic in 2016 (see Fig. 1), compared to estimated global catch per [48].

China's ambition to become a significant player in Antarctic governance.

In May 2017, China, for the first time, hosted the Antarctic Treaty Consultative Meeting (ATCM) in Beijing.⁶ This 40th ATCM could be seen as a milestone in China's engagement with the ATS whereby China, though a latecomer, now plays a more active role in the system after a decades-long learning process. During the 40th ATCM, China organized a special meeting on the balance between use and protection of Antarctica, with high-level government officials emphasizing the utilization of Antarctica in the future [12]. At the same time, to China, Antarctica is different from areas considered "core interests" such as the South China Sea or Taiwan ([59]). In a "strategic new frontier" like Antarctica, China will likely play an important part in the continued evolution of the ATS, trying to influence the development of the regime for its national interests. While the rise of China led to growing pressure for other States to offer China more weight in global issues, suggestions that China will abandon the structures of international order are overblown [27]. It is highly unlikely that China will leave the ATS in the foreseeable future. Further, China would not seek to openly conduct mining activities in Antarctica in the near future, which has been banned by the Madrid Protocol (Article 7, Madrid Protocol). Although China has yet to publish its official Antarctic policy, China has reiterated many times, including in its latest White Paper "China's Antarctic Activities" that the stability of the ATS will be enshrined.

As an international space, the Antarctic needs to be sustainably managed by all States involved and China's rise in Antarctica demands taking more responsibility in the region. This includes activities such as conducting search and rescue operations, providing more research funding for international scientific cooperation and contributing to capacity building of other developing countries' Antarctic affairs. Further, if China, as a rising power, is eager to expand diplomatic influence and deepen participation in the Antarctic regime, shaping international law towards better protection of the Antarctic environment would be a convincing option for China to start with. This was highlighted by President Xi Jinping's visit to Hobart in 2014, when he stated that the guiding principles for China's Antarctic activities should be to "Understand, Protect and Use" Antarctica [10]. Leadership with regards to science, protection and sustainability in Antarctica, including fishing, would enable a positive role for China in Antarctic affairs.

5. Concluding remarks

The establishment of a Ross Sea MPA is an interesting example of changing Antarctic governance in the era of climate change and geopolitical shifts. While China was one of the most vocal opponents to a Ross Sea MPA in early years of negotiations, the three issues outlined above help explain its change in position. As China warmed up to the CAMLR Convention and the larger ATS, Chinese delegates learned the rules and provisions while also building trust in the regime. The revised MPA eventually met China's fishing interests with the addition of a KRZ and limited duration. Finally, agreeing to the MPA also allowed an exertion of high-level diplomacy, both at the presidential level between the United States and China, and in line with global ocean targets and trends. However, other MPAs being negotiated in CCAMLR, including in the East Antarctic, may have not yet met the goals and incentives of China in terms of fishing interests and diplomacy. The United States demonstrated diplomacy by working with China to pave the way for the Ross Sea MPA. The EU, together with France and Australia (all proponents of the East Antarctic MPA proposal), also have the potential to gain China's support, once they find economic levers of influence and

diplomatic common ground.

In short, the Antarctic governance regime will continue to evolve, so as to meet challenges in this most extreme and remote continent. In the era of the Anthropocene, States must work together to maintain the diplomatic stability of the Antarctic and uphold its founding principles of peace and science. China's best Antarctic strategy would be to continue to employ the ATS as a vehicle for becoming more active in international governance, enhancing multi-national diplomacy, and conducting its fishing only in accordance to the precautionary and science-based rules under the CAMLR Convention. China's rising role in global governance and investment in the Poles provides an opportunity for leadership in the Antarctic and beyond.

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⁶ The ATCM is the meeting for all parties of the Antarctic Treaty to discuss pressing Antarctic issues. Only consultative parties – parties that have demonstrated their interest in Antarctica by "conducting substantial research activity there" – are allowed to take part in decision-making processes. China became a consultative party in 1985, after the establishment of the first Antarctic Station - Great Wall Station.

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