

THE 'PEACEFUL PURPOSES' PRINCIPLE IN ANTARCTICA AND THE STABILITY OF ITS PEACEFUL STATUS

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The Common Heritage of Mankind has been a prominent constituent when seeking to define the legal status of the global commons. However, the concept of Common Heritage of Mankind has never been clearly defined and its elements, whilst agreed upon among States in principle, are often subject to different interpretations in substance. One of the exceptions to this may be the element of 'peaceful purposes' prima facie upon the stability of its peaceful status. The most significant threat to this stability is the possible carrying out of mineral exploitation. Nevertheless, significant disruption is unlikely, because CRAMRA, which is widely accepted by the States most concerned, and the most powerful, is in abeyance with respect to the regulation of mineral exploitation. This in no way affects the integrity of the treaty: due to its lack of a benefit-sharing mechanism between technology-ready States and technology-lacking States. The most appropriate international reaction might be the revival of the question of Antarctica in the UN General Assembly, bidding for a benefit-sharing mechanism modelled on that laid out for the Area in UNCLOS.

1 Introduction

Transnational spatial areas, in particular the high seas, Antarctica and outer space, have been spotlighted arenas for inter-State political wrangling over elements such as title, strategic significance, and resource potentiality. Contention between States in these areas used to be dominated by unilateral acts, but was then brought within the framework of cooperation by reserving them as global commons, ie areas that are beyond sovereign State jurisdiction because of the physical impossibility of extending such control or as a consequence of an international agreement.¹ The legal status of global commons is still unclear, but the most prominent candidate so far is the Common Heritage of Mankind, which comprises five main elements: non-appropriation, common management, benefits-sharing, peaceful purposes, and inter-generational equity.² Antarctica is one of the global commons to which this concept applies indirectly, in the sense that although it is not explicitly designated the status of 'common heritage of mankind', as the deep sea-bed and the Moon are,³ almost all its elements are in fact incorporated.⁴

Antarctica is the southernmost continent on Earth and the fifth largest, measuring approximately 14.2 million square kilometres. Between 95 and 98 percent of the landmass is covered by a giant ice sheet that averages 2.5 kilometres in thickness, elevating it to the highest average altitude of all continents.⁵ The ice cap extends offshore, forming vast ice shelves that constitute more than 10 percent of the continent's area.⁶ Vast as it is, Antarctica does not have an indigenous people and is extremely inhospitable to humans with a combination of harsh natural conditions: it is the coldest, driest and windiest continent.⁷ The first sighting of the Antarctic continent is a matter of dispute; but John Davis, an American sealing master, is recorded as the first man to set foot on it, on 7 February 1821.⁸ The continent was almost forgotten during the rest of the 19th century, due to its isolation from inhabited counterparts: approximately 700 miles from the closest part of South America. Today, three key industries are in operation in and around Antarctica: (1) scientific research whose priority was occasioned in the 1957-1958 International Geophysical Year (IGY); (2) commercial fishing, which became sizeable from the 1960s; and (3) tourism - with dramatically

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¹ John Vogler, *The Global Commons: Environmental and Technological Governance* (John Wiley & Sons, 2nd ed, 2000) 6.

² Barbara Ellen Heim, 'Exploring the Last Frontiers for Mineral Resources: A Comparison of International Law Regarding the Deep Seabed, Outer Space, and Antarctica' (1990) 23 *Vanderbilt Journal of Transnational Law* 819, 827.

³ *United Nations Convention of the Law of the Sea (UNCLOS)*, 1982, 1833 UNTS 3, art 136; *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Treaty)*; GA Res 34/68, UN GAOR, 34th sess, 89th plen mtg, Agenda Items 48 and 49, UN Doc A/RES/34/68 (5 December 1979) annex art 11.

⁴ *The Antarctic Treaty*, 1959, 402 UNTS 71, arts I-V.

⁵ Peter J Beck, *The International Politics of Antarctica* (Mackays of Chatham, 1986) 9.

⁶ *Question of Antarctica: Study requested under General Assembly resolution 38/77: Report of the Secretary General*, GA Res 39/583, UN GAOR, 39th sess, 1st pt, Agenda Item 66, UN Doc A/39/583 (31 October 1984), 10 [4] ('*Report of the Secretary-General on Question of Antarctica*').

⁷ F M Auburn, *Antarctic Law and Politics* (C Hurst and Co, 1982) 2.

⁸ Maria Pia Casarini, 'Activities in Antarctica before the Conclusion of the Antarctic Treaty' in Francesco Francioni and Tullio Scovazzi (eds), *International Law for Antarctica* (Kluwer Law International, 1996) 627, 631-2.

increasing volume since the 1990s.⁹

Antarctica is distinct from other global commons in several respects, two worthy of particular mention at the outset. First, 85 percent of Antarctica has already been officially claimed, between the 1900s and the 1940s, by seven States – Argentina, Australia, Chile, France, New Zealand, Norway and Britain – on the grounds of discovery, occupation, contiguity, inherited rights, geological affinity, geographical proximity, formal acts of taking possession, and administrative acts.¹⁰ The claims are recognised between claimant States on a reciprocal basis, except for Argentina, Chile and Britain, whose claims overlap in substantial part; but are not recognised by non-claimant States.¹¹ Second, the *Antarctic Treaty* (AT) was negotiated outside the confines of the United Nations. In 1959, as an initiative of the USA, the AT was negotiated in Washington by the seven claimant States and five other States with interests in the continent, namely Belgium, Japan, South Africa, the USSR and the USA. The AT entered into force on 23 June 1961 upon the 12th ratification. The subsequent five decades have witnessed growth in membership, with 47 signatories representing 80 percent of the world's population today. Among them, 28 States which represent 60 percent of the world's population have consultative status, ie with full right of participation in the Antarctic Treaty Consultative Meeting (ATCM).¹² The ATCM is where the expansion of the AT into the Antarctic Treaty System (ATS) occurred, through discussion and elaboration of measures in furtherance of the principles and objectives of the Treaty.

The AT has stood the test of time for half a century, in particular with respect to preserving the continent in a non-militarised and nuclear-free state. This achievement compares well with other global commons: outer space has been at times on a dangerous course towards an arms race, and on the high seas the words 'peaceful purposes' carry almost no substantial meaning. However, one should not rest easy about the peaceful status of Antarctica. On the one hand, the AT has not resolved the fundamental issue of sovereignty, but has simply shelved it; on the other hand, the possible shift in priority from science to resource exploitation could bring about a revolution within the ATS.

2 The 'Peaceful Purposes' Principle in Antarctica

It is recognised by the 12 original signatories of the AT, and by subsequent acceding States, 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'.¹³ Relevant to the 'peaceful purposes' principle are Articles I, V, VI and VII of the AT.

2.1 Non-Militarisation and Nuclear-Free

The AT represents the only post-war international agreement for the complete demilitarisation of a sizeable geographic region.¹⁴ Article I of the treaty, the core provision in this regard, reads:

1. Antarctica shall be used for peaceful purposes only. There shall be prohibited, *inter alia*, any measure of a military nature, such as the establishment of military bases and fortifications, the carrying out of military manoeuvres, as well as the testing of any type of weapon.
2. The present Treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purpose.¹⁵

It may be argued that this non-militarisation clause could be interpreted in a very broad manner. Apart from 'any

⁹ According to the International Association of Antarctic Tour Operators (IAATO), in the year 2007-08 the number of seaborne, airborne and land-based Antarctic tourists was 46,069. This compares to 12,248 in the year 2000-01. See <http://www.iaato.org/tourism_stats.html> at 25 November 2009.

¹⁰ Edmund Jan Osmanczyk, *Encyclopedia of the United Nations and International Agreements* (Routledge, 3rd ed, 2003) vol 1, 98.

¹¹ Howard J Taubenfeld, 'A Treaty for Antarctica' (1961) 33 *International Conciliation* 245, 248.

¹² Based on the World Development Indicators (WDI) database of the World Bank, 15 September 2009. As of December 2009, there are 28 Consultative Parties (Argentina, Australia, Belgium, Brazil, Bulgaria, Chile, China, Ecuador, Finland, France, Germany, India, Italy, Japan, Republic of Korea, the Netherlands, New Zealand, Norway, Peru, Poland, the Russian Federation, South Africa, Spain, Sweden, Ukraine, the United Kingdom, the United States and Uruguay) and 19 non-Consultative Parties (Austria, Canada, Colombia, Cuba, the Czech Republic, Denmark, Estonia, Greece, Guatemala, Hungary, the Democratic People's Republic of Korea, Monaco, Papua New Guinea, Romania, the Slovak Republic, Switzerland, Turkey, Ukraine and Venezuela).

¹³ *The Antarctic Treaty*, 1959, 402 UNTS 71, Preamble paragraph 2 (emphasis added).

¹⁴ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 44 [164].

¹⁵ *The Antarctic Treaty*, 1959, 402 UNTS 71, art I.

measure of a military nature', it could be argued that other military-related activities are prohibited as well because, prefaced by 'inter alia' and 'such as', the negative undertakings in paragraph 1 are illustrative rather than exhaustive.

Due to dedication to scientific research, exceptions of 'the use of military personnel or equipment for scientific research or for any other peaceful purpose' are allowed according to paragraph 2. This was originally intended to enable continuation of the naval logistical support to scientific research,¹⁶ but has also benefited States whose scientific programs are directed by naval officers and whose bases belong to branches of the military.¹⁷ Public funding was another consideration, as private funds were hardly sufficient for Antarctic activities which are extremely expensive.¹⁸ Today, the military involvement for the purpose of scientific research continues. For instance, Britain's Rothera Base and the Artigas Base of Uruguay both receive logistical support from their respective navies, and the O'Higgins and Frei Bases of Chile, as well as the Esperanza Base of Argentina, are each still operated by the army. Although Soviet Russia (now Russia) was inclined to comment on the high ratio of US enlisted men and officers to US scientists,¹⁹ the article imposes no limitation on the proportion of military personnel within each establishment.

Few loopholes exist with respect to the 'peaceful purposes' principle as embodied in the AT. One possible loophole is that achievements from neutral scientific research may be used for non-neutral military purposes.²⁰ The assertion that a prohibition on this possibility is envisaged by the Treaty is an unconvincing one. It could contradict the fact that, as mentioned above, scientific programs in Antarctica could be directed by naval officers and the bases could belong to branches of the military. Moreover, given that the threshold between civilian use and military use has become very blurred, the difficulty in verifying the intent of research is significant. According to Article III, in order to promote international cooperation in scientific investigation in Antarctica, States have obligations to exchange information regarding plans for scientific programs, scientific personnel and scientific observation and results.²¹ But such obligations are not absolute because Contracting Parties only agree to do so 'to the greatest extent feasible and practicable'.²² In reality, so far, inspections under Article VII have not been conducted as to the intent or purposes of research.

The AT is also the first international agreement which contains provisions ensuring that nuclear weapons would not be introduced into a specifically defined geographical area.²³ In this regard, Article V stipulates:

1. Any nuclear explosions in Antarctica and the disposal there of radioactive waste material shall be prohibited.
2. In the event of the conclusion of international agreements concerning the use of nuclear energy, including nuclear explosions and the disposal of radioactive waste material, to which all of the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX are parties, the rules established under such agreements shall apply in Antarctica.²⁴

The Article proscribes all nuclear explosions, regardless of purpose. It aimed to address concerns over the possible conduct of nuclear explosions in Antarctica and use of the continent as a dumping site for radioactive materials, particularly from nations in the southern hemisphere. Theoretically, Article V does not keep the continent completely nuclear-free, because it does not prohibit the use of nuclear energy, an exception made for the American PM-3A nuclear reactor at McMurdo, which was decommissioned in 1972 when a leak occurred.²⁵ However, in reality, building nuclear power plants or using nuclear-powered vehicles in Antarctica are no longer regarded as good options by States. On the one hand, paragraph 1 prohibits the disposal of radioactive waste material, which means that States would have to ship the material out of the continent for disposal; on the other hand, with regard to nuclear energy, there is always a risk of irreversible environmental damage. In practice, the performance of Article V has proved fairly successful to date. It is even credited as one of the significant post-war contributions towards

¹⁶ John Hanessian, 'The Antarctic Treaty 1959' (1960) 9 *International and Comparative Law Quarterly* 432, 468.

¹⁷ Auburn, above n 7, 95.

¹⁸ Robert D Hayton, 'The Antarctic Settlement of 1959' (1960) 54 *American Journal of International Law* 349, 358.

¹⁹ Y K Fedorov, 'Antarctica: Experimental Proving Ground for Peaceful Coexistence and International Collaboration' (1970) 26 *Science and Public Affairs* 22, 24.

²⁰ Harry H Almond Jr, 'Demilitarization and Arms Control: Antarctica' (1985) 17 *Case Western Reserve Journal of International Law* 229, 250.

²¹ *The Antarctic Treaty*, 1959, 402 UNTS 71, art III.

²² *Ibid.*

²³ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 45 [166].

²⁴ *The Antarctic Treaty*, 1959, 402 UNTS 71, art V.

²⁵ Auburn, above n 7, 146.

averting nuclear weapon proliferation and halting the nuclear arms race.²⁶

2.2 Geographic Coverage

Having stated that, in the context of Antarctica, the 'peaceful purposes' principle is predominantly interpreted as non-militarisation and nuclear-free, we come to the question of the spatial limit to which this strict interpretation is applicable. Article VI of the AT, entitled 'Geographical Coverage', provides:

The provisions of the present Treaty shall apply to the area south of 60° South Latitude, including all ice shelves, but nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area.²⁷

In comparison with the high seas, it appears that the standard of 'peaceful purposes' set by the AT is higher. It follows that Article VI creates two regimes in the area south of 60° south latitude with respect to 'peaceful purposes'. On the land, including the Antarctic territory assimilated to land and most of the islands generally included in political discussions of the area,²⁸ any measure of a military nature and nuclear explosions are prohibited; while for the high seas south of latitude 60° south, a looser interpretation of peaceful purposes is applied. To study the 'peaceful purposes' principle in the context of the high seas merits another discussion. But the writer would like to make a preliminary assertion that it is predominated by the non-aggression doctrine, which at least allows the testing of conventional weapons, and military manoeuvres.

However, the scope of the high seas below latitude 60° south is a matter subject to dispute. Leaving aside the question of recognition from non-claimant States, the AT protects 'previously asserted rights of or claims to territorial sovereignty in Antarctica'.²⁹ Antarctic claimant States contend that the existing territorial claims also include the continental shelf. This is perhaps correct. The basic concept of the sovereign right of the coastal State over the seabed beyond the territorial sea had emerged in State practice since the *Truman Proclamation 1945*.³⁰ The quick process of formation of a customary rule was crystallised by the conclusion of the *Convention on the Continental Shelf (1958 Convention)* in 1958 at UNCLOS I. The *1958 Convention* also provides that the rights of the coastal State over the continental shelf do not depend on, inter alia, any express proclamation.³¹ Therefore, it could be argued that coastal States' sovereign rights over the continental shelf, before the conclusion of the AT, whether proclaimed or not, fell within the realm of the protection clause. The situation with maritime zones, in particular Exclusive Economic Zones (EEZ), could be more doubtful because the regime of EEZ was not created until UNCLOS III 1973-1982. The rights over territorial sea are possibly protected, although there was disagreement about the distance. However, in practice, claimant States seldom exercise these rights vis-à-vis other States. In the *Japanese Whaling* case, the Federal Court of Australia declared Japanese whaling in Australia's Antarctic waters unlawful under the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth), a domestic law, but the decisions were not enforced.³²

As to claims with regard to maritime zones such as EEZ, made since the AT came into force, there is disagreement whether they belong to the prohibitions of 'new claim, or enlargement of an existing claim, to territorial sovereignty in Antarctica'.³³ In the writer's view, the AT does not prohibit new claims to maritime zones such as EEZ while the treaty is in force. Otherwise, it would have used 'rights and territorial sovereignty' as paragraph 1 does. However, these new claims are not protected by the AT. Eventually, these questions boil down to recognition by States. The predominant State practice is that the claimant States maintain formal claims but do not exercise jurisdictions. Non-recognition by non-claimant States is not only directed against new claims since the AT came into force, but more broadly against territorial claims made previously. It is held that the claims made are not recognised by other nations, thus do not constitute national sovereignty in the traditional sense allowed by the *res nullius* tenet of international law,³⁴ and further infer that the high seas include all Antarctic waters, because there is no specific territorial sea.³⁵

²⁶ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 46 [170].

²⁷ *The Antarctic Treaty*, 1959, 402 UNTS 71, art VI.

²⁸ Taubenfeld, above 11, 246.

²⁹ *The Antarctic Treaty*, 1959, 402 UNTS 71, art IV(1)(a) (emphasis added).

³⁰ Proclamation No 2667, 10 Fed Reg 12 305 (28 September 1945).

³¹ *Convention on the Continental Shelf*, 1958, 499 UNTS 311, art 2(3).

³² *Humane Society International Inc v Kyodo Senpaku Kaisha Ltd* [2006] FCAFC 116 (14 July 2006).

³³ *The Antarctic Treaty*, 1959, 402 UNTS 71, art IV(2).

³⁴ Bernard P Herber, 'Mining or World Park? A Politico-Economic Analysis of Alternative Land Use Regimes in Antarctica' (1991) 31 *Natural*

One recent State practice in this connection is the claimant States' submission to the Commission on the Limits of the Continental Shelf (CLCS) with respect to data on the continental shelf beyond 200 nautical miles, and the reaction to this by other States.³⁶ Differing opinions have been registered. On 15 November 2004, Australia submitted full co-ordinates of its continental shelf margin, but asked the CLCS simply to store them, and not to consider the data on its part of Antarctica.³⁷ Based on the Australian request, the CLCS skipped the part of the Australian submission concerning Antarctica during its consideration.³⁸ Although silence on Antarctic issues does not constitute acquiescence (because according to Article IV '[n]o acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica...'),³⁹ some non-claimant States still seized the opportunity to voice their objection. The Australian submission is objected to by the USA, Russia, Japan, the Netherlands, Germany, and India, all of which expressed the view not to recognise any State's claim to territory in Antarctica, and consequently not to recognise any State's rights over the seabed and subsoil of the submarine areas adjacent to the continent of Antarctica.⁴⁰ The Australian approach was followed by Norway, which submitted data in respect of Bouvetøya and Dronning Maud Land on 4 May 2009.⁴¹ This drew objections from the USA, Russia, India, the Netherlands and Japan, with statements on similar lines to those made against Australia.⁴² In 2006, New Zealand notified the CLCS that it was not submitting data for the continental shelf appurtenant to its Ross Dependency in Antarctica, but reserved the right to do so in future.⁴³ This approach was also followed by Britain and France.⁴⁴ The Argentine submission, made on 21 April 2009, included data concerning the continental shelf adjacent to the Argentine Antarctic Sector but did not ask the Commission to lay aside the part concerning Antarctica. Several States 'understand', 'expect', or 'request' that the Commission would not consider that part of the Argentine submission concerning Antarctica.⁴⁵

Consequently there is some uncertainty regarding the land mass of Antarctica, the scope and legal status of which are both disputed. However, for the 'peaceful purposes' principle, these disputes do not seem very significant. Based on a purely theoretical hypothesis, a State not party to the AT is not prohibited, by the standards set by customary international law, from conducting military manoeuvres in this disputed area as long as it disregards the territorial claims, because the AT does not create obligations for non-party States. But in reality, it is not wise at all for States to use the disputed area as they please for military purposes, or even other waters south of latitude 60° south, because the political costs could be extremely high. Doing so by State parties to the AT would at least amount to acting against the object and purpose of the AT. The waters south of latitude 60° south have become a *sui generis* area under the radiation of the 'peaceful purposes' outwards from the Antarctic continent, a positive note that no one

Resources Journal 839, 839.

³⁵ Frank Pallone, 'Resource Exploitation: the Threat to the Legal Regime of Antarctica' (1978) 8 *Manitoba Law Journal* 597, 601-2.

³⁶ According to Article 76 of *UNCLOS*, coastal States have the right to seek to establish an extended outer limit to, up to 350 nautical miles from its coastline, or 100 miles from where the sea reaches a depth of 2 500 metres, and where specified geological conditions exist. For this purpose, the State is required to submit evidence to, which will then make recommendations concerning the establishment of the outer limits of the State's continental shelf. Annex B to *UNCLOS* provides that the CLCS shall be competent to determine the outer edge of the continental shelf beyond 200 miles. Article 4 of the annex sets forth the procedure by which an interested State must submit particulars of the claimed limits to the Commission together with supporting scientific and technical data within 10 years of the entry into force of *UNCLOS* for that State. According to the *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 11 [7], the continental shelf of Antarctica covers an area of about 4 million square kilometres.

³⁷ Foreign and Commonwealth Office, *The Continental Shelf and the UN Process: UK Claims for an Extended Continental Shelf under Article 76 of the United Nations Convention on the Law of the Sea (UNCLOS)* (7 September 2008) <<http://www.fco.gov.uk/en/news/latest-news/?view=News&id=5753494>> at 20 November 2009.

³⁸ Summary of the Recommendation of the Commission on the Limits of the Continental Shelf (CLCS) in regard to the Submission Made by Australia on 15 November 2004, Recommendations adopted by CLCS on 9 April 2008, 1 [3].

³⁹ *The Antarctic Treaty*, 1959, 402 UNTS 71, art IV(2).

⁴⁰ For reaction of States to the submission made by Australia to the Commission on the Limits of the Continental Shelf: USA, Russia, Japan, Netherlands, Germany, India, see <http://www.un.org/Depts/los/clcs_new/submissions_files/submission_austr.htm#Recommendations> at 20 November 2009.

⁴¹ See note from the Permanent Mission of Norway addressed to the Secretary-General of the United Nations accompanying the lodgement of Norway's submission, <http://www.un.org/Depts/los/clcs_new/submissions_files/submission_nor_30_2009.htm>.

⁴² See communications received with regard to the submission made by Norway to the Commission on the Limits of the Continental Shelf,

⁴³ Note from the Permanent Mission of New Zealand to the Secretary-General of the United Nations accompanying the lodgement of New Zealand's submission (Note Number: NZ-CLCS-TPN-02)

<http://www.un.org/Depts/los/clcs_new/submissions_files/nzl06/nzl_doc_es_attachment.pdf>.

⁴⁴ See note to the Secretary-General of the United Nations accompanying the lodgement of the partial submission of the United Kingdom, <http://www.un.org/Depts/los/clcs_new/submissions_files/submission_gbr.htm>; Communication from France (Note verbale dated 5 February 2009) <http://www.un.org/Depts/los/clcs_new/submissions_files/submission_fra1.htm>.

⁴⁵ For communications received with regard to the submission made by Argentina to the Commission on the Limits of the Continental Shelf, see <http://www.un.org/Depts/los/clcs_new/submissions_files/submission_arg_25_2009.htm>.

is likely to deny.

2.3 Verification

The peaceful use of Antarctica is not only strictly laid out, but also guaranteed with the right of verification. According to Article VII, each Consultative Party has the right to designate observers to carry out any inspection provided for by the Article, and observers have complete freedom of access at any time all areas of Antarctica.⁴⁶ The concerns behind the inspection clause are not limited only to keeping the region non-militarised and nuclear-free, but also keeping tabs on matters relating to scientific research, conservation of resources, and environmental protection.⁴⁷ The basis is also found in the 1991 *Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol)*, which states that 'in order to promote the protection of the Antarctic environment and its dependent and associated ecosystems and to ensure compliance with this Protocol, the Antarctic Treaty Consultative Parties shall arrange, individually or collectively, for inspections to be made in accordance with Article 7 of the Antarctic Treaty'.⁴⁸

The extent of the right of inspections is hardly achievable in terms of arms control and disarmament conventions. The provision is unlimited with respect to what may be monitored and verified.⁴⁹ It extends to all areas of Antarctica, including all stations, installations and equipment, all ships and aircraft, at any time, and permits aerial observation.⁵⁰ State practice shows that conducting inspection is not necessarily based on any suspicious breach of the treaty.⁵¹ The State practice of providing advance warning of inspections, justified by polar logistics, enables concealment of possible violations.⁵² But States Parties have been very cooperative during inspections, which has avoided different interpretations that might be derived from the inspection provision, and contributes to abidance by the 'peaceful purposes' principle in a strict sense in Antarctica. In undertaking the inspections, observers these days are guided by the inspection checklists which were adopted under Resolution 5 (1995) of the 19th ATCM. Items 13.0 and 14.0 of the checklists concerning firearms/explosives and military support activities respectively are the most relevant to peaceful purposes. Moreover, the activities that observers may inspect are not limited to those listed on the checklists.

So far, 43 inspections have been conducted, individually or in collaboration, by 18 States. Ten of the 12 original signatories, with the exception of Japan and South Africa, have been involved. The USA is the country which has been conducting inspections routinely every three to four years since 1963/64; 12 in total, with the last undertaken from 12 November to 1 December 2006.⁵³ Inspections so far have not reported any violation of the AT with respect to the non-militarisation or nuclear-free requirements. According to the reports, the largest weapons that have been found are no more than: flare rockets at the Russian Bellingshausen Station for use during an emergency;⁵⁴ two 5.56 caliber bolt action rifles last used for collection of seal specimens in the 1970s at the Polish Arctowski Station; flares for emergency use at the Brazilian Ferraz Base; and one pneumatic rifle and one pneumatic pistol used for recreation at the Ukrainian Vernadsky Station.⁵⁵ The Chilean military-run Frei Station has a gravel runway that could support some low performance military aircraft, but few if any high performance aircraft.⁵⁶ As a matter of fact, a much larger proportion of the inspection reports, as well as the checklists, are dedicated to issues concerning environmental protection.

3 The Stability of the Peaceful Status

The peaceful status of Antarctica has withstood half a century of dynamic international politics. However, the AT is

⁴⁶ *The Antarctic Treaty*, 1959, 402 UNTS 71, arts VII(2), (3).

⁴⁷ John Warren Kindt, *Marine Pollution and the Law of the Sea* (William S Hein, 1985) vol 4, 1931-58.

⁴⁸ *Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol)* (1991) 30 ILM 1455, art 14.

⁴⁹ Almond Jr, above n 20, 254.

⁵⁰ *The Antarctic Treaty*, 1959, 402 UNTS 71, art VII(2)-(4).

⁵¹ Auburn, above n 7, 110.

⁵² *Ibid* 114-5.

⁵³ For a list of inspections conducted by States, see <http://www.ats.aq/e/ats_governance_listinspections.htm> at 22 November 2009.

⁵⁴ United States Department of State, *Report of Inspections under Article VII of the Antarctic Treaty and Article 14 of the Protocol on Environmental Protection, 12 November to 1 December, (2006)* <http://www.ats.aq/e/ats_governance_listinspections.htm> at 22 November 2009.

⁵⁵ United States Department of State, *Team Report of the Inspection Conducted in Accordance with Article VII of the Antarctic Treaty and Article XIV of the Protocol, February 2-16 (2001)* <http://www.ats.aq/e/ats_governance_listinspections.htm> at 22 November 2009.

⁵⁶ *Ibid*.

like a machine assembled, with its significant parts specially machined or ground, in order to make it work perfectly to serve a special purpose – in this instance, the priority of scientific research. Once the priority undergoes a shift away from science, the foundation of the whole treaty system may be challenged and its peaceful status may be at stake. A number of variables could influence the peaceful status of Antarctica, either positively or negatively.

3.1 Positive Variables

3.1.1 Scientific Research

The earliest scientific research program in Antarctica, the *Belgica Expedition*, organised by the Royal Geographical Society of Brussels and conducted by Adrien de Gerlache de Gomery, lieutenant in the Belgian navy, dates back to 1897.⁵⁷ Several programs followed, conducted by Sweden, Britain, Norway, Japan, Germany, the USA, Argentina, France, New Zealand and Australia, among others.⁵⁸ The freedom of scientific research was established as a priority, and international cooperation was facilitated in the IGY, a stimulus to the conclusion of the Antarctic Treaty. This priority is reiterated in the treaty and its protocols.⁵⁹

In the immediate aftermath of World War II there were concerns over the threat to the significant scientific value of Antarctica, due to the tensions between claimant States and non-claimant States, and between claimant States with overlapping claims. Rivalry among the three States with conflicting claims led to a number of serious incidents in which flags were torn down, stations destroyed, and rival expeditions sent to the same areas.⁶⁰ The possibility of an arms race was heightened, in particular when Chile and Argentina declined the Court's jurisdiction when Britain contested their claims in the International Court of Justice.⁶¹ Even though they managed to agree on a Tripartite Naval Declaration, continued expansion of activities finally led to further confrontations involving military measures.⁶² As was well understood, unless an international solution could be reached, confrontation on a world-wide scale might erupt. It was at such a juncture that the AT was negotiated in Washington.

During the negotiations it became apparent that on the one hand there was the need for a formalised multinational research regime critical to prudent scientific exploration on Antarctica; on the other, claimant States were unwilling to retreat on the issue of sovereignty.⁶³ The compromise was the moratorium on the contentious issue of territorial claims as now appearing in Article IV, which is further insured by the non-militarisation clause, Article I. This was acceptable to both claimant States and non-claimant States, most significantly because the cost of entering into conflicts over scientific endeavours would outweigh 'the benefit of exercising sovereignty'.⁶⁴ More specifically: (1) existing claims would not be diminished, and claimant States might reject the treaty should they believe that their interests in establishing territorial or substantial possessory claims outweighed their interests in preserving the arena as 'global commons'; (2) non-claimant States' scientific activities on the claimed territories, while the treaty was in force, would not constitute a basis for claiming territorial sovereignty; (3) scientific research could be accomplished without reference to title, and was neither exhaustive nor exclusive; and (4) the two superpowers would not add fuel to the flames, for example by making territorial claims.

The priority given to scientific research in Antarctica has been immune from the dynamic international politics of the past half-century. Even at the climax of the Cold War, scientific cooperation in Antarctica between the USA and the USSR was robust. Traditionally, the scientific value of Antarctica lies in the combination of a set of environmental stressors, serving as an ideal laboratory for developing new technologies for exploration on or beyond planet Earth. In the past two decades, Antarctic science has progressed steadily and has become an object of general interest. This is largely due to the increasing awareness of the interaction between Antarctica and the global ecosystem, such as climate change and ozone depletion.⁶⁵ As recognised by the 1991 *Madrid Protocol*,

⁵⁷ Gheorghe Racovita, *Belgica Expedition (1897)*, Antarctic Connection <<http://www.antarcticconnection.com/antarctic/history/belgica.shtml>> at 28 November 2009.

⁵⁸ Hayton, above n 18, 350-1.

⁵⁹ *The Antarctic Treaty*, 1959, 402 UNTS 71, Preamble, arts II, III; *Convention for the Conservation of Antarctic Seals*, 1972, 1080 UNTS 175, Preamble.

⁶⁰ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 18 [36].

⁶¹ *Antarctica Cases (UK v Argentina, UK v Chile) (Pleadings)* [1956] ICJ Rep 12.

⁶² *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 18-9, [40]-[43].

⁶³ Richard B Bilder, 'Control of Criminal Conduct in Antarctica' (1966) 52 *Virginia Law Review* 231, 236-7.

⁶⁴ M J Peterson, *Managing the Frozen South: The Creation and Evolution of the Antarctic Treaty System* (University of California Press, 1988) 2.

⁶⁵ Francesco Francioni, 'Introduction: A Decade of Development in Antarctic International Law' in Francesco Francioni and Tullio Scovazzi (eds),

its value as an area for the conduct of scientific research, in particular research essential to understanding the global environment, shall be fundamental considerations in the planning and conduct of all activities in the Antarctic Treaty area".⁶⁶

Scientists drill down deep into the ice for layers of ice that represent what the earth's atmosphere was like at the time each layer of ice was formed. This is of immense value to the study of climate change, a common concern of our world today.

Antarctica was preserved as a non-militarised area because of its dedication to scientific research. As long as this priority continues, its peaceful status can be maintained. It is foreseeable that scientific research will remain the most significant human activity on Antarctica, and thus continue to contribute to its peaceful status.

3.1.2 The Intrinsic Value of Peace

The value of things may be intrinsic or instrumental. The intrinsic value is characterised in terms of the value that something has 'in itself', 'for its own sake', 'as such', or 'in its own right'. The instrumental value is the value something has by virtue of being a means to an end.⁶⁷ For instance, peace could be intrinsically valuable because it is valuable 'in itself' and we just like it; or instrumentally so because in some way it guarantees stability and offers a safe environment for production. However, there is no hierarchy between the two values, as the intrinsic value of something may be sacrificed for its instrumental value, or vice versa.

By the peaceful status of Antarctica, we refer to a state of the continent in peace, rather than the intrinsic or instrumental value of it, although both make a contribution. The peace of Antarctica is of instrumental value, because it guarantees end values such as the common interest of scientific research and the preservation of its unique environment. But is there any intrinsic value at all in a peaceful status of Antarctica? The answer appears to be in the affirmative. It is doubtlessly the case that, for every spatial area, there is an intrinsic value for it in possessing a peaceful status. Peace in Antarctica, a continent where warfare has never been conducted, is all the more cherished. This is recognised by the *Madrid Protocol*, which designates Antarctica as a natural reserve devoted to *peace* and *science*.⁶⁸ Placed in parallel with science, peace is not only the instrument to safeguard scientific value, but also carries some end value in itself. The intrinsic value of peace would contribute to the peaceful status of Antarctica. Even if conflict arises between States about such end values as strategic significance and resource exploitation, States are more likely to choose peaceful arrangements to redistribute these values rather than to unilaterally resort to military offensives.

3.1.3 Environmental Protection

Antarctica is the only continent that, so far, has suffered little destruction and pollution resulting from human activity. But given the sensitivity and fragility of its ecosystem, such damage could very easily result from activities such as scientific research, tourism, the harvesting of marine living resources, and especially mineral exploitation. Since 1961, environmental protection of Antarctic ecosystems has been a central issue on the agenda of ATCM. Today, the *lacuna* in the AT on environmental protection has been filled by the *Madrid Protocol*.

In recent decades, as the importance attached to the environment has grown, it has been advocated, largely by NGOs, that Antarctica should be conserved as a World Park.⁶⁹ For example, outside the ATS, the Second World Conference on National Parks passed a resolution in September 1972 that Antarctica and the surrounding seas be declared a world park, to be administered by the United Nations.⁷⁰ Within the ATS, New Zealand proposed in 1975 at the 8th ATCM in Oslo that Antarctica should be declared a World Park, free of commercial mining.⁷¹ The idea of a World

International Law for Antarctica (1996) 1, 1.

⁶⁶ *Madrid Protocol*, 1991, 20 ILM 1455, art 3(1).

⁶⁷ *Stanford Encyclopedia of Philosophy* (at 7 February 2007) 'Intrinsic vs. Extrinsic Value' <<http://plato.stanford.edu/entries/value-intrinsic-extrinsic/>>.

⁶⁸ *Madrid Protocol*, 1991, 20 ILM 1455, art 2.

⁶⁹ Herber, above n 34, 839.

⁷⁰ Auburn, above n 7, 259.

⁷¹ New Zealand, *White Paper on Antarctic Environment: laid on the table of the House of Representatives* (Government Printer, 1989) 5.

Park implies that the priority for activities in Antarctica would shift from science to environmental protection, and correspondingly a substitution of the present science regime by a World Park regime. Under a World Park regime, the harvesting of marine living resources such as krill, as well as scientific research and tourism, would be allowed to continue, but subject to strict regulations with regard to environmental protection. The regime would prohibit mineral exploitation, and would doubtlessly also continue to prohibit nuclear explosions and militarisation.⁷²

In fact, the present science regime possesses many of the essential characteristics of an Antarctic World Park. However, these features are derived as secondary effects accruing from the primary use of Antarctica for science.⁷³ Keeping Antarctica non-militarised and nuclear-free is emphasised, whether the priority of activities on the continent is given to science or to environmental protection.

3.2 Negative Variables

It is held that important omissions from the AT, such as the lack of a final settlement of the claims issue and the omission of all economic activities from the treaty's purview, may well cause a reversal of the underlying assumption that there is no value to be gained by fighting over Antarctica.⁷⁴ Apart from sovereign claims and economic benefits, in this instance its strategic significance may also have a negative impact on the peaceful status of Antarctica.

3.2.1 Sovereign Claims

Although history teaches us that long unsettled sovereignty disputes can boil over into full-scale military confrontations, such as the armed conflicts between claimant States over the Spratly Islands, or between Argentina and Britain over the Falkland Islands,⁷⁵ it is evident from the success of the present Antarctic science regime that sovereign claims alone, barring concrete exclusive and exhaustive benefits, are unlikely to become the first priority for which States might resort to military measures.

Conflicts resulting from sovereign claims in Antarctica arise between claimant States with conflicting claims, or claimant States *vis-à-vis* non-claimant States. Article IV of the AT, which freezes national claims, was essential to a successful conclusion of the agreement.⁷⁶ While freezing the claims, it does not prohibit claimant States from maintaining their claims, so long as they are not enlarged. Various techniques are used to support claims, such as adopting decrees covering the claimed areas, or issuing postage stamps indicating the boundaries of their claims.⁷⁷ Claimant States use these techniques to restate the proposition that their sovereign claims have not been relinquished, although '[n]o acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting... a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica'.⁷⁸ In response, claimant States with conflicting claims seize every opportunity to express their non-recognition of the claims, with Argentina and Chile very often arguing in alliance against Britain. Non-claimant States, whose silence, according to Article IV, should not be taken as acquiescence either, have on various occasions expressed their non-recognition as well, in particular when some specific interest is concerned.

Consequently we are able to see that engagements between States such as those mentioned above continue, while the legal effects of these proposals, territorial claims and counterclaims, rejections of claims and rejections of counterclaims, are nullified by Article IV. This acts as a 'buffer zone', preventing the escalation of conflicts arising from sovereignty issues. As long as the AT remains in force, it is unlikely that States would militarise the continent or use force on it solely for the purpose of sovereignty claims. This might occur only when concrete benefits, such as strategic significance and economic benefits, supersede scientific research as the primary State interest, and a new consensus proves impossible.

⁷² Herber, above n 34, 844-5, citing Donald Rothwell, 'A World Park for Antarctica?' (Paper presented at the 44th Annual Conference of the Australasian Universities Law Schools Association, Victoria University of Wellington, New Zealand, 7 July 1989).

⁷³ Herber, above n 34, 850.

⁷⁴ Taubenfeld, above n 11, 293.

⁷⁵ Kevin Tray, 'Fear and Loathing in the South Pole: the Need to Resolve the Antarctic Sovereignty Issue and a Framework for Doing It' (2008) 22 *Temple International and Comparative Law Journal* 213, 213.

⁷⁶ Hayton, above n 18, 359.

⁷⁷ Taubenfeld, above n 11, 253.

⁷⁸ *The Antarctic Treaty*, 1959, 402 UNTS 71, art IV(2).

3.2.2 Strategic Significance

When the AT was concluded, the strategic significance of Antarctica was threefold: between the two superpowers of the Cold War; between States situated in geographic proximity to Antarctica; and between the superpowers and the Southern Hemisphere States.

The AT represented an important example of cooperation between the United States and the former USSR in the field of arms control. The two adversaries of the Cold War had little incentive to militarise the Antarctic, which, unlike the Arctic, had very limited strategic significance for the two superpowers, located as they are in the Northern Hemisphere. First, any activity that could be carried out in Antarctica could be done from the seas and from bases elsewhere, and would not involve the extreme problems of logistics and supply facing any user of Antarctica.⁷⁹ Secondly, before the AT was adopted, the larger powers had benefited from the scientific research conducted for military purposes, such as practising medicine in cold weather, ice-breaking, and building runways on sea-ice.⁸⁰ For example, in 1946 and 1947 the USA conducted Operation Highjump and Operation Windmill, two exercises to gather scientific, cartographical and related information and to provide military training in polar conditions.⁸¹

For States situated in geographic proximity to Antarctica, the importance of a peaceful Antarctica was relevant in the context of national security. Strategic problems relating to Antarctica while the AT was negotiated fell into three patterns: (1) there was a fear among the nations nearest the continent that an unfriendly nation might establish bases for the delivery of a direct attack; (2) there was a fear that hostile submarines or surface raiders might hide in Antarctic waters and might seriously interfere with world shipping; and (3) there was a more generalised fear that military bases, rocket-launching sites and the like might be established in the Antarctic waters for use against other nations anywhere in the world.⁸² Using Antarctica for strategic purposes is fundamentally a prisoner's dilemma, ie States might not cooperate even if it were in their best interests to do so.⁸³ The AT was a win-win outcome for them, because it eliminated the uncertainties by designating it as a non-militarised and nuclear-free continent and guaranteeing this with the right of unlimited inspection. It was also in the common interest of those States which would be most likely to suffer if a nuclear explosion took place on the continent, to keep the continent free from the possible negative impact of the Cold War.

In the light of the background of east-west competition, the conclusion of the AT was hard-earned. Considering that the international political atmosphere is much milder today, and that the strategic significance of Antarctica is essentially of minor importance, this element is also not likely to have any significant impact on the peaceful status of Antarctica.

3.2.3 Economic Benefits

The economic benefits in Antarctica derive from its living resources and mineral resources. The former is renewable, and could be exploited sustainably by conservation measures. These have been elaborated according to paragraph 1(f) of Article IX of the AT. Two protocols, namely the *Convention for the Conservation of Antarctic Seals* (1972) and the *Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)*, are complementary to the treaty in this respect. Exploitation of living resources in Antarctica has already been taking place, and has not had significant impact on the peaceful status of the continent.

Mineral exploitation, on the other hand, is the most significant negative variable to the peaceful status of Antarctica. The seventh continent is believed to contain many varieties of minerals, such as chromium, coal, iron and uranium. Based on the generally accepted Gondwanaland Thesis, and supported by recent discoveries, Antarctica is believed to contain huge oil reserves in its continental shelf.⁸⁴ Although mining in Antarctica is still not cost-effective, nevertheless technology development, the exhaustion of global resources and the growing accessibility of Antarctic minerals due to global warming could render it possible in the near future. Once resource activity becomes an issue,

⁷⁹ Taubenfeld, above n 11, 262.

⁸⁰ Auburn, above n 7, 95.

⁸¹ Taubenfeld, above n 11, 256.

⁸² *Ibid* 261-2.

⁸³ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583. 45 [165].

⁸⁴ Tray, above n 75, 216.

allocation of it could shift the balance of costs and benefits. There would be significant benefits to having sovereignty over Antarctic territory if resource exploitation occurred, and these might be deemed greater than the cost of conflict ensuing from efforts to assert that sovereignty.⁸⁵

When the AT was negotiated in 1959, the participating States were well aware of the possibility that there were minerals in Antarctica.⁸⁶ But the Washington Conference deliberately chose not to deal with the issue, partly because the prospect of exploitation was still too remote, and partly because of the fear among participating States that 'any multilateral approach would be detrimental to their territorial claims'.⁸⁷ Shortly after the AT entered into force, the Contracting Parties began to feel that the gap in the treaty with respect to mineral exploitation should be confronted.⁸⁸ Many States were concerned that the Treaty would fail to keep the peace in Antarctica once mineral exploitation became feasible, and unilateral actions were taken by claimant and non-claimant States. With the aim of filling this *lacuna*, at the 11th ATCM it was decided that a Special Consultative Meeting (SATCM) should be convened to discuss the minerals issue.⁸⁹ Negotiations commenced within the ATCM in 1982, and resulted in the signing of the final Act of the *Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA)* in 1988. This provides an elaborate framework for possible mineral exploration and mining, including detailed provisions for environmental protection, but due to opposition from Australia and France – soon joined by Belgium, India and New Zealand and others,⁹⁰ *CRAMRA* did not enter into force.⁹¹ Australia and France turned instead to support a comprehensive convention for environmental protection, which resulted in the 1991 *Madrid Protocol* and its five annexes.

Although *CRAMRA* did not come into force, it signified a near unanimous belief by interested parties that mineral exploitation in Antarctica was not only feasible but also desirable.⁹² Most Consultative Parties were at least in support of having such a mechanism in place to avoid *laissez-faire* when exploitation did take place. Although mineral exploration and exploitation are set aside by the *Madrid Protocol* until 2048,⁹³ exploitation is still possible if a mineral resource regime is unanimously agreed upon by the Consultative Parties.⁹⁴ Consequently *CRAMRA* is merely in suspense, and would provide a most acceptable convention once exploitation becomes an important issue. On one hand, it is evident from the negotiation of *CRAMRA* that the Consultative Parties do not want mining to take place on an unregulated basis; on the other, the Australian and French objections to *CRAMRA* were largely due to the advocacy of NGOs to declare Antarctica a World Park.⁹⁵ This is probably the optimal balance that could be struck at this stage, while the need to exploit Antarctica for minerals is less urgent. Although it is true that there ought to be a mechanism like *CRAMRA* in place to avoid *laissez-faire*, its entering into force might well encourage exploitation, because from an economic perspective, even before mining was profitable, States would nevertheless invest in exploitation in order to gain advantage.

If exploitation does occur, conflicts would emerge regarding exploitation versus environmental protection, claimant States versus non-claimant States, and technology-ready States versus technology-lacking States. Some of these conflicts have been resolved already in *CRAMRA*, some not. *CRAMRA* was negotiated behind closed doors, the drafting history not revealed. When it closed for signature on 26 November 1989, it was signed by 19 States: Argentina, Brazil, Chile, China, Czechoslovakia, Denmark, Finland, the German Democratic Republic, Japan, New Zealand, Norway, Poland, the Republic of Korea, Sweden, South Africa, Uruguay, Britain, the USSR and the USA.⁹⁶ It is noteworthy that at that time there were 37 State parties to the Antarctic Treaty, 23 with Consultative

⁸⁵ Peterson, above n 64, 2.

⁸⁶ Jorg G Podehl and Donald Rothwell, 'New Zealand and the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA): An unhappy divorce?' (1992) 22 *Victoria University of Wellington Law Review* 23, 25, referring to the statement by Wight: Commonwealth of Australia, *Parliamentary Debates*, House of Representatives, 18 October 1960, 2110.

⁸⁷ Pallone, above n 35, 604.

⁸⁸ Podehl and Rothwell, above n 86, 26.

⁸⁹ William M Bush, *Antarctica and International Law* (Oceana, 1982) vol 1, 442, recommendation XI-1.

⁹⁰ Samuel K N Blay, 'Current Developments, New Trends in the Protection of the Antarctic Environment: The 1991 Madrid Protocol' (1992) 86 *American Journal of International Law* 377, 378.

⁹¹ *Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA)*, 1988, 27 ILM 859, art 62. In order for the convention to enter into force, one of the requirements is that all claimant States should be parties to it.

⁹² Tray, above n 75, 223.

⁹³ *Madrid Protocol*, 1991, 20 ILM 1455, art 7.

⁹⁴ *Ibid* art XXV(5)(a).

⁹⁵ Donald R Rothwell, 'A World Park for Antarctica? Foundations, Developments and the Future' (1990) 3 *Antarctic and Southern Ocean Law and Policy Occasional Paper* 4, 7-11.

⁹⁶ Podehl and Rothwell, above n 86, 32. A series of international events happened after this date, for our purpose, mainly the dissolution of USSR

status. *CRAMRA* was subject to ratification, acceptance or approval by signatory States.⁹⁷ None of them did so,⁹⁸ despite the fact that signature is one of the means of expressing consent to be bound by a treaty.⁹⁹ It reveals States' support of a treaty and to what extent its interests are accommodated.

As a matter of fact, *CRAMRA* attaches much emphasis to environmental protection. The Convention states 'that the protection of the Antarctic environment and dependent and associated ecosystems must be a basic consideration in decision taken on possible Antarctic mineral resource activities'.¹⁰⁰ Article 4 lays down several requirements concerning environmental protection before Antarctic mineral exploitation is allowed. In many places it also mentions the importance of protecting the wilderness value of Antarctica,¹⁰¹ an element of the World Park doctrine, but the convention was finally rejected on environmental grounds. Fundamentally, this is because the exploitation of Antarctica is still not a vital issue.

The relationship between claimant States and non-claimant States is almost always central to issues concerning Antarctica. Mineral exploitation confronts the issue of title directly, and unlike scientific exploitation it is exclusive and exhaustive. It is without doubt that claimant States would expect more privileges than others in exploitation, if not exclusive rights. Monopoly by the claimant States had early been proved impossible due to non-recognition from non-claimant States. In the absence of new agreements, new claims could be made by the USA and Russia. The USA and the former USSR from the outset categorically rejected the possibility of recognising any territorial claim in Antarctica, and reserved the right to Antarctic territories based on discoveries and explorations made by their scientists and explorers.¹⁰² It is also worth mentioning that their basis of claim was asserted not just in relation to some specified part of Antarctica, but in relation to the continent as a whole.¹⁰³ If the scramble for Antarctic minerals did take place, militarisation would be almost inevitable and the continent's peaceful status would be jeopardised. However, the existence of *CRAMRA* signifies that an international consensus on the benefits distribution of Antarctic minerals is possible. According to *CRAMRA*, claimant States had a guaranteed seat in each Regulatory Committee responsible for the area they claimed,¹⁰⁴ while the USA and the former USSR, as countries which 'assert a basis of claim in Antarctica', were granted the same right for any established Regulatory Committee, irrespective of the area concerned.¹⁰⁵ *CRAMRA* was signed by all claimant States except: Australia and France, whose objections were based on environmental concerns; and the United States and the former USSR. States with overlapping claims, namely Argentina, Chile and Britain, also signed. Therefore it is fair to say that *CRAMRA*, by and large, is sufficient to accommodate the interests of claimant States and the two States maintaining a basis for claims.

According to *CRAMRA*, Antarctic mineral resource activities are prohibited outside the convention.¹⁰⁶ A problem arises as to benefits-sharing between technology-ready States and technology-lacking States, which is akin to that between Consultative Parties and non-Consultative Party States, because a State in possession of the requisite technology would easily qualify as a Consultative Party by demonstrating its interests in Antarctica.¹⁰⁷ It could be argued that *CRAMRA* is very weak in catering for the interests of technology-lacking States. While the interests of developing Contracting Parties, with or without consultative status, are taken into account, States not party to the AT are not given attention. For example, according to the preamble, Contracting Parties are '[c]onvinced that participation in Antarctic mineral resource activities should be open to all States which have an interest in such activities and subscribe to a regime governing them and that the special situation of developing country Parties to the regime should be taken into account'.¹⁰⁸ Article 6, entitled 'Cooperation and International Participation', reads:

In the implementation of this Convention cooperation within its framework shall be promoted and encouragement given to international participation in Antarctic mineral resource activities by interested Parties which are Antarctic Treaty

and Czechoslovakia and the unification of German Democratic Republic and the Federal Republic of Germany.

⁹⁷ *CRAMRA*, 1988, 27 ILM 859, art 61(1).

⁹⁸ Podelt and Rothwell, above n 86, 32.

⁹⁹ *Vienna Convention of Law of Treaties*, 1969, 1155 UNTS 331, art 11.

¹⁰⁰ *CRAMRA*, 1988, 27 ILM 859, Preamble.

¹⁰¹ *Ibid* Preamble, arts 2(3), 4(2).

¹⁰² *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 16 [26].

¹⁰³ Arthur Watts, *International Law and the Antarctic Treaty System* (Grotius Publication, 1992) 120.

¹⁰⁴ *CRAMRA*, 1988, 27 ILM 859, art 29(2)(a).

¹⁰⁵ *Ibid* art 29(2)(b).

¹⁰⁶ *Ibid* art 3.

¹⁰⁷ *The Antarctic Treaty*, 1959, 402 UNTS 71, art IX(2).

¹⁰⁸ *CRAMRA*, 1988, 27 ILM 859, Preamble paragraph 12.

Consultative Parties and by other interested Parties, in particular, developing countries in either category. Such participation may be realised through the Parties themselves and their Operators.¹⁰⁹

Seventeen of the 23 Consultative Parties signed *CRAMRA*, with the exception of Australia, Belgium, France, India, Italy and Peru. However, only two of the 14 non-Consultative Parties, Denmark and Czechoslovakia, signed it. It is revealed that while most Consultative Parties were content with the mechanism, almost none of the non-Consultative Parties were in agreement, not to mention those not parties to the AT. The credibility of the ATS has long been questioned, as its internationalisation was carried out by a self-appointed group of States and it is exclusive in its decision making. Criticism on these lines is typically countered by arguing that the decision making mechanism is an open one, in the sense that participation is based on the conduct of substantial scientific research in the area. However, the author has doubts about the association between scientific research and mineral exploitation, in other words, whether a State with the capability to conduct scientific research in Antarctica should have greater privileges in mineral exploitation. This would contradict the argument for the exclusive character of the ATCM - that the responsibility to manage activities in Antarctica was more of a burden than a privilege, since the ATS consisted of obligations and not of rights.¹¹⁰

If mineral exploitation takes place in the framework of the *CRAMRA*, States who are not parties to the AT are bound to react. It is unlikely that they would react in a hard-line manner, to the extent of jeopardising the stability of the Antarctic's peaceful status, although the AT does not create obligations for third parties as to non-militarisation. Almost all leading States of the world, in an economic, political, or military sense, are Contracting Parties to the AT, if not Consultative Parties. According to Article X, the Contracting Parties undertake to exert appropriate efforts to ensure that no-one engages in any activity in Antarctica contrary to the principles and purposes of the treaty, one of which is to maintain the continent's peaceful status.¹¹¹ The non-Consultative States Parties to the AT are in an awkward situation, because their interests do not seem to be catered for in *CRAMRA*, but they cannot act contrary to the objectives and purposes of the treaty, including keeping Antarctica peaceful. In summary, it is fair to conclude that the peaceful status of Antarctica is not likely to be seriously at risk, even if mineral exploitation commences.

The most likely reaction from States not parties to the AT would be to advocate discussion of the Antarctic mineral resource issue in a global international forum. In fact, before the AT, the question was proposed twice by India for discussion at the UN, but both proposals were eventually withdrawn.¹¹² In addition, the popularity of the 'question of Antarctica' in the UN General Assembly has been synchronous to the negotiations regarding *CRAMRA* in the ATCM. At the initiative of Antigua, Barbuda and Malaysia,¹¹³ the issue has been discussed in the United Nations since the 1980s, but has declined from being an annual agenda item to a biennial and then a triennial item. In December 2005, the UN General Assembly adopted Resolution 60/47, according to which while the UN remains 'seised' of the 'question of Antarctica' the topic would not be placed on the agenda of the 63rd session in 2008.¹¹⁴ For the first time since 1983, the UN General Assembly is not scheduled to return to the question. This coincides with the rise and fall of *CRAMRA* in ATCM. As Professor Francioni writes, the ideological overtones surrounding the denunciation of the ATS as a 'closed' club surged in the 1980s because of the negotiations undertaken by the Consultative Parties with a view to *CRAMRA*, and subsided in the 1990s, primarily due to the shift in policy towards the protection and conservation of Antarctica.¹¹⁵

Once exploitation becomes technically feasible, the issue is very likely to be revived in the forum of the UN. The technology-lacking States would refer to the concept of the Common Heritage of Mankind, which has been given credibility by *UNCLOS* in relation to areas beyond national jurisdiction, and in relation to benefits-sharing. As put forward by Dr Mahathir Bin Mohamad, the then Malaysian Prime Minister, Antarctica belongs to the international community, and it should be the United Nations that administers the area or 'the present occupants' act as trustees for the nations of the world.¹¹⁶ And Christopher Pinto, the delegate of Sri Lanka to *UNCLOS III*, advocated in 1977

¹⁰⁹ Ibid art 6.

¹¹⁰ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 35 [143].

¹¹¹ Stefan Brunner, 'Article 10 of the Antarctic Treaty Revisited' in Francesco Francioni and Tullio Scovazzi (eds), *International Law for Antarctica* (1996) 103-24.

¹¹² UN Doc A/3118/Add.1 (13 September 1956); UN Doc A/3852 (15 July 1958).

¹¹³ UN GAOR, 37th sess, 10th mtg, UN Doc A/37/PV.10 (1982) 17.

¹¹⁴ *Question of Antarctica*, GA Res 60/47, UN GAOR, 1st Comm, 60th sess, 61st plen mtg, Agenda Item 88, UN Doc A/Res/60/47 (8 December 2005).

¹¹⁵ Francioni, above n 65, 2.

¹¹⁶ UN GAOR, 37th sess, 10th mtg, UN Doc A/37/PV.10 (1982) 17.

that Antarctica's resources should be made subject to a regime of rational management and utilisation to secure optimum benefits for mankind as a whole and in particular for the developing countries.¹¹⁷ Technology-ready States, as in deep seabed mining, would consider the market approach more appealing. Several of them consider the principle of the Common Heritage of Mankind as irrelevant to Antarctica because: (1) the existing ATS is effective and there exists no *lacuna*; (2) Antarctica is neither *res communis* nor *res nullius* as is the deep seabed; and (3) the concept of the Common Heritage of Mankind has not been declared as generally applicable to all spaces beyond national sovereignty, but limited to the area and the Moon.¹¹⁸ One useful means to resolve the conflict would be to strike a balance between 'distribution on the basis of labour' and 'average distribution' with respect to benefits-sharing, perhaps modified on the basis of the model for the Area.

4. Conclusions

The 'peaceful purposes' principle is strictly laid out in the AT, and guaranteed with the right to mutual verification. The Contracting Parties have exhibited goodwill in observing this principle. Although Antarctica may in future be regarded as sufficiently valuable to merit armed conflict, international agreement has been reached over the distribution of the benefits of mineral exploitation. The integrity of *CRAMRA* is in doubt, for the lack of a benefits-sharing mechanism for technology-ready States vis-à-vis technology-lacking States. To seek ways of accommodating these conflicts would be beyond the purpose of the present study and demands the collective wisdom of many, but the writer nevertheless considers that *CRAMRA* has settled elements of the conflicting issues and significantly reduced the possibility of militarisation.

Non-militarisation and nuclear-free, in the context of Antarctica, has been regarded as a model interpretation of the 'peaceful purposes' principle, applied in a rigorous manner. It was the hope of many that the AT pointed the path to peaceful settlement of other questions, such as disarmament and control of nuclear explosion, and to the neutralisation of other areas of potential conflict, such as the Arctic and outer space.¹¹⁹ However, attempts at analogy to other global commons are seldom successful. In outer space, the non-militarisation doctrine has already been superseded by the non-aggression doctrine. While on the high seas, negotiation of the complete demilitarisation of the high seas, which was expected to follow the *Seabed Arms Control Treaty* 1972, was never realised.¹²⁰ As a matter of fact, the non-militarisation and nuclear-free status of Antarctica have been achieved more due to the instrumental value of peace, rather than the intrinsic value. Seen in this way, the interpretation of the 'peaceful purposes' principle as meaning 'non-militarisation' and 'nuclear-free' in Antarctica shall not be wilfully analogised in interpreting the same principle in other fields of global commons such as the high seas and outer space.

¹¹⁷ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 64 [278].

¹¹⁸ *Report of the Secretary-General on Question of Antarctica*, UN Doc A/39/583, 38 [158], 65-6 [281]-[285].

¹¹⁹ Taubenfeld, above n 11, 301.

¹²⁰ Jinyuan SU, 'The 'Peaceful Purposes' Principle in Outer Space and the Russia-China PPWT Proposal' (2010) 26(2) *Space Policy* 81.