

Antarctic Resources and International Law: Japan, the United States, and the Future of Antarctica

*Robert Friedheim**

*Tsuneo Akaha***

INTRODUCTION

An interesting phenomenon of our times has been the negotiation of a number of multilateral natural resource regimes. Not only has the negotiation process been fascinating to both analysts and “stakeholders” alike,¹ but, most importantly, we are now beginning to see the next phase of the process—implementation. We can now begin to address the question—will these new regimes work?

This Article concerns the role that one stakeholder, Japan, has played in the development and early phases of implementation of three natural resource regimes in the Antarctic region—the Antarctic Treaty System (ATS),² the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR),³ and the newly completed Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA).⁴ We will discuss the perspectives, interests, and concerns that Japan brought into the development of these regimes in order to gain an understanding of the role Japan has played in both the formation and implementation of the Antarctic regime. This Article will also examine some

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* Professor of International Relations, University of Southern California; former Director of the Sea Grant Program at the University of Southern California; former Director, Law of the Sea Project, Center for Naval Analyses; Ph.D. 1962, University of Washington; M.A. 1958, B.A. 1955, Columbia University.

** Associate Professor of Political Science, Bowling Green State University; Ph.D. 1981, M.A. 1977, University of Southern California; B.A. 1975, Waseda University, Tokyo; B.A. 1974, Oregon State University.

1. Stakeholders are those who make and those who are affected by decisions. W. EDWARDS & J. NEWMAN, MULTIATTRIBUTE EVALUATION 33 (Quantitative Applications in the Social Sciences No. 26, 1982).

2. The Antarctic Treaty System is the institutional framework designed to encourage cooperation in scientific research in the Antarctic. It is defined by the Antarctic Treaty, *see infra* note 11, and by all subsequent agreements and recommendations that have been made by the Consultative states. *See, e.g.*, F. AUBURN, ANTARCTIC LAW AND POLITICS 147 (1982).

3. Convention on the Conservation of Antarctic Marine Living Resources, May 20, 1980, 33 U.S.T. 3476, T.I.A.S. No. 10,240, 19 I.L.M. 838 [hereinafter CCAMLR].

4. Convention On the Regulation Of Antarctic Mineral Resource Activities, June 2, 1988, Doc. AMR/SCM/88/78, 27 I.L.M. 859 [hereinafter CRAMRA].

of the dilemmas of Japanese foreign policy in general, and resource policy in particular, as well as provide some insight into the nature of negotiated resource regimes.

There are a number of basic features of the Antarctic region that provide a setting for all three regimes. First, Antarctica and the Southern Ocean are the last frontier.⁵ There are some very practical reasons for important states to show an interest in the future of the region, but we should not forget that its future also fascinates the romantic, the adventurer, and the knowledge seeker. Both practical and romantic considerations may influence even the most developed stakeholders.

Second, as more discoveries are made, we are beginning to realize that all people in the world may be stakeholders in Antarctica and the Southern Ocean. The future of the Antarctic is important to the future of the world. The world ecosystem is affected by both the activities that occur and the resources that are exploited in the region. Reciprocally, what we do in our home areas also has environmental impacts there.⁶

Third, some important states have mixed or even conflicting motives⁷ concerning the region. For some developed states that are either resource poor or are contemplating Antarctic resource exploitation, estimates and discoveries of oil and gas, hard rock minerals, and krill and fish resources in the Antarctic raise the possibility of resolving some of their own resource dilemmas. As the states providing the expertise to explore and understand the region, they have an incentive to treat the region as a collective good. On the other hand, as potential exploiters, developed states would not like to forego the possibility of reducing Antarctic resources to private goods by making claims for sovereign territory.

Fourth, the regimemaking process of Antarctica is complex. It is characterized by multiple stakeholders,⁸ a wide variety of interests, the

5. See P. QUIGG, A POLE APART: THE EMERGING ISSUE OF ANTARCTICA 5-38 (1983); Hatherton, *Antarctica Prior to the Antarctic Treaty—A Historical Perspective*, in POLAR RESEARCH BOARD, NATIONAL RESEARCH COUNCIL, ANTARCTIC TREATY SYSTEM: AN ASSESSMENT 15-32 (1985) [hereinafter ANTARCTIC TREATY SYSTEM]; Rutford, *Summary of Science in Antarctica Prior To and Including the International Geophysical Year*, in ANTARCTIC TREATY SYSTEM, *supra*, at 87-102.

6. Concerned states have begun to address the issue of manmade chlorofluorocarbons (CFC's) reduction of the ozone, especially severe over the polar regions. A treaty controlling these substances was negotiated in Vienna in March 1985. Vienna Convention for the Protection of the Ozone Layer, Mar. 22, 1985, Doc. UNEP/IG.53/5/Rev.1, 26 I.L.M. 1516. For an extended discussion of the ongoing problem, see Maugh & Stammer, *Loss of Ozone Calls for Speedy Action, Experts Say*, L.A. Times, Mar. 21, 1988, at 6, col. 5.

7. R. AXELROD, CONFLICT OF INTEREST 158-63 (1970).

8. W. EDWARDS & J. NEWMAN, *supra* note 1, at 33.

inherently complex substantive problem of the Common,⁹ and a laborious decisionmaking process requiring multilateral negotiation.¹⁰

The multiple stakeholders that are in the process of creating and implementing the regimes of the Southern Ocean include the "competent" states which, under all present rules, must show active participation in work in the Southern Ocean to be "Consultative Parties" or, as critics see it, to be "members of the club." There are other states, referred to as "nonconsultative" parties, which subscribe to the principles of the Treaty and which have some presence in the region. Stakeholders also include territorial claimants, nonterritorial claimants, and those states that are members of the United Nations and that assert all states are stakeholders but that, because they do not have the qualifications to be Consultative Parties, their equity claim to a stake in the region is being ignored.¹¹

The substantive problems with which the new regimes must deal are equally complex and classic. Until recently, Antarctica and its surrounding ocean were treated as a "common," either as not subject to appropriation, or at least as so difficult to divide up that it was best to treat its resources as a "joint supply." However, some of the living resources, such as whales and finfish, were overexploited under the commons regime.¹² Some others may be vulnerable to overexploitation, such as krill.¹³ Furthermore, the lack of an exclusive right to explore and exploit became a serious disincentive to the development of the nonliving resources of the region, such as oil, gas, and hardrock minerals.¹⁴

9. See, e.g., C. PEARSON, INTERNATIONAL MARINE ENVIRONMENT POLICY (1975); Friedheim, *The Political, Economic, and Legal Ocean*, in MANAGING OCEAN RESOURCES 26-44 (R. Friedheim ed. 1979); Gordon, *Economic Theory of a Common Property Resource: The Fishery*, 62 J. POL. ECON. 124-42 (1954); Hardin, *The Tragedy of the Commons*, 162 SCI. 1243-48 (1968); Wijkman, *Managing the Commons*, 36 INT'L ORG. 511, 532-34 (1982).

10. See, e.g., R. FRIEDHEIM, K. GOUDREAU, W. DURCH, & J. KADANE, FORECASTING OUTCOMES OF MULTILATERAL NEGOTIATIONS (Institute of Naval Studies No. CRC 291, 1977); I. Zartman, *Many Are Called But Few Choose: Managing Complexity in Multilateral Negotiations* (American Academy of Arts and Sciences Working Paper Series No. WP-14, 1987); S. Touval & J. Rubin, *Multilateral Negotiation: An Analytic Approach*, presented to the Annual Meeting of the American Political Science Association, Chicago (Sept. 3, 1987).

11. See generally *Multilateral Antarctic Treaty*, Dec. 1, 1959, 12 U.S.T. 794, T.I.A.S. No. 4780, 402 U.N.T.S. 71 [hereinafter *Antarctic Treaty*].

12. NAT'L MARINE FISHERIES SERVICE, NAT'L OCEANIC AND ATMOSPHERIC ADMIN. & U.S. DEP'T OF COMMERCE, ANTARCTIC MARINE LIVING RESOURCES (AMLR): PROGRAM PLAN UPDATE 1988-1990, at 16 (1987).

13. See generally U.S. DEP'T OF STATE, THE ANTARCTIC KRILL RESOURCE: PROSPECTS FOR COMMERCIAL EXPLOITATION (1978); Knox, *The Key Role of Krill in the Ecosystem of the Southern Ocean With Special Reference to the Convention on the Conservation of Antarctic Living Marine Resources*, 9 OCEAN MGMT. 113 (1984); McElroy, *Krill—Still an Enigma*, 6 MARINE POL'Y REP. 238 (1982).

14. For excellent summaries of the incentives and disincentives for ocean mineral exploitation, see R. ECKERT, THE ENCLOSURE OF OCEAN RESOURCES 214-60 (1979); see also O. YOUNG, RESOURCE REGIMES: NATURAL RESOURCES AND SOCIAL INSTITUTIONS (1982).

Exclusive rights of access to resources are now much in demand in the new resources regimes. They are very difficult to negotiate because the question of who gets what must be resolved. It is much easier to design regimes that concentrate on management or conservation of the resources. But can these management- or conservation-based regimes solve the conservation or sustainable yield problem without the allocation questions being answered?

There are inherent difficulties in attempting to negotiate a resolution to a problem that is of concern to multiple stakeholders. Each stakeholder insists upon participation in the decision process. Currently, under the Antarctic Treaty System, the consent of twenty Consultative Parties must be obtained before any actions can be taken.¹⁵ If the existing regimes for the Southern Ocean fail and we must resort to a law of the seatype universal conference, the consent of more than 150 states must be obtained. In either setting, those who feel at a disadvantage will prefer consensus as the decision rule to protect themselves. Consensus requirements can lead to least-common-denominator solutions. Viewing the problem from the perspective of a single, important participating state like Japan will provide some illumination not otherwise available. We will proceed first by examining the nature of regimes and regime-making in general, then by looking at some of the physical characteristics of Antarctica and the Southern Ocean that shape our problem. Then we will sketch in the Antarctic Treaty, CCAMLR, and the minerals resource negotiations, and finish by examining the particular interests, concerns, and perspectives of Japan.

I

REGIME-MAKING

What we are observing in Antarctica and the Southern Ocean is the creation of an interrelated set of legal regimes. Because both of the present authors were trained as social scientists and not as lawyers, we will emphasize the social, political, and economic functions of international regimes. Unlike many of our colleagues who must worry whether something as vast as, say, the international monetary regime is sufficiently finite as to be characterized as a regime, we face the easier problem of diplomats negotiating a set of legally binding obligations, usually with implementing rules specified, and often with a set of institutions designed.

As is now common, we follow Stephen Krasner's definition of a regime as the "principles, norms, rules, and decision-making procedures

15. Antarctic Treaty, *supra* note 11, art. IX(4).

around which actor expectations converge in a given issue-area.”¹⁶ Again, we have the luxury of examining primarily (although not exclusively) the willingness of the stakeholders to make explicit rather than implicit commitments.¹⁷ We also have the luxury of addressing ourselves primarily to one aspect of regimes—their formation.¹⁸ We are interested in trying to understand and (perhaps) forecast the likely outcome when the regime matures into the implementation phase. In particular, we are interested in whether the problem of allocation is resolved in the negotiation phase; if it is not, the problem of allocation will shape implementation and affect the answer to the question of whether the regime is worthwhile. Therefore we focus on *who* gets what. Oran Young points out that resource regimes are social institutions and essentially come about in one of three ways: first, by the process of human interaction we call negotiation, in which the parties try to find better collective outcomes than they might arrange if each acted separately; second, by imposition of the will of the stronger party; or third, spontaneously, where “expectations converge to a remarkable degree in the absence of conscious design.”¹⁹ As we shall see, some of the stakeholders, primarily from the environmental community, support a negotiated outcome because they fear a spontaneous outcome of willy-nilly resource exploitation. Other stakeholders, principally from the developing states, fear the recent negotiations because they are afraid that the negotiations will result in an outcome that will be imposed on them.

A. Antarctica

For a resource management regime to succeed, it must be designed with the physical attributes of the particular region in mind. The Antarctic region is quite distinctive.

The Antarctic region covers large expanses of land and water. The Convention on the Conservation of Antarctic Living Marine Resources (which we will examine later) defines the waters of the region as beginning at 60 degrees south latitude, or at the Antarctic Convergence (where Antarctic and more temperate waters mix), if the Convergence is farther away from the continent than 60 degrees south latitude.²⁰ The Southern

16. Krasner, *Structural Causes and Regime Consequences: Regimes as Intervening Variables*, 36 INT'L ORG. 185 (1982).

17. See Haggard & Simmons, *Theories of International Regimes*, 41 INT'L ORG. 494 (1987).

18. See, e.g., Young, *Regime Dynamics: The Rise and Fall of International Regimes*, 36 INT'L ORG. 277, 281-90 (1982).

19. *Id.* at 282; see also O. YOUNG, *supra* note 14, at 96.

20. The Antarctic Convergence is a zone of water that averages 20-30 miles wide in which colder, lighter Antarctic waters mix with warmer, heavier, and saltier northern waters. See Holdgate, *The Use and Abuse of Polar Environmental Resources*, 22 POLAR REC. 27, 27-28 (1984).

Ocean occupies roughly 36 million square kilometers. The land area is enormous—13.5 million square kilometers, or approximately one-tenth of the earth's surface. It is divided by the Transarctic Mountains, some of which exceed 4,000 meters in height.²¹

Ninety-eight percent of the continent is covered by an icecap. Seventy percent of the world's fresh water and ninety percent of its ice are trapped therein. It averages 3000 meters in thickness. If a complete meltdown of the Antarctic icecap were to occur, the world's sea level would rise fifty-five meters. The weight of that ice has depressed the continent about one kilometer. But if the ice were removed, half of Antarctica would still remain below sea level after adjustments. In the Antarctic winter, the mass of continent is doubled by sea ice.

The climate also holds some interesting surprises. During summer the South Pole receives more solar radiation than the equator in an equivalent period. While very cold—the average annual temperature on the polar plateau is -50 degrees centigrade and the average temperature of the coastal region is -15 degrees centigrade—the South Pole receives less than one inch of snow annually. Most of the continent is essentially a desert that retains its small amount of precipitation because of the extreme cold. It seems snowier because the high winds that scour the continent move the loose snow about.

The continent and its continental shelf areas may contain mineral resources. Exploration is very difficult because only two percent of the land area is exposed, and working through an overburden of one mile of ice is laborious and expensive. However, deposits of iron ore and coal have been discovered, and traces of copper, chromium, and gold have been found in analysis. Much of the hope for mineral riches is based on the belief by geologists that in the Mesozoic Period, Antarctica, Latin America, Africa, and part of India were part of one landmass—Gondwanaland. Using a mirror image concept, geologists reasonably assume that discoveries made in the areas that have broken away from Antarctica may be matched by similar resources in the areas left behind.

Exploration for oil and gas on the continental shelves is equally difficult. The East Antarctic shelf is narrow (averaging thirty kilometers wide, as compared to the worldwide average of seventy kilometers), and deep (averaging 400 to 600 meters, and up to 800 meters in the Ross Sea). West Antarctica is primarily continental shelf. There are, however, known sedimentary basins in the Ross and Weddell Seas, and traces of methane were found in cores taken from the Weddell Sea in 1987.²² But the huge icebergs that calve off the continent and often scour the

21. Unless otherwise noted, all data concerning the physical attributes of Antarctica are drawn from U.S. CENTRAL INTELLIGENCE AGENCY, POLAR REGIONS ATLAS 35-39 (1978).

22. P. Barrett & R. Cook, Press Release, Victoria University, Wellington, N.Z. (1987).

bottom of the ocean,²³ and the frequently severe weather, make exploration, much less exploitation, of oil and gas both extremely difficult and very costly. It is hoped, however, that the oil technologies successfully being developed in the Arctic can be applied to the Antarctic.²⁴

While the exploitation of nonliving resources is only a future possibility, exploitation of the living resources has been practiced since the first explorers probed the edges of the Antarctic continent by ship. Six species of seals exist in the Antarctic region. Although seals were exploited heavily in the past, there is no sealing currently under way. Whale species such as blue, sei, sperm, fin, minke, and killer also populate the Antarctic and have been heavily exploited. Some species continue to be taken. There are also abundant squid resources as well as finfish. Antarctic waters are home to approximately 100 of the earth's 20,000 species of fish. Four of them are already overexploited. One species of Antarctic cod, *N. rossii*, has been reduced to only ten percent of its pre-1983 population.²⁵

At the base of the faunal system is krill, the most common variety being *Euphausia superba*. All other living creatures in this relatively simple ecosystem are dependent on these crustaceans. Although krill are fifteen percent pure protein, they are difficult to process, and their availability is highly variable. Nevertheless, they are a very tempting target for distant-water fishermen. When krill can be found, they exist in huge swarms and are relatively easy to catch. To date, however, there is no agreed estimate of the biomass. Some specialists believe that the stock in the Antarctic could supply ten to twenty million metric tons a year on a sustainable basis; others estimate the sustainable yield at 200 million metric tons a year. In contrast, the catch of all species worldwide in recent years has been in the 60-70 million metric ton range. Even if the conservative estimates prove to be more accurate, the potential size of the catch is very large.²⁶

In sum, potential users must operate in a remote and hostile region. The absence of a native people, and the necessity for advanced technolog-

23. Icebergs might become a valuable source of fresh water if they could be towed to arid regions of the world. A few years ago a Saudi Arabian prince took an interest in such a project, but his ideas have not yet been applied. Nevertheless, much has been learned about the costs, engineering, towing, and ice preservation problems that would be encountered if the icebergs were moved into the temperate and tropical waters. See, e.g., J. HULT & N. OSTRANDER, ANTARCTIC ICEBERGS AS A GLOBAL FRESHWATER RESOURCE (National Science Foundation Rep. No. SR-1255-NSF, 1973). See generally ICEBERG UTILIZATION (A. Hussein ed. 1977).

24. See Croasdale, *Arctic Offshore Technology and its Relevance to the Antarctic*, in ANTARCTIC TREATY SYSTEM, *supra* note 5, at 245-64.

25. NAT'L MARINE FISHERIES SERVICE, *supra* note 12, at 16; Everson, *Antarctic Fisheries*, 19 POLAR REC. 233 (1978).

26. NAT'L MARINE FISHERIES SERVICE, *supra* note 12, at 7; see also sources cited *supra* note 13.

ical equipment to endure the climate, invariably mean that operations in the Antarctic are extremely expensive. However, although this ecosystem is harsh, it is also fragile. It is a unique system thus far most useful for the advancement of human knowledge and the exploitation of marine creatures.²⁷ However, participation in the Antarctic research programs is hindered by the daunting costs of operating there. Much more is spent on logistics than science per se. Potential profits must be very large to justify exploitation of its natural resources.

B. *Management of Antarctica and the Southern Ocean*

Exploration is associated not only with adventure, but with the process of claiming territory based on discovery. Eight states (now seven after Japan's renunciation of a de facto territorial claim based on discovery²⁸) have made territorial claims to portions of Antarctica since 1908, based on the exploration of their citizens or agents of their governments. Two states—Argentina and Chile—have bolstered their territorial claims with arguments based on proximity and effective occupation through colonization. Most of the territorial claims are anchored in the sector theory.²⁹

Until 1959, there was very little to govern or manage. Despite a few minor shooting incidents,³⁰ there was little reason for the world to pay attention to the Antarctic, or to develop a legal regime there. However, the activities of the International Geophysical Year (IGY) changed that by bringing numerous cooperative scientific expeditions to the region.³¹

As the interactions between scientific parties increased and our knowledge of the region soared, the need for some form of regularized governance increased. However, some of the major states participating in the IGY, particularly the USSR and the United States, did not find territorial division based on discovery or occupation acceptable as the basis for a management regime (although both the United States and the Soviet Union maintain the basis for territorial claims in the event the present regime were to collapse).³² Thus, a fundamental dilemma that emerged early in the development of the Antarctic regime is still with us

27. For a useful comparison of the Arctic and Antarctic, see Holdgate, *supra* note 20, at 28-29.

28. T. Iguchi, Commentary on Arctic Environment and Resources 2, prepared for delivery at the Seminar on "The Polar Regions", Center for Oceans Law and Policy, University of Virginia School of Law (Mar. 27, 1987).

29. See F. AUBURN, *supra* note 2, at 17-31; see also L. MERICQ, ANTARCTICA: CHILE'S CLAIM 89-104 (1987); Child, *Antarctica: Issues and Options*, 10 MARINE POL'Y REP. 4-5 (1987). See generally Child, *South American Geopolitical Thinking and Antarctica*, 11 INT'L STUD. NOTES 23 (1985).

30. P. QUIGG, *supra* note 5, at 119-26.

31. See Rutford, *supra* note 5, at 99-100.

32. See F. AUBURN, *supra* note 2, at 61-83.

today—how to accommodate both those states that insist that their presence in the Antarctic is not based on a claim to the territory and those states that insist not only the converse, but may, at times, further insist that others can remain in “their” territory only at their sufferance.

This problem has been overcome by an ingenious solution devised by the Antarctic Treaty drafters. However, it is not a definitive legal solution, and critics still express concern over whether territorial claims will create a stumbling block when the first generation of mine site claimants make a claim in an area where another Consultative Party retains a sovereignty interest.³³

The Antarctic Treaty is considered by many to be a successful model of regime-making. Supporters point to the ability of the negotiators to get the parties, territorial claimants, and nonclaimants to agree to put aside the question of territorial claims.³⁴ The Treaty did not require the claimants to give up their claims, nor did it require the nonclaimants to recognize the claims of the claimants. Moreover, defenders of the Treaty point out, it is an arms control treaty. In areas south of 60 degrees south latitude,³⁵ all parties promise to use Antarctica “for peaceful purposes only,”³⁶ and not to explode nuclear weapons or store nuclear wastes there.³⁷

Because the major use of Antarctica in 1959 was the conduct of science, the Treaty guaranteed freedom to conduct scientific research³⁸ and enjoined the signatories to “promote international cooperation in scientific investigation.”³⁹ To that end, the Treaty established an inspection system.⁴⁰

The Treaty created a two-tiered membership system—contracting or Consultative Parties (ATCP's) and noncontracting or nonconsultative parties (NCP's).⁴¹ The distinction between them was that ATCP's had to conduct “substantial scientific activity there.”⁴² NCP's had no such requirement. The Treaty really created a three-tiered system. If other states, especially United Nations members, showed an interest in Antarctica but did not accede to the Treaty, as is possible under article XIII, they had to be treated as nonparties to the Treaty. There are twelve

33. *Id.* at 104-10, 256-59.

34. *See* Antarctic Treaty, *supra* note 11, art. IV.

35. *Id.* art. VI.

36. *Id.* art. I.

37. *Id.* art. V.

38. *Id.* art. II.

39. *Id.* art. III.

40. *Id.* art. VII.

41. *Id.* arts. IX(2), XIII.

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

original Consultative Parties, eight other Consultative Parties who joined after the Treaty came into force, and eighteen nonconsultative parties.⁴³

Activities under the Antarctic Treaty are conducted through consultative meetings.⁴⁴ No secretariat is authorized by the Treaty. For expert assistance, the Consultative Parties must turn to international nongovernmental organizations such as the Scientific Committee on Antarctic Research.⁴⁵ Decisions at consultative meetings are made only with the unanimous consent of the Consultative Parties.⁴⁶ The Treaty can be modified in two ways: by the consent of all of the Consultative Parties or by a review conference assembled at the request of a Consultative Party after thirty years of operation of the Treaty (i.e., in 1991 or thereafter).⁴⁷

Defenders of the Treaty can marshal powerful arguments on its behalf. At the height of the Cold War, the treaty-makers were able to get the superpowers to cooperate. Although the injunction against nuclear weapons was much easier to negotiate and to enforce than, say, the Intermediate Range Nuclear Force Treaty, it did keep the arms race from spreading to another region of the world. Science has made splendid advances under the Treaty, and the system of governance has remained stable. Under the amendment feature, the implementation of a number of recommendations made at Antarctic Treaty meetings has repaired some of the Treaty's original gaps and deficiencies. While it is difficult to demonstrate that chaos would have ensued without the Treaty, most observers would agree that the world has been better off with the Treaty than if no treaty had been agreed to in 1959.

Despite these successes, the Antarctic Treaty is under attack today. Its detractors range from those who wish only to expand or modify the system it created, to those who wish to eliminate it and begin over again.

A number of weaknesses in the Antarctic Treaty have become evident. First, it is a least-common-denominator agreement. Its requirement that the consent of the Consultative Parties be gained prior to adoption of an amendment created a unit veto system. Second, only Consultative Parties can exercise a veto. Nonconsultative parties, therefore, are essentially second-class citizens. Nonparties are not citizens at all and have absolutely no voice in the future of the area. It is a regime of the "competent," a club of those who have the science infrastructure and the resources to devote to exploration of the region. Until recently, most of the records of the Consultative meetings had not even been made pub-

43. *Id.* preamble; see also U.S. DEP'T OF STATE, TREATIES IN FORCE 265-66 (1988).

44. Antarctic Treaty, *supra* note 11, art. IX.

45. See Zumberge, *The Antarctic Treaty as a Scientific Mechanism—The Scientific Committee on Antarctic Research*, in ANTARCTIC TREATY SYSTEM, *supra* note 5, at 164-66.

46. Antarctic Treaty, *supra* note 11, art. IX(4).

47. *Id.* art. XII(1)(a), (2).

lic. In sum, many observers have characterized the Antarctic Treaty regime as inequitable.

Another important weakness of the Treaty is that it postponed but did not solve the sovereignty issue. Initially, when questions of claims over resources related primarily to wandering resources, the Treaty was adequate. With the advent of 200-mile Exclusive Economic Zones (EEZ's), and new technology enabling the extraction of nonliving resources, however, this shortcoming is very noticeable. Simply put, the Treaty gives no guidance as to how resource questions would be managed.

As long as cooperation on science is the principal activity regulated by the Treaty, the lack of expertise and continuity that might be provided by a professional secretariat is not serious. If resource management questions become the principal issues, the management system of the Antarctic Treaty would prove to be inadequate. In sum, the Antarctic Treaty had serious deficiencies that required reform and renewal (as we shall argue), if not replacement (as others argue). The regime worked reasonably well when Antarctica was of concern to only a limited number of states, and indeed to only a limited group of stakeholders within those states (principally scientists). But in a world where others outside the regime, mainly Third World states, said they too were stakeholders, and fishermen, whalers, oil explorers, and holders of minerals interests also claimed to be potential stakeholders, the salience of Antarctic issues was raised significantly and the original management system outlined by the Antarctic Treaty could not handle the ensuing problems.

The problems of managing the living resources of the Antarctic has been addressed in recent years. Although attention had been paid to sealing in a Convention on the Conservation of Antarctic Seals (CCAS),⁴⁸ signed in 1972, and whaling in the region had been potentially subject to regulation since 1945, it can be argued that it was not until CCAMLR⁴⁹ was signed in 1980 and brought into force in 1982, that the "club" began to pay consistent attention to resource issues.

The most notable of CCAMLR's features is its geographic scope. It applies to living resources south of 60 degrees south latitude and to resources between that latitude and the Antarctic Convergence.⁵⁰ In places, the Convergence wanders above 50 degrees south latitude. It is useful as a biological boundary because, with the exception of whales, most living creatures do not wander across the convergence zone.⁵¹

48. Convention for the Conservation of Antarctic Seals, June 11, 1972, 29 U.S.T. 441, T.I.A.S. No. 8826, 11 I.L.M. 251 [hereinafter CCAS].

49. CCAMLR, *supra* note 3.

50. *See supra* note 20.

51. CCAMLR, *supra* note 3, art. I.

The objective of CCAMLR is conservation,⁵² and in this context conservation is taken to include "rational use." Rational use occurs only when harvesting does not reduce populations below that necessary for sustainable yields. Moreover, ecosystem relationships should be taken into account in harvesting decisions.

The Treaty reaffirms the setting aside of territorial claims.⁵³ While this is a useful feature of CCAMLR, it was inherently much less difficult to persuade states to forego territorially based claims to wandering living resources than to nonliving resources in Antarctica. Enforcement costs would be substantial if territorial claimants tried to apply their claims to 200-mile EEZ's off the coasts of the land areas they claim.

Parties to the Antarctic Treaty were rewarded with a special status under CCAMLR. Their "special obligations and responsibilities" under the Antarctic Treaty were acknowledged by CCAMLR contracting parties that are not parties to the Antarctic Treaty.⁵⁴

Unlike the Antarctic Treaty, CCAMLR is more than a periodic meeting of its members. The commission engages in active management.⁵⁵ Commission members are original signatories of CCAMLR,⁵⁶ acceding members if they are "engaged in research or harvesting activities" (in other words, if they are competent),⁵⁷ or representatives of regional economic integration organizations.

Critical to the operation of the Commission is its method of making decisions. On matters of substance, consensus is required;⁵⁸ on other matters, a simple majority will carry the day.⁵⁹ The Commission's powers encompass a wide range of resource management functions—facilitating research, compiling data, publishing information, observing and inspecting and, most important of all, formulating conservation measures on the basis of the best scientific evidence.⁶⁰

Among its regulatory powers are the right to specify the quantity of species caught, either on the whole or by subregions; designation of protected species; specification of size, age, or sex of harvestable species; establishment of seasons or open and closed areas; and gear regulation.⁶¹

52. *Id.* art. II.

53. *Id.* art. IV.

54. *Id.* art. V.

55. *See id.* art. VII.

56. *Id.* art. VIII(2)(a).

57. *Id.* art. VIII(2)(b).

58. *Id.* art. XII(1).

59. *Id.* art. XII(2).

60. *Id.* art. IX.

61. *Id.*

The work of the Commission is supported by a Scientific Committee.⁶² While members are obligated to provide data,⁶³ and the Scientific Committee is urged to encourage cooperation, the Committee is also empowered to assess and analyze data on harvesting and to develop research plans.⁶⁴

But how does the Commission enforce its regulations? The process is initiated through the right of observers and inspectors appointed by members of the Commission to inspect the activities of signatories. However, even though inspectors can document a violation of CCAMLR, the Commission has no powers of enforcement. Prosecution and sanctions are the obligation of the flag state.⁶⁵

Although we have inadequate experience to make a definitive judgment on a convention that came into force as recently as 1982, a few observations concerning its efficacy can be made. Although not optimal, CCAMLR is certainly preferable to no treaty. CCAMLR was an improvement on the status quo. It developed a new ecosystem approach to resource management which should help to avoid repeating past mistakes made in the management of a single species in a complex food web. It finessed the sovereignty question once again. It provided continuous attention to the problems of Antarctic living marine resources management through creation of a Commission, a Scientific Committee, and a Secretariat. It initiated an impressive research program and also made progress toward reducing the overexploitation of finfish.

Unfortunately, the convention has several weaknesses.⁶⁶ If pressure on the living resources does *not* become intense—especially pressure on krill—the Treaty could provide an adequate means of managing the living resources of the Southern Ocean. However, if fishing pressure increases substantially, CCAMLR has within it the seeds of its own failure. It has the fault of fisheries treaties that depend upon a conservation approach to resource management.⁶⁷ That is, the convention attempts to control *what* and *how much* is caught, but it does not contain rules for deciding *who* is authorized to do the catching. It defers, but does not solve, the allocation problem. If the resources prove valuable, and the first generation of exploiters gain wealth, powerful incentives exist for them to increase their catch capability and for second-generation fishermen to join them. Such events could result in the classic problem of

62. *Id.* art. XIV.

63. *Id.* art. XX.

64. *Id.* art. XV.

65. *Id.* art. XXIV(2)(a).

66. For a detailed summary of the Treaty's deficiencies, see B. MITCHELL & R. SANDBROOK, *THE MANAGEMENT OF THE SOUTHERN OCEAN* 127-39 (1980).

67. For an attempt to operationalize a conservation approach to management of the Southern Ocean, see Butterworth, *Antarctic Marine Ecosystem Management*, 23 *POLAR REC.* 37 (1986).

overinvestment and overutilization of labor that plagues the exploitation of common property resources.⁶⁸ As long as the allocation question remains unresolved, the resource is still a common-property resource, even if subject to conservation rules.

In addition, while the creation of a Commission, a Scientific Committee, and a Secretariat is an advance over the ad hoc approach to management under the original Antarctic Treaty, it is still a very constrained organization. The unanimity rule probably will lead to least-common-denominator decisions. Some observers have said that Japan and the USSR insisted on the consensus approach because of their experience under the three-fourths majority rule of the International Whaling Commission (IWC). While this may be true, the unanimity rule is a step backwards in comparison with the IWC—however well or poorly it has used its powers.

The IWC is also experiencing difficulties today. It is threatened with dissolution, or at least abandonment, by some of its major whaling members who have threatened to create their own organization. While its responsibilities encompass all of the world's oceans, much of its work is in the Antarctic. CCAMLR, because of the existence of the IWC, does not attempt to make decisions relating directly to whaling, but the Scientific Committees of the two organizations cooperate closely. It is the feeling of one close observer that if the IWC were to fold, CCAMLR would take over many of its responsibilities in the Antarctic.⁶⁹ The IWC has had a checkered history. First attempts to regulate whaling began in the mid-1930's, but the Commission was not formally established until 1946.⁷⁰ When the Commission first established a quota for whales in 1948, it used the infamous "blue whale units."⁷¹ Species quotas using a maximum sustainable yield criterion were not implemented until 1972.⁷²

Today the structure and powers of the IWC are quite limited. While decisions can be made by a three-fourths majority, members can withdraw, or, on ninety days notice, can void the application to themselves of any decision of the IWC of which they disapprove.⁷³ As a result, decisionmaking in the Commission has proceeded at a glacial pace. It was not until the 1981 and 1982 meetings, in which opponents of whal-

68. For literature on the economics and politics of common property resources, see sources cited *supra* note 9.

69. Telephone Interview with Thomas MacIntyre, Fishery Biologist, Office of Protected Resources, National Oceanic and Atmospheric Administration (Feb. 2, 1988).

70. International Convention for the Regulation of Whaling, Dec. 2, 1946, 62 Stat. 1716, T.I.A.S. No. 1849, 161 U.N.T.S. 72.

71. That is, one blue whale was the equivalent of two fin whales, two and one-half humpback whales, or six sei whales. Woodhouse, *Management of Marine Mammals*, in *MANAGING OCEAN RESOURCES*, *supra* note 9, at 127.

72. See generally *id.*

73. K. ALLEN, *CONSERVATION AND MANAGEMENT OF WHALES* 25 (1980). However, the objection process is rarely used in practice. *Id.* at 26.

ing were able to convince a large number of nonwhaling states to join, or as the whaling states perceived it, to "pack" the Commission, that the IWC took strong conservationist measures.⁷⁴ The thirty-nine members (up considerably from the original fourteen) imposed a moratorium on whaling to begin in 1986.⁷⁵ As we shall see below, attempts to make the moratorium work, especially as it may apply to Japan, have created some difficulties in U.S.-Japanese relations.⁷⁶

The question of the management of potential mineral resources in Antarctica has also been dealt with in a series of recent negotiation sessions among the Antarctic Treaty Consultative Parties.⁷⁷ Although there is little immediate prospect of finding exploitable quantities of oil and gas or hard rock mineral resources, the negotiations have recently produced CRAMRA.⁷⁸

The possibility that exploitable quantities of nonliving resources might be found was considered as early as 1939 in a U.S. Department of State study.⁷⁹ While iron, coal, copper, lead, zinc, silver, and other minerals had been found in areas not covered with snow and ice, the size of the finds (they are too small to be considered reserves by economic geologists), logistical problems, potential costs, and the lack of technological knowledge have precluded much interest in trying to exploit them.⁸⁰ There is much more recent interest in the possibility of discovering oil and gas under the seafloor of the Southern Ocean. In 1973, methane was detected in cores drilled under the Ross Sea by the *Glomar Explorer*. The United States Geological Survey, in what Francis Auburn called a secret study, estimated that 45 billion barrels of oil and 115 trillion cubic feet of natural gas might exist under the Ross, Weddell, and Bellingshausen Seas.⁸¹ The United States Geological Survey states, however, that only one-third of these deposits might be recoverable.⁸² In 1975, the

74. See Nemiroff & McCarthy, *International Regulation of Whaling: The U.S. Role*, OCEAN LAW MEMO, Oct. 1987, at 3.

75. See *id.*

76. See Leggett, *International Whaling Policy*, 7 MARINE POL'Y REP. 1, 3-5 (1985); Nemiroff & McCarthy, *supra* note 74, at 14; Woodhouse, *supra* note 71, at 135. See generally THE WHALING ISSUE IN U.S.-JAPAN RELATIONS (J. Schmidhauser & G. Totten III eds. 1978).

77. Recommendation XI-1, adopted at the eleventh Consultative Meeting in Buenos Aires in 1981, provided the basis for these negotiations. The first session was held in Wellington, New Zealand in 1982. Subsequent sessions were held in Wellington (Jan. 1983), Bonn (July 1983), Washington, D.C. (Jan. 1984), Tokyo (May 1984), Rio de Janeiro (Feb.-Mar. 1985), Hobart (Apr. 1986), Montevideo (May 1987), and Wellington (Jan. 1988 and May-June 1988).

78. CRAMRA, *supra* note 4.

79. See F. AUBURN, *supra* note 2, at 241.

80. Zumbege, *Mineral Resources and Geopolitics in Antarctica*, 67 AM. SCI. 68, 72 (1979).

81. See F. AUBURN, *supra* note 2, at 245.

82. Joyner & Theis, *The United States and Antarctica: Rethinking the Interplay of Law and Interests*, 20 CORNELL INT'L L.J. 65, 86 (1987).

United States Government turned down a request by Texas Geophysical for exclusive rights to explore the Ross and Weddell Seas. Pandora's box was opened and it was impossible to close it again.

The recently concluded CRAMRA⁸³ exhibits an approach to the management of mineral resources similar to that of CCAMLR for living resources. The Convention authorizes creation of a Commission to oversee the entire process,⁸⁴ aided by a Scientific, Technical and Environmental Advisory Committee,⁸⁵ and a Secretariat.⁸⁶ Members of the Commission will be drawn from Consultative Parties to the Antarctic Treaty, other parties engaged in substantive scientific, technical, or environmental research in the area, and any other party whose operator has applied for an exploration permit.⁸⁷

While prospecting would be free, no title would be conveyed to any resource discovered.⁸⁸ However, if a party wishes to identify an area for possible exploration and development, it may notify the Commission.⁸⁹ The Commission could accede to the request only after favorable reports by the Scientific, Technical and Environmental Advisory Committee⁹⁰ and a Special Meeting of State Parties.⁹¹ This is one of the few issues on which the Commission must act by consensus.⁹² Each area designated for exploration would be supervised by a Regulatory Committee on which the territorial claimant(s) of the area in question, and the members "which assert a basis of a claim in Antarctica" (in other words, the superpowers) as well as members who have sponsored prospecting efforts or submitted applications for exploration permits, are guaranteed representation.⁹³ If the Regulatory Committee acts favorably, exploration⁹⁴ and development⁹⁵ permits can be issued by the Commission.

Several sets of concerns have complicated the negotiations. The first was the division of the territorial claimants and nonclaimants. The claimants wanted special rights in "their" territory in which they would be entitled to representation on efforts at mineral exploitation within their territory. In addition, the claimant states wanted their "interests

83. CRAMRA, *supra* note 4.

84. *Id.* art. 18.

85. *Id.* arts. 23-27.

86. *Id.* art. 33.

87. *Id.* art. 18.

88. *Id.* art. 37(1).

89. *Id.* art. 39.

90. *Id.* art. 40(1); *see also id.* art. 26(4).

91. *Id.* art. 40(2)-(4); *see also id.* art. 28.

92. *See id.* arts. 41(2), 22(2) (providing for consensus on certain budgetary items as well as on any elaborations of the principle of nondiscrimination).

93. *Id.* art. 29.

94. *Id.* arts. 44-48.

95. *Id.* arts. 53-54.

. . . in the matter in relation to the area in question . . . respected in any disposition of . . . surplus revenues.”⁹⁶

The second division was between the two superpowers and other major developed states. The superpowers wanted guaranteed representation on the major organs of the Minerals Commission. The others feared that such a guarantee would at a minimum reduce their voice, and possibly even exclude them from important decisions entirely, if “developed” seats are limited. Japan has expressed such concerns.⁹⁷ As we shall see below, Japan believes it currently is and should remain in a position of equality vis-à-vis all the other Consultative Parties.

Although all members of the Antarctic Treaty System can devote major resources to creating and sustaining a presence in Antarctica, some are less developed industrially and scientifically than others. Some developing states are Consultative Parties. Most are not parties to any of the Antarctic regimes. Many nonconsultative as well as nonparty developing states wanted some form of guaranteed representation in the minerals arrangements. Their demands ranged from broader international representation to some scheme for compulsory compensation for their willingness to acquiesce in allowing the more advanced states to extract resources from the Antarctic before they are capable of doing so themselves. But the Convention limits membership on a Minerals Committee to ATS Consultative Parties, thereby excluding nonparty developing states.⁹⁸ The response of ATS members to the equity concerns of developing states seems to have been, “Join us. The ATS and its follow-up living and nonliving resource treaties are open treaties. Sign and become a nonconsulting member. When you have the interest and resources to become a consulting member, apply for that status and then become eligible for participation in decisions relating to mineral exploitation.”

It seems unlikely that the response thus far of ATS members to the demands of developing states, especially those within the United Nations who are not members of the Antarctic Treaty System, would dissuade the states from continuing to insist upon a Common Heritage of Mankind type of solution for the management of Antarctica.⁹⁹ The issue was brought before the 1983-84 meeting of the General Assembly of the

96. *Id.* art. 35(7)(b).

97. Kumagai, *Remarks*, in *THE LAW OF THE SEA: PROBLEMS FROM AN EAST ASIAN PERSPECTIVE* 127-28 (C. Park & J. Park eds. 1987) [hereinafter *THE LAW OF THE SEA*].

98. CRAMRA, *supra* note 4, arts. 29(3)(b), 18(2)(a).

99. See Joyner, *Remarks at the Seventy-Ninth Annual Meeting*, 1985 AM. SOC. INT’L L. PROC. 62-67. For an impassioned defense of the Common Heritage principle as it might apply to Antarctica, interestingly in a South African journal, see Barratt, *Towards A Minerals Regime for Antarctica: The Problems Associated Therewith and Possible Solutions Offered by the Common Heritage of Mankind Principle*, 1987 SEA CHANGES 110.

United Nations.¹⁰⁰ A special conference of experts and Third World country representatives was held to address developing country concerns with Antarctic management arrangements.¹⁰¹ Because Third World representatives expressed skepticism concerning the ongoing minerals negotiation, there is little that would make us believe that Third World representatives will give up their quest for equitable treatment.¹⁰²

Whenever a possibility of development of a pristine area is under discussion, alarm bells go off in the environmental community. While there are many provisions in the draft convention concerning steps that would have to be taken before development could be authorized, the environmental community still is not satisfied that the convention would be adequate to protect the natural system. Some environmentalists would prefer to preclude any development and make Antarctica a "nature park."¹⁰³ Other environmental representatives do not disapprove of development per se, but view the draft as far too weak.¹⁰⁴ Others want consensus as a decisionmaking standard on all major issues in the hope that they will find at least one ally among the Consultative Parties.¹⁰⁵

II

JAPAN AND THE ANTARCTIC

Japan's activities in the Antarctic began in the early part of this century, and have grown from exploration to research to full participation as a member of the Antarctic Treaty. Japan's experience with Antarctica began with a South Pole expedition in 1911-12, led by Lt. Nobu Shirase, to the Ross Ice Shelf. The team went through the Ross Sea and named that area Kainan Bay on January 16, 1912.¹⁰⁶ The expedition provided the Japanese Government with a basis for asserting the right to claims of territorial sovereignty in Antarctica.

100. Christopher C. Joyner and Peter J. Lipperman provide a useful summary of the recent involvement of the United Nations General Assembly in Antarctica and references to the literature in Joyner & Lipperman, *Conflicting Jurisdictions in the Southern Ocean: The Case of the Antarctic Minerals Regime*, 27 VA. J. INT'L L. 1, 31-33 & n.106 (1986).

101. For one view of those concerns, see Azraai, *The Antarctic Treaty System from the Perspective of a State Not Party to the System*, in ANTARCTIC TREATY SYSTEM, *supra* note 5, at 305-13.

102. See, e.g., D. Hitam, *Treaty System and Global Interests in the Antarctic*, prepared for delivery at the Seminar on "The Polar Regions", Center for Oceans Law and Policy, University of Virginia School of Law (Mar. 27, 1987).

103. See Clark, *Antarctica: A Wilderness Compromised*, 11 INT'L STUD. NOTES 29 (1985).

104. See, e.g., Barnes, *Remarks at the Seventy-Ninth Annual Meeting*, 1985 AM. SOC. INT'L L. PROC. 67-69.

105. INT'L INST. FOR ENV'T & DEV., REPORT ON ANTARCTICA 15 (1987).

106. Taijudo, *Japan and the Problems of Sovereignty over the Polar Regions*, 3 JAPANESE ANN. INT'L L. 12, 15 (1959).

Japan's postwar activities in Antarctica began with its participation in the IGY from 1959-62.¹⁰⁷ Until the expedition was suspended, as IGY came to an end, Japan sent six expedition teams (JARE-1 through JARE-6) to Antarctica, establishing Syōwa¹⁰⁸ Station on East Ongul Island. During the same period Japan experienced a number of difficulties. First, financial support for the Antarctic expedition was less than ideal.¹⁰⁹ Second, the Maritime Safety Agency (MSA), responsible for the transportation of Japanese expedition personnel, equipment, and supplies, could only provide limited transport capability.¹¹⁰ Subsequently, transportation responsibilities were all transferred from MSA to the Maritime Self-Defense Forces (MSDF).¹¹¹

The third problem Japan faced in its early phases of Antarctic exploration was that its first Antarctic research vessel, the *Soya*, did not have icebreaking capability.¹¹² The *Soya* was subsequently replaced by a new icebreaker, the *Fuji*. Fourth, the forbidding Antarctic climate took its toll. One of the Japanese scientists on the fourth expedition team lost his life when he was caught in a blizzard in October 1960.¹¹³

Despite these difficulties, Japan's active role in IGY and accumulation of research experience were sufficient to qualify the nation for partic-

107. MONBUSHŌ, NANKYOKU KANSOKU NIJŪGONENSHI [The Twenty-five Year History of the Antarctic Research Expedition] 1 (1982). In November 1955, the Japanese Government approved the nation's participation in Antarctic research and established a Headquarters for Japanese Antarctic Research Expedition under the chairmanship of the Minister of Education, Science, and Culture.

108. The Hepburnian system of spelling Japanese words would spell this "Shōwa" instead of "Syōwa." Throughout this paper the Hepburnian system is used for Japanese words with the single exception of Syōwa because it is more commonly spelled that way in Japanese Government documents.

109. MONBUSHŌ, *supra* note 107, at 3.

110. *Id.* at 5.

111. *Id.* at 7. This transfer of authority to MSDF created a problem. The Self-Defense Forces are constitutionally prohibited from defense activities beyond the limits of Japanese national jurisdiction. This point was raised by opposition party members in the parliamentary debate on Japanese Antarctic research. Critics have cautioned that the SDF's activities in the Antarctic region may exceed the constitutional limits imposed on the Self-Defense Forces. Opponents argue that because the Antarctic region is clearly beyond the national jurisdiction of Japan, the SDF may be violating their constitutional limits when they provide transportation to, from, and within the region. One member of the parliament has asked why other governments regard SDF officials onboard the SDF ships as members of the armed forces. He has also questioned why the vast majority (more than 80%) of the government's budget for Antarctic expeditions has been accounted for by the Defense Agency. The government has responded that the Japanese ships used for Antarctic research expeditions are neither armed nor fit for armaments, that they are not intended to be dispatched to any conflict situation and therefore, that their activities are within the limits of the Japanese constitution. The government has also maintained that the SDF's large share of the government budget in the area is due to the high cost of maintaining and upgrading the Antarctic research vessels. See *Dai 98-Kai Kokkai, Shūgiin Kessan Iinkai Kaigiroku* [Proceedings of the House of Representatives, Committee on Budget Settlement, 98th Session of the Diet] No. 3, at 10-11 (1982).

112. MONBUSHŌ, *supra* note 107, at 4.

113. *Id.*

ipation in the Antarctic Treaty. Japan signed the Treaty in December 1959 and has been a Consultative Party since the Treaty went into force in June 1961.

Japan learned early the importance of international cooperation in Antarctic research. Between 1956 and 1987, twenty-eight Japanese scientists served at research stations of other countries. In return, between 1965 and 1987, Japanese research stations hosted twenty-two scientists from other countries.¹¹⁴

The 1973-74 oil crisis did much to remind the Japanese of their potential vulnerability to a disruption of energy supplies and to increase their awareness of the resource potential of Antarctica. This is reflected in a 1976 report prepared by scientific members of the JARE Headquarters. The report called for: (1) the promotion of focused scientific surveys and research of high academic value; (2) the promotion of basic surveys and research regarding Antarctic resources and their development; (3) the strengthening of international cooperation and the expansion of geographical areas covered by research expeditions; (4) the construction of additional facilities and enhancement of transport capabilities in order to implement the preceding three objectives.¹¹⁵

Pursuant to this recommendation, the government decided to build a new icebreaker to replace the aging *Fuji*. The new 11,600-ton ship, named *Shirase*, was officially commissioned for Antarctic research in November 1983.¹¹⁶ Thanks to the expanded transport capacity, JARE has been able to expand its research activities since the Syōwa station was reopened in 1966.¹¹⁷

Thus, Japan's scientific activities in Antarctica have grown from the modest beginning in 1956, with an eleven-man wintering party, to the current expedition (JARE-28), composed of fifty-two people, including thirty-seven who were scheduled to spend the Antarctic winter at the Japanese research stations.¹¹⁸ Ongoing activities include research in upper atmosphere physics, meteorology, glaciology, solid earth geophysics, petrology, geomorphology, geodesy, search for meteorites, biology and medicine, and physical, chemical, and biological oceanography.¹¹⁹

114. NAT'L INST. OF POLAR RESEARCH, JAPANESE ANTARCTIC ACTIVITIES 24 (1987). In 1962, when a debate began concerning the desirability of resuming Antarctic research after IGY ended, Yasuhiro Nakasone (Prime Minister of Japan from 1982 to 1987) and another member of the ruling Liberal Democratic Party, along with the leader of the JARE-5 wintering team, visited the U.S. McMurdo station in November at the invitation of the National Science Foundation. These individuals proved instrumental in mobilizing the necessary political support in their party and in parliament for the resumption of Japanese Antarctic expeditions. MONBUSHŌ, *supra* note 107, at 6-7.

115. MONBUSHŌ, *supra* note 107, at 11-12.

116. *Id.* at 12.

117. NAT'L INST. OF POLAR RESEARCH, *supra* note 114, at 6.

118. *Id.* at 7.

119. For a summary of current research activities, see *id.* at 12-22.

A. *Japan's Interests in the Living Resources of the Antarctic*

Japan's interests in the Antarctic extend beyond science to encompass living resources including whales, finfish, squid, and krill, and mineral resources such as petroleum, natural gas, and hardrock minerals. Japan potentially has territorial interests as well.

Begun in 1934, Japanese whaling in the Southern Ocean reached its prewar peak in 1941, when 2,972 crewmen were employed on six factory ships (totaling 100,300 tons) and forty-five whaling boats.¹²⁰ Because Japan refused to join the 1931 International Convention for the Regulation of Whaling and the 1937 International Agreement for the Regulation of Whaling, Japan's prewar whaling was not subject to international regulation. This refusal prompted other nations to oppose the resumption of Japanese whaling in the Southern Ocean after the Second World War.

However, in 1946-47, when Japan faced a severe food shortage, the Supreme Commander for the Allied Powers decided, over the objection of other nations, to allow Japanese whaling in the Antarctic. This "temporary measure" was renewed each year thereafter until 1952, when Japan regained full sovereignty and resumed regular distant-water fishing and whaling. In 1951, at the urging of the United States, Japan joined the 1946 International Convention for the Regulation of Whaling.¹²¹

Southern Ocean whaling continued to represent the largest and the most important part of the thousand-year-old Japanese whaling industry. At the height of its prosperity in 1965, Japanese whaling in the Southern Ocean comprised a total of 9,007 crewmen, seven factory ships (totaling 137,000 tons), and seventy-three whaling boats (44,900 tons). Japan's total catch during most of the 1960's exceeded 20,000 whales a year, with a high of 26,986 whales in 1965.¹²² This period coincided with Japan's fastest economic growth in its history. Whale meat was one of the most important sources of protein for Japanese consumers. In fact, until 1963 the Japanese consumed more whale meat than any other type of meat. By the late 1960's, however, Japan's exploitation began to endanger several whale stocks in the Southern Ocean as well as in the North Pacific. As a result, Japan's total catch declined from 16,887 whales in 1970 to 4,918 in 1979.¹²³

Alarmed by the virtual extinction of some stocks and the marked deterioration of others, the IWC adopted a moratorium on factory-ship whaling after the 1980 season, over loud Japanese objections. The only commercial whaling allowed after the moratorium on factory-ship opera-

120. SŪJI DE MIRU NIHON NO HYAKUNEN [Japan's 100 Years in Statistics] 214 (Y. Kinekai 2d ed. 1986).

121. KENZO KAWAKAMI, SENGU NO KOKUSAI GYOGYŌSEIDO [Postwar International Fisheries Regime] 33-36, 137-43 (1972).

122. SŪJI DE MIRU NIHON NO HYAKUNEN, *supra* note 120, at 214.

123. *Id.*

tions was minke whaling in the Southern Ocean. Japanese boats caught 4,000-5,000 minke whales a year. In 1982, Japan challenged the 1982 IWC resolution to ban all commercial whaling by arguing that there was no scientific basis for the action. Nonetheless, when the United States threatened to ban Japanese fishing within the U.S. 200-mile economic zone, Japan decided to refrain from commercial whaling altogether.¹²⁴ When the IWC then proceeded to ban all commercial whaling after the 1986 season, Japan reluctantly agreed to discontinue commercial whaling after the 1988 season.¹²⁵

Rather than totally abandoning whaling in the Southern Ocean, however, Japan has decided to continue taking minke whales in the name of scientific research. Whaling for scientific purposes is allowed under the Convention on the Regulation of Whaling. Moreover, Japan claims whaling research is necessary to implement the IWC decision that accompanied the 1982 resolution on commercial whaling, calling for a full assessment of whale resources by 1990.¹²⁶ Japan was originally planning to take 875 minke whales and fifty male sperm whales,¹²⁷ but under international pressure, Prime Minister Nakasone intervened and reduced the planned kill to 825 minke and fifty male sperm whales. Even so, with an estimated \$2.5 million in government subsidies in addition to revenues from sales of whale meat and oil, Japanese whalers were expected to recover their investment fully.¹²⁸

Japan subsequently reduced the total catch to less than 300 minke.¹²⁹ Nevertheless, on February 9, 1988, in retaliation for Japan's continued whaling efforts, the United States administration invoked the Packwood-Magnuson Act. Under the Act, Japan's 1988 quota in the U.S. EEZ was reduced by 50% from the 1987 level of 104,000 tons and Japan's share in 1989 was totally eliminated.¹³⁰ Since no retaliatory action had been announced against Iceland, which was also engaged in whaling "for scientific purposes," some Japanese saw the U.S. action as nothing other than Japan-bashing.¹³¹ Although over one-half of all Japanese polled favored continued whaling, the more urban, younger, better educated, and more professional sectors favored ending whaling to protect Japan's reputation in the international community.¹³²

124. When Japan's fish quota in the U.S. economic zone was drastically reduced during the same period, Japanese fishery concerns expressed dismay. See *Asahi Shimbun*, Feb. 13, 1988, at 4.

125. SŪJI DE MIRU NIHON NO HYAKUNEN, *supra* note 120, at 207.

126. *Asahi Shimbun*, Apr. 21, 1988, at 4.

127. PAC. FISHING, Dec. 1987, at 15.

128. See *N.Y. Times*, Apr. 27, 1987, at A3, col 5.

129. *Asahi Shimbun*, Apr. 21, 1988, at 34.

130. *Id.* at 4.

131. *Id.*, Jan. 24, 1988, at 3; see also *id.*, Feb. 11, 1988, at 1; *id.*, Feb. 13, 1988, at 4; *N.Y. Times*, Jan. 22, 1988, at A7, col. 1.

132. *Asahi Shimbun*, Feb. 13, 1988, at 9; *L.A. Times*, Dec. 22, 1982, I-A, at 8, col. 1.

Some in the United States suggested an even stiffer sanction, including a ban on all Japanese fishery imports to the United States.¹³³ Although Japan's Ministry of Agriculture, Forestry, and Fisheries did not believe the threat would be carried out, the agency was reportedly prepared to charge that the threatened act would be a violation of U.S. obligations under the General Agreement on Tariffs and Trade (GATT).¹³⁴ Thus, although whaling is outside the framework of the Antarctic and Southern Ocean regimes, it has become a thorny issue in U.S.-Japan relations, with a potential impact on U.S.-Japan relations with respect to the Southern Ocean and Antarctica. Many Japanese perceive, for example, that U.S. actions are based on discriminatory motives and an indifference to traditional Japanese values. The Japanese also insist that the need for a ban on whaling be proven scientifically.

As a signatory of CCAMLR, Japan is required to submit an annual report on its research activities and conservation measures regarding marine living resources to the Commission. CCAMLR resulted from a recommendation adopted by the Antarctic Treaty Consultative Meeting at its third session in Brussels in 1964. Japan waited eighteen years before it ratified the Treaty by passing domestic legislation, the Law for the Conservation of Antarctic Fauna and Flora (LCAFF), in 1982. Japan was also the last of the signatories to ratify the Convention. Japan's slow response to the Antarctic initiative taken by the international community caused its reputation with respect to marine resource conservation to suffer. Officials in Tokyo openly admitted that it was shameful of Japan to be the last of the twelve Antarctic Treaty Consultative members to implement the 1964 recommendation.¹³⁵

Government officials gave two reasons for the long delay. First, the government found it difficult to establish the legal basis for domestic legislation to govern the activities of Japanese nationals beyond the limits of national jurisdiction. Second, interagency coordination proved difficult. LCAFF requires coordination among several government agencies, namely, the Ministry of Agriculture, Forestry, and Fisheries (for purposes of protecting Antarctic animals and plants), the Ministry of Education (with respect to the JARE activities), the Ministry of Finance (for customs purposes), the Ministry of Justice (for punitive action against violators of the law), and the Environmental Agency (for environmental conservation). After difficult negotiations, final authority to enforce the legislation was given to the Ministry of Foreign Affairs, because CCAMLR was a product of the Antarctic Treaty and domestic law

133. See, e.g., L.A. Times, Dec. 22, 1982, I-A, at 8, col. 1.

134. General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. 5, T.I.A.S. No. 1700, 55 U.N.T.S. 187.

135. *Dai 96-Kai Kokkai, Shūgiin Gaimuiinkaigiroku* [Proceedings of the House of Representatives, Committee on Foreign Affairs, 96th Session of the Diet] No. 10, at 24 (1982).

would be applied to the Antarctic region—a region that lay beyond the limits of national jurisdiction. It was unusual for the Foreign Ministry to be responsible for this type of legislation. An official of the Foreign Ministry acknowledged that effective enforcement would require cooperation from the other government agencies concerned, as well as from commercial entities.¹³⁶

Japan's krill fishing has also been the target of international scorn and even some domestic criticism. According to a Japanese report required under CCAMLR, during the November 1986-April 1987 season, Japanese fishermen made their largest catch ever, taking 78,360 tons of krill in the Treaty area and another 29 tons outside the area.¹³⁷ This represented more than 20% of the world's total catch of 376,527 tons (down from 445,673 tons the previous year).¹³⁸

Recent fluctuations in the krill harvest have caused some environmentalists and conservationists to suspect that the krill, as part of a simple food chain in the Southern Ocean preyed upon by whales, squid, and finfish, may be more fragile than originally thought. The mythical abundance of the resource may be a matter of natural variability. The problem of krill variability has received increasing attention among marine biologists in recent years.¹³⁹

Japan is generally satisfied with the existing Antarctic living resources regime represented by CCAMLR and CCAS and does not wish to bring in more stringent conservation measures. Japan is particularly defensive when environmental concerns of other governments and scientists find their way into the discussion of the conservation of Antarctic living resources. This attitude is reflected in the Japanese policy state-

136. The same official said that a violation of the new law by any JARE participants would be considered a violation of the National Public Service Law since they are legally considered public servants while participating in the Antarctic research expedition. The official was satisfied that the contents of the new legislation would be communicated to private visitors to Antarctica through their travel agents. According to the Foreign Ministry official, anyone carrying Antarctic animals or plants into Japan would be subject to the Japanese legislation and dealt with accordingly by customs agents. See *Dai 96-Kai Kokkai, Sangiin Gaimuiinkai Kaigiroku* [Proceedings of the House of Councillors, Committee on Foreign Affairs, 96th Session of the Diet] No. 10, at 20-23 (1982); *Dai 96-Kai Kokkai, Shūgiin Gaimuiinkai Kaigiroku* [Proceedings of the House of Representatives, Committee on Foreign Affairs, 96th Session of the Diet] No. 11, at 1-2 (1982).

137. *Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Report of Member's Activities in the Convention Area in 1986/87: Japan*, U.N. Doc. CCAMLR-VI/MA/9, at 1 (Oct. 13, 1987).

138. COMMISSION FOR THE CONSERVATION OF ANTARCTIC MARINE LIVING RESOURCES, CCAMLR NEWSLETTER NO. 6, at 1 (Nov. 1987). The Soviet Union is the largest harvester of krill in the Treaty area, with its catch over the years fluctuating between 80,000 and 112,000 tons. Other countries engaged in krill fishing include Chile, East Germany, Poland, and South Korea. NAT'L MARINE FISHERIES SERVICE, NAT'L OCEANIC AND ATMOSPHERIC ADMIN., U.S. DEP'T OF COMM., DIRECTED RESEARCH 7 (1987).

139. See, e.g., CCAMLR NEWSLETTER NO. 6, *supra* note 138, at 4.

ment submitted to the U.N. Secretary-General at the General Assembly discussion of Antarctica in 1983-84, which states:

The Consultative Parties have made very great efforts to [protect Antarctica's vulnerable environment] and have adopted various practical measures to protect the flora and fauna indigenous to Antarctica, designating specially protected areas. [CCAS and CCAMLR] are good examples and represent significant results of the co-operative efforts of all the Consultative Parties in the area of the environmental protection of the Antarctic region.¹⁴⁰

The statement then goes on to point out that Japanese domestic legislation on the protection of Antarctic fauna and flora is "clear proof of Japan's determination to protect Antarctica's environment."¹⁴¹

As we have noted, CCAMLR and CCAS probably will provide adequate protection to Antarctica's living resources as long as the pressure on the stocks of commercial importance—especially krill—remain well below sustainable yield. However, because Japan's protein needs, taste for ocean products, and capable fishing fleets provide an economic impetus to increase its Antarctic catch, the monitoring of Antarctic resources must be continued.

B. Japan's Interest in Antarctic Minerals

Japan is dependent on imports for more than eighty percent of most natural resources,¹⁴² it therefore naturally looks for sources outside its resource-poor islands. In particular, Japan views Antarctica as a potential reservoir of substantial amounts of minerals. The Agency of Natural Resources and Energy (ANRE), under the control of the Ministry of International Trade and Industry, is in charge of the Japanese Government's ocean minerals exploration. Although ANRE has not made public the details of the exploratory activities in the Southern Ocean, it openly acknowledges that the Metal Mining Agency of Japan, responsible to ANRE, is using the *Hakurei-Maru*, a dedicated minerals research vessel, to conduct deepsea mining exploration. The ship explored the Antarctic Treaty area in January and February 1988.¹⁴³

140. *Question of Antarctica: Report of the Secretary-General (Views of States)*, 39(2) U.N. General Assembly (Agenda Item 66) at 104, U.N. Doc. A/39/583 (1984) [hereinafter *Views of States*]. For a discussion of the General Assembly debate, see Hayashi, *The Antarctica Question in the United Nations*, 19 CORNELL INT'L L.J. 275 (1986). Writing in a private capacity, Hayashi, a counsel to Japan's Permanent Mission to the United Nations, makes no mention of his government's position on any of the issues he discusses in this article.

141. *Views of States*, *supra* note 140, at 104.

142. KEIZAI KOHO CENTER [JAPAN INST. FOR SOCIAL & ECONOMIC AFFAIRS], JAPAN 1988: AN INTERNATIONAL COMPARISON 66 (1988). Import dependency is measured as (import volume - export volume)/(domestic production volume + import volume - export volume) × 100.

143. JAPANESE ANTARCTIC ACTIVITIES FOR 1987-1988: EXCHANGE OF INFORMATION UNDER ARTICLE VII(5) OF THE ANTARCTIC TREATY 16-17 (1988).

Despite the difficulties of exploratory activities in Antarctica and the Southern Ocean, Japan has been actively engaged in earth science research, including solid earth geophysics, regional geology and petrology, geomorphology, geodetic surveys, and searches for meteorites. For example, geological surveys of ice-free areas in Queen Maud Land and Enderby Land have enabled the compilation of a series of geological maps, published in 1986.¹⁴⁴

Japan's vigorous research program has created a controversy, still minor at present, that has aroused the suspicions of the other states negotiating a minerals regime. As Japanese vessels have spent a number of seasons doing seismic work in Antarctic waters, an American official has noted that the possibility exists that Japan is doing "prospecting" under the guise of scientific research in the area south of 60 degrees south latitude and not fully reporting the data collected as required by the Antarctic Treaty.¹⁴⁵ However, another member of the U.S. delegation to the minerals negotiation pointed out that Japan has released some of the data from its 1983-84 expedition. The controversy may be as much over scientific data standards as a national attempt to gain an edge. Moreover, Japanese officials have noted that, under article VI, the Treaty protects their high-seas rights¹⁴⁶ and that their "scientific research" activities in the area are being pursued under that provision.¹⁴⁷ Their critics, however, have noted that Japan's definition of scientific research, as it applies to whaling, is a bit elastic. This in turn makes application of the same concept to the nonliving resource area rather suspicious.

Some Japanese Government officials have expressed personal views on the ongoing negotiation for the creation of an Antarctic minerals regime. Takeo Iguchi, a Japanese ambassador and former head delegate to the negotiation of the Antarctic living resources regime, has asserted that the final draft that was converted into the Minerals Convention would impose "undue burdensome consideration of undefined environmental concerns and potential impacts prior to any prospecting or exploration activities." He feared that claimant states may make use of the Convention to deter prospecting or exploration activities by nonclaimant states. He then warned of environmentalists' tendency to view the Antarctic "as sacrosanct, that it should be maintained in its relatively pristine state for the benefit of future generations."¹⁴⁸

144. Detailed studies on regional metamorphism and structural history have recently been made. As a result, a progressive metamorphic zoning of high grade metamorphic sequence in the Lutzow-Holm Bay and Prince Olaf Coast region has been revealed. NAT'L INST. OF POLAR RESEARCH, *supra* note 114, at 18.

145. See Antarctic Treaty, *supra* note 11, arts. III(1)(c), VI.

146. *Id.* art. VI.

147. See, e.g., Minutes of the Antarctic Treaty Consultative Meeting XIV, Oct. 1987, ¶¶ 113-15.

148. T. Iguchi, *supra* note 28, at 5-6.

His views are consistent with earlier estimates of Japanese behavior in the minerals negotiations made by an American analyst.¹⁴⁹ Until recently, Japan had played a minor, indeed passive, role in the negotiations. Japanese delegates made positive contributions, but these were restricted to, for example, offering alternative wording to major proposals made by others.

More recently, Japan has openly expressed its concerns and defended its interests. Japan has stated that it would prefer an open access system in the Antarctic, with a special status accorded to the Consultative Parties who have the experience and technological and financial capabilities to manage the resources on behalf of the international community. This would contrast with the parallel system for the development of deep seabed minerals incorporated into the 1982 U.N. Convention on the Law of the Sea (1982 Convention). According to their scheme, Japan and the other Consultative Parties would act as the trustees of the Antarctic for the international community.¹⁵⁰

As a nonclaimant, Japan did not wish to accord claimant states any form of priority in exploration or exploitation of the territories they claim. While Japan would probably prefer a condominium, which would put Antarctica under the joint sovereignty of the Consultative Parties to the Antarctic Treaty,¹⁵¹ Japan has been willing to accept the Beeby regulatory approach, provided regulators do not prejudice Japanese access. Japan's representatives have expressed concern that the details of the regulatory scheme might be used to discriminate against Japanese-sponsored exploitative activities. Japan worried that it had not been guaranteed a seat on the regulatory committees as had the United States, the Soviet Union, and the relevant claimant states.¹⁵² Under the recently adopted Treaty, only if Japan sponsors an exploration or exploitation operator will Japan be officially represented. Furthermore, if a Japanese company participates in a consortium of companies sponsored by another state, Japan fears that its representatives could be excluded entirely from a regulatory committee.¹⁵³

Japanese representatives have also expressed concern that liability rules governing compensation for potential environmental damage that might occur during exploration or exploitation might be too stringent and, therefore, discourage efforts to develop Antarctica's nonliving resources. Nor is Japan a supporter of an Australian proposal that would

149. W. WESTERMEYER, *THE POLITICS OF MINERAL RESOURCE DEVELOPMENT IN ANTARCTICA: ALTERNATIVE REGIMES FOR THE FUTURE* 164-65, 244 (1984).

150. See Yokota & Kumagai, *Comments*, in *THE LAW OF THE SEA*, *supra* note 97, at 121-23, 125-29.

151. W. WESTERMEYER, *supra* note 149, at 71-75.

152. Yamamoto, *Nankyoku Kōbutshusigen Kaihatsu no Hōseido* [The Legal Regime for Antarctic Minerals Resource Development], 710 *JURISTO* 134 (1980).

153. *Id.*

have had ATS parties refrain from subsidizing Antarctic mineral exploration and exploitation efforts. Australia, a minerals producer, would want market prices to determine when an Antarctic minerals exploitation effort was economically viable. Finally, Japan, while a supporter of the language that encourages "international participation" in minerals exploitation in the Antarctic, opposes attempts to implement a mandatory technology transfer scheme.

An advisor to the Japanese delegation indicated, however, that if negotiations broke down or led to too many special privileges for territorial claimants or superpowers, Tokyo would have no alternative but to accept international (collective) management of the region, perhaps accepting the definition of the Antarctic region as a Common Heritage of Mankind and recognizing the authority of the United Nations or some other global organization over the management of the area.¹⁵⁴ At present, the government is strongly opposed to such a concept.¹⁵⁵

III

JAPAN AND THE ANTARCTIC REGIME

A. Japan's Concerns over Territorial Sovereignty in Antarctica

Japanese officials' references to future minerals exploitation in the Antarctic often appear in connection with the domestic debate on the possible future conflict over territorial claims in Antarctica. Optimistic officials have stated repeatedly that they expect the Antarctic Treaty to continue with little or no change beyond 1991, the year in which any ATS Consultative Party has the right to request a review of the Treaty. Officials in Tokyo believe that the stable functioning of the Treaty beyond 1991 will help prevent potential conflict over competing territorial claims and struggles for resources in Antarctica.¹⁵⁶ Foreign Minister Sunao Sonoda stated in 1979 that the government would continue to argue that all nations should refrain from asserting territorial claims in the Antarctic.¹⁵⁷

Japan has never formally and positively asserted territorial claims based on the prewar Japanese expeditions to Antarctica.¹⁵⁸ After the successful Shirase expedition, Japan did not explicitly assert territorial

154. *Id.* at 134-35.

155. Letter from Moritaka Hayashi, Minister, Permanent Mission of Japan to the United Nations, to Tsuneo Akaha (July 6, 1988).

156. *See, e.g., Dai 102-Kai Kokkai, Shūgiin Gaimuinkai Kaigiroku* [Proceedings of the House of Representatives, Committee on Foreign Affairs, 102nd Session of the Diet] No. 8, at 11 (1985); *Dai 97-Kai Kokkai, Sangiin Yosaniinkai Kaigiroku* [Proceedings of the House of Councillors, Committee on the Budget, 97th Session of the Diet] No. 2, at 27 (1982); *Dai 87-Kai Kokkai, Shūgiin Yosaniinkai Kaigiroku* [Proceedings of the House of Representatives, Committee on the Budget, 87th Session of the Diet] No. 17, at 31-32 (1979).

157. *Dai 87-Kai Kokkai, supra* note 156, at 31.

158. *See* Taijudo, *supra* note 106, at 14-15.

claims based on occupation.¹⁵⁹ Prior to the Second World War, however, the imperial government took two actions that might have been interpreted as an assertion of territorial claims to Antarctica.

First, Japanese diplomatic records show that in 1938 the Japanese Embassy in Washington verbally communicated to the U.S. State Department that Japan reserved the right to a voice in territorial matters concerning the Antarctic region and noted that Japan expected to be made a party to the negotiations in which the problem would be discussed. The same communication was apparently sent by telegraph to Great Britain, Germany, the Soviet Union, and Argentina. In 1940, in the second action, the Japanese Embassy in Santiago, Chile, submitted a note verbale to the Chilean foreign minister regarding Chile's domestic legislation defining its territorial limits in the Antarctic region. According to the note, Japan again reserved its right to a voice in territorial matters in Antarctica. Without rejecting or accepting the Japanese position, the Chilean Government relayed Japan's assertion to the U.S. Government. Washington declined to comment directly on the validity of the Japanese claim.¹⁶⁰

Japanese prewar assertions notwithstanding, the nation surrendered all claims to Antarctica when it accepted the San Francisco Peace Treaty. Article 2, paragraph e of the Treaty, which went into force in 1952, states: "Japan renounces all claims to any right or title to or interest in connection with any part of the Antarctic area, whether deriving from the activities of Japanese nationals or otherwise."¹⁶¹

Since Japan became a party to the Antarctic Treaty, the government has had several occasions to refer to the Peace Treaty in connection with Japan's prewar claims in Antarctica. Government representatives' statements over the last decade can be summarized as asserting that, although Japan had surrendered all potential prewar rights to Antarctica, Japan's postwar activities should be evaluated in the same manner as other nations' activities if territorial claims are recognized.¹⁶²

The common understanding in Japan over the effect of article IV of the Antarctic Treaty on the contracting parties' pretreaty rights and claims to territorial sovereignty in Antarctica is that all territorial rights,

159. For a Foreign Ministry official's statement on this point, see *Dai 84-Kai Kokkai, Shūgiin Gaimuinkai Kaigiroku* [Proceedings of the House of Representatives, Committee on Foreign Affairs, 84th Session of the Diet] No. 11, at 9 (1978).

160. Tsutsui, *Nankyoku no Hōteki Genjō*, 839 JURISTO 95 (1985).

161. Treaty of Peace with Japan, Sept. 8, 1951, art. 2, ¶ e, 3 U.S.T. 3169, 3172, T.I.A.S. No. 2490, 136 U.N.T.S. 45, 50; see also *Dai 80-Kai Kokkai, Shūgiin Gaimuinkai Kaigiroku* [Proceedings of the House of Representatives, Committee on Foreign Affairs, 80th Session of the Diet] No. 20, at 13 (1977) (statement by a Foreign Ministry Official). Takeo Iguchi suggests that Japan did claim territorial sovereignty in the Antarctic Continent before the war. See T. Iguchi, *supra* note 28, at 2.

162. Tsutsui, *supra* note 160, at 95.

all claims to territorial rights, and all bases for laying territorial claims that may have existed before the entry into force of the Treaty have been frozen. These claims may be resurrected if and only if either the Treaty is revised and the provision in question is eliminated or the Treaty itself expires.¹⁶³

However, competing interpretations exist as to Japan's potential claims after the Antarctic Treaty loses effect. The basic question is: what is the future effect of the Antarctic Treaty and the San Francisco Peace Treaty on Antarctic activities conducted by Japan and Japanese nationals during the effective period of the Antarctic Treaty? On the one hand, there are those who assert Japan cannot use any of its activities or those of its nationals undertaken during the effective period of the Antarctic Treaty to assert any claims to sovereignty in Antarctica either during or after the effective Treaty period.¹⁶⁴

The government's position on this question is closer to another view. In 1959, one Japanese scholar wrote of article 2, paragraph e of the Peace Treaty: "[I]t must be noted that Japan renounced only the claims which accrued before the Peace Treaty, and that this renunciation does not extend to claims which might accrue subsequently by the activities of Japanese nationals." He did add, however, that "this remains only as a matter of interpretation of the treaty, and, as a matter of policy, Japan has no desire to acquire any territorial rights over the Antarctic region in the future."¹⁶⁵

In 1977 a Foreign Ministry official stated that if article IV of the Antarctic Treaty should lose its effect and the claimant states and others attempt to assert and exercise rights of territorial sovereignty, Japan would be entitled to assert territorial claims. He qualified his statement, however, by expressing doubt that such an eventuality would materialize, noting that a unanimous decision by the Consultative Parties of the Treaty would be necessary for it to occur.¹⁶⁶

More recently, in 1982, another Foreign Ministry official provided a more assertive view on the question when he stated that, in theory:

163. See, e.g., *Dai 87-Kai Kokkai*, *supra* note 156, at 32-33 (statement by a Foreign Ministry official).

164. For example, immediately following the entry into force of the Treaty a Japanese international law expert wrote that as long as the Treaty is in effect, article IV, paragraph 2 denies recognition of "any basis for claiming territorial rights, any claims to territorial rights, or any territorial rights" arising out of activities while the Treaty was in force. He reasoned that such new bases for claims, new claims, and new rights could not have existed prior to the entry into force of the Treaty, that the Treaty froze the status quo as existing at the time it went into force and, therefore, that no activities undertaken since the effective date of the Treaty can possibly give rise to any rights or claims to territorial sovereignty *during or after* the effective period of the Treaty. Yokota, *Nankyoku no Kokusaiho (I)* [The International Law of Antarctica], *GAIKO JIHŌ*, May 1960, at 56-58.

165. Taijudo, *supra* note 106, at 15.

166. *Dai 80-Kai Kokkai*, *supra* note 161, at 13.

[I]f and when the [Antarctic Treaty's] provision prohibiting the use of the effects of activities during the effective period of the Treaty should be eliminated through a Treaty revision, the currently frozen claims to territorial rights might be reasserted and the provision prohibiting the use of the effects of activities during [the effective period of the Treaty] to assert rights and claims to territorial sovereignty might lose its effect¹⁶⁷

He added that Japan's renunciation of territorial claims in Antarctica in the San Francisco Peace Treaty was aimed at "preventing Japan from using its previous activities in the region to lay claims to rights there and did not prevent Japan from asserting certain claims on the basis of activities it has conducted since the effective date of the Peace Treaty."¹⁶⁸

Considering Japan's keen interest in resource issues, these statements cannot be dismissed as a mere exercise in legal theorizing or as purely hypothetical speculations. Nor can they be said to represent Japan's attempt to prepare for an eventual demise of the existing Antarctic regime. In fact, Japan wishes to avoid such an eventuality. Japan remains one of the most outspoken defenders of the current Antarctic regime.

B. Japan's Interest in Stable Antarctic and Southern Ocean Regimes

In addition to Japan's concern that the Antarctic be free of territorial conflicts, the nation's other less tangible interests include the preservation of the use of the Antarctic exclusively for peaceful purposes and the non-nuclear status of Antarctica, as well as the promotion of freedom of scientific investigation and international cooperation. From the Japanese perspective, the maintenance of the existing Antarctic Treaty regime is of utmost importance to continued stability in the region in much the same way that Japan believes that the 1982 Convention should provide stability in the international law of the sea regime.¹⁶⁹ In both cases, there were major features of the conventions that Japan wished had not been incorporated into the agreements.

The Japanese perspective is clearly reflected in its 1984 policy statement.¹⁷⁰ This statement, submitted to the U.N. Secretary-General, asserted:

The maintenance and future development of the existing Antarctic Treaty is of prime importance to the well-being of mankind. It is of the utmost importance for the future of Antarctica that all interested coun-

167. *Dai 96-Kai Kokkai, Shūgin Gaimuinkai Kaigiroku* [Proceedings of the House of Representatives, Committee on Foreign Affairs, 96th Session of the Diet] No. 11, at 2 (1982).

168. *Id.* For earlier expressions of the same point, see *Dai 80-Kai Kokkai, supra* note 161, at 13; *Dai 84-Kai Kokkai, supra* note 159, at 9-10.

169. T. Akaha, *Internalizing International Law: Japan and the Regime of Navigation Under the U.N. Convention of the Law of the Sea* 38-39, delivered at the Annual Meeting of the American Political Science Association, Chicago (Sept. 3-6, 1987).

170. See *supra* text accompanying notes 140-141.

tries should join the present Treaty regime and contribute actively to the attainment of its objectives.¹⁷¹

The Japanese policy paper applauded the past accomplishments of the Treaty in freezing territorial claims and noted that "Japan believes that Antarctica must not become the object of territorial claims." The statement further expressed Japan's satisfaction with the existing Antarctic Treaty regime with respect to the peaceful use of the region, the freedom of scientific research, and the protection of the Antarctic environment. It further noted the special role of the Consultative Parties in the functioning of the Antarctic Treaty regime and positively evaluated the openness of the Treaty.¹⁷²

IV

CONCLUSION

Japan's assertions in support of the existing Antarctic Treaty regime reflect the nation's preference for stable international economic regimes. Japan has preferred a bilateral approach when a bilateral approach is seen as more effective in developing or maintaining the stability of an international regime. When, on the other hand, a multilateral approach demonstrates more promise, Japan has promoted a multilateral approach. When a regime is in transition and the success of a bilateral or a multilateral approach is uncertain, Japan has behaved less assuredly. In either case, Japan has sought to minimize its losses. Preservation of the status quo has more often than not suited this goal. This approach has influenced its behavior in such fora as the United Nations Conference on the Law of the Sea and GATT.

Although Japan today supports the multilateral 1982 Convention, except in regard to Part XI (on deep seabed minerals), for many years it pursued a bilateral approach to the management of maritime affairs, particularly in fishery negotiations. It continued to support a bilateral approach so long as that approach suited the nation's interest in maintaining distant-water fisheries. Only when a multilateral approach became the more realistic and, over the long haul, the more promising of the two approaches did Japan begin to accept and then support the establishment of a compromise global ocean regime that struck a balance among a multiplicity of interests, as among the interests of the traditional maritime powers, including Japan, and those of the less developed coastal states.¹⁷³

After having made important and far-reaching concessions, particularly in the area of distant-water fishing, Japan has decided to accept the

171. *Views of States, supra* note 140, at 102.

172. *Id.* at 103-05.

173. For a detailed analysis of the evolution of Japan's policies on the law of the sea, see generally T. AKAHA, *JAPAN IN GLOBAL OCEAN POLITICS* (1985).

1982 Convention and is now preparing for its eventual ratification. Japan sees the new law as close to the best international compromise possible for maintaining a stable global ocean regime.¹⁷⁴ At the same time, Japan is maneuvering to protect its deepsea minerals interest by entering into provisional agreements with the United States and other potential exploiters of mineral resources.¹⁷⁵ Japan regrets the necessity of such arrangements and believes instead that the 1982 Convention should be modified so that it might be universally acceptable.¹⁷⁶

While the liberal international trade regime under GATT allowed Japan to enjoy preferential treatment vis-à-vis the United States—the world's largest importer—Japan took advantage of the arrangement by expanding its exports across the Pacific. As the United States has increased its pressure on other GATT members to open up their markets, Tokyo has attempted to minimize the negative impact of the pressure through bilateral negotiations with Washington. Now that U.S.-Japanese trade relations are strained by protectionist pressures in the United States, Japan has begun to emphasize multilateral coordination of policies to maintain the liberal trade regime that has served its interests so well. Japan asserts that the imbalance in U.S.-Japanese trade ought not to be viewed in bilateral terms but within the context of global trade relations. Japan pledges to work toward multilateral means of solving international trade problems.¹⁷⁷

Japan wants to maintain a stable, liberal international trade regime within which it can enjoy sustained economic growth. There is no substitute for GATT. The multilateral trade regime under U.S. leadership has served Japanese interests well. With the decline of U.S. dominance and the comparative ascension of Japan and EEC nations in the capitalist economic system, together with the pressure for reform from developing countries, GATT is under severe strain today. Thus, Japan has come to the rescue. Japan today recognizes its responsibility in the multilateral management of the trade regime and has embarked on a major policy shift away from the promotion of export-led economic growth towards an increasingly domestic demand-driven economy.

A bilateral approach has never been a viable option for Japan in the case of the Antarctic regime. Nor does Japan today have the luxury of choosing between a bilateral and a multilateral approach. The Antarctic Treaty is a product of multilateral negotiations. Had Japan pursued a

174. *Id.*

175. T. Akaha, Japan and the Law of the Sea 14-15, delivered at the Annual Meeting of the American Political Science Association, New Orleans (Aug. 29-Sept. 1, 1985).

176. Letter from Moritaka Hayashi to Tsuneo Akaha, *supra* note 155.

177. T. Akaha, Trade Friction, Security Cooperation, and the Soviet Presence in Asia 20-25, delivered at the Center for International Security and Strategic Studies, Mississippi State University, Conference on U.S.-Japan Trade Friction: Geopolitical and Security Considerations in the Pacific Basin, Jackson, Mississippi (Sept. 26-27, 1986).

bilateral approach in staking out its interests in Antarctica, it would have run into the formidable problem of territorial sovereignty. Moreover, in the postwar period, Japan was at the mercy of other states in resuming its Antarctic activities, whether whaling in the Southern Ocean or scientific research in Antarctica. In short, multilateralism has been the only alternative available to Japan.

From the Japanese perspective, the Antarctic Treaty has advanced its interests. The Treaty's provisions for the peaceful use of the Antarctic region, the prohibition of military activities, the freezing of all claims to territorial sovereignty, the freedom of scientific investigation and international cooperation, and the protection of the environment have worked well for Japan.¹⁷⁸ Above all, Japan's status as one of the original Consultative Parties has given Japan a strong argument that it should be treated as an equal vis-à-vis the other Consultative Parties in the establishment of other Antarctic regimes.

From Japan's vantage point, therefore, the recently concluded negotiations for the creation of an Antarctic minerals regime runs the risk of giving claimant states or superpowers greater access to minerals resources than the other nonclaimants, including Japan. Thus, that regime holds the seeds of its own destruction. Japan is equally apprehensive about the possible conflict in this area between developed countries and developing countries.¹⁷⁹ Japan is especially wary of the developing countries' demand that the whole Antarctic region be placed under the authority of an international agency or, failing that, that multilaterally negotiated rules and regulations be imposed on all nations' activities in the Antarctic region. For example, Japan joined the United States and the other Consultative Parties in their attempt to defeat the General Assembly resolutions, supported by developing countries, in the fortieth, forty-first, and forty-second sessions (1985, 1986, and 1987) calling for expanded discussion of Antarctic issues in the politically charged General Assembly. Most of the Consultative Parties did not participate in the voting on each of the resolutions and China abstained from voting on the principal resolutions.¹⁸⁰ Although Japanese Government officials are quiet on the concept of the Common Heritage of Mankind, originally developed in the context of the law of the sea negotiations, Japanese scholars writing on the subject of Antarctica generally oppose the introduction of the concept into the discussion of the Antarctic regime.¹⁸¹

While Japan sees the existing Antarctic Treaty System, including CCAMLR and the emerging minerals treaty, as stable regimes and there-

178. *Views of States, supra* note 140, at 103-05.

179. GAIMUSHŌ KAGAKUKA, NANKYOKU KŌBUTSUSHIGEN KYŌGI [Antarctic Minerals Resource Consultation] 3 (1987).

180. Letter from Moritaka Hayashi to Tsuneo Akaha, *supra* note 155.

181. *See, e.g., THE LAW OF THE SEA, supra* note 97.

fore in its interest as a status quo state, its representatives have not been dominant players in their formation. Japan was reluctant to accept CCAMLR both because its citizens have been exploiters of the living resources of the Southern Ocean and because Japanese diplomats have been frustrated by what they perceive to be excessive environmental sensitivity concerning fish and krill. Furthermore, although management of whaling is not a formal part of a regional set of regime rules, Japan's insistence upon the continuation of whaling puts pressure on CCAMLR and places the entire system of managing the living resources of the Southern Ocean at risk. Similarly, Japan has not been a leading party in the negotiation of the minerals treaty. Its major concern has been the maintenance of access for its nationals on equal footing with other parties. Thus, Japan's delegates to the minerals regime negotiation have concerned themselves with such matters as ease of prospecting rules, equality of representation on regulatory committees with the territorial claimants and superpowers, and liability for damages in exploration or exploitation.

Throughout much of the 1980's observers have asked: When will Japan take its "true" place in the community of nations, commensurate with its economic and potential military power? When will Japan propose and not merely react diplomatically? Our case, for the most part, shows Japan as reacting to the initiatives of others. We cannot answer the larger question, but will respond by noting that, in the situation we have examined, there was little reason for Japan to seize the initiative. Others were shaping a set of regimes that, except for significant details, were largely satisfactory to Japan.

Japan, perforce, will likely play a larger role in the next stage of the regimes of Antarctica and the Southern Ocean—implementation. Given the magnitude of Japan's Antarctic scientific research program and its existing and future efforts to exploit the living resources there, if minerals or oil are discovered in exploitable quantities, Japan will wish to be among the first generation of exploiters and, therefore, will be a force to be reckoned with in Antarctica. Despite concerns over what some see as attempts to gain advantage on minerals exploration, and the bitter fight over whaling, we believe that Japan will play a positive role in the implementation of the Antarctic regimes. Japan only reluctantly accepted the shift from the old laissez-faire regime of freedom of the sea to the new regime of 200-mile EEZ's. But Japan adapted. Indeed, the nation adapted well. Reluctance turned to firm support as Japan found ways to protect Japanese interests under the new regime. Japan's preference for stability promises that we can look forward to much the same behavior in relation to the implementation of the Antarctic and Southern Ocean regimes. We do not think Japan will imperil a stable regime by operating

largely outside the regime's rules even if it means that the government may have to curb the exploitative appetite of some of its citizens.