Legal Aspects of Mineral Exploitation in Antarctica

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ARTICLES

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INTRODUCTION

From the time of its discovery and exploration in the early nineteenth century, Antarctica long received only sporadic attention from the international community. Apart from occasional conflicts arising from competing territorial claims—Great Britain and Argentina, for instance, claimed overlapping sectors south of the Falkland/Malvinas Islands as early as 1908—the Antarctic continent attracted mostly the interest of whalers and explorers rather than lawyers.

Even after the Treaty of Washington of 1959,1 which set up the present cooperative regime,2 the international community treated the Antarctic continent with benign neglect. The 1970's marked the beginning of a new, growing interest in Antarctica reflected both in legal scholarship3 and in the undertaking of a multifarious diplomatic

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3. It would be impossible to provide an exhaustive list of the literature on the subject. The following books, however, are worth mentioning for the useful overview and bibliographical reference they provide. Regarding the political and legal questions involved in
Various factors account for the growing interest in Antarctica. First, states placed a strong emphasis in the mid-1970's on the new international law of common resources, including the need to conserve resources and to fashion principles of redistributive justice in areas otherwise subject to the regime of freedom (e.g., the seabed, outer space, and Antarctica). Second, following the 1973 oil crisis, the industrialized world demonstrated spasmodic concern for new sources of energy. This concern fostered interest in the significant reserves of coal and hydrocarbons that might be present in Antarctica. Third, world powers increasingly perceived the Antarctic region as potentially a strategic zone in the event of armed conflict because of the easy control Antarctica would provide over maritime communications between the Pacific and Atlantic Oceans.

Although at least the first two factors mentioned above require re-evaluation in light of current economic realities, the task of developing a legal framework for exploration and development of mineral resources in Antarctica remains a priority among the states party to the Antarctic Treaty. As of October 7, 1985, seven meetings had taken place within the Consultative Group of the Antarctic Treaty. Work on the elaboration of a set of principles on mineral resources, however, began in the early 1970's. In 1973, a meeting of experts, the Antarctic regime, see F. Auburn, Antarctic Law and Politics (1982); The New Nationalism and the Use of Common Spaces (J. Charney ed. 1982) [hereinafter cited as Charney]; P. Quigg, A Pole Apart: The Emerging Issue of Antarctica (1983). For an early comprehensive study of Antarctica, see G. Battaglini, La Condizione dell'Antartide nel Diritto Internazionale (1971).


5. This perception is reflected, for example, in the Statement on Foreign Policy issued by the President of the United States on the eve of the Falkland/Malvinas Conflict, which reiterated: “The United States has significant political, security, economic, environmental, and scientific interests in [Antarctica].” Question of Antarctica, Study Requested Under General Assembly Resolution 38/77, Report of the Secretary General, U.N. GAOR Annex (Agenda Item 66), U.N. Doc. A/39/583, vol. III at 126 (1984) [hereinafter cited as Report of the Secretary General].

6. Limited growth in the major industrial countries, coupled with the upsurge of the foreign debt of less-developed countries, has determined a shifting of focus from the long-term ambitious objective of the New International Economic Order to the more pressing short-term goals of economic recovery, reduction of unemployment, and reduction of the financial exposure of less-developed countries to the banking system of the Western World. At the same time, limited growth and conservation of energy sources have greatly reduced the dramatic concern for oil supplies that characterized the industrial world in the 1970's.

sponsored by the Nansen Foundation, addressed the question of whether possible mineral activities would be compatible with the Antarctic Treaty. Although the Nansen Foundation Report indicated that several states considered commercial exploitation of Antarctic minerals a breach of the Treaty—especially because of foreseeable adverse effects on scientific research and the risk of contamination—the issue nevertheless remained on the Consultative Meetings’ agenda.

At the Oslo meeting in 1975, mineral exploitation was considered for the first time at a substantive level. The subsequent meeting, the Ninth, gave rise to the first major effort to define a set of guidelines on the subject. Such guidelines are found in Recommendation X-1, adopted following a group of experts’ report elaborating and enlarging a document previously prepared by the Scientific Committee on Antarctic Research (SCAR) on the risk of mineral activities for the Antarctic ecosystem. These guidelines, later reiterated in Recommendation XI-1, provided a general framework of principles on which further negotiations were to be based.

At present, negotiations are continuing within the Consultative Parties group. A special meeting on the prospective mineral regime was held in Bonn from July 11-22, 1983, and the ad hoc working group has since discussed an informal project prepared by its Chairman, Ambassador Beeby of New Zealand. In May, 1984, a parallel set of draft articles, largely following the Chairman’s scheme, was presented by the Federal Republic of Germany.

This diplomatic ferment bears witness to the Consultative Parties’ intention to maintain an “active and responsible” role with respect to the possible future management of Antarctic resources. This involves the conviction that an eventual mineral regime must be rooted in the Antarctic Treaty system and that the special provision of article IV concerning the freezing of claims and relative objections must be preserved.

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12. Antarctic Treaty, Appendix, infra, art. IV.
The prospect of impending mineral exploitation in Antarctica has also worked to bring Third World demands for universal participation in Antarctic decision-making within the jurisdiction of the U.N., possibly of an ad hoc committee. Spurred by this demand, the Secretary General prepared a comprehensive study, together with a document containing the views of a great many member states. These documents were issued in late October, 1984. Chapter IV of the study deals with mineral resources in Antarctica.

On the basis of these preliminary observations, several important issues arise and require more substantive treatment: (1) whether mineral activities are compatible with the Antarctic Treaty; (2) whether and on what conditions the setting up of a mineral regime may be lawful and valid under customary international law; (3) what features the substantive content of the regime should have to be acceptable to the Consultative Parties and to other interested states who may want to accede to the regime; and (4) what institutions can be envisaged for implementing the mineral regime.

I. THE LAWFULNESS OF MINERAL EXPLORATION AND DEVELOPMENT UNDER THE ANTARCTIC TREATY

The Antarctic Treaty does not specifically address the issue of mineral activities. Therefore, the question of their admissibility is one of treaty interpretation. One view has emerged—as mentioned earlier—that the proposed mineral activities in Antarctica would violate the Antarctic Treaty. They would do so because of their alleged prejudice to pure scientific research and their inescapable contamination of the environment, with consequent frustration of the fundamental objectives of the Treaty set forth in the Preamble and in articles II and III. On the other hand, it has been maintained that the "peaceful purpose" clause in article I(1) must be understood to include mineral activities within the sphere of permissible uses of Antarctica—insofar as they are neither hostile nor military in nature.

13. The actual availability of Antarctic mineral resources, as well as the economics of their exploitation, are the subject of abundant literature. For a detailed discussion, see Zumberge, Potential Mineral Resource Availability and Possible Environmental Problems in Antarctica, in Charney, supra note 3, at 115; Pontecovo, The Economics of the Resources of Antarctica, id. at 155. See also the excellent study proposed by the U.N. Secretary General, supra note 5.

14. Report of the Secretary General, supra note 5. This report includes the views expressed by fifty-four States.

15. See supra note 8 and accompanying text.

16. For this view, see Bilder, The Present Legal and Political Situation in Antarctica, in Charney, supra note 3, at 167, 186.
As of today, this later view has largely prevailed among the Consultative Parties to the Treaty. The negotiations on the mineral regime referred to above have begun and are being pursued based on the assumption that mineral activities are per se consistent with the objective and purpose of the Antarctic Treaty.

Another question is whether, independently of the Treaty, an obligation to refrain from mineral activities in Antarctica flows from the 1977 Consultative Parties Recommendation establishing a moratorium on resource exploration and exploitation. This Recommendation was adopted at the Ninth Consultative Meeting and is addressed both to parties to the Treaty and to non-parties. Paragraph 8 recommends that governments “urge their nationals and other states to refrain from all exploration and exploitation of Antarctic mineral resources while making progress toward the timely adoption of an agreed regime concerning Antarctic mineral resource activities.”

Is such a recommendation capable of barring states from engaging in mineral activities in Antarctica? In answering this question, it might appear logical to distinguish between parties to the Treaty and third states; one could argue, for example, that despite the language of the recommendation, third parties may be free to consider the recommendation irrelevant to them as res inter alios acta. But such a distinction is only of theoretical interest. This recommendation is not a binding instrument imposing legal obligations on states and their nationals with respect to Antarctic resources. This recommendation is only intended to implement a policy of voluntary restraint which might become legally binding only upon its incorporation in international or national instruments imposing unambiguous legal obligations on states and their nationals.

Even assuming arguendo that such a recommendation has acquired the status of a binding instrument, it is clear that the moratorium established therein refers only to actual exploration and exploitation and is intended to prevent an unregulated race to mineral fields in Antarctica. Under the 1977 moratorium, the Consultative Parties are not only free to undertake consultations, but are morally and politically bound to do so pursuant to article IX, paragraph 1 of the Treaty.

Within the Treaty framework, the real issue with respect to mineral activities in Antarctica is that of agreeing upon the modalities of mineral exploration and development and setting up appropriate safeguards for other competing interests. In particular, these interests

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17. Recommendation IX-1, para. 8, reprinted in Charney, supra note 3, at 294.
18. See Antarctic Treaty, Appendix, infra, art. IX, para. 1 (establishing a framework for living resources).
include the protection of the environment, the position of the so-called claimant states, and non-militarization.

Despite the very tentative stage of the projects for the mineral regime, current negotiations show a strong sense of obligation toward the Antarctic environment. It is true that the group of industrialized states may favor more strongly a rapid development of mineral activities, while the Antarctic Treaty developing countries, especially the Latin American group, may place paramount interest in the protection of the Antarctic environment. However, all the Consultative Parties agree that the establishment of environmental safeguards is an imperative deriving from the trust accepted under the Antarctic Treaty. This is not surprising, since the functioning of the Treaty has long shown a solidarity that tends to blur traditional dividing lines and distinctions such as those between North-South and East-West.

The other major factor that will condition the development of a legal regime for mineral activities within the Treaty system is the special territorial status of Antarctica. Article IV of the Antarctic Treaty temporarily freezes existing claims and relative objections. Future activities connected to the exploration and development of mineral resources will obviously affect this situation. For the first time, in fact, activities in Antarctica will be directed neither to purely scientific goals nor to mere conservation. Mineral exploitation of non-renewable resources is normally a corollary of national sovereignty; contemporary international law suggests this principle in the close connection between title over the territory and the concept of permanent sovereignty over natural resources. It is essential, therefore, that however flexible the future regime may be, it will take into consideration the necessity of neither jeopardizing nor confirming territorial claims—as, for instance, by granting exclusive oversight and control powers to one or more claimant states—until a definitive solution of the territorial claims problem has been reached. As will be discussed later, current projects only partially succeed in this task.

The non-militarization principle may prove rather easy to establish in the future mineral regime by incorporating a clause similar to that of article I(1) of the Antarctic Treaty. The application of the peaceful use principle to installations, structures, and equipment used for mineral exploration and exploitation will be more meaningful if accompanied by the extension to these activities of the inspection

20. See infra Part III.
mechanism which today applies successfully to scientific stations and expeditions.\textsuperscript{21}

II. THE LAWFULNESS OF MINERAL EXPLORATION AND DEVELOPMENT UNDER CUSTOMARY INTERNATIONAL LAW

The current debate over the future of Antarctic mineral resources is not limited to the parties to the Antarctic Treaty. The group of non-aligned countries, in particular, has been increasingly active with respect to Antarctica in view of the considerable importance they attach to the continent in terms of resources and global development.\textsuperscript{22} In this context, it is obvious that the non-aligned group will be reluctant to accept a scenario in which the decision-making process regarding mineral activities remains in the hands of the Consultative Parties alone.

Although the Antarctic Treaty’s successful role in providing an effective legal framework for scientific cooperation and conservation initiatives is generally recognized, the emerging view among less-developed countries is that a broader international arrangement is needed to guarantee that economic activities carried out in Antarctica are for the benefit of all of humanity. This concept underlies the position taken by the Conference of Heads of State or Government on Non-Aligned Countries held in New Delhi in March, 1983, which passed a resolution stating:

The Heads of State or Government noted that the Continent of Antarctica has considerable environmental, climatic, scientific and potential economic significance to the world. They expressed their conviction that, in the interest of all mankind, Antarctica should continue forever to be used exclusively for peaceful purposes, should not become the scene or object of international discord and should be accessible to all nations. They agreed that the exploration of the area and the exploitation of its resources shall be carried out for the benefit of all mankind, and in a manner consistent with the protection of the environment of Antarctica . . . . The Heads of State or Government, while noting that relevant provisions of the Antarctic Treaty of 1959 related to international cooperation in the area, considered that in view of increasing international interest in the Antarctic, the United Nations, at the thirty-eighth session of the General Assembly, should undertake a comprehensive study on Antarctica, taking into account all the relevant factors, including the Antarctic Treaty, with a view to widening international cooperation in the area.\textsuperscript{23}

\textsuperscript{21} Antarctic Treaty, Appendix, \textit{infra}, art. I.

\textsuperscript{22} For a full discussion of the views of non-aligned countries, see Hayashi, \textit{supra} note 4.

\textsuperscript{23} This resolution is reprinted in an annex to the request presented by Antigua and Barbuda and Malaysia for the inclusion of a supplementary item concerning Antarctica in the agenda of the thirty-eighth session of the General Assembly. \textit{See} U.N. Doc. A/38/193 at 2-3 (1983).
Following this resolution, the representatives of Antigua and Barbuda and Malaysia requested, in a letter of August 11, 1983, the inclusion of Antarctica in the agenda of the General Assembly. Despite the reservations expressed by the Consultative Parties with respect to this request, the General Assembly resolved to inscribe the question on the agenda of its thirty-eighth session and to give the Secretary General the mandate to prepare the study on Antarctica mentioned above. The question once again appears on the agenda of the General Assembly at its fortieth session.

Against this background of active and widespread interest in Antarctica, the question of the lawfulness of mineral activities under customary international law is the threshold issue in the present negotiating process. Unlike the Law of the Sea Conference, where negotiations for the drafting of the controversial mineral regime of the international seabed area saw the participation of virtually all the states of the world, present negotiations on the Antarctic mineral regime are conducted within the rather small circle of states party to the Antarctic Treaty. These states, however, are not free to shape a mineral regime accounting only for the legal framework of the Antarctic Treaty. Rather, they must conduct their negotiations with due regard for the evolving body of customary international law applicable to the exploitation of resources beyond national jurisdiction. Consideration of customary international law is essential for several reasons, regardless of whether applicable norms of customary international law have become rules of jus cogens. First, the Antarctic

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24. See supra note 5.
25. See Letter of Oct. 5, 1983 (from the Australian Permanent Representative to the United Nations addressed to the Secretary General), in which the following view was stated on behalf of the Consultative Parties to the Antarctic Treaty:

Revision or replacement of the Treaty which is now being suggested by Malaysia and Antigua and Barbuda would undermine this system of international law and order in Antarctica with very serious consequences for international peace and cooperation. It is unrealistic to think that, in the present state of world affairs, a new or better legal regime for Antarctica could be agreed upon. The undermining of the Treaty could open the way to an arms race in the region and might lead to new territorial claims. It would not serve the interest of any country, or group of countries, if Antarctica became an area of international conflict and discord.

It is for these reasons that the Consultative Parties to the Antarctic Treaty have serious reservations about the initiative by the Governments of Malaysia and Antigua and Barbuda and about any attempt to revise or replace the present Treaty system.

27. See Hayashi, supra note 4.
28. See infra note 42.
MINERAL EXPLOITATION

Treaty itself contains a clear reference to international law. Second, more than twenty-five years have passed since the adoption of the Treaty; in the meantime, new principles and new norms of international law have emerged with respect to the legal status of spaces beyond national jurisdiction. Third, in view of the fast-approaching deadline of 1991 for the Treaty's eventual revision, it would hardly be defensible on policy grounds to develop a mineral regime openly inconsistent with newly established or emerging principles of customary international law. This paper will discuss the prospects of an Antarctic mineral regime in light of these principles.

A. COMMON HERITAGE OF MANKIND

The first and most important principle of customary international law that must be applied to any minerals regime in Antarctica is that of the common heritage. This principle has become the *leitmotif* in the progressive development of international law governing the use of areas beyond national jurisdiction. Its specific recognition can be found in the 1982 Law of the Sea Convention, as well as in the Moon Treaty of 1979; reference to this principle was also made in the Outer Space Treaty of 1967. Despite the fact that its precise legal implications still remain rather uncertain, there is general consensus that the common heritage principle tends to create an obligation for individual states to use the resources of the international seabed area as well as those of outer space in a way that promotes not only national interests, but the well-being of mankind as a whole.

The Antarctic Treaty does not contain a specific reference to the common heritage principle, and it could not have done so because, in 1959, the expression was not yet part of the international vocabulary. The application of the common heritage principle to Antarctica, however, has been advocated in legal literature and diplomatic pro-

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29. "[N]othing 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." Antarctic Treaty, Appendix, *infra*, art. VI.
30. *Id*, art. XII, para. 2(a).
nouncements. Some states have gone so far as to suggest that even the work on a mineral regime currently undertaken by the Consultative Parties should cease until an international administration is established.

I do not believe that the latter view correctly represents the legal implications of the common heritage principle on mineral activities in Antarctica. It postulates a standstill obligation, not only with respect to actual exploration and exploitation of resources, but also with respect to negotiations on this matter amongst the states who have accepted the primary responsibility of guaranteeing peaceful access to and use of Antarctica.

On the other hand, I do not share the view advanced in legal literature and state practice that the common heritage principle should not definitely be made applicable to Antarctic resources. The correct approach to this problem requires that two distinct issues be kept separate. The first is whether the common heritage principle is applicable at all to Antarctica. The second, which arises only in the case of an affirmative answer to the first, is whether the development of a mineral regime restricted to the Consultative Parties necessarily constitutes a violation of the common heritage principle for lack of universal participation.

1. General Applicability of the Common Heritage Principle to Antarctica

No formal instrument directly sanctions the application of the common heritage principle to Antarctica. The extent to which the continent's legal regime already reflects common heritage principles, however, implies recognition that the principle imposes at least some

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35. See the Mauritius-sponsored resolution adopted on August 7, 1985, by the Heads of States of the Organization of African Unity, whose first paragraph of the operative part declares "Antarctica to be the common heritage of mankind." (Unpublished text of the Resolution on file at the offices of the Cornell International Law Journal).

36. Report of the Secretary General, supra note 5.

obligations. Ironically, it is the remarkable success that the numerically limited Antarctic group has achieved in preserving the continent from nationalistic aims and unilateral assertion of claims that evidences the Consultative Parties' sense of obligation and responsibility, not only inter se, but toward the international community as a whole. I would even dare say that the present Antarctic regime represents the only existing example of substantive implementation of the common heritage principle.

Once we recognize this proposition, it is easier to accept the existence of a set of substantive obligations binding upon those who have access to or who are preparing to obtain access to the mineral resources of Antarctica. In defining such obligations, an analogy can be drawn with the criteria developed by Professor Conforti in a seminal article of 1977. Professor Conforti correctly argues that although unilateral exploitation of the deep seabed may not be prohibited absolutely by U.N. resolutions and by the work of the Third Conference on the Law of the Sea, nonetheless, states are bound by the established and emerging principles of international law limiting their freedom to use sea resources.

Applying this framework of inquiry to Antarctica, the first and most obvious obligation that arises under the common heritage principle requires states to abstain from asserting claims to exclusive control or appropriation over areas in which mineral activities will be carried out. In this situation, the common heritage principle plays a concomitant role with article IV of the Antarctic Treaty in preventing pioneering mineral activities from being used as the first step in a process to establish jurisdiction over specific areas of the continent. From the point of view of customary international law, therefore, one reaches the same conclusion reached under the Antarctic Treaty: the future mineral regime will have to lay down a principle that precludes claims of sovereignty based upon occupation of a given area for purposes of mineral exploration or exploitation.

The second obligation of a substantive character stemming from the common heritage principle involves allocation of a fair share of mineral resource revenues for the benefit of the international community. This allocation would be required as long as mineral resource

38. See supra note 2.

39. The common heritage principle in the Outer Space Treaty, supra note 33, and in the Moon Treaty, supra note 32, remains at the stage of mere enunciation. Part XI of the 1982 Law of the Sea Convention, supra note 31, remains a victim of the overly ambitious and burdensome bureaucratic apparatus that is to implement the common heritage principle with respect to the seabed.

activities were being carried out. The rate of such a levy would be
determined so as to guarantee an equitable and well-balanced relation-
ship between the profits that investing companies or states reasonably
expect from the Antarctic venture and the contribution to develop-
ment that non-industrial states legitimately expect from the recovery
of non-renewable resources in a common space. 41

2. Application of the Common Heritage Principle to Negotiations for
   a Mineral Regime

Having established the general applicability of the common heri-
tage principle to Antarctica, the question that follows is whether nego-
tiations for a mineral regime in a restricted forum (such as that of the
Consultative Parties) violate the common heritage principle. In my
view, the answer is no. Under the present structure of international
law, observance and implementation of substantive norms are, in prin-
ciple, left to the individual states. States are also free to negotiate and
conclude agreements provided that they do not run counter to the
principles of jus cogens. 42 But even if we were to admit hypothetically
that the common heritage principle is a principle of jus cogens, the
only conclusion we could draw from such an assumption would be
that a conventional regime for mineral resources which is inconsistent
with the substantive principles enunciated above would be invalid. In
no way would the above assumption warrant the conclusion that mere
negotiations for the development of a mineral regime violate the com-
mon heritage principle for lack of universal participation.

B. Preservation and Protection of the
   Natural Environment

The second principle applicable to the legality of mineral activi-
ties in Antarctica is the preservation and protection of the natural
environment. It is almost superfluous to recall that this principle has

41. It is not the task of this paper to propose exact figures as to the amount of such a
levy. However, on the basis of the experience of national laws on mineral exploitation of
the deep seabed area, a fair amount would be between 5% and 10%. An adjustment mech-
anism would be required in any case to account for the larger profits that normally will
accrue after the initial period of the investment.

42. The principle of jus cogens is set out in the Vienna Convention on the Law of
Treaties as follows:
   A treaty is void if at the time of its conclusion, it conflicts with a peremptory norm
   of general international law. For the purpose of the present Convention, a peremp-
   tory norm of general international law is a norm accepted and recognized by the
   international community of States as a whole as a norm from which no derogation
   is permitted and which can be modified only by a subsequent norm of general
   international law using the same character.
increasingly become a fundamental concept inspiring the development of international law; the principle has had a significant impact on the regulation of the marine environment, the use of space, and the concept of state responsibility for transboundary pollution. In particular, attempts to codify the notion of state responsibility for transboundary pollution have produced a considerable degree of consensus that serious damage to the natural and human environment gives rise to an international crime, i.e., that such damage constitutes a wrongful act involving responsibility to the international community as a whole and not merely to the state or states specifically affected.

Despite the still undefined character of such an erga omnes obligation, it seems indisputable that preservation of the Antarctic environment was one of the fundamental goals of the trust created under the Antarctic Treaty. This goal has come to be widely shared even among the states that are not parties to the Antarctic Treaty, as is evidenced by the repeated reference to the paramount importance of environmental protection in current attempts to bring the matter within U.N. jurisdiction and in the views of states attached to the Secretary General's study.

The principle of environmental protection of Antarctica will have to be accepted as a legal restraint to mineral activities regardless of the


45. For an early application of the principle of international responsibility for transboundary pollution, see the Trail Smelter Arbitration (U.S. v. Can.), 3 R. Int'l Arb. Awards 1911 (1941).

46. Article 19 of the International Law Commission's Draft Articles on State Responsibility, after defining the category of international crimes, exemplifies such wrongful acts by reference to (a) aggression, (b) breach of self-determination of peoples, (c) slavery, genocide, and apartheid, and “(d) a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment...” The text of article 19 appears in 2 Y.B. INT’L L. COMM’N (part 2) 80 (1978).

47. This is shown not only by the general purposes and parameters set up by the Antarctic Treaty, but by the great emphasis that the Consultative Parties have put on promoting conservation measures. See supra note 2. For a thorough discussion of the various aspects of environmental protection in the Antarctic area, see Joyner, The Southern Ocean and Marine Pollution: Problems and Prospects, 17 CASE W. RES. J. INT’L L. 165 (1985).

48. See paragraph 3 of the Explanatory Memorandum attached to the request to include Antarctica in the agenda of the Thirty-Eighth Session of the General Assembly, supra note 23. For the views of states, see Report of the Secretary General, supra note 5.
future territorial status of the continent. In other words, even if the present territorial claims were to be partially or fully recognized as a legal basis for a national concessionary model of mineral exploitation, this could not be done without consideration for preserving the Antarctic milieu in its entirety. The value of environmental integrity, as is clearly proclaimed in the U.N. Stockholm Declaration of 1972, is indivisible. It is all the more so for Antarctica in that extension to this continent of the traditional attributes of state sovereignty over territory, exclusivity, and freedom in the exercise of territorial jurisdiction, presents much greater risks in view of the unity and fragility of the pertinent ecosystem. Therefore, even if claimant states were to consolidate their title, such consolidation could not involve the freedom to recklessly exploit mineral resources of the respective sectors. Such freedom and the parallel exclusive character of state authority over the relevant sector would still be limited by the general prohibition of massive degradation of the Antarctic environment, of total depletion of mineral resources, and of compromising the balance between the ecosystems of the continent. This conclusion is valid for a mineral regime of an international character under which the terms, conditions, and oversight of exploitation activities depend upon an intergovernmental authority to be constituted by treaty.

C. PRINCIPLES OF THE NEW INTERNATIONAL ECONOMIC ORDER

The third set of principles that I consider relevant for assessing the lawfulness of mineral exploitation of Antarctica are those related to the structure and objectives of the new international economic order. Despite the skepticism surrounding such a normative category (especially as over ten years have elapsed since the enunciation of the international economic order without its having been translated into binding instruments), I believe that the political movement that originated its demand has produced at least a sediment of general principles. One such principle is the requirement that the inequalities between industrialized states and less-developed countries not be worsened by the unregulated introduction on the world market of raw


50. For an analysis of these two attributes of state sovereignty, see B. CONFORTI, LEZIONI DI DIRITTO INTERNAZIONALE 158 (1982).

materials and commodities from new sources which would cause a sudden collapse in prices and a serious crisis for the economy of less-developed producing countries. This principle is to be considered part of emerging customary international law as is witnessed by its systematic adoption in international trade agreements concerning price stabilization in commodities and by its incorporation in part XI of the Law of the Sea Convention. The detailed regulations laid down in article 150 of this Convention, although not necessarily applicable to Antarctic mineral activities, are reflective of the same basic need for some measure of restraint and regulation to reconcile the concept of the common heritage principle with the eventual mineral exploitation of Antarctica. A principle of laissez faire in this field is hardly compatible with the concept of common resources and with the need to protect the less-developed countries whose economy would be adversely affected by future mineral extraction from Antarctica.

III. SUBSTANTIVE ASPECTS OF THE PROPOSED MINERAL REGIME

The above analysis brings us to the conclusion that, although there is a set of minimum legal restraints with which the future Antarctic mineral regime will have to comply, such restraints do not include the obligation to abstain from undertaking or pursuing negotiations on this subject within the framework of the Consultative Parties. On the basis of this assessment, I turn now to examine the main

52. Among the many examples of this practice are the pioneering 1956 International Tin Agreement, 1014 U.N.T.S. 43 (revised June 26, 1981); the International Sugar Agreement of 7 Oct. 1977, 1064 U.N.T.S. 219; the International Coffee Agreement of 3 Dec. 1975, 1024 U.N.T.S. 3; and the International Cocoa Agreement of 20 Oct. 1975, 1023 U.N.T.S. 253. The common feature of these agreements is that they provide mechanisms of financing for buffer stocks of relevant commodities and "stabex" type of funds intended to sustain prices in periods of sharp decline. The Charter of Economic Rights and Duties of States, supra note 51, contains several references to the principle of balanced expansion of world trade (art. 14), international cooperation for the purpose of facilitating economic and social development (art. 17), of abstention from policies having a negative effect on the national economics of developing countries (arts. 18, 23), and of special attention and duty to the needs of the least developed among the developing countries, so as to develop economic policies capable of overcoming present economic difficulties (art. 25).

53. The Convention provides that mineral exploitation of the seabed area "shall . . . be carried out in such a manner as to foster healthy development of the world economy and balanced growth of international trade, and to promote international co-operation for the overall development of all countries, especially the developing states . . . ." 1982 Law of the Sea Convention, supra note 31, art. 150. Article 150 also indicates that one of the objectives of the policies relating to the development of seabed resources is "the protection of developing countries from adverse effects on their economies or on their export earnings resulting from a reduction in the price of one affected mineral, or in the volume of that mineral exported, to the extent that such reductions are caused by activities in the Area. . . ." Id. art. 150(g).
features and directions of the work currently being carried out within the Consultative Group with a view toward drafting a mineral regime.

Two projects have so far been circulated among the Consultative Parties to the Antarctic Treaty. Although both are still at a rather general level of elaboration, a set of substantive principles and a skeleton of institutional machinery appear sufficiently developed to permit a preliminary evaluation in light of the applicable principles drawn from the Antarctic Treaty and from customary international law.

Both the German Draft and the Beeby Draft indicate that negotiations are moving toward a mineral regime that is complementary to the Antarctic Treaty and to the legal system that gradually developed from it. This is clear from the Preamble and from article II, paragraph 2(d) of both drafts, which reads: “The Antarctic Treaty Consultative Parties shall retain an active and responsible role in relation to all proposed or actual Antarctic mineral activities.”

This conservative statement is balanced by some procedural novelties that tend to enlarge the scope of the decision-making process. Starting with the meeting held at Rio de Janeiro in February-March, 1985, the Consultative Parties have agreed to invite other contracting parties without consultative status to participate in the negotiations as observers. This has enabled a group of sixteen states, some of whom are actively seeking consultative status, to be involved directly in the negotiating process. Obviously this does not mean that the privileged status of the Consultative Parties has been brought to an end. Even from a procedural point of view, the difference between the two categories of contracting states is emphasized by restrictive rules for non-Consultative Parties who are allowed to speak only after the full-fledged partners have spoken. It is very likely, however, that despite such formal distinctions, this new cooperative atmosphere will enable the non-Consultative Parties to make an important contribution to the shaping of the mineral regime by the very fact of their active participation. Further, a proposal has been made in recent negotiations for the creation of a forum allowing participation by all parties to the eventual mineral regime, regardless of their consultative status. This forum could take the form of a special organ or an ad hoc conference where some major decisions, such as the opening of an area for mineral activities, would be discussed.

Let us now examine the substantive features of the proposed regime.

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54. See supra notes 10-11.
55. Id. Article II, paragraph 2(d) of both draft proposals uses the identical language.
56. As of October 7, 1985, China, Uruguay, Peru, and Italy were actively seeking Consultative status.
A. PROTECTION OF THE ENVIRONMENT

The Preamble, article II, and article III of both the German and Beeby Drafts incorporate the principle that Antarctic mineral activities may be carried out only within the framework of previously established safeguards of the environment. This principle is specified in detail through a set of norms which include: (1) the necessity for impact assessment studies before any mineral activities take place; (2) the requirement of prior adequate information concerning possible risks and consequences of eventual accidents before any judgment is passed on the feasibility of mineral activities; and (3) the prohibition of any exploitation of mineral resources until technology and procedures are available to cope with operating risks and eventual accidents. The German Draft also contains a reference to a strict obligation concerning the removal of pollutants and the disposal of industrial waste.\(^{57}\)

These provisions represent a good starting point for further improvement of the environmental guarantees as a condition for mineral activities in Antarctica. The revised text of the Beeby Draft shows several signs of improvement, especially with regard to a new article on protected areas and to the extension to the mineral activities and installation of an inspection mechanism modeled on article VI of the Antarctic Treaty.\(^{58}\)

B. SOVEREIGNTY CLAIMS

The mineral regime proposed under the German and Beeby Drafts attempts to resolve the delicate problem of preserving the principles established in article IV of the Antarctic Treaty. This is very important because no other activity carried out in Antarctica to date has posed a threat to territorial claims comparable to the threat posed by minerals exploitation. Article VII of both Drafts reiterates the notion that nothing in the regime and in the activities carried out while it is in force shall “constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in the Antarctic Treaty area . . . .”\(^{59}\) The final provision of article VII confirms the familiar “freezing clause” according to which no new claims or enlargement of existing claims are admissible while the Antarctic Treaty is in force.

Two differences, however, exist at the present stage between the Beeby Draft and the German Draft. First, the Drafts differ as to

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57. German Draft, supra note 11, art. III(e).
58. A detailed analysis of these provisions and a judgment as to their adequacy will not be attempted here because environmental protection is the specific subject of another paper in this Conference. See Joyner, Protection of the Antarctic Environment: Rethinking the Problems and Prospects, 19 CORNELL INT'L L.J. 259 (1986).
59. Beeby Draft, supra note 10, art. VII; German Draft, supra note 11, art. VII.
which claims to territorial sovereignty the freezing clause affects. The German Draft contains the words “previously asserted”\textsuperscript{60} with reference to claims to territorial sovereignty, while the Beeby text speaks generally of “any right or claim.”\textsuperscript{61} The second difference is the inclusion in the Beeby Draft of a reference to “coastal state jurisdiction,”\textsuperscript{62} whereas the German Draft speaks only of claims to “territorial sovereignty” within the Antarctic Treaty area.\textsuperscript{63}

Although the German Draft follows more faithfully the language of the Antarctic Treaty, the Beeby text is more appropriate and precise for the purpose of reconciling mineral activities with territorial claims. The wording “previously asserted” rights or claims, in fact, could be interpreted as referring to claims that were once asserted and later abandoned.\textsuperscript{64} This interpretation would, of course, be unacceptable for those states who are still maintaining claims. Also, with respect to the second difference, the Beeby text presents a better drafting technique. If, as seems probable, Antarctic mineral activities will be located both on land and in marine areas, it will be necessary for the mineral regime to apply the “stand still” clause to coastal state jurisdiction as well. A combination of the language of article IV of the Antarctic Treaty and of article IV(2)(b) of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR),\textsuperscript{65} which obviously is concerned with marine areas, seems to be the most appropriate solution.

Despite such drafting differences, current negotiations appear to take fully into account and to further refine the principle laid down in article IV of the Antarctic Treaty. Furthermore, the proposed draft articles provide that parties to the mineral regime shall observe, whether or not they are parties to the Antarctic Treaty, the various instruments adopted within its framework. The most notable of these instruments are the Agreed Measures for the Conservation of Antarctic Fauna and Flora,\textsuperscript{66} CCAMLR,\textsuperscript{67} and the Convention for

\textsuperscript{60} German Draft, \textit{supra} note 11, art. VII(b).

\textsuperscript{61} Beeby Draft, \textit{supra} note 10, art. VII(b).

\textsuperscript{62} \textit{Id}.

\textsuperscript{63} German Draft, \textit{supra} note 11, art. VII(b).

\textsuperscript{64} Article VII, paragraph 1(b) of the German Draft notes:

\begin{quote}
Nothing in the regime and no acts or activities taking place while the present regime is in force shall . . . be interpreted as a renunciation or diminution by any Party of, or as prejudicing any previously asserted right or claim or basis of claim to territorial sovereignty within the Antarctic Treaty Area. . . .
\end{quote}

\textsuperscript{65} Nothing in this convention and no acts or activities taking place while the present Convention is in force shall . . . be interpreted as a renunciation or diminution by any Contracting Party of, or as prejudicing, any right or claim or basis of claim to exercise coastal state jurisdiction under international law within the area to which this Convention applies. . . .

\textsuperscript{66} Agreed Measures for the Conservation of Antarctic Flora and Fauna, \textit{supra} note 2.

\textsuperscript{67} CCAMLR, \textit{supra} note 2, art. IV, para. 2(b).
the Conservation of Antarctic Seals.\textsuperscript{68}

\textbf{C. THE LINK BETWEEN THE STATE AND THE OPERATOR OF MINERAL ACTIVITIES}

Antarctic mineral activities are likely to be carried out by private or public operators as distinct from the states party to the regime. This possibility requires that a state-operator link be established to ensure compliance with the regime and the obligations arising from its implementation. The Law of the Sea Convention of 1982 establishes a precedent for resolving this problem; the Convention lays down the concept of “sponsoring states” in the machinery for exploitation of the deep seabed.\textsuperscript{69} In turn, this concept is borrowed from the institution of diplomatic protection where the nationality link is the prerequisite for protective intervention.

The mineral regime negotiations account for the need to establish a state-operator link by requiring every operator to have a “substantial and genuine link” with a state that is party to the Treaty and by requiring every operator to have a “sponsoring state.” This solution does not present any particular difficulty in the case of uninational operators. In these cases, the controlling factors would be the nationality, in the case of natural persons, or the criterion of incorporation in the sponsoring state, in the case of corporate entities. The location of management, control, and resources in the territory of the sponsoring state may also be factors.

Problems are likely to arise, however, when multinational operators, groups of companies, consortia, and joint ventures are involved. In those cases, the effective enforcement of regulatory measures may be hampered with regard to components of the multinational group that are beyond the reach of the state jurisdiction. The best approach to this problem is to adopt a criterion of “effectivity,” i.e., to select as sponsoring state the state in whose territory the actual control, management, and use of resources is located. When, as in the case of joint ventures, this approach leads to more than one state, the sponsoring state will necessarily be determined by agreement between the interested parties.

\textsuperscript{67} CCAMLR, \textit{supra} note 2.
\textsuperscript{68} Seal Convention, \textit{supra} note 2.
\textsuperscript{69} Among the entities which the Convention provides may carry out mineral activities in the area are “natural or juridicial persons which possess the Nationality of States Parties or are effectively controlled by them or their nationals, when sponsored by such States, or any group of the foregoing . . . .” 1982 Law of the Sea Convention, \textit{supra} note 31, art. 153, para. 2(b). See also \textit{id.}, art. 4, para. 3 of Annex III (referring to the basic ambitions of prospecting, exploration, and exploitation); \textit{id.}, art. 139 (establishing the principle of state responsibility to ensure compliance with the minerals regime by sponsored entities and liability for damage).
The adoption of the “sponsoring state” feature in the mineral regime also appears to be important because of the related issue of international responsibility. Rules on imputability and “due diligence” are still rather vague in the law of state responsibility for wrongful acts committed by private parties. Therefore, it seems desirable to guarantee that, in addition to the individual operator’s liability for loss or damage caused by its mineral activities, the possibility exists of recourse against a state party for its failure to secure compliance with the regime. For this purpose, the designation of the sponsoring state is a useful and even a necessary element for the attribution of responsibility and for the working of an effective system of remedies.

IV. THE MINERAL REGIME AS AN INSTITUTION

While it may prove relatively easy to reach a consensus on the aforementioned substantive principles, the institutional aspects of the mineral regime still remain a rather controversial issue in the negotiations presently underway.

The first question posed by the establishment of an institutional structure having jurisdiction over mineral resources concerns the open or the restricted character of the organs of that institution. The alternatives are a model in which all the parties to the mineral regime and the acceding states will be represented in the organs, and a model based on the “closed shop” philosophy of the Antarctic Treaty. The latter would involve representation only of the Consultative Parties and of those states which show a substantial interest in the concrete development of Antarctic resources. So far, the majority of the Contracting Parties share a preference for the “closed shop,” confirming their preference for the continuity of the Antarctic Treaty philosophy. The two superpowers strongly favor such a model.

Yet the question must be asked, whether the “closed shop” model is consistent with the common heritage of mankind, a principle that we have considered applicable to Antarctic resources. The answer to this is already partially provided by our previous observations on the nature, content, and present limitations of the common heritage principle.70 This principle remains a “primary norm”—to use Hart’s terminology71—not accompanied by any “secondary rule” contemplating the mechanism of implementation. In other words, the common heritage principle presents only a substantive dimension involving the obligation to use certain spaces and finite resources so as to satisfy not only the selfish national interest of a few technologically advanced states, likely to be favored by the rule prior in tempore potior in jure,

70. See supra Part II(A)(1).
MINERAL EXPLOITATION

but the interest of all mankind. So far, this general principle is not accompanied by the obligation to entrust the management of common resources to a universal agency having the monopoly power of implementation.

An example of the missing implementation mechanism is the great difficulties that exist in creating consensus on part XI (the International Seabed Authority) of the Law of the Sea Convention. In this case, it is not the recognition of the international seabed area as the common heritage of mankind that precludes consensus, but skepticism about the efficiency and reliability of a system where the common heritage principle is entrusted to a rather baroque international bureaucracy. The unavoidable split between the substantive content of the common heritage principle and the institutional overstructure that should implement it generates an increasing tendency to consider states free to take the principle in "their own hands" and to unilaterally regulate the exploration and exploitation of common resources on the basis of their "spontaneous" observance of the common heritage principle. This tendency has led a number of states to enact national laws permitting unilateral exploration, and possible exploitation at a later stage, of deep seabed minerals. 73

Further arguments exist with respect to Antarctica that support the legality of a mineral regime of restricted participation. First, it may be argued that the Consultative Parties group—which comprises the two super powers, the industrial states of the West, socialist states, less-developed countries, and even South Africa—is already pluralistic in character. Second, it may be argued that the "entrance fee" required to become an active part of the decision-making institution is reasonable. Such an entrance fee, insofar as it relates to the capacity to organize an Antarctic station or to engage in a scientific expedition, is the guarantee of technical expertise and scientific accountability of all states involved in Antarctic activities 74 and in the related decision-


74. See Antarctic Treaty, Appendix, infra, art. 9, para. 2.
making process.

As far as the structure of the institution is concerned, present negotiations envisage the establishment of three organs. The first organ (the Commission) would include all states party to the regime and would have general competence to authorize submission of applications for the development of mineral activities, the regulation of prospecting, the evaluation of environmental impact of mineral activities, and the reservation of areas for scientific, ecological, or historic reasons.\textsuperscript{75} The second organ would be an advisory body (Advisory or Scientific Committee) which would perform consultative functions on scientific, environmental, and technical matters.\textsuperscript{76} Finally, an executive organ (Regulatory Committee in the Beeby Draft, or Executive Committee in the German Draft) would regulate and monitor mineral activities in a given area.\textsuperscript{77}

There appears to be consensus among the Consultative Parties as to the Commission. Objections and difficulties have emerged, however, with respect to the Regulatory or Executive Committee. The main feature of this organ under the present Draft is that it is to be constituted in relation to each area opened for exploration and exploitation. The organ is to be composed of states which are themselves, or through their nationals, engaged in mineral activities in the relevant area, and of the states who maintain a claim in that area, as well as of other claimant-state members of the Commission, up to a maximum of three. This solution, although understandable as enticement for claimant states to accept a joint mineral regime, represents the first and the only open recognition of an entitlement of claimant states over the claimed area. In this respect, it represents an indirect disavowal of article VII of the Draft which purports to ensure that article IV of the Antarctic Treaty—freezing of claims—is not affected. It is difficult to see how the freezing of claims will not be affected if the regime gives claimant states a privileged position—and perhaps a right of veto—in the decision-making affecting the area opened for exploration.

Some effect on the freezing of claims seems all the more likely when we think how important the role of the Executive Committee will be in implementing the mineral regime. Its function would include establishing terms, conditions, and fees for mineral development at each site; the preparation and adoption of the so-called management scheme, which is the concessionary instrument within whose framework mineral activities are to be carried out; as well as maintain-

\textsuperscript{75} Beeby Draft, \textit{supra} note 10, art. X; German Draft, \textit{supra} 11, art. X.
\textsuperscript{76} Beeby Draft, \textit{supra} note 10, art. XVI; German Draft, \textit{supra} note 11, art. XVI.
\textsuperscript{77} Beeby Draft, \textit{supra} note 10, art. XX; German Draft, \textit{supra} note 11, art. XX.
ing operations and, if required, undertaking a revision plan. These functions admittedly require a specific administrative body different from the Commission. However, it appears that the present draft articles go too far in attributing administrative and management powers to an organ (the Committee) in which the necessary and decisive presence of the claimant states is tantamount to recognition of sovereignty.

Given this sensitive issue, it is not surprising that the two Drafts currently circulating among the Consultative Parties differ to some extent not only with respect to the name of the committee, but also with respect to its composition. The German Draft, on the one hand, contemplates a de jure membership of the state(s) on whose request (or on the request of whose nationals) the area was opened, and of the state(s) (members of the Commission) who assert claims in the area, with additional members selected by the requesting state(s) to ensure that the Committee is composed of four claimant states and four non-claimant states.\(^{78}\) The Beeby Draft, on the other hand, guarantees membership to "the two states which, prior to the entry into force of this regime, maintained the largest presence in Antarctica."\(^{79}\) Obviously, this refers to the United States and the Soviet Union.

A possible way out of the claims dilemma is to devise an organ—preferably denominated "executive committee"—which, although charged with important supervisory and implementing functions, neither controls access to the relevant area nor holds power to determine the amount of royalties to be paid by the operation engaged in mineral activities. This modification could be achieved by shifting the basis of the decision-making system from the rights of claimants, as recognized in the present drafts, to the functions of the organ with general competence, the Commission. This organ would therefore be responsible for fixing in detail the terms, conditions, and guidelines for mineral activities.

The advantage of this system would be an a priori uniform standard of regulation and a clear and certain picture of the legal basis on which perspective applications will be evaluated. But, most importantly, the decision-making powers would be retained in the organ in which all parties to the mineral regime are represented; decision-making would not be decentralized to an organ in which the particular interests of the claimant state(s) and of the state(s) involved in mineral operations are paramount. This solution would not require that one of the key elements of the mineral regime—the so-called "manage-

\(^{78}\) German Draft, \textit{supra} note 11, art. XX.

\(^{79}\) Beeby Draft, \textit{supra} note 10, art. XX.
It would only require that such an instrument either be approved by the Commission (rather than by the Regulatory or Executive Committee as in the present draft), or that, although approved by such a Committee, its content would be restricted to oversight of mineral activities. The solution would thus represent a change in the management scheme, which today is considered as a comprehensive set of regulations following the model of a concession contract in national administrative law with all the related flavor of sovereignty.

A final point concerns the question of decision-making procedures followed in the bodies of delegated authority. Current negotiations appear to favor a two-thirds majority for deliberations on substantive matters and a simple majority of the members present when voting on procedural matters. This system applies to the Commission and to the Advisory Committee;81 the Regulatory Committee should, in principle, decide by simply majority.82

This voting system departs from the rule of consensus which characterizes decision-making under the Antarctic Treaty. The reason for this departure is obviously a practical one: the desire to avoid the risk of paralysis in an already complex decision-making process. At least two arguments, however, can be made in favor of consensus. First, the claimant states argue that no decision with respect to the claimed area should be made without their consent. Second, states such as the Soviet Union and the United States, who, although not claimant states, reserve the right to maintain access to the whole of the Antarctic continent, likewise argue that no decision with respect to claimed areas should be made without their consent. Support for a consensus system may involve a desire to prevent the establishment of a majority decision-making process that could foreclose access in specific areas to these two states or their nationals.83

Despite these conflicting interests and the preference for consensus sometimes expressed in legal literature,84 majority rule seems the better solution for a mineral regime that will unavoidably go beyond the scope of the Consultative Parties. In fact, we cannot ignore that while consensus has proved to be a successful system with respect to

80. The "management scheme" is contemplated in the Beeby Draft, supra note 10, arts. XXIX, XXX, XXXI, XXXV.
81. Beeby Draft, supra note 10, arts. XV, XIX; German Draft, supra note 11, arts. XV, XIX.
82. Cf. art. XX of Draft Articles, supra notes 10 and 11.
84. See generally Wolfrum, supra note 37, at 185. Wolfrum nevertheless expresses some reservations about the wisdom of extending consensus to "newcomers." Id. at 159.
the Consultative Parties, the same may not be true with respect to a potentially much larger group of states party to the mineral regime. Consensus requires exercise in self-restraint on the part of each individual state who ultimately is given a veto power against the will of the majority. Self-restraint comes more easily with the long-term experience of working in the rather closely knit group of the Consultative Parties. In a more heterogeneous mineral resources institution, the states who have been outsiders to the Antarctic system may generate new attitudes, contentious relationships, and a more frequent inclination to resort to the veto. For these reasons, I tend to support the choice of majority rule, perhaps with the possibility of resorting to consensus in the most important of all the minerals decisions, that is, the opening of a new area for mineral exploration and exploitation.

CONCLUSION

The prospect of a commercially viable exploitation of Antarctic mineral resources is still rather uncertain. It is clear, however, that the interest in mineral activities in that continent has gone well beyond the merely speculative stage and has entered the phase of concrete diplomatic negotiations.

Whether, and to what extent, such negotiations will succeed in bridging the gap between conflicting interests in Antarctica—claimant states and non-claimant states, Consultative Parties and non-Consultative Parties, Treaty States and Third States—will much depend upon the ability of the future conventional regime to remain consistent with the principles of the Antarctic Treaty and to fashion a system acceptable to the international community at large.

The Antarctic Treaty permits the development of mineral activities under the following conditions: (1) the activities remain "peaceful" in the sense of involving no military use of mining installations; (2) the activities not jeopardize the "freezing" of sovereignty claims which is the mainstay of the present Antarctic system; and (3) the activities continue to guarantee the freedom of scientific research and the protection of the Antarctic environment in its entirety. The 1977 Moratorium Recommendation on mineral exploration and exploitation takes the position that such a moratorium is a self-imposed restraint for the purpose of evaluating the development of a conventional framework for mineral activities. The moratorium recommendation, rather than hindering the undertaking of negotiations for the development of a mineral regime, has become the natural springboard for negotiations.

From the point of view of general international law, analysis starts from the premise that Antarctica is a res communis omnium to
which the principle of common heritage of mankind applies. The nearly twenty-five years of successful international management of Antarctica, the continuing observance of the freezing of territorial claims, and the remarkable level of cooperation achieved by a non-homogeneous group of participants, is evidence of the sense of responsibility that the Parties to the Antarctic Treaty maintain toward the international community as a whole. Recognition of the previous international management does not imply, however, that mineral activities are unlawful unless carried out within an international institution of a universal character. The common heritage principle, like most rules of international law, may be observed and implemented through self-imposed limitations, restraints, and safeguards so that states involved in mineral activities in Antarctica will behave not only \textit{uti singuli}, in the pursuit of their national interest, but also \textit{uti universi}, as interpreters and guarantors of the interests of mankind, in the conservation of the Antarctic environment and in the rational use of its resources.

As international lawyers, we are accustomed to think, and teach, that law is the product of facts. In the case of mineral activities in Antarctica, however, the law must somehow develop before the facts are accomplished. This is true not only because the risk of unregulated mineral exploration and exploitation is too great for the environmental integrity of Antarctica, but also because of the political and legal principle that infuses contemporary international law: common resources may not be allocated according to the primitive \textit{first come, first served} rule, but must be subject to some governance that will include effective access and equitable sharing today as tomorrow, for all participants of the world community and for future generations. In such a governance rests the true essence of the common heritage spirit.