

INTRODUCTION

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The historian David Day has described Antarctica as ‘a mirror on which centuries of human hopes, fears and desires have been projected.’¹ These projections have taken a myriad of legal forms, as states initially explored and claimed parts of the Antarctic continent and its adjacent waters, and from 1959 onwards put territorial ambitions to one side in favour of cooperative management under the *Antarctic Treaty*.² Fears that Antarctica would become a new front in the Cold War catalysed agreement on that treaty and the Antarctic Treaty System (ATS) built around it, and provided the foundations for surprisingly harmonious and effective governance of the frozen continent.

There are, however, new anxieties for the continent, and the Southern Ocean that surrounds it. Antarctica already feels the early effects of climate change and ocean acidification. Claimant states assert rights to the Antarctic continental shelf and competitive interest in Antarctic resources grows. Tourism is spreading, bringing environmental and safety risks. China and other new powers are significantly increasing their presence on the continent, and some question the old consensus of the ‘Antarctic club’. Security concerns too are increasingly discussed, despite the dedication of Antarctica to peaceful purposes over the past 50 years.

As the primary legal materials in this book show, however, Antarctica’s legal and regulatory arrangements have constantly and effectively adapted to meet new challenges, evolving into an increasingly sophisticated, inclusive, dynamic and responsive governance regime. To set the scene for the materials that follow, this introductory essay explains the background, context and development of the cooperative legal regimes governing the Antarctic continent, its adjacent waters, continental shelf and islands, and the unique environment and living and non-living resources found there.

Antarctic Geography and Ecology

Most of the Antarctic continent falls within Antarctic Circle (at 66°33’44”S, the northernmost latitude where the sun does not rise in winter and does not set in summer). Unlike the Arctic, which is surrounded by five nearby coastal states, most of the Antarctic continent is extremely remote, with the exception of the Antarctic Peninsula that stretches northwards towards Cape Horn, the southern tip of the South American continent.

The Antarctic continent covers an area of around 14 million km², and almost all of its surface is covered by the Antarctic ice sheet. At the littoral edge of the continent there are large ice shelves that extend seawards, in some cases by many hundreds of kilometres. The Ross ice shelf is the largest, with an area around the size of France. Antarctic ice sheets

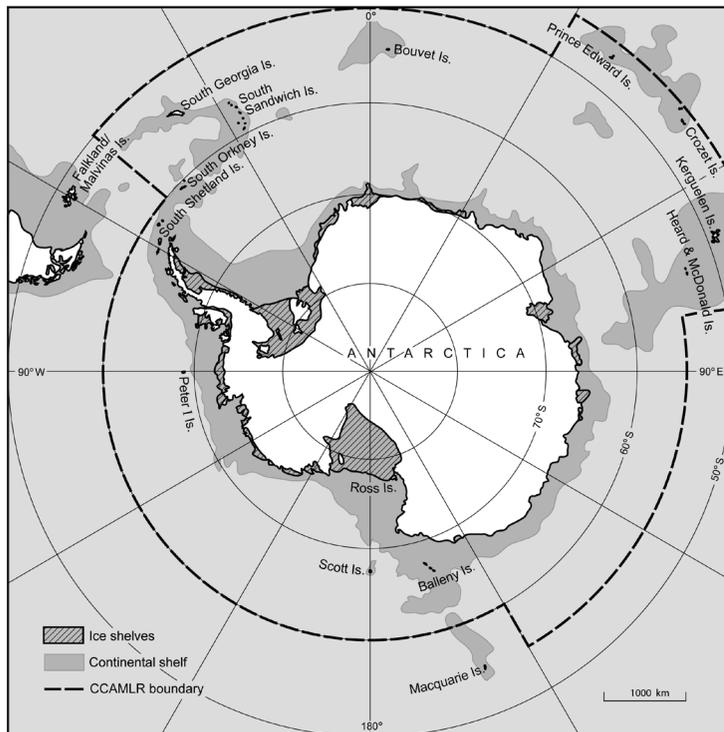
¹ David Day, ‘Ice Works: Three Portraits of Antarctica’ *The Monthly*, March 2012, 56. See further David Day, *Antarctica: A Biography* (Vintage, Sydney, 2013).

² Antarctic Treaty, adopted 1 December 1959, 402 UNTS 71 (entered into force 23 June 1961).

(on the Antarctic continent), ice shelves (where glaciers flow onto adjacent seas) and sea ice (which forms at sea) are undergoing substantial changes as a result of human-induced climate change. In summary, while seasonal sea ice is increasing in area, the ice sheets and shelves are losing volume.

Ecologically, the Antarctic bioregion extends from the continent into the sea, taking in areas of adjacent seas in the Southern Ocean extending beyond the sea ice fringing the continent and well into the Southern Temperate Zone. Whereas the biomass on the Antarctic continent itself is limited (there is, for instance, virtually no plant life on Antarctica), the Antarctic coastline and Southern Ocean supports extensive marine and seabird life, such as marine mammals (whales and seals), lower order fauna species such as toothfish and krill, and birdlife including penguins and albatrosses.

A key biophysical boundary that distinguishes the Antarctic is the Antarctic Convergence (or 'Polar Front'), the oceanic boundary, variably occurring between 45°S and 60°S, where colder Antarctic waters meet warmer northern seas. There is evidence that as the world's oceans absorb heat, the Antarctic Convergence, or Antarctic Polar Front, is moving southwards, and the Southern Ocean is becoming less alkaline under the influence of ocean acidification (as the oceans absorb CO₂ from the atmosphere).³ The effects upon Southern Ocean are likely to be severe unless greenhouse gas emissions are very significantly reduced.



³ John Turner et al, 'Antarctic Climate Change and the Environment: An Update' (2014) 50 *Polar Record* 237. See also, Tim Stephens, 'Warming Waters and Souring Seas: Climate Change and Ocean Acidification' in Donald R. Rothwell, Alex G. Oude Elferink, Karen N. Scott, Tim Stephens (eds), *The Oxford Handbook of the Law of the Sea* (OUP, Oxford, forthcoming, 2015).

Territorial Claims to Antarctica

The early legal history of Antarctica mirrors the history of other frontier areas subject to discovery, territorial claims and occupation. The expeditions of the British explorer Captain James Cook, who made a circumpolar voyage in the 1770s, provided the first persuasive evidence that a 'Great Southern Land' lay at high latitudes in the Southern Ocean. However, it was not until the 1820s that the continent was first sighted, at around the same time, by Russian and British discoverers and an American sealer. The early nineteenth century witnessed extensive activities by sealers and whalers, who pursued rich stocks of these species that Cook and others had reported on returning from their voyages. There was a frenzy of activity at the beginning of the twentieth century, leading to stunning new discoveries, but also disastrous tragedies. Both features of Antarctic exploration were on display in the race to the South Pole, won by a Norwegian team led by Roald Amundsen. British explorer Robert Falcon Scott arrived at the geographic South Pole a month later, but perished with four others in his Terra Nova expedition during the return journey to the edge of the continent.

Further government sponsored voyages of discovery followed, and these soon turned to expeditions directed at claiming formal, legal possession of parts of Antarctica. From the early twentieth century until the 1950s, seven states made claims to Antarctica: Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom. These resulted in most of the continent coming under one (or several) claims to territorial sovereignty, with the exception of Ellsworth Land and Marine Byrd Land, which to this day remain unclaimed (and indeed are the only land areas on Earth that have not been subject to sovereign claim). The United Kingdom maintains the earliest claim to Antarctica, which is closely linked to its claims to the sub-Antarctic South Georgia Island (over which Cook proclaimed sovereignty), and the Falkland Islands further north. The extent of the British claim, which embraces the Antarctic Peninsula, was set out in Letters Patent in 1908,⁴ and in 1962 the claimed sector between 20°W and 80°W was named the British Antarctic Territory (BAT).⁵ Claims by Argentina and Chile overlap with most of the BAT.

The titles to Antarctica claimed by Australia and New Zealand derive from various discoveries and proclamations of sovereignty made on behalf of Britain, and later independently of British claims. The Australian geologist and explorer, Douglas Mawson, who led the Australasian Antarctic Expedition between 1911 and 1914, and later the British, Australian and New Zealand Antarctic Expedition between 1929 and 1931, made claims to large areas of Antarctica. New Zealand's claimed sector, the Ross Dependency, was created by the British government and transferred to New Zealand administration in 1923.⁶ Ten years later, the Australian Antarctic Territory (AAT) was recognised by the British government and placed under the administration of the Commonwealth of Australia.⁷

Australia's Antarctic claim remains the largest of the seven claimants, covering approximately 42 per cent of the continent. Within the AAT lies a slender sector claimed by France, Adelie Land. The eastern and western boundaries of Adelie Land were settled between Britain and France in 1938.⁸ Norway's claims to Antarctic territory emerged at around the time that the extent of the French claim was clarified. Based upon Amundsen's

⁴ 'Letters Patent Providing for the Government of the Falkland Islands Dependencies', 21 July 1908.

⁵ British Antarctic Territory Order 1962 (UK).

⁶ Order in Council under the British Settlements Act 1887 (UK).

⁷ Australian Antarctic Territory Acceptance Act 1933 (Australia).

⁸ Decree Defining the Limits of Adelie Land, 1 April 1938 (France).

discovery of the South Pole, Norway asserted priority of claim over those territories where the conditions of effective occupation could be fulfilled, and in 1939 issued a proclamation over a lengthy area of the Antarctic coast between the Australian and British Antarctic Territories, and inland areas explored by Amundsen. Chile's and Argentina's claims to Antarctica were proclaimed in the early 1940s, and overlap between each other, and also with areas of the British Antarctic Territory.

The Antarctic continent is fringed by a large number of coastal islands and a smaller number of offshore islands and groups. Except for islands adjacent to the unclaimed sector of Antarctica, all of these islands have been subject to territorial claims, sometimes by several states (such as the South Shetlands, which are claimed by Argentina, Chile and the United Kingdom). The sovereign claims over Sub Antarctic islands have not been subject to any general opposition (that is to say it is generally accepted that the islands may be claimed, even if there is dispute in relation to some of them among several overlapping claimants). The same cannot be said for the Antarctic continent itself.

The validity of the territorial claims to Antarctic territory is recognised only by the claimants themselves. The claimants insist that general principles of international law concerning the acquisition of territory, as set out in the *Island of Palmas Arbitration*⁹ and the *Eastern Greenland Case*,¹⁰ also apply in the Antarctic context. Discovery, followed by formal proclamation of title and an ongoing display of authority through effective occupation, is the *sine qua non* for sovereignty over *terrae nullius*. The obvious difficulty in meeting the effective occupation requirement in Antarctica is the great distance from the claimant states and the hostile environment, which make settlement beyond isolated research stations impractical. However, the claimants have contended that a lesser standard of effective occupation is accepted in the *Island of Palmas Arbitration* and *Eastern Greenland Case* in respect of remote areas, such that a reasonable level of state activity and administration, given the circumstances, will be sufficient to meet the requisite standard.¹¹

The Antarctic Treaty System

The Antarctic Conference and the Antarctic Treaty

In 1948 the United States, which had not claimed territory in Antarctica, proposed placing Antarctica under United Nations trusteeship.¹² The proposal was rejected by some claimant states, which insisted on their sovereign rights, while other claimants (such as Britain) did not want the Soviet Union to gain a foothold in Antarctica under United Nations auspices. A revised United States proposal for a multi-power condominium over Antarctica also faced a mixed reception.¹³

By the middle of the twentieth century there was however a decisive shift in the international legal treatment of Antarctica, from being a domain of territorial claims to

⁹ *Netherlands v United States* (1928) 2 RIAA 829.

¹⁰ *Legal Status of Eastern Greenland (Norway v Denmark)* (1933) PCIJ Rep Ser A/B No. 53.

¹¹ Donald R. Rothwell, *The Polar Regions and the Development of International Law* (CUP, Cambridge, 1996), 59-61.

¹² United States Draft Agreement for Placing Antarctica under a United Nations Trusteeship, June 1948, in W.M. Bush, *Antarctica and International Law: A Collection of Inter-state and National Documents* (Oceana Publications, New York, 1988), vol. III, 461-464.

¹³ United States Draft Agreement for Providing for a Condominium over Antarctica, July 1948, in Bush, *ibid*, 464-465.

one of international concern and management through the *Antarctic Treaty*. A number of factors explain this shift, including the increased prominence given to cooperative scientific investigation in Antarctica, as exemplified by the International Geophysical Year of 1957-58, as well as fears of superpower competition during the Cold War.

The international legal framework for the Antarctic is provided by the Antarctic Treaty System, the centrepiece of which is the *Antarctic Treaty*, which was agreed in 1959 in Washington DC. The Preamble to the *Antarctic Treaty* recognises that 'it is in the interest of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.' Concluded at the height of the Cold War between the United States and Soviet Union, the *Antarctic Treaty* addresses the key issues of concern to the international community in the management of Antarctica: the demilitarisation of Antarctica, the promotion of scientific research and, most critically of all, the freezing of claims to territorial sovereignty.

The original parties to the *Antarctic Treaty* were the twelve states participating in the Antarctic Conference: Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the Soviet Union, the United Kingdom and the United States. These states had the most significant interests in Antarctica, including the two superpowers, and all seven states that had made territorial claims to Antarctica. Admittedly, original membership was still somewhat politicised; China's was explicitly excluded by a United States veto.¹⁴ The *Antarctic Treaty* establishes a regime that is, however, also open to participation by all states, even those without particular Antarctic interests.

The *Antarctic Treaty* nevertheless bestows some privileges upon the most active Antarctic states by creating a two-tier membership structure: Antarctic Treaty Consultative Parties (ATCPs) and non-consultative parties. The ATCPs are the original members in addition to those states subsequently joining the treaty that have demonstrated an interest in the Antarctic by undertaking substantial research activity there.¹⁵ There are now 28 ATCPs and these members are entitled to attend and participate in decision-making at annual Antarctic Treaty Consultative Meetings (ATCMs). This is in contrast to the 22 Non-Consultative parties that are permitted to attend ATCMs but not vote upon decisions. The latest state to join the *Antarctic Treaty* is Pakistan, which became a Non-Consultative party in March 2012, taking the total number of state parties to 50 – about one quarter of all states, with 80 per cent of the world's population.¹⁶ There are also three ATCM Observers.¹⁷

The *Antarctic Treaty* was presented by the claimants and the ATCPs as an objective regime, that is one having legal effect upon all states, including non-parties. However this was contested by a number of states, notably Malaysia which was behind the placing, in 1983,¹⁸ of the 'Question of Antarctica' on the agenda of each annual meeting of the First Committee of the United Nations General Assembly (UNGA). Malaysia argued that Antarctica should be regarded as the common heritage of humankind of similar status to the high seas.

Malaysia's position shifted in the early 2000s from being opposed to the ATS to being actively engaged with it. Following a Malaysian initiative, from 2005 the General Assembly

¹⁴ Anne-Marie Brady, 'China's Rise in Antarctica?' (2010) 50 *Asian Survey* 759, 761.

¹⁵ *Antarctic Treaty*, Art. 9(2).

¹⁶ Karen Scott, 'Institutional Developments within the Antarctic Treaty System' (2003) 52 *International and Comparative Law Quarterly* 473, 476.

¹⁷ The Scientific Committee on Antarctic Research (SCAR), Commission for the Conservation of Antarctic Marine Living Resources and Council of Managers of National Antarctic Programs (COMNAP).

¹⁸ See UN General Assembly Resolution 38/77 (15 December 1983).

remained 'seized' of the 'Question of Antarctica' but no longer considers it annually on the Assembly's agenda or receives regular reports.¹⁹ Malaysia has since become increasingly active in Antarctic science programs, and acceded to the *Antarctic Treaty* in 2011.

Core Elements of the Antarctic Treaty

The *Antarctic Treaty* has three main elements. First, the Treaty establishes that Antarctica is to be used exclusively for peaceful purposes, and prohibits the deployment of military forces in Antarctica unless used for scientific research or other peaceful purposes.²⁰ A right to inspect others' scientific bases has, however, been little used. Second, the Treaty seeks to facilitate and promote the freedom of scientific investigation, and requires states to cooperate to the greatest extent possible in their research endeavours.²¹

Third, and perhaps most significantly, the Treaty includes a very carefully drafted provision that freezes sovereign claims for the life of the treaty, and prohibits the enlargement of existing claims or the making of new claims.²² Non-claimant states are therefore free to undertake scientific research and establish scientific stations in the purported 'territory' of claimant states, just as claimant states can establish bases in the 'territories' of other claimant states.

Another consequence of the suspension of sovereignty is that claimant states cannot exercise their usual civil, criminal and enforcement jurisdiction over the territories they claim. Instead, Article VIII of the *Antarctic Treaty* permits states to exercise nationality jurisdiction, that is, to regulate only the activities of their own citizens in Antarctica.²³ Later treaties recognise certain forms of jurisdiction for specific purposes, such as environmental protection or ensuring the safety of aerial or maritime navigation. But in general a state cannot exercise jurisdiction over non-nationals, potentially giving rise to gaps in law enforcement where another state party to the *Antarctic Treaty* does not enforce its laws against its nationals, or where nationals of non-party states are involved.

The *Antarctic Treaty* defines its area of operation to be south of 60°S,²⁴ which captures the landmass and also significant adjacent sea areas. This 'Antarctic Treaty area' (ATA) sets the boundary which applies in respect of all except one of the treaties that make up the ATS. The 1980 *Convention for the Conservation of Antarctic Marine Living Resources*²⁵ (CAMLR) adopts a more northerly boundary, which extends that treaty's operation up to a circumpolar line that roughly approximates the Antarctic Convergence, discussed above.²⁶

The Antarctic Treaty System

A significant feature of the *Antarctic Treaty* was that it was intended to establish an evolving international legal regime that would grow over time to deal with Antarctic questions as

¹⁹ Peter J. Beck, 'The United Nations and Antarctica, 2005: The End of the "Question of Antarctica"?' (2006) 42(3) *Polar Record* 217.

²⁰ Antarctic Treaty, Art. 1.

²¹ *Ibid.*, Arts. 2 and 3.

²² *Ibid.*, Art. 4.

²³ See generally Donald R. Rothwell, 'Law Enforcement in Antarctica' in Alan Hemmings, Donald R. Rothwell and Karen Scott (eds), *Antarctic Security in the Twenty-First Century* (Routledge, London, 2012), 135.

²⁴ Antarctic Treaty, Art. 6.

²⁵ Convention on the Conservation of Antarctic Marine Living Resources, adopted 20 May 1980, 1329 UNTS 47 (entered into force 7 April 1982).

²⁶ *Ibid.*, Art. 1(4).

they arose. The *Antarctic Treaty* laid the legal foundations for what was to become the ATS, first clearly defined in the 1991 *Protocol on Environmental Protection to the Antarctic Treaty (Environmental Protocol)*²⁷ as ‘the Antarctic Treaty, the measures in effect under the Treaty, its associated separate international instruments in force and the measures in effect under those instruments.’²⁸

From 1959 onwards the Antarctic regime was developed first through the adoption of recommendations by ATCMs (which now number in the hundreds), including the 1964 Agreed Measures on the Conservation of Antarctic Fauna and Flora.²⁹ Later the ATS was augmented by new treaties, the first being the 1972 *Convention for the Conservation of Antarctic Seals* (CCAS),³⁰ later the CCAMLR, and most recently the Environmental Protocol. The CCAMLR and the *Environmental Protocol* regimes have themselves undergone significant evolution.

Agreement on the *Antarctic Treaty* crystallised in large part because of security concerns during the Cold War. There was another equally important turning point in the late 1980s which led to the adoption of the *Environmental Protocol*. The *Antarctic Treaty* did not deal with mineral resource issues, and it was not clear how mining in the Antarctic could occur. To resolve the uncertainty and in an effort to open up Antarctica to mining, the 1988 *Convention on the Regulation of Antarctic Mineral Resources*³¹ (CRAMRA) was adopted. However, there was a quick turn-around in international attitudes towards Antarctic mining, with Australia and France reversing support for CRAMRA and pushing instead for a comprehensive treaty to protect the Antarctic environment. This led in a short time to the effective abandonment of CRAMRA, which never entered into force, and the adoption instead of the Environmental Protocol which provides in Article 7 that ‘[a]ny activity relating to mineral resources, other than scientific research, shall be prohibited.’

The ATS is somewhat unique among international regimes in not having strong central institutions for management and governance. The *Antarctic Treaty* establishes regular ATCMs to discuss Antarctic affairs, held biennially until 1991 (often with inter-sessional preparatory meetings) and annually thereafter (without preparatory meetings). There are also occasional Special Consultative Meetings and Meetings of Experts.

Over time the agenda of ATCMs has become fuller and more diverse, and its working methods and outputs more systematised. ATCMs exercise law-making, administrative, and non-binding standard setting powers.³² In 1995 the ATCM adopted Decision 1 on Measures, Decisions and Resolutions, which sets out the legal status of ATCM texts. Only ‘measures’ are legally binding, once approved by all ATCPs. ATCM ‘decisions’ are operative only in respect of internal organisational matters. ‘Resolutions’ have only a recommendatory effect.

In recent practice, legally binding measures tend to be confined to the technical or scientific designation of specific protected areas and historic sites.³³ Where there is less consensus, as

²⁷ Protocol on Environmental Protection to the Antarctic Treaty, adopted 4 October 1991, 30 ILM 1455 (entered into force 14 January 1998) (Environmental Protocol).

²⁸ Environmental Protocol, Art. 1(e).

²⁹ Agreed Measures on the Conservation of Antarctic Fauna and Flora, 1964, ATCM III–VIII.

³⁰ Convention for the Conservation of Antarctic Seals, adopted 1 June 1972, 1080 UNTS 175 (entered into force 11 March 1978) (CCAS).

³¹ Convention on the Regulation of Antarctic Mineral Resources, adopted 2 June 1988, 27 ILM 868 (never entered into force) (CRAMRA).

³² Alan Hemmings, ‘The Antarctic Treaty System’ (2012) 10 *New Zealand Yearbook of International Law* 39, 42.

³³ *Ibid.*, 40.

on more political or policy-oriented issues, non-binding resolutions are more common.³⁴ Even so, such 'soft' law can still shape behaviour on the ground amongst the relatively small social community of states and actors in Antarctica. Precisely because resolutions do not have immediate legal effects, they may be easier to agree upon and reflect nascent normative agreements. Even if they do not coalesce into 'harder' norms over time, they can still continue to influence community expectations of good Antarctic practice.

The *Environmental Protocol* also establishes an additional forum for the governance of Antarctic environmental matters: The Committee for Environmental Protection (CEP). The CEP is 'to provide advice and formulate recommendations to the Parties in connection with the implementation of this Protocol, including the operation of its Annexes'.³⁵ A significant number of ATCM texts relate to CEP matters. The CCAMLR Commission also possesses certain law-generating and standards setting powers. Its Conservation Measures are binding on all members and apply in the CCAMLR Convention area. Its resolutions are non-binding but complement or supplement its Measures, and parties are urged to implement them.

The ATS contrasts significantly with the more primitive governance arrangements in the Arctic polar region. In the Arctic, there is 'no firm legal structure, or regulatory functions assumed by a regional body, and only limited capacity to influence the development of Arctic policy'.³⁶ The difference is partly explained by geography. There is no Arctic landmass, undisputed sovereign territories fringe Arctic waters, and Arctic states exercise the usual legal rights and powers of sovereigns. The number of states directly involved in Arctic affairs is also fairly small – eight – lessening the pressures for a more participatory regime open to a wider group of interested states. The geopolitical and other factors driving a special Antarctic regime and stronger Antarctic cooperation are not the same in the Arctic, even if the Arctic presents its own unique coordination and governance challenges (such as the increase in shipping resulting from rapidly declining sea ice, overfishing, and overlapping maritime and continental shelf zones).

Sovereignty Issues

Article 4 of the *Antarctic Treaty* places to one side the sovereignty question for the life of the Treaty; existing claims are neither recognised nor rejected, while no new claims or the enlargement of existing claims are permitted. It is this delicate and ambiguous compromise that is central to the stability of the ATS, allowing parties to manage Antarctic affairs in a co-operative manner without having either to defend or protest territorial interests.³⁷ By precluding new claims, however, the ATS preserves a status quo that is more favourable to existing claimant states than would-be Antarctic powers.

Disputes over Antarctic sovereignty have been deferred but are not forgotten, nor resolved. Indeed, the very terms of Article 4 have been the subject of discussion and debate. For instance, Article 4 issues have arisen after some claimant states purported to establish maritime zones adjacent to their Antarctic territories.³⁸ Those who made these maritime

³⁴ Ibid, 42.

³⁵ Environmental Protocol, Art. 12.

³⁶ Tim Stephens, 'The Arctic and Antarctic Regimes and the Limits of Polar Comparativism' (2012) 54 *German Yearbook of International Law* 315, 316.

³⁷ Gillian D. Triggs, *International Law and Australian Sovereignty* (Legal Books, Sydney, 1986), 137.

³⁸ Patrizia Vigni, 'Antarctic Maritime Claims: "Frozen Sovereignty" and the Law of the Sea', in Alex G. Oude Elferink and Donald R. Rothwell (eds), *The Law of the Sea and Polar Maritime Delimitation and Jurisdiction* (Martinus Nijhoff, Leiden, 2001), 69.

claims sought to explain them on the basis that they are permitted under the law of the sea and the *Antarctic Treaty*, because the latter does not prevent states from simply declaring existing legal entitlements that flow from territorial claims. This argument has merit in relation to the territorial sea and the continental shelf, both of which are inherent maritime zones belonging automatically to coastal states.³⁹ A number of non-claimants, most notably the United States, have strongly protested these claims, but on the basis that the territorial claims upon which they are dependent are themselves not legally sound.⁴⁰

Claimants made various maritime claims from the 1960s onwards, but matters have now come to a head with the territorial claimants submitting data on the extent of their Antarctic continental shelves to the Commission on the Limits of the Continental Shelf (CLCS), through the process established by the *United Nations Convention on the Law of the Sea* (UNCLOS). This process has, to date, been handled diplomatically and has not been elevated to a dispute before an international court or tribunal.

There have been only two cases in the International Court of Justice to touch upon Antarctic issues, and neither led to an engagement with sovereignty issues. In the first, the *Antarctica Case*, the United Kingdom asserted its sovereignty over the Falkland Island Dependencies, which included its Antarctic territorial claim, and contested the competing claims by Argentina and Chile. However, the Court did not have jurisdiction and the case was removed from the Court's docket in 1956.⁴¹

In the recent *Whaling in the Antarctic* case between Australia and Japan, Australia contended that Japanese scientific whaling was unlawful under the terms of the *International Convention for the Regulation of Whaling* (ICRW),⁴² rather than basing the argument on any claim to jurisdiction over whales and living resources generally within waters adjacent to the AAT. Consistent with the way in which the case was argued by the parties, it is unnecessary for the Court to consider Antarctic sovereignty issues.

Antarctic Continental Shelf Submissions

Ordinarily, coastal states enjoy sovereign rights to explore and exploit living and non-living natural resources in their continental shelf under Article 77 of UNCLOS. Article 76(1) sets the limits of this zone to either 200 nautical miles (nm) from the coastal state's baselines, or to the outer edge of the continental margin if it extends beyond 200 nm. All seven Antarctic claimants are parties to the ATS and UNCLOS and assert that by virtue of being coastal states they are entitled to define their continental shelves where their margins extend from the landmass beyond 200 nm.

In this respect Article 76 affords coastal states two options for identifying the outer limits of their continental shelves. They may delineate lines by reference to the outermost fixed points at each of which the thickness of the sedimentary rocks is at least one per cent of

³⁹ United Nations Convention on the Law of the Sea, adopted 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994), Art. 77(3) (UNCLOS). Stuart B. Kaye, 'The Outer Continental Shelf in the Antarctic', in Alex G. Oude Elferink and Donald R. Rothwell (eds), *The Law of the Sea and Polar Maritime Delimitation and Jurisdiction* (Martinus Nijhoff, Leiden, 2001), 69, 125–137.

⁴⁰ However note that the United Kingdom sought to bring proceedings against two other claimants, Argentina and Chile, in relation to disputed Antarctic and sub-Antarctic territories: ICJ, *Antarctica (United Kingdom v Argentina; United Kingdom v Chile)*, Order of 16 March 1956, [1956] ICJ Rep 12; [1956] ICJ Rep 15.

⁴¹ *Antarctica (United Kingdom v Argentina; United Kingdom v Chile)*, Order of 16 March 1956, [1956] ICJ Rep 12; [1956] ICJ Rep 15.

⁴² *International Convention for the Regulation of Whaling*, opened for signature 2 December 1946, 161 UNTS 72 (entered into force 10 November 1948).

the shortest distance from the point to the foot of the continental slope.⁴³ Alternatively they may apply a combined geomorphological and geographical approach, specifying a line by reference to fixed points not more than 60 nm from the foot of the continental slope.⁴⁴ While states are entitled to adopt either approach in various sectors of their continental margins to give themselves the widest shelf, there are important ultimate limits. Article 76(5) of the UNCLOS provides that the lines adopted may not exceed 350 nm from the territorial sea baselines, or 100 nm from the 2500 metre isobath (which in some cases will exceed 350 nm). The UNCLOS does not leave it to coastal states alone to establish outer continental shelf limits. Instead they are required to submit information to the CLCS, an independent scientific and technical body, within 10 years of the entry into force of the UNCLOS for those states.⁴⁵ Once it has scrutinised the data received, the UNCLOS makes recommendations on the establishment of the outer limits of the continental shelf, and the limits so established by a state on the basis of such recommendations are final and binding.⁴⁶

It soon became clear that the submission deadline would be unrealistic for many, particularly developing, states. Accordingly, in 2001 a meeting of state parties to the LOSC resolved that for those states for which the UNCLOS entered into force prior to 13 May 1999 the 10 year period would begin to run from that date.⁴⁷ As all Antarctic claimants had joined the UNCLOS before this time, they were required to meet the 2009 deadline and all did so except Chile. Because of technical and financial constraints Chile has submitted only 'Preliminary Information'. In so doing Chile relies on another decision of the states parties in 2008 that the deadline will be complied with by submitting initial information, to be followed at a later stage by a full submission.⁴⁸

The claimants' submissions have taken somewhat different approaches in addressing the sensitive sovereignty question. The first claimant to make a submission was Australia, which included extensive data for the continental shelf of the AAT.⁴⁹ Conscious that few states recognise Australia's Antarctic claim, Australia requested the CLCS not to consider the Antarctica component of its submission for the time being. When handing down its recommendations, accepting most of Australia's outer continental shelf, the CLCS duly avoided addressing the Antarctic data.⁵⁰ Several ATCPs lodged an objection with the CLCS to Australia's submission of data with respect to Antarctica,⁵¹ including the United States. The United States insisted that while it did not recognise any state's claim to Antarctica or its continental shelf areas, it did acknowledge 'with appreciation Australia's request to the Commission that it not take any action on that portion of its

⁴³ UNCLOS, Art. 76 (4)(a)(i).

⁴⁴ UNCLOS, Art. 76 (4)(a)(ii).

⁴⁵ Pursuant to LOSC, Article 76 and Annex II. See also Ted L. McDorman, 'The Role of the Commission on the Limits of the Continental Shelf: A Technical Body in a Political World' (2002) 17(3) *International Journal of Marine and Coastal Law* 301.

⁴⁶ UNCLOS, Art. 76 (8).

⁴⁷ UNCLOS, Annex II, Art. 4. In 2001 a meeting of states parties to the Convention resolved that for those states for which the UNCLOS entered into force prior to 13 May 1999, the 10 year period would begin to run from that date: UN Doc. SPLOS/72 (2001).

⁴⁸ UN Doc. SPLOS/183 (2008).

⁴⁹ Continental Shelf Submission of Australia: Executive Summary, 15 November 2004, available at http://www.un.org/depts/los/clcs_new/submissions_files/aus04/Documents/aus_doc_es_web_delivery.pdf (accessed on 22 November 2011).

⁵⁰ Summary of the recommendations of the Commission on the Limits of the Continental Shelf in regard to the submission made by Australia on 15 November 2004, adopted 9 April 2008, at http://www.un.org/Depts/los/clcs_new/submissions_files/aus04/aus_summary_of_recommendations.pdf (accessed on 22 November 2011).

⁵¹ Germany, India, Japan, Netherlands, the Russian Federation and the United States.

submission relating to areas of the seabed and subsoil adjacent to Antarctica.⁵² Other states similarly commended Australia for taking an approach that was consistent with the spirit of the ATS.

In its 2006 submission New Zealand took a different approach from Australia, making no reference to continental shelf areas offshore of its Antarctic territory, the Ross Dependency. New Zealand identified the 'special legal and political status of Antarctica' and stated that it is open to states pursuant to the LOSC to make a partial submission, and that a submission relating to Antarctic shelf 'may be made later'.⁵³

The United Kingdom followed the same approach in reserving its capacity to make an Antarctic submission at a later date. It has lodged several partial submissions alone and with other states, including its May 2009 partial submission in relation to the Falkland Islands, South Georgia and the South Sandwich Islands.⁵⁴ In that submission it did not include continental shelf data for the British Antarctic sector. Instead it relied on its statement in 2008, when submitting its partial submission in relation to Ascension Island, that it recognised 'the special legal and political status of Antarctica' and may in the future make a submission for the British Antarctic sector.

France addressed its Antarctic territory, Adélie Land, in its CLCS submission in a similar fashion to New Zealand and the United Kingdom. In France's partial submission in 2009, in relation to the subantarctic Kerguelen Island and the French Antilles, it advised that it did not include areas of the continental shelf that adjoin Antarctica, 'for which a submission may later be made'.⁵⁵

In Norway's first partial submission to the CLCS in 2006, in relation to the northeast Atlantic and the Arctic, Norway preferred complete silence on Antarctic issues while expressly keeping open the possibility of future continental shelf submissions.⁵⁶ This was followed by Norway's May 2009 partial submission relating specifically to its Antarctic possessions, the sub-Antarctic island Bouvetøya (Bouvet) and its continental territory of Dronning Maud Land⁵⁷ (the latter claimed in part to thwart Nazi Germany's Antarctic aspirations⁵⁸). Norway included data in relation to Dronning Maud Land but, like Australia, requested the CLCS not to take any action for the time being in relation to the continental shelf appurtenant to Antarctica. The submission of Norway that included data for Dronning Maud Land attracted a similar response from other ATCPs as Australia's submission had done.

By contrast to the other claimants, Argentina's 2009 submission took a very assertive approach.⁵⁹ Argentina made a full submission to the CLCS, including the Argentine Antarctic sector and the Islas Malvinas, Georgias del Sur and Sandwich del Sur. Unlike Australia and

⁵² See further Christopher C. Joyner, 'United States Foreign Policy Interests in the Antarctic' (2011) 1 *The Polar Journal* 17.

⁵³ Note from the Permanent Mission of New Zealand to the Secretary-General of the United Nations Accompanying the Lodgement of New Zealand's Submission, 19 April 2006.

⁵⁴ United Kingdom Submission in respect of the Falkland Islands, and of South Georgia and the South Sandwich Islands: Executive Summary, 2009.

⁵⁵ The French Continental Shelf: Partial Submission to the Commission on the Limits of the Continental Shelf in Respect of the Areas of the French Antilles and Kerguelen, 5 February 2009.

⁵⁶ Continental Shelf Submission of Norway in Respect of Areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea: Executive Summary, 2006.

⁵⁷ Continental Shelf Submission of Norway in respect of Bouvetøya and Dronning Maud Land: Executive Summary, 2006.

⁵⁸ Klaus Dodds and Alan Hemmings, 'Britain and the British Antarctic Territory in the Wider Geopolitics of the Antarctic and the Southern Ocean' (2013) 89 *International Affairs* 1429, 1442.

⁵⁹ Outer limit of the continental shelf: Argentine submission: executive summary, 2009, at http://www.un.org/Depts/los/clcs_new/submissions_files/arg25_09/arg2009e_summary_eng.pdf (accessed on 22 November 2011).

Norway, Argentina did not request the CLCS not to consider its Antarctic data. For this and other reasons (including because it covered the disputed Falkland/Malvinas, South Georgia and South Sandwich islands) the Argentinian submission excited objections from several states, including India, Russia and the United States. They stated their expectation that the CLCS would not take any action in relation to the Antarctic component of Argentina's submission. This protest means that there no prospect that the CLCS will consider the Antarctic component of Argentina's submission, as Article 5(a) of Annex I of the CLCS's rules of procedure preclude the CLCS from considering and qualifying a submission where a land or maritime dispute exists, unless prior consent is given by all parties to the dispute.⁶⁰

The making of Antarctic maritime claims has not produced major difficulties, mainly because the claims have been made largely in the abstract. While maintaining their entitlement to sovereignty as coastal states, with all that entails for the claiming of maritime zones, the claimants have not sought to assert jurisdiction inconsistently with the *Antarctic Treaty*.⁶¹ A second reason that there has not been an open challenge made to the *Antarctic Treaty*'s compromise on sovereignty is that Antarctic claimants have mostly (though not uniformly) shown exceptional deference to both the letter and spirit of the ATS, as seen in the careful way submissions have been made to the CLCS on Antarctic continental shelf areas. Moreover there has been restraint on the part of non-claimants, who have not taken every possible objection to the making of Antarctic maritime claims. This is seen in the tolerance towards the 'claims' to extended continental shelves from sub-Antarctic islands even though these extend in some cases within the ATA and therefore are at odds with the ATS.⁶²

Antarctic Resource Management

Mining may not be carried out in Antarctica unless and until the prohibition under the *Environmental Protocol* is lifted. This prohibition on mining applies not only to the Antarctic continent, but throughout the ATA, and will remain in force until such time as the Protocol is amended to overturn it, which is possible at any time but not likely until the 2048 review conference at the earliest.⁶³ The mining ban applies to the maritime zones, including the continental shelves of the territorial claimants.

While mining is not permitted, there is extensive exploitation of a number of species of living organism in the Southern Ocean, and even active bio-prospecting programs for organisms found on and adjacent to the Antarctic continent. The Southern Ocean holds rich fishing grounds for some species, and there is a lengthy history of the exploitation of Antarctic marine living resources, including extensive whaling and sealing operations, and fishing for a range of species from krill to Antarctic toothfish.

Sealing is comprehensively regulated in the Antarctic under the CCAS, but as there is no longer any commercial sealing in the Antarctic, the CCAS has fallen into disuse. Commercial whaling has also been phased out in the Southern Ocean, as a result of the moratorium adopted in 1982 and the establishment of the Southern Ocean Sanctuary in

⁶⁰ Kaye, above note 39, 126.

⁶¹ Tim Stephens and Ben Boer, 'Enforcement and Compliance in the Australian Antarctic Territory: Legal and Policy Dilemmas' in Lorne K. Kriwoken, Julia Jabour and Alan D. Hemmings (eds), *Looking South: Australia's Antarctic Agenda* (Federation Press, Sydney, 2007), 54, 58–59.

⁶² Alan D. Hemmings and Tim Stephens, 'Reconciling Regional and Global Dispensations: The Implications of Sub-Antarctic Extended Continental Shelf Penetration of the Antarctic Treaty Area' (2009) *New Zealand Yearbook of International Law*, 273.

⁶³ See Environmental Protocol, Art. 24.

1994, both under the ICRW. The only whaling that continues is controversially conducted by Japan, which purports to rely on Article 8 of the ICRW, which allows parties to take whales for the purposes of scientific research.

As regards marine living resources other than mammals, the CCAMLR establishes an extensive regulatory framework that applies to all Antarctic marine living resources found south of the Antarctic Convergence, including finfish, molluscs and crustaceans.⁶⁴ It is generally judged to have been an effective regional fisheries management organisation, having adopted many conservation measures to protect heavily targeted species and associated and dependent organisms. However illegal, unreported and unregulated (IUU) fishing remains a challenge that has only partially been addressed.⁶⁵ Another challenge is harmonising the CCAMLR Convention regime with the international fisheries law that has expanded substantially since the CCAMLR Convention was concluded, as best exemplified by the *Fish Stocks Agreement*, which adopts a precautionary approach to the management of highly migratory and straddling fish stocks.⁶⁶

One of the interesting dynamics in the operation of the regime for Antarctic marine living resources is that it applies in both areas over which sovereignty is not recognised or exercised, and areas adjacent to sub-Antarctic islands over which sovereignty is accepted. This has led national authorities to apply and enforce CCAMLR standards against vessels fishing unlawfully in the exclusive economic zones of sovereign territorial islands such as Heard and McDonald Islands (Australia) and Kerguelen (France). Antarctic states have also sought to develop innovative arrangements for cooperative enforcement to address the practical difficulties of enforcement in these remote areas.⁶⁷

Environmental Protection

One of the great strengths of the ATS is its extensive and effective system for protecting the Antarctic environment. Environmental protection has been a focal point for Antarctic cooperation from the 1960s onwards. It was raised to particular prominence by the *Environmental Protocol*, under which states committed to ‘comprehensive protection of the Antarctic environment and dependent and associated ecosystems’ and also designated ‘Antarctica as a natural reserve, devoted to peace and science.’⁶⁸

The *Environmental Protocol* takes an ecosystem approach and applies throughout the ATA. It requires parties to cooperate in planning and conducting activities in the ATA,⁶⁹ undertake environmental impact assessments (EIA) for potentially harmful activities⁷⁰ according to detailed procedures set out in Annex I to the Protocol, and establishes the

⁶⁴ CCAMLR Convention, Art. 1(2).

⁶⁵ Rachel J. Baird, *Aspects of Illegal, Unreported and Unregulated Fishing in the Southern Ocean* (Springer, Netherlands, 2006).

⁶⁶ Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, adopted 4 August 1995, 2167 UNTS 3 (entered into force 11 December 2001). See Gregory Rose and Ben Milligan, ‘Law for the Management of Antarctic Marine Living Resources: From Normative Conflicts towards Integrated Governance?’ (2009) 20(1) *Yearbook of International Environmental Law* 41.

⁶⁷ Warwick Gullett and Clive Schofield, ‘Pushing the Limits of the Law of the Sea Convention: Australian and French Cooperative Surveillance and Enforcement in the Southern Ocean’ (2007) 22 *International Journal of Marine and Coastal Law* 545, 567.

⁶⁸ Environmental Protocol, Art 2.

⁶⁹ Environmental Protocol, Art. 6.

⁷⁰ Environmental Protocol, Art. 8.

CEP to provide advice in connection with the implementation of the Protocol.⁷¹ Drawing from the model provided by the *Antarctic Treaty* itself, it also sets up a system of inspection to ensure compliance.⁷²

One of the most important features of the *Environmental Protocol* is its Annexes, which form an integral part of the Protocol and have been significantly developed over time.⁷³ In addition to EIA (Annex I), these deal with the conservation of Antarctic Fauna and Flora (Annex II), waste disposal (Annex III), marine pollution (Annex IV), protected areas (Annex V) and liability arising from environmental emergencies (Annex VI). Although legitimate questions are raised about operational issues in the implementation of aspects of the *Environmental Protocol* (such as EIA⁷⁴) and how it deals with specific activities (such as tourism⁷⁵) and threats (such as invasive species⁷⁶), overall it provides a highly effective, ecosystem-based system for Antarctic environmental management.

There nonetheless loom significant challenges for effective Antarctic environmental protection. Two examples are shipping and climate change/ocean acidification. In relation to shipping, the Southern Ocean has not been used for significant merchant traffic since the Clipper Route fell into disuse with the opening of the Panama Canal in 1914. However, the number and type of fishing, tourist and research vessels operating in the Antarctic has increased significantly in recent decades. This increased shipping activity poses risks for the Antarctic environment, as illustrated by several casualties involving fishing and cruise vessels, including the sinking of the *MS Explorer* in 2007, and the trapping of a Russian research vessel, the *Akademik Shokalskiy*, in sea ice in 2013-14.

Both the Arctic and the Antarctic have been the subject of attention from the International Maritime Organization (IMO) for several decades. In 2009 the IMO Assembly adopted revised guidelines that applied to both Arctic and Antarctic areas: the Guidelines for Ships Operating in Polar Waters.⁷⁷ While providing extensive provisions for protecting the Antarctic environment the efficacy of the guidelines is limited because they are only recommendatory. Turning the guidelines into a legally binding ‘Polar Code’ is currently being negotiated within the IMO. Issues that have been sticking points include the geographical coverage (whether in the Antarctic they will apply only to the ATA or to the Antarctic Convergence) and the type of vessels to be included (whether all vessels, including fishing vessels, or only larger vessels).

Undoubtedly the most significant environmental challenge facing the Antarctic is one driven by external rather than localised risks, namely climate change and ocean acidification.⁷⁸ The Fifth Assessment Report of the Intergovernmental Panel on Climate Change in 2013 included the following conclusions in relation to the Antarctic:⁷⁹

⁷¹ Environmental Protocol, Art. 12.

⁷² Environmental Protocol, Art. 14. See further Tim Stephens and Ben Boer, above note 61.

⁷³ Environmental Protocol, Art. 9.

⁷⁴ See Alan D. Hemmings and Lorne K. Kriwoken, ‘High Level Antarctic EIA under the Madrid Protocol: State Practice and the Effectiveness of the Comprehensive Environmental Evaluation Process’ (2010) 10(3) *International Environmental Agreements: Politics, Law and Economics* 187.

⁷⁵ Murray P. Johnson and Lorne K. Kriwoken, ‘Emerging Issues of Australian Antarctic Tourism: Legal and Policy Directions’ in Kriwoken et al (eds), above note 61, 85.

⁷⁶ Sandra Potter, ‘Protecting Antarctica from Non-Native Species: The Imperatives and the Impediments’ (2009) 1 *The Yearbook of Polar Law* 383.

⁷⁷ IMO, *Guidelines for Ships Operating in Polar Waters*, IM Doc. A 26/Res.1024, 2 December 2009.

⁷⁸ Duncan French and Karen Scott, ‘International Legal Implications of Climate Change for the Polar Regions: Too Much, Too Little, Too Late?’ (2009) 10(2) *Melbourne Journal of International Law* 631.

⁷⁹ David G Vaughan et al, ‘Chapter 4: Observations: Cryosphere’, in *Working Group I Contribution to the IPCC Fifth Assessment Report* (2013), at http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_Chapter04.pdf (accessed on 19 February 2014).

- It is very likely that the annual Antarctic sea ice extent increased at a rate of between 1.2 and 1.8 per cent per decade between 1979 and 2012. There was a greater increase in sea ice area, due to a decrease in the percentage of open water within the ice pack. There is high confidence that there are strong regional differences in this annual rate, with some regions increasing in extent/area and some decreasing;
- The Antarctic ice sheet has been losing ice during the last two decades. There is very high confidence that these losses are mainly from the northern Antarctic Peninsula and the Amundsen Sea sector of West Antarctica, and high confidence that they result from the acceleration of outlet glaciers;
- The average rate of ice loss from Antarctica likely increased from 30 to 147 gigatonnes per year between 1992 and 2011, causing global sea levels to rise; and
- In parts of Antarctica, floating ice shelves are undergoing substantial changes. There is medium confidence that ice shelves are thinning in the Amundsen Sea region of West Antarctica, and low confidence that this is due to high ocean heat flux. There is high confidence that ice shelves round the Antarctic Peninsula continue a long-term trend of retreat and partial collapse that began decades ago.

While climate change has been a major focus of Antarctic research, and has attracted considerable attention within the CEP and is a core part of its five-year work plan,⁸⁰ there have been limited policy initiatives and no concrete legal steps taken to deal with adaptation or other climate change issues.⁸¹

The Documents in this Collection

This book brings together the key legal materials that are the product of multilateral efforts expended since 1959 to regulate the Antarctic continent, its adjacent maritime areas, and resources. As a sophisticated and active regime, the ATS has given rise to voluminous documentation, and it would not be possible to reproduce all international documents relevant to Antarctica within this volume. The more modest purpose of this collection is to provide governments, researchers, and students with an accessible and up-to-date compendium of the treaties, decisions, resolutions, recommendations, conservation measures, guidelines and other documents that are of central relevance to contemporary Antarctic governance. In so doing, we wish to acknowledge the path-breaking work by others, most notably W M Bush, Donald R Rothwell, and Ruth Davis,⁸² that has been of tremendous assistance to us as we selected the most appropriate documents for inclusion.

The collection is divided into ten parts. In Part 1, we set out the framework treaties of the ATS, namely the *Antarctic Treaty*, the CCAS, the CAMLR Convention, and the *Environmental Protocol*. Also included is CRAMRA; although this mining regime did not enter into force, it remains of relevance in an era in which there is increasing interest in the mineral resource potential of the Antarctic continent. The ATS treaties

⁸⁰ See Report of the Committee for Environmental Protection, CEPXIV, 2011, 38.

⁸¹ French and Scott, above note 78, 649–650.

⁸² W.M. Bush, *Antarctica and International Law: A Collection of Inter-state and National Documents* (Oceana Publications, New York), vols. I (1982), II (1982), III (1988) and IV (1991); Donald R. Rothwell and Ruth Davis (eds), *Antarctic Environmental Protection: A Collection of Australian and International Instruments* (Federation Press, Sydney, 1997).

are accompanied by selected documents from the *travaux préparatoires*, including drafting records.

Part 2 of the book collects the legal and administrative arrangements establishing and governing the Antarctic Treaty Secretariat. The Antarctic Treaty Secretariat was only established in 2004,⁸³ after a string of proposals over the years – some as early as 1959 – to create a central ATS institution.⁸⁴ The Secretariat provides a focal point for Antarctic cooperation and is based in Buenos Aires, Argentina. The tasks of the Secretariat are to support the annual meetings of the ATCMs and the CEP, to assist the exchange of information between parties, to collect and archive ATCM and CEP documentation, and to disseminate information about the ATS to the world at large.

In Parts 3 and 4 the book sets out the core documentary outputs of ATCMs and the CEP. Crucial to the functioning and adaptability of the ATS are the recommendations, measures, decisions and resolutions of the ATCM, including those adopted by the ATCM and designated as relating to the CEP. The book provides a complete chronological list of this mix of hard and soft law instruments that address a diversity of regulatory subjects.⁸⁵ Between 1961 and 2014, the ATCM adopted 543 instruments in total, of which 74 are no longer current.⁸⁶ The book reproduces the text of many of the most significant normative or standard-setting instruments.

For reasons of space, the book omits instruments which are no longer current. It also omits the many materials relating to specific specially protected areas, which concern particular local sites rather than having broader, Antarctic-wide, standard-setting relevance. Where multiple instruments over subsequent years address the same subject, the book typically includes only those instruments which most comprehensively address the area. These are often more recent instruments, signifying the increasing sophistication of regulation over time. Earlier documents on a given subject are sometimes included to illustrate the historical emergence of regulatory interest in a subject.

In a similar vein, Part 5 lists all instruments of the CCAMLR and reproduces most (53 of 85) of its Conservation Measures and resolutions, chiefly omitting those (35) narrowly targeted at a particular species.⁸⁷ Part 6 includes the Constitution of the Council of Managers of National Antarctic Programs Constitution (COMNAP), which dedicates COMNAP to serve its scientific role in supporting scientific research and cooperation under the ATS. It also includes a list and map of national scientific bases in Antarctica.

Other relevant ‘hard’ international treaty provisions, outside the ATS, are set out in Part 7, including those relating to whaling in the Southern Ocean, the safety of fishing vessels in ice areas, shipping pollution in Antarctic waters, the conservation of albatrosses and petrels, and regional fisheries conservation agreements applying to areas adjacent to the ATS and CCAMLR Convention areas.⁸⁸ Of course, many other international treaties of general application are relevant to state activities in Antarctica and its surrounds, but not reproduced here, from the UNCLOS, to international environmental and human rights treaties.

⁸³ See ATCM Measure 1 (2003) (the Secretariat became operative on 1 September 2004).

⁸⁴ See Scott, above note 16, 478-487.

⁸⁵ All ATCM documents are online at http://www.ats.aq/e/ats_meetings_atcm.htm. CEP documents are available at http://www.ats.aq/e/cep_handbook.htm.

⁸⁶ As a result of Decision 1 (2011), Annex.

⁸⁷ All CCAMLR documents are available at <https://www.ccamlr.org/en/conservation-and-management/conservation-measures>.

⁸⁸ See Dodds and Hemmings, above note 58, 1435-6.

Particularly relevant ‘soft’ law materials outside the ATS are also included in Part 7, such as IMO standards on fishing vessels in ice areas, passenger ships in remote areas, intact stability of shipping in ice areas, and shipping generally in polar waters. Standards continue to evolve in this area; the IMO is continuing work on a binding International Code of Safety for Ships in Polar Waters, building on its existing non-binding guidelines.

The episodic interest in Antarctica of the United Nations General Assembly is the focus of Parts 8 and 9. The book includes periodic resolutions on the ‘Question of Antarctica’ between 1983 and 2006, along with the reports of the United Nations Secretary General on various scientific, environmental, legal and political issues connected with Antarctica. These materials also provide a flavour of the controversies in the Assembly, including over discrete issues (such as the role of apartheid South Africa) and big picture debates (such as whether Antarctica should be declared the common heritage of humankind and subject to a universal regime, or left to be regulated by the smaller group of ATS parties).

For reasons of space, the book is unable to include all relevant legal materials on Antarctica.

Consistent with its focus on multilateral arrangements, the book omits the many national legal and policy instruments which purport to evidence sovereign claims to Antarctic territory. However, some of the documents that have been included do shed significant light on sovereign claims. Some of the claimants’ recent continental shelf submissions, summaries of which are included in Part 11 of the book, provide information on the extent and the history of territorial and maritime claims. Moreover, Part 10 reproduces materials from International Court of Justice proceeding concerning the British-Argentine dispute over sovereignty in the Falkland Islands/Malvinas.

The book also excludes national laws on with Antarctica, much of which domestically implements ATS instruments. Part 10 of the book does, however, include some key national judicial decisions which discuss international law issues pertaining to Antarctica. Many of the legal materials not found in this book can be found in the comprehensive, three-volume collection of W.M. Bush in 1991.⁸⁹ While now dated, it contains an excellent selection of historical and national materials.

Conclusion

In a highly creative way the ATS defused the risks of sovereign competition which arose from the early era of exploration in Antarctica, and were later brought to a head in the early years of the Cold War. On the whole it has produced a peaceful, stable, effective and widely accepted regime for cooperation on a range of scientific, environmental, and related issues. Rising powers, such as China (which joined in 1983), have been brought into the system. The ATS has proven sufficiently flexible to accommodate new challenges and risks, even as the number of state parties has expanded, thus making consensus on many issues more difficult to achieve. Above all the ATS has, at least for now, seen off challenges to its normative and institutional authority in the United Nations General Assembly.

There is nonetheless ongoing speculation about the future of the Antarctic regime, including rising concerns about security risks.⁹⁰ The prospect of military confrontation

⁸⁹ W.M. Bush, *Antarctica and International Law: A Collection of Inter-state and National Documents* (Oceana Publications, New York, 1991).

⁹⁰ Australian Strategic Policy Institute, *Cold Calculations: Australia’s Antarctic Challenges*, ASPI Strategic Insights, October 2013; Ellie Fogarty, *Antarctica: Assessing and Protecting Australia’s National Interests*, Policy Brief, Lowy Institute for International Policy, August 2011.

in Antarctica is remote. How one views the security landscape, however, depends on how security is conceptualised, for instance, as ‘human’, ‘environmental’, ‘resource’, ‘maritime’, ‘regime’ or ‘national’ security and so on.⁹¹

Some are legitimately concerned about the use of militaries for non-peaceful purposes, such as the use of satellite installations for intelligence gathering, weapons targeting, or the militarisation of space. There is a debate about whether China’s growing presence in Antarctica is a threat, or simply commensurate with its renewed place in the world. On one view China’s interests and behaviour in Antarctica are little different from those of the hegemonic Western powers in Antarctica over many years.⁹² There is also renewed debate about living and non-living resources in Antarctica. A ‘cold rush’ for oil, gas and minerals has not yet eventuated, despite the proliferation of extended continental shelf submissions by the Antarctic claimant states. But there are certainly risks of mineral exploitation disguised as scientific research, and growing interest in bio-prospecting for commercial purposes. Some environmental disagreements are sharp, such as over marine protected areas, illegal fishing and non-cooperation in its investigation, and dangerous skirmishes at sea between Japanese whalers and anti-whaling protesters. Above all climate change and ocean acidification pose perhaps the greatest challenge to Antarctic governance in the long term, not least because they are changing the productivity and range of valuable fisheries in the Southern Ocean.

So far there is no serious evidence that tensions arising from these issues threaten to unravel the half-century consensus on the Antarctic regime. To the contrary, the growing number of states participating in the ATS is testament to its vitality, and it has weathered efforts by some states in the General Assembly to replace the ATS with a more universal arrangement that would truly vest the Antarctic continent in humanity as a whole. In the long term, the persisting uncertainty about the final status of sovereign territorial, maritime and continental shelf claims will present the greatest challenge to Antarctic stability. The ATS embodies an uneasy truce and cannot indefinitely defer disputes over sovereign title (and thus sovereign rights to exploit Antarctica’s riches). The time will come when it may be necessary to reconsider sovereign claims and to desire an alternative legal architecture for securing Antarctica’s future.⁹³ Until such a time comes (and even when it does) we hope this volume will be of assistance in understanding the origins and the practical operation of the Antarctic regime.

Sydney, September 2014

⁹¹ For different approaches, see Donald R. Rothwell and Hitoshi Nasu, ‘Antarctica and International Security Discourse: A Primer’ (2008) 6 *New Zealand Yearbook of International Law* 3; and the chapters in Hemmings et al (eds), above note 23.

⁹² Dodds and Hemmings, above note 58.

⁹³ Alan Hemmings, ‘Beyond Claims: Towards a Non-Territorial Antarctic Security Prism for Australia and New Zealand’ (2008) 6 *New Zealand Yearbook of International Law* 77.