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The Antarctic Regime: An Introduction

BERNARD H. OXMAN*

This year marks the twentieth anniversary of the Antarctic Treaty.¹ While the absence of extensive debate regarding Antarctica during most of the intervening period is due partly to the geographic and functional remoteness of the continent from most of mankind, it also reflects the success of the Antarctic Treaty and general rules of international law in providing a peaceful and orderly basis for governing man's activities in the region. The twelve states that negotiated the Treaty² and that have administered it as "Consultative Parties"³ may, and occasionally do, take pride in their accomplishments.

Now the quiet interlude seems to be ending. Cacophony is but one of the harmonic possibilities of the accelerating activity. The result will depend upon a timely and proper identification of the difficulties and the capacity to find solutions to these problems. Recognizing the degree to which the former comprehends the latter, the *University of Miami Law Review* has rightly chosen to devote this symposium issue to expert appreciation of and suggestions concerning the natural, political, ethical and economic factors bearing upon Mr. Alexander's general legal survey, as well as Ms. Hook's

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1. Antarctic Treaty, Dec. 1, 1959, 42 U.N.T.S. 71, [1961] 12 U.S.T. 794, T.I.A.S. No. 4780 [hereinafter cited as the Treaty]. The text of and the parties to the Treaty are set forth in appendix A *infra*.

2. The original parties were Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, Union of South Africa, Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.

3. Poland became the 13th Consultative Party at a Special Consultative Meeting held between July 25 and 29, 1977. Handbook of Measures in Furtherance of the Principles and Objectives of the Antarctic Treaty xiv (London, Sept. 16, 1977) (prepared for the Ninth Consultative Meeting).

specific inquiry regarding criminal jurisdiction.

Antarctica is the coldest, highest and windiest continent.⁴ It is inhospitable to most living creatures, yet is a fertile environment for others. The harsh climate makes it—until now—the most unspoiled area on earth. Human settlement, as commonly understood, or perhaps even as understood in the context of a forbidding desert, has not yet reached Antarctica. Its “stations” are more like ships at sea, or perhaps the space stations of the next decade. Two classic Antarctic epithets—“environmental preserve,” “natural laboratory”—are still valid today. Antarctica is a place for adventurous naturalists and for scientists, and for penguins.

The problem is not Antarctica itself, although it is true that natural changes in Antarctica could effect major changes in the rest of the world. With some ninety-five percent of the world's fresh water captured as Antarctic ice, a significant increase in the melting rate of that ice could inundate the coastal areas of the world. The effect on weather conditions could be equally dramatic. Aside from the direct life support for whales and other migratory species, the relationship between the nutrient-rich Antarctic waters and the life-cycle in other parts of the planet is not completely understood.⁵ But there is no indication that intervention by man is necessary to prevent some natural disaster, to defend mankind from some inexorable and threatening process.

The problem is man, or more aptly, men. Increasing numbers are going to or are interested in Antarctica.⁶ This is a political problem. Like other political problems, both the issues and the solutions are frequently expressed in legal terms. The context in which this problem arises is different, perhaps astonishingly different, from the norm. Yet, for the most part, the issues are not new, nor are they very different from the political and legal issues that men face elsewhere. However, two unique questions are posed. First, are we capable of finding solutions relevant to the unusual conditions in Antarctica? Second, are we capable of finding better solutions in principle than we have thus far devised for dealing with these problems elsewhere? These two questions can be regarded as the politi-

4. Dr. de Blij's article provides an illuminating description of the climate and geography of the Antarctic. See de Blij, *A Regional Geography of Antarctica and the Southern Ocean*, 33 U. MIAMI L. REV. 299 (1978).

5. Dr. Llano's article discusses this matter as well as the interrelationship among species in the Antarctic ecology. See Llano, *The Ecology of the Southern Ocean Region*, 33 U. MIAMI L. REV. 357 (1978).

6. Ms. Hook's comment presents a discussion of the increasing encroachment by man in Antarctica and the jurisdictional difficulties regarding the maintenance of public order as access to the continent improves. See Hook, *Criminal Jurisdiction in Antarctica*, 33 U. MIAMI L. REV. 489 (1978).

cal equivalents of the two classic Antarctic epithets: the first emphasizes Antarctica as a political preserve, while the second emphasizes Antarctica as a political laboratory.

Both tendencies find ample support in the current regime in Antarctica. The Antarctic Treaty, the result of an earlier "Spirit of Camp David," demilitarized Antarctica.⁷ It was the first arms control agreement of its kind since World War II. The effect was to isolate Antarctica from the military rivalries between the West and the Soviet bloc; the continent became a "preserve" in the arms race. That Treaty was followed by similar efforts: to prevent the nuclear arms race from extending to outer space and celestial bodies⁸ or to the seabeds;⁹ to create a Latin American nuclear-free zone¹⁰ and perhaps an Indian Ocean "zone of peace";¹¹ and less directly to prevent nuclear testing¹² and the proliferation of nuclear weapons,¹³ and to limit strategic arms.¹⁴ In this sense, Antarctica was a political "laboratory" in efforts to control the arms race. The historic role of the Antarctic Treaty as the first successful effort of its kind to regulate post-war rivalries (the first controlled experiment in détente or peaceful co-existence) gives it a symbolic significance that ought not to be overlooked in assessing various political alternatives.

Like many constitutive instruments that work fairly well, the Antarctic Treaty falls victim to the assumption that it was drafted

7. Antarctic Treaty, *supra* note 1, art. I.

8. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, *done* Jan. 27, 1967, 610 U.N.T.S. 205, [1967] 18 U.S.T. 2410, T.I.A.S. No. 6347 [hereinafter cited as the Outer Space Treaty].

9. Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and the Subsoil Thereof, *done* Feb. 11, 1971, 480 U.N.T.S. 43 [1972] 23 U.S.T. 701, T.I.A.S. No. 7337.

10. Treaty for the Prohibition of Nuclear Arms in Latin America, Feb. 14, 1967, 634 U.N.T.S. 282, [1970] 21 U.S.T. 77, T.I.A.S. No. 1838. *See also* Protocol II to the treaty, 634 U.N.T.S. 364, [1971] 22 U.S.T. 754, T.I.A.S. No. 7137.

11. *See* Declaration Regarding an Indian Ocean Zone of Peace, G.A. Res. 2832, 26 U.N. GAOR, Supp. (No. 29) 36, U.N. Doc. A/8584 (1971). In an address to the United Nations General Assembly on March 17, 1977, President Carter proclaimed that the United States "will . . . seek to establish Soviet willingness to reach agreement . . . on mutual military restraint in the Indian Ocean." N.Y. Times, Mar. 18, 1977, § 1, at 10, col. 4. The Soviet response to this initiative was a willingness to open talks on the issue of establishing the Indian Ocean as a "zone of peace." N.Y. Times, Mar. 25, 1977, at 4, col. 3.

12. Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, *done* Aug. 5, 1963, 480 U.N.T.S. 43, [1963] 14 U.S.T. 1313, T.I.A.S. No. 5433.

13. Treaty on the Non-Proliferation of Nuclear Weapons, *done* July 1, 1968, 729 U.N.T.S. 161, [1970] 21 U.S.T. 483, T.I.A.S. No. 6839.

14. Interim Agreement on the Limitation of Strategic Offensive Arms, May 26, 1972, United States-Soviet Union, [1972] 23 U.S.T. 3462, T.I.A.S. No. 7504 (expired Oct. 3, 1977); *see U.S. Intent with Regard to SALT I Interim Agreement*, 77 DEP'T STATE BULL. 642 (1977); Treaty on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, United States-Soviet Union, [1972] 23 U.S.T. 3437, T.I.A.S. No. 7503.

in splendid isolation by a group of profound wise men whose overriding characteristic was foresight. The journeys of the early explorers, the slaughter of the southern fur seal and the southern elephant seal, the military skirmishes between territorial claimants, the vague allusions to the inchoate claims of the United States and the Soviet Union to the entire continent, the expansion of a permanent Soviet presence in Antarctica, the novel experiment in cooperative scientific research during the International Geophysical Year,¹⁵ and many more pre-Treaty events are consigned to a sort of pre-history. This perspective insufficiently emphasizes the extent to which fear and suspicion rooted in events past and present, as much as hope and vision for the future, motivated the concerned states to agree on the Treaty. It was a settlement as well as an institutional blueprint, in both respects deeply rooted in perceptions of rival intentions¹⁶ as well as the potential for constructive and cooperative restraint.

What did the Treaty settle? To put it differently, who compromised what interests to achieve what benefits or to prevent what potential adversities?

The territorial claims lie at the heart of the matter. Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom asserted territorial claims in Antarctica. Some of these claims overlap.¹⁷ The territorial claims are based on a combination of two different principles.¹⁸ The first is the classic principle of discovery and occupation. The second is a principle of contiguity, expressed in polar regions as a "sector principle" under which sovereignty extends to the pole in the wedge formed by the outermost meridians of longitude of occupied or "recognized" coastal territory. An interesting nuance is the question of whether the territory from which the lines extend must be in Antarctica, or whether they extend from the coasts of other (proximate?) continents and islands that "face" Antarctica.¹⁹

15. The International Geophysical Year was a nongovernmental project that collected a broad spectrum of scientific data on the Antarctic continent. It involved the cooperative efforts of scientists from 11 states. Mr. Alexander's article explores the significance of this endeavor. See Alexander, *A Recommended Approach to the Antarctic Resource Problem*, 33 U. MIAMI L. REV. 371, 377-79 (1978).

16. See generally *The Antarctic Treaty: Hearings Before the Comm. on Foreign Relations*, 86th Cong., 2d Sess. (1960).

17. For a chart of the respective claims, see p. 297 *infra*.

18. Mr. Alexander's article discusses the legal bases of these claims. See Alexander, *supra* note 15, at 381-94.

19. The question of the extent to which "permanent" ice, that does not overlie land above sea level, is subject to sovereignty claims presents another interesting nuance. Is such ice subject to the regime of the land, or the regime of the water, or some hybrid regime? *Id.* at 384-85. This question has implications for other parts of the world. Since resolution of the

The United States and the Soviet Union refused to recognize any of these territorial claims. One may presume that other non-claimants perceiving actual or potential interests in Antarctica would probably refuse to recognize these territorial claims as well. The nonrecognition position necessarily entails two legal conclusions: (1) that no claim of sovereignty in Antarctica has been perfected under classic principles of discovery and effective occupation; and (2) that a "sector principle" cannot be invoked to support claims of sovereignty in Antarctica, at least where such claims would extend sovereignty to Antarctica from other continents and islands.²⁰

The crucial question is why there is no sovereignty under classic principles. If the answer is that there has been no effective occupation, it is likely that with time the combination of expanding technology and expanding incentive would allow the perfection of sovereignty claims. It commits the nonrecognition position to eventual extinction and encourages the states with inchoate claims to base their Antarctic policy on perfection of these claims. An "international" Antarctica is more than likely an intermediate pre-sovereignty phase under this approach; the world is not at a stage where states easily relinquish and internationalize recognized territory. However sincere an analytical conclusion might be that sovereignty claims are legally possible, but that a nonterritorial solution is preferable, the probable effect of this conclusion would be to prejudice the international solution.

The alternative position on nonrecognition is that Antarctica is

question is potentially significant in Antarctica only if sovereignty (or arguably some other type of geographic jurisdiction) over land (including ice-covered land) exists in the Antarctic, the question might better be deferred. At the least, it might more usefully be addressed by creative application of existing principles of international law of the sea, such as those regarding elevations, baselines and artificial installations, rather than by attempting to introduce new rules for deciding when frozen water is or is not water. Convention on the Continental Shelf, *done* Apr. 29, 1958, 499 U.N.T.S. 311, 15 U.S.T. 1606, T.I.A.S. No. 5578, art. 5(2)-(7); Convention on the Territorial Sea and Contiguous Zone, *done* Apr. 29, 1958, 516 U.N.T.S. 205, 15 U.S.T. 1606, T.I.A.S. No. 5639, arts. 3-11; Convention on the International Regulations for Preventing Collisions at Sea, *done* Oct. 20, 1972, T.I.A.S. No. 8587. The Informal Composite Negotiating Text currently before the Third United Nations Conference on the Law of the Sea addresses these principles of international law. Informal Composite Negotiating Text, U.N. Doc. 8 A/CONF./62/W.P. 10, arts. 2-13, 47, 60, 80, 87, 121, 147, 259-63 (July 15, 1977) [hereinafter cited as ICNT].

There is a related question regarding the treatment of "occupied" ice—which could include moving or "nonpermanent" ice. It might make sense to treat the confined ice station or community as a ship or structure on the high seas. See *United States v. Escamilla*, 467 F.2d 341 (4th Cir. 1972). Indeed, it might make sense to treat a confined Antarctic station over land in the same way. See Hook, *supra* note 6, at 499-500.

20. Ambassador Zegers considers this question from a different perspective. See Zegers, *El Sistema Antártico y la Utilización de los Recursos*, 33 U. MIAMI L. REV. 426, 458 (1978).

not amenable to claims of sovereignty. The combination of Antarctic characteristics is sufficiently distinct to ensure that any implication of prejudice to sovereignty claims outside Antarctica could easily be avoided. Two variants of this position are possible. Under the first, one could argue that Antarctica (like the high seas) was never amenable to sovereignty claims and that any change in that customary rule would be opposed. Alternately, one could argue that whether or not sovereignty was theoretically possible, no claims were perfected, and a new international status is now established that precludes sovereignty, as on the moon and other celestial bodies.²¹

In principle, the Antarctic Treaty does not compromise either the sovereignty claims or the nonrecognition positions. It expressly preserves the positions of the claimants and the nonrecognition states, serving the interests of both by prohibiting new claims or expansion of existing claims.²² The provisions for arms control and inspection,²³ open access and cooperation in scientific research,²⁴ veto power over any proposed agreed measures for each Consultative Party,²⁵ restriction on who may become a Consultative Party,²⁶ joint environmental controls,²⁷ and "sending state" jurisdiction over observers and scientific exchange personnel²⁸ are all compatible with either position. Thus, the basic Treaty settlement has three elements: (1) the claimants freeze the situation among themselves where their claims overlap and need not take actions to protect their claims, relying on both the juridical and demilitarization provisions; (2) the claimants are assured by the provisions prohibiting new claims and demilitarizing the area that the United States, the Soviet Union and others will not make claims and that foreign activities in claimed areas will not prejudice existing claims; and (3) personnel of the nonclaimants are assured access to the area unhindered by "sovereignty" claims or military preemption.

This is not to suggest that community interests that transcend the sovereignty question did not play an important role in the

21. See Outer Space Treaty, *supra* note 8, art. II. As previously noted, the Antarctic Treaty itself was once utilized as an example of the success of an international system for dealing with remote areas. Its success probably facilitated the efforts to draft and gain acceptance of the Outer Space Treaty. Accordingly, some may sense a certain irony in looking to the provisions of the Outer Space Treaty as a model for Antarctica.

22. Antarctic Treaty, *supra* note 1, art. IV(2).

23. *Id.* arts. I & VII.

24. *Id.* arts. II & III.

25. *Id.* art. IX(4).

26. *Id.* art. IX(2).

27. *Id.* art. IV(1).

28. *Id.* art. VII(1).

Treaty. Quite to the contrary, the common interest in conservation and environmental protection necessitates international cooperation to protect the Antarctic ecosystem as a whole. This in turn enables advocates of restraint to moderate nationalistic sentiment. It is likely that shared environmental concerns will increasingly become the essential cement for international cooperation in Antarctica.

Economic factors did not loom large in the negotiation of the Antarctic Treaty. High seas freedoms and the activities of other international organizations, both relevant to fishing, were expressly protected.²⁹ While at least one claim to extended jurisdiction over fisheries had already been made, it does not seem to have affected the negotiations.³⁰ There is evidence that the negotiators were aware of potential issues arising out of natural resource exploitation, tourism and other economic activity. The resolution of these issues, however, presented difficulties in terms of the competing sovereignty positions and was not considered essential in light of the circumstances at that time.

Thus, the Treaty is "silent" on economic questions: while the provisions of the Treaty on arms control, inspection, environmental protection and other matters apply to all activities in Antarctica, no express provision is made for the acquisition, exercise, allocation or control of rights to exploit resources and to reap benefits from such exploitation.

Resources, however, are now the key issue, and several new factors are involved that deserve consideration. First, there is an increased interest in the exploitation of Antarctic marine biological stocks. Vast quantities of krill, a small, shrimp-like zooplankton, have been discovered in Antarctic waters. Some estimate the available krill resource as two to three times the total world catch of marine living resources.³¹ Experimental fishing has begun and has resulted in very high yields. Squid and other living resources may also be of interest.

Second, marine mammals in general, and whales in particular, have become a symbol of international conservation and environmental efforts.³² The Antarctic ecosystem supports the world's larg-

29. *Id.* arts. III(2) & VI.

30. In 1947, Chile proclaimed jurisdiction over a two hundred mile maritime zone applicable to its Antarctic claim. Zegers, *supra* note 20, at 458; U.S. DEP'T OF STATE, No. 36, NATIONAL CLAIMS TO MARITIME JURISDICTION, LIMITS IN THE SEAS 17 (2d rev. Apr. 1974) [hereinafter cited as LIMITS IN THE SEAS].

31. TETRA TECH, INC., FINAL REPORT—THE ANTARCTIC KRILL RESOURCE: PROSPECTS FOR COMMERCIAL EXPLOITATION (1978).

32. See, e.g., Convention for the Conservation of Antarctic Seals, done June 1, 1972, T.I.A.S. No. 8826, reprinted in 11 INT'L L. MATERIALS 251 (1972); Marine Mammals Protection

est stocks of baleen whales, which feed directly on krill. Moreover, the decomposition of krill may be a significant factor in the extraordinarily high nutrient content of Antarctic waters. Thus, the determination of the krill stock available for harvest implicates the question of its effect on the maintenance and growth of whale stocks and other species.³³

Third, the concept of a two hundred nautical mile fishing (or economic) zone along the coast has achieved widespread acceptance at the Third United Nations Conference on the Law of the Sea³⁴ and has been implemented by a large number of coastal states.³⁵ What effect does this have on waters within two hundred miles of Antarctica? Is establishment of such a zone a prohibited expansion of an existing claim? Would attempts to enforce it against foreign vessels violate the demilitarization provisions? How do states that do not recognize territorial claims in Antarctica deal with the problem without prejudicing that position, since recognition of a coastal state's jurisdiction in such a zone implies recognition of that state's claim to the coastline from which the zone extends?

Fourth, the Antarctic marine ecosystem may be defined by the Antarctic Convergence, an area of significant changes in temperature and salinity that circles the continent. While the Antarctic Treaty applies south of latitude 60° S., the Antarctic Convergence extends north of that latitude in places and embraces several islands where sovereignty is uncontested.³⁶ Thus, the Treaty line may not be adequate for conservation measures designed to protect the ecosystem as a whole, while another line may pose new challenges for the legal draftsmen.

Fifth, reports indicate a "good probability" of offshore oil or gas in the continental shelf of Antarctica, although it is unclear whether there are deposits of sufficient magnitude to be economically recoverable under the severe Antarctic conditions.³⁷ Technology for

Act of 1972, 16 U.S.C. §§ 1361-62, 1371-84, 1401-07 (1976).

33. Mr. Scully's article thoroughly describes the interrelationship between the delicate food chain and the Antarctic species. See Scully, *The Marine Living Resources of the Southern Ocean*, 33 U. MIAMI L. REV. 341, 344-45 (1978). See generally U.S. DEP'T OF STATE, FINAL ENVIRONMENTAL IMPACT STATEMENT FOR A POSSIBLE REGIME FOR CONSERVATION OF ANTARCTIC LIVING MARINE RESOURCES (June 1978).

34. See ICNT, *supra* note 19, arts. 55-75.

35. LIMITS IN THE SEAS, *supra* note 30, *passim*.

36. See de Blij, *supra* note 4, at 300; Llano, *supra* note 5, at 358-59. A comparison of the charts at p. 297 *infra* and in Scully, *supra* note 33, at 342, demonstrates the possible extent of the Convergence, as well as the fact that islands of Australia, France and Norway lie outside the Treaty area but within the Convergence.

37. Mr. Dugger's article provides a thorough discussion of research efforts and results, as well as an analysis of present technological capabilities. See Dugger, *Exploiting Antarctic*

Arctic oil and gas exploration and exploitation now being developed may be directly relevant, although the enormity of Antarctic icebergs is one of the additional complications. The possibility of exploration and exploitation raises difficult problems for the protection of the fragile Antarctic ecosystem. The question of jurisdiction over continental shelf oil and gas poses problems of sovereignty and recognition similar to those regarding the two hundred mile fishing zone.³⁸ So long as the possibility of exploitation exists, however, it may be one of the alternatives whose existence helps restrain oil price increases.

Sixth, international affairs are increasingly dominated by demands of developing countries for a new international economic order.³⁹ Primary emphasis is placed by them on questions of distribution of wealth and collective control of economic power at precisely the same time that the United States is deemphasizing some of these considerations as it embarks on a program of deregulation domestically and seeks—as in the preamble of the new aviation agreement with West Germany⁴⁰—to establish the same goals internationally.⁴¹

Mineral Resources: Technology, Economics, and the Environment, 33 U. MIAMI L. REV. 315 (1978).

38. The question of a prohibited expansion of existing claims is perhaps complicated by the widespread acceptance of the legal concept of the continental shelf prior to 1959, and the view that the sovereign rights of the coastal state over the continental shelf exist *ipso facto* and *ab initio*. North Sea Continental Shelf Cases, [1969] I.C.J. 3, 22; Convention on the Continental Shelf, *supra* note 19, art. 2; see Truman Proclamation, 10 Fed. Reg. 12,303 (1945), reprinted in 59 Stat. 884; ICNT, *supra* note 19, art. 77.

39. Ambassador Pinto analyzes the issue of a regime for Antarctica from the perspective of those urging a new international economic order. See Pinto, *The International Community and Antarctica*, 33 U. MIAMI L. REV. 475 (1978).

40. Paragraph three of the preamble states: "Desiring to promote an international aviation system based on competition among airlines in the market place with minimum governmental regulation." Protocol Relating to the Air Transport Agreement of 1955 [275 U.N.T.S. 3, [1956] 7 U.S.T. 527, T.I.A.S. No. 3536, as amended Apr. 5, 1968, 697 U.N.T.S. 252, [1968] 19 U.S.T. 4402, T.I.A.S. No. 6434] Nov. 1, 1978, United States-Federal Republic of Germany, reprinted in U.S. Dep't of State, Press Release No. 410, Nov. 1, 1978.

41. One wonders whether the different perspectives regarding the desirable extent of economic regulation are sufficient to prevent the emergence of a certain community of interest between those who advocate universal rights of political participation and those who advocate universal freedom of economic opportunity. This may depend on whether and when the territorial claimants conclude that it is desirable to accommodate nonclaimant interests within the framework of the Treaty.

The theoretical debate about regulation of Antarctic oil and gas exploitation will probably be attenuated to some degree because: (1) oil and gas producers generally require an assurance of exclusive rights in a defined area before proceeding with intensive localized activity necessitating substantial investments; (2) the allocation of the right to authorize and control mining to some states might result in less efficient exploitation (or no exploitation) despite market considerations; and (3) there exists a special need for extensive and continuing environmental controls.

Seventh, the increasing world demand for fresh water is creating interest in the enormous quantities of ice available in Antarctica.⁴²

Eighth, not all states fishing or capable of conducting other economic activities in Antarctica are parties to the Treaty, despite its liberal accession provisions.⁴³ Moreover, "substantial scientific research activity" is the sole Treaty criterion for becoming a "Consultative Party" with a right to participate in the elaboration and approval of "agreed measures" under the Treaty and in the modification or amendment of the Treaty.⁴⁴

Finally, the prospect of increased human activity in Antarctica gives added importance to the question of maintenance of law and order. To the extent that an act such as murder, assault or theft committed by an American civilian in Antarctica cannot be regarded as piracy on the high seas or in areas outside the jurisdiction of any state,⁴⁵ or as an offense committed on the high seas or on board a vessel of the United States for purposes of the special maritime and territorial jurisdiction of the United States,⁴⁶ there is generally no federal court—and no foreign "territorial" court in the view of the United States—that could try and punish that person for the act.⁴⁷

42. See de Blij, *supra* note 4, at 307.

43. Antarctic Treaty, *supra* note 1, art. XII. In addition, some of the Treaty parties are members of the European Economic Community. The Council of the European Communities has conferred responsibility on the Commission of the European Communities with respect to fishing rights of third countries in the fishing zones off the coasts of Community members and the fishing rights of Community members in the waters off the coasts of other countries. Council Resolution on Certain External Aspects of the Creation of a 200-mile Fishing Zone in the Community, *reprinted in* 15 INT'L L. MATERIALS 1425 (1976) (effective from Jan. 1, 1977).

44. The Convention for the Conservation of Antarctic Seals, *supra* note 32, was prepared as a separate treaty, while various rules for the protection of Antarctic flora and fauna were prepared by the Consultative Parties as agreed measures under Article IX of the Treaty. The Antarctic Treaty attempts to deal with the nonparty problem by requiring the parties to exert "appropriate efforts . . . to the end that *no one* engages in any activity in Antarctica contrary to the principles or purposes of the present Treaty." Antarctic Treaty, *supra* note 1, art. X (emphasis added). Perhaps because of the specific protection of the rights "of any State under international law with regard to the high seas within" the area to which the Treaty applies, *id.* art. VI, as well as the practical and legal problems arising with any direct attempt to implement Article X of the Treaty at sea, the separate treaty may be considered a preferable means for dealing with Antarctic marine living resources.

45. 18 U.S.C. §§ 1651-53 (1976); Convention on the High Seas, *done* Apr. 29, 1958, 450 U.N.T.S. 82, 13 U.S.T. 2312, T.I.A.S. No. 5200, arts. 14-22.

46. 18 U.S.C. § 7 (1976); S. 1437, 95th Cong., 1st Sess. § 203 (1977).

47. For a discussion of the present status of control over criminal conduct in Antarctica, see Hook, *supra* note 6, at 494-95. In some cases the crime may be generally extraterritorial, for example, where the object of the crime is the United States government itself or its officials or property. Thus, certain criminal statutes may apply universally to American citizens. See, e.g., 18 U.S.C. §§ 351, 662, 1114, 1751 (1976). The Uniform Code of Military Justice may be adequate to deal with United States military personnel. 10 U.S.C. § 305

There is nothing new about a scramble for wealth, a demand for law and order, and programs for regulation and control following upon the discovery of a new and valuable resource. But inflated expectations can produce unnecessary discord. Eruption of sovereignty disputes could discourage economic activity; conversely, accelerated economic activity could trigger such disputes. The extent, if any, of new and valuable resources in Antarctica is unclear. Hydrocarbon deposits in Antarctica may not be economically exploitable.⁴⁸ Moreover, the environmental risks of hydrocarbon exploitation, or the cost of minimizing those risks, may be unacceptable, at least pending development of new technology. The extent of the krill resource available for harvesting is also unclear. The environmental questions posed raise problems going beyond conservation. Ultimately, the question of "sharing" a primary food supply with other creatures, particularly intelligent creatures that are not (or ought not to be) exploited directly or indirectly by man, raises profound ethical questions about the place of man in the natural order.

The question of sharing in potential benefits from economic activities also bears closer examination. The more symbolic this issue becomes, the more it may render territorialist and universalist positions irreconcilable. All consumers generally benefit from new supplies of a commodity, either directly or indirectly by reduced competition for other supplies. The number of persons, natural or juridical, willing and able to engage in living or mineral resource activities in Antarctica is severely limited by factors such as training as well as cultural and climatic background. Even the most ardent advocates of a new economic order may be skeptical about the value of transferring Antarctic technology to tropical developing countries—except, of course, from the perspective of one or two tropical proto-industrial states. The extent of the economic rent that could be derived by a sovereign or resource manager from the allocation of resource rights will probably be seriously limited by the high risk and cost of operations in Antarctica. As for refining, processing, packing, support and similar activities, it would seem that normal economic factors—including proximity, facilities, labor and investment climate—are more likely to affect the result than the "control" of the resource.

While the case for international cooperation and restraint is considerable, it must be emphasized that the sovereignty problem is critical. Demands by territorial claimants for a moratorium pend-

(1976). The proposed revision of title 18 of the United States Code elaborates various categories of extraterritorial offenses. S. 1437, 95th Cong., 1st Sess. § 204 (1977). A United States state court may have residual extraterritorial jurisdiction provided such jurisdiction is not preempted by statute or the Treaty.

48. Dugger, *supra* note 37, at 317-20.

ing consent by each of them to an exploitation regime may be more closely related to sovereignty considerations than to environmental concerns. If their claims are recognized, the territorial claimants may have little interest in a regime in Antarctica that gives rights to nonclaimants or restrains the discretion of claimants. Nothing approaching adequate international environmental controls or free access for foreign scientists or observers exists in other areas where states enjoy undisputed territorial sovereignty. Virtually every one of the territorial claimants in Antarctica has recently engaged in a degree of expropriation or regulation of private economic activity that might not please "free market" advocates. If the territorial claimants believe that others fear United Nations involvement in Antarctica more than they, the incentive for accommodation may be reduced. At the same time, it should be recognized that it would be difficult for a territorial claimant to accept the possibility of resource exploitation in a claimed area under any system to which the claimant does not consent. For this reason, demands by territorial claimants for a veto of some sort in the application of the system are possible, even if this means according similar voting rights to some nonclaimants.

In brief, the Antarctic Treaty was possible because states, including the territorial claimants, had reason to believe that without it their national interests might be prejudiced. It is submitted that no such international system in Antarctica will remain likely unless such concerns continue, particularly as attention is directed to matters that are not resolved in the Treaty. It is perhaps unfortunate that this is so, but one wonders how else thoughtful and restrained leaders could command national support for allegedly compromising "sovereignty" during a highly nationalistic period. Interestingly, evidence of the determination of certain nonclaimants to remain in Antarctica may presently be sufficient incentive for cooperation by all concerned, just as it may have been the catalyst for the Antarctic Treaty itself.

The *University of Miami Law Review* has assembled a diverse and outstanding group of contributors to this symposium which it is the author's honor to precede. Particular note should be made of the wise decision to request that the contributors avoid discussion of certain complex questions peripheral to the main purpose of this symposium, notably the comparative merits of competing territorial claims in Antarctica. Finally, while the expertise of the contributors is self-evident, readers should be aware of the extraordinarily gracious decisions of Ambassador Pinto of Sri Lanka, a member of the International Law Commission, and Ambassador Zegers, Chile's representative to recent Consultative Meetings under the Antarctic

