Antarctica – The game of great powers' geopolitical strategies

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Abstract: Antarctica is a unique and valuable continent. The international community, through the Antarctic Treaty, is interested in providing efficient administration, achieving rational management of ecosystems. One of the countries located closest to Antarctica is New Zealand. This country is interested in prevention of any conflicts caused by claims on this continent. Since the end of Cold War and especially in the beginning of 21st century, this country has been interested in maintaining this continent as an important gateway used for sustainable development. While the whole world is in a state of transition, and considering that Antarctica is a continent 30% larger than Europe and 50% larger than Australia, it is a true "scientific lab" for the entire world and it contains a significant part of earth's ice cap, playing a decisive role in provision of world's climate balance, the international community establishing a set of provisions in the Antarctic Treaty System, implementing practical conditions for efficient administration and rational management of Antarctica and its dependent and associated ecosystems. (Stuart Prior, 1997)

Key-words: Antarctica, Antarctic Treaty, sustainable development, ecosystem, climate balance, geopolitical strategies

1. Introduction

The Antarctic Treaty was concluded more than 40 years ago, proposing an integrated and global framework to provide preservation of this unique continent.

After the end of Cold War and dissolution of USSR in 1991, the decisive role of the United States in administration of Antarctica's issues, as well as the American presence on this continent, became undisputable. After losing in the global competition against the United States, Russians were forced to reduce dramatically their presence and claims on this area, of a strategic importance for the whole world.

On the other hand, the end of Cold War caused the smaller states to be forced to conclude circumstantial alliances in order to promote more strongly their interests in this region. A similar competition also takes place between the great powers, but in this case the capacity for design of power and interests in Antarctica, inclusively

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by the use of commercial routes or of the scientific exploration potential is incomparably higher. Thus, the great powers were provided with strong capabilities to impose their own control and management system for Antarctica's business, to the detriment of smaller states, less capable to project their power from thousands of miles away. (Conant M.A., 1986)

1.1. United States and Antarctica

USA's objective consisted in identification of factors that would facilitate coverage of - rather high - costs required to maintain research missions in this part of the world, which is lacking major economic significance, contrary to the Arctic region which has rich hydrocarbon deposits and can be used to set up military facilities in the vicinity of Russian Federation and European partners.

2. Scientific projects in Antarctica

A turning point in Antarctic exploration occurred when multiple research works performed on this continent delivered two key answers to the line of questions raised by representatives of international scientific community. The first answer concerns strategic capabilities that may be provided by the continent (including satellite monitoring), and the second concerns the importance of environment protection and of worldwide climate balance. To this end, Antarctica plays a deceive role in preservation of the planet, given its glaciers.

Facilities installed on this continent and aerial transportation allowed scientists to visit Antarctica quickly and in shorter time intervals, in order to perform experiments and research works. But relatively high costs involved by Antarctic expeditions and the need to provide substantial operational and logistic support determined countries and world's organizations to lay the foundations of a multilateral cooperation, promoted through the Antarctic Treaty Protocol concerning environment protection, concluded in 1991.

In this stage of increasingly intense exploration of the region, foundations are laid for new conditions of research and use of this continent, their range being extended by involvement of non-governmental organizations, of tourism operators and educational activities. (Cioppa, 1995)

2.1. Antarctic Treaty System

The Antarctic Treaty System is a full, complex set of arrangements provided to regulate inter-state relations in Antarctica. It is centered on the actual Treaty, signed in 1959 and on the Environment Protocol dated 1991, together with recommendations adopted by the treaty signatories and two conventions. This treaty

lead to demilitarization of this continent, and upon its signing 43 states agreed to prevent use of Antarctica for installation of nuclear warheads or for other military purposes. The major interest is focused on scientific research, more exactly on understanding of this region that provides uniquely important information for understanding of the global environment. This provides intrinsic strategic significance to the scientific view. In the same time, the continent in itself is known to have a fragile environment, calling for international protection.

As stated before, the end of global competition under the Cold War generated new challenges concerning the use and exploration of this continent. Expenditures to secure control on this region were reduced dramatically. Furthermore, during 1981-1991, the Treaty System was joined by new states. To a certain extent, this process diminished the interest of first founding members on Antarctica, of the model of a union of multiple states sharing common interests and values. The group of states involved in the management of this region was extended.

Claims of states discontented with the current management system request that this continent should be transferred under the administration of UN.

New rhetorical discussions followed, concerning the use of mineral resources, but involvement of NGOs in settlement of environment issues drove these problems closer to the overall UN agenda, not only to specific agendas of signatory states. Starting in the 90s, cooperation between signatory states and United Nations improved significantly. What's more, the process of approach of Antarctic problems was extended to a new format, once the non-signatory states raised specific requests for actual participation in administration of this continent and in management of ecosystems. The agenda became generalized, reasoning that Antarctica is of actual interest for the whole world. An important contribution to the development of the Antarctic Treaty System was brought by New Zealand. (https://postalmuseum.si.edu/research/pdfs/ChildStamps_of_the_American_Quadran t of Antarctica.pdf)

3. Elaboration of Policy and Determination of Consultative Status based on the Treaty

The Antarctic Treaty has a huge scope of implementation. It cannot fall exclusively under responsibilities of specialists who in Antarctica act separately from worldwide trends. Objectives of global importance are pursued, which were discussed during the United Nations Conference on Development and Environment held in Rio de Janeiro in June 1992. During this summit, parties exceeded the provisions of Antarctica Treaty, establishing new instruments of action in this part of the world. New parts are promoted to be integrated in the decisive processes of the Treaty, including consultative parts, to guide already adopted policies.

This approach is of significance for a set of practices set forth in the Antarctic Treaty System. Among these:

- Criteria for the consultative nature of certain parts. Since governmental involvement may be reduced (inclusively due to budget cuts), involvement of commercial sector is encouraged, playing an increasingly important role in the support of national activities.
- Preparation of new logistics and operational capacities (setting up a secretariat, more intensive use of transportation means, provision of logistic support for exploration).
- Understanding issues and management of protection of maritime biodiversity in this region.
- Issues related to sovereignty of states on Antarctica. New Zealand claims extended sovereignty on this continent, but other Treaty signatories contest this country's capacity to provide environment protection on such a large surface by its own, without external support.
- New threats against environment. Several conditions are set forth for the use of continent's mineral resources. It is stated that these resources cannot be used without the consent of all signatories and without thorough evaluation of the impact caused by exploitation activities. (Stuart Prior, 1997)

3.1. Institutions and processes in the Antarctic Treaty System

At the beginning of 21st century, signatory parties discussed the opportunity to increase efficiency of decision management and of implementation process under the Antarctic Treaty System. It is claimed that this treaty should become and remain transparent and therefore easily understandable by the signatories and also by non-signing parties.

Work teams make reference to some strength that should represent the fundamental characteristic of activities of the Committee for environment protection and of Treaty implementation - flexibility, pragmatism, innovation, out-of-the-box approach, mutual consensus in decision-making process. It is certain that great shares of managerial deficiencies are due to the fact that, in the beginning, the Treaty had a small number of members. Then their number increased, augmenting informational and institutional burden of managers. Improvement of consultative reunion procedures must promote order and predictability and optimum use of time. On the other hand, the system may become less flexible, focusing on details and not on the overall picture of policies implemented. (Janis N., 1977)

4. New Zealand and Antarctica

New Zealand's claims on Antarctica date back since 1923, being related to Ross Island, used for camping, preparation of Antarctic expeditions and other logistic purposes. In December 1959, New Zealand undertook a large number of obligations and engaged in a substantial program to continue scientific research on Ross Island.

The end of Cold War required a new approach of Antarctica and of scientific expeditions on this continent. This approach requires more resources and a multinational management system, through collective efforts of states having interests in this region.

Reference is also made to United States' capacity to contest the control of New Zealand on Ross Island, all the more since Americans were quite active in this region and they do not give up easily on facilities supporting expeditions in Antarctica. A report published in 1994 discusses New Zealand's capacity to continue scientific programs started in Antarctica and the extent to which the actual interests of this country oscillate between foreign policy and security objectives, and purely scientific goals. (Anne-Marie Brady, 2013).

4.1. 1994 Report: Scientific Considerations

First, this report acknowledges the interests of New Zealand on Ross Sea and on this overall region, used as an outpost for expeditions in Antarctic continent. New Zealand's permanent engagement in Antarctica is approached inclusively by reference to historical connections and to uniqueness and scientific significance of this region. After the end of Cold War, New Zealand declares an engagement favorable to concepts of prosperity, scientific collaboration, environment protection and prevention of Antarctica's militarization process. Foreign policy factors have a similar dimension. The position of member of the Antarctic Treaty System, as well as involvement in collective efforts made New Zealand a relatively reliable partner for many countries.

4.2. United States

With regard to relations with United States, formalized in 1958-1959, involvement of Americans in this valuable region is acknowledged, inclusively by development of a station on Ross Island, in McMurdo Sound, as a vital link in the supply chain for the South Pole.

4.3. Defense of Antarctica and New Zealand

Discussions on New Zealand's defensive objectives highlight the opportunity of collaboration with American and Italian partners in achieving valuable logistic and operational support in exploration of Antarctica and in providing mobility on this continent. On the other hand, USA involvement brings restrictions for New Zealand army forces. But the annual budget (of app. 18 million dollars) allocated to the army to maintain regional security exceeds the expenses assumed by the government to support scientific activities. This generates disputes both domestically and with the American side.

5. Other cooperation agreements

New Zealand concluded a series of agreements with several states, at government level (Sweden, Switzerland, Germany, France and Italy), to provide active collaboration in regional exploration. For example, Italy supports the International Antarctic Center (IAC) in Christchurch and opened an office there. Although the usefulness of these agreements cannot be challenged, amplitude of bilateral activities remains limited, based largely on initiatives of scientists and on individual projects.

5.1. Gateway connections

In an effort to diversify cooperation with other states in Antarctic exploration, New Zealand tried to extend scientific connections with other countries, especially with partners in Southern Hemisphere. The argument claimed is geographical proximity, countries involved being Argentina, Australia, Chile and South Africa. This cooperation model is also consolidated through the specific instrument referred to as ICAIR (International Center for Antarctic Information and Research). At the level of local authorities, Christchurch become "twin" with other cities in Chile (Punta Arenas), South Africa (Cape Town), Australia (Hobart), Argentina (Ushuaia) and Stanley (Malvinas-Falkland).

5.2. Asia – Pacific

We must not forget the pressure that may be exercised on this region by several states in Asia – China, Korean Republic, Japan. They are also interested in exploration of areas neighboring the continent and extension of control. In addition, New Zealand's interest is challenged by Malaysia's ambitions. The latter, through various interventions in UN, pursues further discussions on sovereignty on Antarctica.

5.3. Strategic Objective of New Zealand in Antarctica

Strategic objectives of New Zealand in Antarctica for the 21st century, as reconfirmed in 1995, are limited to "...preservation of values of Antarctica and Southern Ocean to the benefit of worldwide community, for present and future generation of New Zealand". Active and responsible administration shall be provided through:

- •long-term maintenance of New Zealand's interest and engagement concerning Ross Island;
- •development of economic opportunities for New Zealand, in relation to Antarctica and under the Antarctic Treaty System;

- •consolidation of the role assumed by New Zealand in management of Antarctica;
- •promotion of Antarctic region as a natural reservation dedicated to peace and science.

6. Geostrategic Aspects, Geopolitical Perspectives and Safety Issues in Antarctic Region

During the past two decades, significant geopolitical and geostrategic mutations occurred in the world, determined by increase in aviation potential, development of new work procedures for stratosphere satellites and the overall technological progress.

Significant changes in organization of security systems are explained by the following events:

- 1. Coastal states annex large maritime surfaces.
- 2. Island micro-states increase in number after decolonization
- 3. Great Powers introduce nuclear submarines to discourage competitors
- 4. For the first time, Soviet Union develops a sea fleet comparable to the American fleet. (P. Giot and E. Kofman, 1987)

On the background of dissensions between Great Britain and Argentina (and Chile) on the division of areas of influence in Antarctic region and of local involvement of USSR and USA, first negotiations and started for signing of the Antarctic Treaty in 1959, which as of 1991 is one of the most successful international agreements in history.

The essence of this Treaty consists in the use of Antarctica exclusively for peaceful purposes (Article I) and in establishment of restrictions for the use of nuclear explosions (Article V). But Article VI of this Treaty does not restrict in any manner the rights of states set forth in international legislation concerning deep waters in this region. Therefore, Antarctica may be also used for non-peaceful purposes, since glaciers present many advantages for submarines that may hide below Antarctic ice caps and evade any specific sensor. Alternatively, we may acknowledge that Great Powers insisted on inclusion of Article VI in the Antarctic Treaty, for a possible future promotion of geostrategic interests in this region. (Anthony Parsons, 1987)

This is also the case of Australia, located rather close to Antarctica and which arises suspicions, using here satellite monitoring facilities. We may add that Great Britain lost South Georgia in 1982, similarly to the loss of Falkland Islands. After a brief analysis of geopolitical factors that lead to this development of geostrategic competition in this region, we may conclude that, contrary to this difficult context, we must insist for demilitarization of Antarctic region.

Military significance of Antarctica is due both to Palmer Peninsula and narrow Drake Passage, where German navy sunk 195 thousand tons of ally supplies, as well as to the position of Antarctic region in a central point of many commercial

routes. Another cause for the strategic importance of Antarctica from military standpoint is the possibility to install a single station, for satellite monitoring of all passages of a defense system. (Burey, 1974)

Antarctica became a common point of great interests and even a region of crisis, due to reconsideration of security policies and reformation of navy forces in some states, in the imminent extension of control over Arctic space. During the 90s, strategy experts elaborated a list of the main security issues in Antarctic region, including the Southern Ocean:

Safety of access to resources of Antarctic Treaty Region, preventing whale hunting and allowing krill fishing in sustainable limits etc.

- 1. Presence of important commercial routes through the Drake Passage.
- 2. Prevention of occupation of strategically important areas by neighboring states Latin America, New Zealand, Australia.
- 3. Intensification of competition for areas of influence between the Great Powers.
- 4. Mitigation of political fears that may result from possible ideological challenging of the Antarctic Treaty System from third party states who claim within UN that Antarctica should be declared part of the "Common Heritage of Mankind".
- 5. The concept that Antarctic Treaty Region should be used exclusively for peaceful purposes, by demilitarization.
- 6. A high probability that the Antarctic Treaty Region is an area of potential conflict between initial signing parties, due to contradicting territorial claims, as well as between signatory powers and international community at large.
- 7. From navigational standpoint, the Antarctic Treaty sets forth explicitly the free circulation in international waters (through the 1956 Convention). At that time, definition of international waters for the Antarctic Treaty Region included explicitly all regions not covered by ice, and this definition is still in place.
- 8. Prohibition of claims of some states, after 1991, on exclusive economic zones and other maritime areas adjacent to the territory claimed in the Antarctic Treaty Region.
- 9. Since Antarctica was declared a region of scientific research, performance of research works exclusively in peaceful purposes must be provided. (Morris M.A., April 1981)

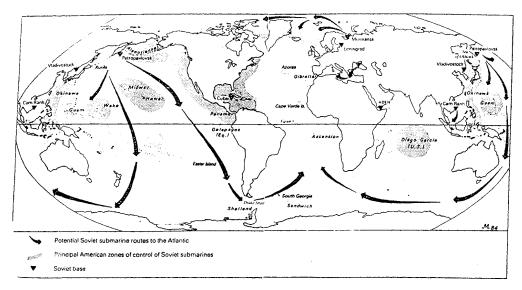


Fig. 1 Map: Strategic importance of Drake Passage

As seen in the two world wars, the geostrategic importance of the Antarctic Treaty Region consists in proximity of ocean to the Cape of Good Hope and Cape Horn, inclusively up to Polar Regions. (M.A. Conant, 1986)

International waters are an area that favor deployment of large scale military operations, a famous example in this direction being the Cuban Missile Crisis in 1962, when USA were one step away from a direct conflict with Soviet military ships. In addition, large distances and availability of international waters represent a significant obstruction for the capacity of design of military interests even for powerful countries, like Great Britain, who in 1982 took part in the Falkland/Malvinas Islands conflict. This conflict against Argentina may be seen as a conflict for extension of sovereignty on overlapped continental platforms of Falkland Islands. More recently, in 1985, Libya established a blockade in Sidra Gulf, claiming it as its own exclusive economic zone, after it was crossed by American ships (who considered the gulf to be part of international waters). (M.A. Morris, 1979)

Furthermore, 135 claims involving straits are known. USA was the first to declare that they assume the right to navigate and fly all over the world, applying what we may call the principle of military unipolarism on the rest of world's states.

Correspondingly, when we approach geostrategic competition based on navy forces, we must not confuse coast navy with deep water navy only from standpoint of position or relation of inferiority (N. Janis, 1977). For example, Cuba acquired sigh strategic significance after forming alliances with the Soviet Union. Another example of overlapping between the coast navy and deep water navy is provided by

conflicts between regional powers and Great Powers for capitalization of the increasing strategic potential of exclusive economic zone in South China Sea.

Presently, the worldwide naval scene is dominated by two main developments:

- 1. The huge naval potential of the United States and of the Soviet Union.
- 2. The possibility to build fast naval forces with high capacity for worldwide attacks

We cannot speak of a balanced distribution of naval forces around the world. While United State dominate Atlantic Ocean (together with NATO) and they are a dominant force in Pacific Ocean, ignoring to a great extent the potential of Indian Ocean after Great Britain left that region (although USA extended facilities in this ocean on Diego Garcia Island, app. 1000 miles south from India), Soviet navy forces are present in the Pacific Ocean, Baltic Sea, Mediterranean Sea, Indian Ocean (in a larger extent), South Atlantic. Although many people considered that the Soviets are faced with disadvantages related to camping and travels exclusively in cold waters or near narrow straits, their presence gradually increased in warm water harbors, mainly in Cuba, Ethiopia, Angola and Egypt.



Fig. 2. Map no. 2 Archipelago off the southernmost tip of the South American mainland, across the Strait of Magellan

Distribution of navy forces in Latin America features several contrasts. While Brazil and Argentina represent mid-level navy powers of the third world, like India in the Indian Ocean region, Chile, Columbia, Peru and Venezuela are focused on rapid development of deep water navy assets, Ecuador/Uruguay are better equipped with costal navy forces, and Guyana and Suriname have river fleets (M.A. Morris, 1981).

Uneven distribution of navy forces in Latin America mitigates current and potential disputes, meaning that one state may increase significantly its capacity of promotion of national naval interests, and the other states deploy only passive and vulnerable fleets (M.A. Morris, 1979).

AS for super powers and great powers, the size and strength of navy forces and strategies implemented in geostrategic competition on seas are dictated by the actual economic potential. While the Soviet Union established its main goal to defend domestic territories, the United States are focused on strategic prevention, extended control on seas, projection of coastal power and naval presence.

6.1. Security issues in Southern Ocean and Antarctica

The presence of numerous islands and archipelagos in the Southern Ocean and Antarctic region, and also of areas claimed by great powers or regional powers (like Argentina), require a rationally critic analysis of various logical and well-grounded conclusions, focused on policies resulting therefrom. They must also be accompanied by speculative legal and political forecasts. It has been demonstrated that these places are not only a region adjacent to the international system, but areas of strategic importance (CIA, 1978), that may be claimed inclusively by great powers like the United Kingdom or the USA.

Before conclusion of the Antarctic Treaty in 1959, app. 85% of the Antarctic territory were claimed by only 7 states (Bernhardth, 1975), respectively Argentina, Australia, Chile, New Zealand, Norway, France and United Kingdom, claiming the need for discovery, exploration and sovereignty (The Yale Law Journal, 1978). Seemingly, the other states are not ready to give up their claims in the future (De wit, 1985). Despite legal grounds and statuses under dispute, several important and certain notes may be expressed (ICJ, 1956) concerning these areas claimed in Antarctica (Joyner, C.C., 1985). As per popular opinion, the remaining 15% of Antarctic territory was returned to USA (M.J. Peterson, 1980).

Importance of this region is highlighted by its resources: This area is known for its rich content of A, B and D vitamins, minerals like calcium, copper, iron, magnesium and phosphorus (McWenthy, 1977). The fundamental argument for capitalization of this krill is the increasing world demand for proteins (S.Z. El-Sayed, 1979).

This area also abounds in material resources (P.D. Rowley, et al., 1983), as, in the future, important suppliers are advertised for coal, iron, platinum, magnesium geodes (which contain Co, Ni, Mn, Cu, Fe and chrome), tin and some minerals and heavy metals, respectively tin, titanium, uranium, gold and silver, which may be found in large quantities (Zumberge, 1979). This assessment is based on the observations of "continental drift" theory. However some people still consider that presence of abundant material resources in this area is materially uncertain and based on speculations (Ivanhoe, 1980).

7. Conclusions

Apart from considerations based on which Antarctica should remain a demilitarized zone, geostrategic competition among great powers does not completely exclude use of this region for military purposes. Considering the circumstances from this regional standpoint, we can identify several major security issues:

- 1. Measures for trans-oceanic transports: underlining the strategic potential of Drake Passage, which should be thoroughly analyzed, in the light of the Falkland conflict and of the Panama Canal blockade (J. L. Burey,1974). Consequently, protection of the free passage right in international waters is still a subject that stirs numerous disputes among states involved.
- 2. Access to natural resources (WWF News, 1983). While third world countries express their interest for material resources from remote oceans, facing serious food shortcomings, developed countries achieved only partial success in exploration of living resources, respectively Russia, Japan, Poland, Western Germany, Eastern Germany, Chile, South Korea, Taiwan and Norway, to this date. As for the access to mineral resources in this area, the Falkland conflict provided a clear illustration of the seriousness in division of resources in this strategic region.
- Although rather fragile politically, while requiring improvements and additional amendments for an operational perception in settlement of Antarctica's statute, while being dominated by powerful and unreasonable nationalistic views, the Antarctic Treaty remains the best instrument for a self-critical approach in settlement of issues shown above. The goal is to establish the statute of Antarctica in the near-future and in the long run, and to preserve this continent exclusively for peaceful purposes.

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