SOVEREIGNTY IN ANTARCTICA

J. PETER A. BERNHARDT*

Antarctica, as its etymology implies, until recently was popularly conceived as a region of icefields opposite the North Pole, a final frontier of continental unknowns inhabited by penguins and friendly seals. Formerly the almost exclusive province of exploration giants such as Amundsen, Perry, Shackleton and Scott, that continent has increasingly become the object of large national and international expeditions since the Second World War. Time and technology have started to erode the peaceful state of earlier years. Since the entry into force of the 1959 Antarctic Treaty,[1] these factors have generated a renewed interest in the legal rights and relationships in the continent, especially insofar as they have been affected or altered by the treaty regime.

The treaty, although a laudable and extremely practicable approach to international political problems associated with Antarctica, does little more, legally speaking, than preserve an opaque *status quo ante*, putting on ice the complex and contradictory rights and claims lodged earlier by the contracting parties. Most of these rights and claims were voiced in an earlier age and based, with one notable exception, on traditional international legal modes of acquiring title to territory. While it is true that the moratorium created under the treaty causes unique problems in relation to sovereign claims, the foundation of the issue is independent of the treaty, and although the issues are temporarily eclipsed by the latter, they will ultimately, in no small measure, be resolved by recourse to the traditional underpinnings. A reassessment of the problem is due given recent developments in:

* Advisor to the United States Delegation to the Third United Nations Conference on the Law of the Sea, Geneva, March-May 1975; Department of State, Office of the Law of the Sea, Washington, D.C.; B.A., Dartmouth College; Certificate in International Law, London School of Economics and Political Science; J.D. University of Virginia School of Law. Member of the District of Columbia Bar. The views expressed herein are those of the author, and do not necessarily represent the views of the United States Government or the Department of State.

1. The Antarctic Treaty, December 1, 1959, [1961] 1 U.S.T. 794, T.I.A.S. No. 4780, 42 U.N.T.S. 71 (entered into force for U.S. June 23, 1961).

(1) the law of the sea; (2) the technological ability to explore and to exploit minerals in a highly interdependent world rudely introduced to the energy crisis; (3) the increase in activity of a permanent nature in Antarctica; and (4) the imminent equinox of the Antarctic Treaty's envisaged duration.

This article is divided into several sections. After a brief historic and geologic description of Antarctica, certain provisions of the Antarctic Treaty relating to the issue of sovereignty are identified and discussed. Then a section will follow which treats the problems evinced in the treaty language by the fact that much of Antarctica is composed of ice. The remainder of the article deals with the problem of acquisition of territory in Antarctica under traditional and nontraditional modes. Although not specifically intended to posit United States' practice *vis-à-vis* Antarctica, reference will be made to that practice as a convenient analytical mode of examining the entire question.

I. HISTORIC AND GEOLOGIC DESCRIPTION OF THE ANTARCTIC CONTINENT

Antarctica, traditionally *terra australis nondum cognita*,[2] is the fifth largest continent of the world, comprising five and one half million statute square miles.[3] The continent is generally considered as consisting of two major areas, Eastern (Greater) and Western (Lesser) Antarctica, divided by the Transantarctic Mountains.[4] Whereas Eastern Antarctica consists largely of a high ice-covered plateau, Western Antarctica consists of an archipelago of mountainous islands covered and bonded together by ice.[5] Primarily overlain by a continental ice sheet averaging 6,500 feet thick, many deep embayments of the Ross and Weddell Seas are covered by ice shelves, or ice sheets floating on the sea.[6] The Ross, Ronne and Filchner Shelves around the continental periphery, along with lesser shelves, constitute approximately ten percent of the area of Antarctic ice. These shelves and ice sheets "calve", or discharge icebergs into the sea along the continental perimeter.[7]

2. This term refers to the unknown land in the south.
3. ENCYCLOPAEDIA BRITANNICA, 1 MACROPAEDIA 947 (1974).
4. *Id.*
5. *Id.*
6. *Id.*
7. *Id.*

Relatively little knowledge has been gleaned on the geologic substructure of Antarctica. However, recent discoveries have indicated that Eastern Antarctica is made up of a stable Precambrian shield, while Western Antarctica consists of a mobile belt separated from East Antarctica by a fault block belt or horst, the Transantarctic Mountains. Although it has been proposed that Western Antarctica might be an oceanic island, its crustal thickness of about twenty miles indicates an absence of oceanic structure.[8]

As will become apparent from a theoretical legal viewpoint, the relationship of the ice to the geomorphologic basement is important in weighing the merits and demerits of applying a continental versus high seas regime to Antarctica. Apart from the question of whether the ice is fresh water or sea water in origin, the fact that the immense weight and thickness of the ice cap, shelves, and sheets have severely depressed what otherwise would have been a continental land mass with perhaps arcuate chains gives rise to intriguing legal issues.

In considering the rock elevation beneath the thick, grounded ice of Marie Byrd Land, it should be remembered that the weight of the overlying ice has depressed the land surface approximately 500 meters, and up to 1,000 meters in the deepest part of the central basin. Thus, sea level before the growth of the ice in Western Antarctica could be represented fairly well by the 500 meter contour.[9] Although the legal consequences, if any, of a "lost continent" depressed under the Antarctic Ocean by the polar ice cap must await the further development and refinement of geophysical techniques, the very existence of the basement itself and its sialic nature indicates a closer relationship to terrestial rather than to submarine areas.

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8. *Id.*

9. Observers have written:

> [I]t may be seen that, with the exception of Roosevelt Island near Little America Station, and the high spot centered around latitude 82 degrees south, longitude 105 degrees west, the region between the Sentinel, Horlick and Queen Maud Mountains to the south and Kola Executive Committee and Edsel Ford Ranges to the north, is below sea level, most of it at least 500 meters below.
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> This discovery together with that of a large channel in Marie Byrd Land has disclosed that West Antarctica consists, in fact, of a great southward extension of the Palmer Peninsula together with a mountainous island or, more probably, series of islands, comprising the coastal ranges of Marie Byrd Land.

Bentley, Crary, Ostenso, & Thiel, Structure of Western Antarctica, 131 SCIENCE 131, 133 (1960).

Webster's New World Dictionary defines "land" as being "the solid part of the earth's surface: distinguished from sea."[10] The immediate question which arises is whether a land or high seas regime should be applied to Antarctica. This in turn depends on several factors: the historic nature antecedent to the current traditional high seas doctrine; the nature of the ice formations under discussion; and article VI of the 1959 Antarctic Treaty.[11]

II. HISTORIC ANTECEDENTS TO THE FREEDOM OF THE HIGH SEAS DOCTRINE

The traditional high seas freedoms beyond the territorial seas of nation-states have enjoyed a checkered history, primarily dictated in less enlightened eras by England's ability or inability to dominate the high seas. Grotius contended that the sea could not be state property because it could not really be taken into possession through occupation, from which it followed that the sea was free from the pretensions of sovereignty by any state.[12] This power concept of the effectiveness of occupation and control found further form in the establishment of the three mile territorial sea,[13] a distance predicated at that time on the theoretic range of coastal cannon, and the state's consequent ability to defend the territorial sea from invaders.[14]

Before Drake and the weather destroyed Philip II's Armada in 1588, during an era in which the Armada was the paramount naval force afloat, Queen Elizabeth I was the first European sovereign to enunciate the freedom of the seas doctrine. As Balch states:

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10. WEBSTER'S NEW WORLD DICTIONARY OF THE ENGLISH LANGUAGE (College ed., 1960).

11. The Antarctic Treaty, *supra* note 1.

12. 1 L. OPPENHEIM, INTERNATIONAL LAW 585 (8th ed. 1955) [hereinafter cited as OPPENHEIM].

13. This trend was primarily influenced by C. BYNKERSHOEK, DE DOMINIO MARIS (1702).

14. *See* Camden, *Annales* 225, in C. COLOMBOS, INT'L LAW OF THE SEA 83-4 (5th ed. 1962):

> [S]he [Queen Elizabeth I to Mendoza, Ambassador of Phillip II to England] refused to admit that Spain had any right to debar British subjects from trade or from freely sailing that vast ocean, seeing that the use of the sea and air is common to all; neither can any title to the ocean belong to any people and private man for as much as neither nature or regard of public use permitteth any possession thereof.

> What is the law applicable to the sea? Originally formulated by Queen Elizabeth and more fully expounded by the Hollander, Hugo Grotius, the freedom of the high seas was controverted in the reign of Charles the First by the publication of the treatise *Mare Clausum* written some years before by England's ablest jurist at that time, John Selden.[15]

As mentioned above, Grotius gave scholarly vent to the freedom of the seas doctrine in his treatise *Mare Liberum*, first published in 1609 in justification of the allied Low Countries' rights against Portuguese sea power.[16] John Selden, however, attacked *Mare Liberum* in his treatise *Mare Clausum*,[17] and established a principle incorporating English domination. The latter principle remained part and parcel of the English high seas doctrine, whereby English men-of-war on the high seas required foreign ships to dip their colors to the English standard in deference to the latter's claim to the high seas. The doctrine remained in vogue until the mid-Napoleonic period, when pre-eminent English sea power, the burgeoning of global trade, and a nascent empire dictated an endorsement of the freedom of the high seas principle as inuring to the English advantage.[18]

The original reason postulated by Grotius for freedom of the seas was that the high seas were incapable of effective occupation. Another prevalent rationale involved the notion that the riches of the sea were inexhaustible and that there was therefore no need for any state to claim them to the exclusion of others. Neither of these notions are currently maintained. However, the third reason then espoused, the need for unimpeded passage and communication, is still prevalent:

> [T]he real reason for the freedom of the open sea is represented in the motive which led to the attack against marine sovereignty, and is the purpose for which such attack was made—mainly, the freedom of communications and especially commerce, between the states which are separated by the sea. The sea being an international highway which connects distant lands, it is the common conclusion that it should

15. Balch, *The Arctic and Antarctic Region and the Law of Nations*, 4 AM. J. INT'L L. 265 (1910).

16. *See generally* H. GROTIUS, MARE LIBERUM (1609) [hereinafter cited as GROTIUS]. See also J. BRIERLY, LAW OF NATIONS 305 (6th ed. 1963) [hereinafter cited as BRIERLY].

17. J. SELDEN, OF THE DOMINION, OR, OWNERSHIP OF THE SEA (MARE CLAUSUM) (Nedham 1972).

18. C. COLOMBOS, INTERNATIONAL LAW OF THE SEA 53 (5th ed. 1962).

> not be under the sway of any state whatsoever. It is in the interest of free intercourse between the state that the principle of the freedom of the open sea has become universally recognized and will always be upheld.[19]

Thus the prevailing reasoning behind the high seas principle appears to have little applicability to Antarctica. A further examination of this issue, therefore, must be undertaken. It will be preceded by a discussion of the nature and characteristics of Antarctic ice.

III. THE ANTARCTIC ICE

Antarctic ice occurs in three major forms: pack ice, ice shelves, and ice sheets. Pack ice is generally categorized as sea ice, and is formed by the freezing of sea water. Although normally brittle and broken up by the sea state, pack ice near land may attach itself to shore and become what is called an ice foot. Shelf ice, initially generically the same as pack ice, forms on the surface of the sea, but normally in bays or other sheltered areas. Such deposits may build up a shelf which remains attached to the land for many years. Such shelf ice can reach thicknesses of 500-1000 feet, as in the Ross Sea, and on its most seaward extremities is subject to calving; that is, the breaking away of large pieces into the sea. Ice sheets, on the other hand, are generally considered land ice, and are formed on land by the freezing of fresh water or the compacting of snow as layer upon layer adds to the pressure on that beneath. On the Antarctic Plateau ice caps form and remain throughout the year, some attaining several thousand feet in thickness.[20]

When the ice is terrestial in nature, as is sheet ice, not as many legal problems are evinced. But where the ice is sea-based, such as is the case with pack ice or shelf ice, fifty years of exegesis have not resolved the regimes issue.

An interesting vantage on the ice issue is tangentially provided by Oppenheim, in his definition of high seas:

> The open sea, or the high seas, is the coherent body of salt water all over the greater part of the globe, with the exception of the maritime belt and the territorial straits, gulfs, and bays, which are part of the sea but not parts of the open sea. Wherever there is a salt-water sea on the globe, it is a part

19. OPPENHEIM, *supra* note 12, at 593-94.

20. N. BOWDITCH, AMERICAN PRACTICAL NAVIGATION 747-48 (1962).

> of the open sea, provided it is not isolated from, but coherent with, the general body of salt water extending over the globe, and provided that the salt water approach to it is navigable and open to vessels of all nations.[21]

Leaving aside the navigability and open approach issues which would clearly remove most Antarctic ice from any high seas regime, Oppenheim maintains that the high seas must be a "coherent body of salt water."[22] Would this, then, imply that fresh water could not be the subject of a high seas regime, and possibly provide a partial key in resolving this issue?

The nature of the ice precludes such a possibility. Depending upon the temperature, the trapped brine in sea ice either freezes or remains liquid, but due to its density, settles downward. As settling occurs, the ice gradually freshens so that after two years of initial formation, virtually all salt has been eliminated. Icebergs originally formed from sea ice contain no salt with the passage of time, and uncontaminated melt water obtained from them is fresh. Thus it would be highly impractical, if not impossible, to ascertain the "dividing line" between the high seas and mainland Antarctica based on the above criterion. In similar vein, even if Oppenheim's definition were accorded oecumenical subscription it would be impracticable to insist that ice shelves over the open sea are not a "coherent body of salt water"[23] merely because ice, especially that composing the Antarctic barriers, is not coherent with the body of water comprising the high seas.

The Arctic experience of the late nineteenth and early twentieth centuries has provided much guidance on possible approaches to the ice problem. However, given the fact that Arctic ice is completely devoid of terrestrial origins, and that the North Polar ice cap is completely floating on the high seas, much of the guidance provided is initially misleading if not carefully evaluated. Lakhtine, in discussing Arctic ice, states with regard to the above distinction:

> We are of the opinion that floating ice should be assimilated legally to open polar seas, whilst ice formations that are more or less immovable should enjoy a legal status equivalent to polar territory.[24]

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21. OPPENHEIM, *supra* note 12, at 587 (footnotes omitted).
22. *Id.*
23. *Id.*
24. Lakhtine, *Rights Over the Arctic*, 24 AM. J. INT'L L. 703, 712 (1930) [hereinafter cited as Lakhtine].

Although much of Lakhtine's writing was written in the 1920's in a quite apparent and febrile attempt to substantiate the then recently proclaimed Soviet sector principle and, therefore, should largely be discounted, there is merit to his distinction drawn here. Balch neatly draws this distinction when he states that the frozen oceans of the North Pole, as they are in continual motion moving from the Bering Straits towards the Atlantic Ocean, are incapable of being owned; but that immobile ice such as exists at the South Pole may be made the subject of sovereignty.[25] Rolland maintains that a permanent surface of ice extending from the coast out towards the sea should be a continuation of the land.[26]

There are an equal number of proponents of the view that ice is not land and therefore is incapable of being subsumed in any terrestrial regime. Clute maintains that even if large areas of the Arctic Sea are frozen up, it must still be regarded as an open sea and thus not subject to claims of sovereignty.[27] Oppenheim asserts that the North Pole cannot be occupied "as there is no land on the North Pole."[28] Fouchille maintains, on the other hand, that ice, being in its nature essentially different from water as well as from dry land, can be made with some limitations the object of exploitation.[29]

Smedal, in his excellent and definitive article *Acquisition of Sovereignty over Polar Areas*, on which much of the sector principle discussion of this article is based, ably synthesizes these convergent views and provides a basis on which to proceed:

> [I]f we now raise the question whether the Ross Barrier can be subjected to sovereignty then the question is least difficult to answer with regard to that part of the Barrier which rests on solid ground. It must be put on a par with a land territory, and it can be occupied.
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> Doubts arise when the question affects that part of the barrier which is afloat. We are of opinion that since there is

25. *See* Balch, *supra* note 15, at 266. *See also* Waultrin, *Le problème de la souveraineté des poles*, XVI REV. GEN. DE DROIT INT. PUBLIQUE 649-60, *passim* (1909).

26. L. Rolland, *Alaska: Maison de jeu établie sur les glâces au délà de la limite des eaux territoriales*, XI REV. GEN. DE DROIT INT. PUBLIQUE 340-42 (1904).

27. 1 G. HACKWORTH, DIGEST OF INTERNATIONAL LAW 452 (1940) [hereinafter cited as HACKWORTH].

28. *Id.*

29. Lakhtine, *supra* note 24, at 712.

> no natural borderline between the two parts of the barrier, and as the latter appears externally as a whole, the same principle should apply to the whole extent of the barrier.
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> In appearance it resembles a land territory rather more than a sea territory. At the barrier edge all navigation obviously ceases. In this instance it is difficult to plead the considerations that have formed the rule that the sea cannot be made subject to the sovereignty of a state. We are, therefore, of the opinion that good reasons favor the view that the Ross Barrier should be regarded as land and can be the object of sovereignty . . . .
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> What has been said above on the question of sovereignty in respect to Ross Barrier, applies also to other barriers resembling the Ross Barrier.[30]

Smedal's synthesis, accounting for the dichotomy between floating and non-floating ice, proceeded one step further. In examining the Ross Barrier he addressed the subject of thick floating ice, which for all apparent purposes is immobile, even though it is in fact slowly advancing towards the open ocean where it calves. Although this phenomenon was not *per se* mentioned in his article, he was doubtless cognizant of it, its discovery having been attested to in another article two years before:

> Captain Scott in his two studies of the Barrier Edge in 1902 and 1911 noted that the greater part of the ice-field had advanced at the rate of about a mile a year, but he also found that there were two fixed points where neither advance nor recession was appreciable.[31]

It is further submitted that Smedal's analysis should not be discounted merely due to the phenomenon of calving. While it is true that under general terrestrial principles the loss of such legal portions of a land domain is unusual, the process should be analogized to accretion, erosion, and avulsion, as these processes are not inherently dissimilar in nature. While calving generally

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30. G. SMEDAL, ACQUISITION OF SOVEREIGNTY OVER POLAR REGIONS 30-31 (1931) [hereinafter cited as SMEDAL]. *See also* D. PHARAND, THE LAW OF THE SEA OF THE ARCTIC WITH SPECIAL REFERENCE TO CANADA 86 (1973) [hereinafter cited as PHARAND]:

> [A]s long as those huge ice tongues are joined to the land [referring to Ellesmere] and the glaciers which produced them—in other words, as long as they remain ice shelves—they are generally considered as land since their thickness and immobility make them as effective a barrier to navigation as land itself.

31. See C. HAYES, ANTARCTICA: A TREATISE ON THE SOUTHERN CONTINENT, at 54 (1928).

produces sudden, significant territorial changes, avulsion also refers to a "sudden change in the channel of a stream, . . ."[32] Even fewer problems are present if wave action causes the gradual erosion of the seaward edge of an ice barrier, as this phenomenon is very similar to erosion.

Earlier objections raised to the treatment of Arctic ice under a terrestrial regime were to a large degree based on the inherent difference between the nature of Arctic and Antarctic ice. Pharand objects to the treatment of Arctic polar ice as immobile, not because of the type of mobility associated with the Ross Barrier, but because, unlike the latter, no part of the Arctic polar ice cap proper is either attached to or resting upon land. The problem he refers to is that Arctic ice is and was originally pack ice, and thus in constant motion without reference to any fixed continental point. "Such a view [that Arctic ice should be a valid object of territorial sovereignty]," he says, "does not take sufficient account of the fact that the North Pole [rests] on 4,300 meters of water . . . ."[33] Balch alludes to the same problem:

> But the ice at the North Pole is never at rest. It is in continual motion. It moves slowly in a direction from Bering's Strait towards the Atlantic Ocean. Consequently any habitation fixed upon it would be continually moving. And such possible occupation would be too precarious and shifting to and fro to give anyone a good title. And so the rules of the Law of Nations that recognize the freedom of the high seas, would seem to apply naturally to a moving and shifting substance like the North Polar Sea ice at all points beyond the customary three-mile limit from the shore.[34]

The above illustrations demonstrate that given an appreciation of the fixed versus floating nature of the ice in the antipodes, prior legal authorities would not necessarily share similar sentiments were they writing today on the same issue in Antarctica.

When examining "continental" Antarctica as distinguished from the ice shelves and the barriers, unique problems also arise. As alluded to earlier, Eastern Antarctica presents little problem; the continental mass is typified on a large scale by a simple structure of broad basins and swells, with the rock surface being at

32. O. SVARLIEN, AN INTRODUCTION TO THE LAW OF NATIONS 182 (1955).
33. PHARAND, *supra* note 30, at 84.
34. Balch, *supra* note 15.

an altitude of zero to two hundred meters.[35] However as a result of glacial depression, there are several depressions below present sea level.[36]

The subglacial topography of Western Antarctica, however, is more complicated. Much of central Western Antarctica is a deep basin, with depressions as great as 2500 meters below sea level. This channel is connected by other channels to the Bellingshausen, Amundsen, and Ross Seas, all of which, even after isostatic rebound, would remain under present sea level. Such isostatic rebound would isolate the high standing areas of coastal Marie Byrd Land and Thurston Land as islands.[37]

What real-world significance does isostatic rebound and Antarctic subglacial geomorphology hold for us? Rebound in itself, and a presence of islands and surrounding seas in Western Antarctica, should be accorded but slight attention. Even if man is able, it is highly unlikely that he will embark on so ambitious a project as one which would submerge most of the major coastal cities and adjacent coastal plains of the world. Nor will such a phenomenon occur during the projected future of mankind. In that it precludes any possibility of navigation, however, it is significant that a depressed geologic basin is extant in most of Eastern Antarctica and part of Western Antarctica. For that matter, the very thickness of the shelf ice precludes submarine navigation for the greatest part of the continent. Seismic tests by the United States Navy in the immediate vicinty of the South Pole indicate there was an accumulation of 8,200 feet of dense ice, topped by twenty feet of harder ice, topped, in turn, by surface layers of snow and ice seventy-seven feet thick.[38]

In this regard, Hayton states:

> In any event the complications for international law are numerous when it must be conceded that thousands of square miles of interior Antarctic surface are in reality ten thousand feet of rigid ice over rock that is well below seal level. If this ice were melted, much of the area would clearly be only "high seas." Such a holding under present conditions is patently absurd. It is not yet known whether the ice in these below-sea-level regions is frozen fresh or frozen sea water. Even if

35. *See* text accompanying notes 2 through 9, *supra.*

36. T. HATHERTON, ANTARCTICA 282 (1965) [hereinafter cited as HATHERTON].

37. *Id.* at 281.

38. TIME, Dec. 23, 1957, at 26a.

> a basic continent with its major portions above sea level is finally confirmed and delimited, there may be the anomaly of fringe portions of the Antarctic totality consisting of "islands" bound together for eons by a layer of solid ice rising from below sea-level bedrock to an altitude of several thousand feet above sea level. If Marie Byrd Land should turn out to be this kind of ice-bound archipelago, what should the U.S. position be with respect to the application of the law in this case?[39]

If the isostatic rebound argument or the geologic inquiry is carried beyond these reasonable initial observations in any exhaustive analysis, the difficulties raised far outweigh any real-world solution to be derived therefrom. For example, if the summit of Marie Byrd Land, which would be islands if the ice sheet was removed, would be considered as islands in the present frozen "sea," then the ice sheet covering the "island" above sea level could be subjugated to a land regime. But could this island "coast" be determined with any accuracy?

If the Antarctic Treaty language itself is examined it is apparent that article VI of the treaty treats all ice shelves, as distinguished from pack ice, as *glacies firma.* It provides:

> The provisions of the present Treaty shall apply to the area south of 60° South Latitude, including all ice shelves, but nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of rights, of any State under international law with regard to the high seas within that area.[40]

The above article, while answering some questions, also raises some. It certainly assimilates ice shelves to the "area" of Antarctica and therefore presumably to a land status. The adverb "presumably" is used not *ex abundanti cautela,*[41] for nowhere in the treaty is the word "land" or "continent" used as referring to Antarctica. Rather, it is always referred to as "Antarctica" or

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39. Hayton, *Polar Problems in International Law,* 52 AM. J. INT'L L. 746, 761 (1958). *Cf.* Hayton, *The Antarctic Settlement of 1959,* 54 AM. J. INT'L L. 349, states:

> A more or less land-locked ice-cap in firm union with the bedrock beneath is, because of its origin, probably made up chiefly of frozen fresh water, or compressed and transformed snow, not frozen salt water. . . . Whether certain portions of Antarctic are shown to be only islands. . . .

Id. at 360 n.36.

40. The Antarctic Treaty, *supra* note 1, art. VI.

41. This phrase translates: "out of abundant caution." BLACK'S LAW DICTIONARY 659 (4th ed. 1951).

"area." Thus, as a matter of technical interpretation, it is unclear whether any part of Antarctica at all is to be considered land. There are, however, several valid rejoinders to this question. First, mountain chains of both sea level and ice level cannot be considered as anything but *terra firma* from a logical viewpoint. Second, article VI of the treaty in a comparative fashion distinguishes between "high seas" and "area,"[42] and since (in the Antarctic context at least) the only principal regimes would be the high seas and the land, it can reasonably be assumed that "area" equates with "land." Finally, the acts of the parties, during both the term of the treaty and the period of discovery of the continent, have indicated the parties always acted toward Antarctica as if it had been land. This being so, ice shelves to all intents and purposes have been assimilated to the land regime. Since the treaty specifically provided for this particular category of ice to the exclusion of any other, it can be assumed that pack ice has not been included within the land definition. The same may also be held to apply to ice islands which occur in the area south of 60 degrees south latitude.

The freedom of navigation principle, as the basis of the high seas regime today, has already been discussed. Little need be said to indicate that the Antarctic presents very limited opportunity for traditional surface or subsurface navigation.

> By far the greater part of the interior is covered by an unknown thickness of snow and ice which extends generally as far on the coast. Along the coast there is a special formation of ice called shelf ice or the barrier. It stretches from land towards the sea and varies in height from some few feet to over 100 feet above the level of the sea. Its surface is approximately horizontal, but it terminates on the sea side in vertical cliffs.[43]

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42. The Antarctic Treaty, *supra* note 1, art. VI.

43. Cole, Claims of Sovereignty over the Antarctic, at 11 (unpublished thesis on file with the Judge Advocate General School of Charlottesville, Virginia). He continues:

> In appearance it resembles a land territory rather than a sea territory. At the barrier edge all navigation obviously ceases. In this instance it is difficult to plead the considerations that have formed as a rule that the sea cannot be made subject to the sovereignty of a state. We are, therefore, of the opinion that good reasons favor the view that the Ross Barrier should be regarded as land and can be the object of sovereignty.
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> . . .
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> What has been said above of the question of sovereignty in respect of Ross Barrier applies also to other barriers resembling the Ross Sea.

Id.

Finally, in connection with navigation and Antarctic ice, the argument could be voiced that because navigation might be possible to some degree under the seaward coast of certain ice shelf borders of Antarctica, it would be impossible for any states to claim sovereignty over such an area from a security viewpoint. Several responses could be made. First, under prevailing international law, the right of innocent passage is accorded all ships, including submarines, although the latter are required to navigate on the surface and show their flag.[44] Second, assuming that sovereignty over the submerged lands of the adjacent continental shelf has already been granted coastal states, is there any valid reason why the reverse of this state of affairs could not equally apply as a valid one (that is, to treat the land above as sovereign and the waters below *res communis omnium*)? First of all, from a practical vantage, the problem would be *de minimis*, as only few areas of Antarctica would admit of such submarine navigation; second, in most places where the ice shelves would so admit, their thickness would be so great as to preclude any danger from submarine navigation to the territorial sovereign above; third, a territorial sovereign would in all probability be entitled to a territorial sea in which he could, in his discretion, prohibit such subsurface navigation, thereby preventing the problem from ever arising. While recognizing the present right of innocent passage accorded capital ships through the territorial sea, a submarine under thick ice would in all probability render little threat.

In summary, there is no logical or compelling legal reason, including navigational freedom, why the shelf and sheet ice of Antarctica should not be assimilated to a land regime governing that continent.

IV. EFFECT OF TREATY TERMINATION

As alluded to previously, prior discovery and exploration and current activities of the United States in Antarctica achieve their greatest relevance and significance when applied to the sovereignty issue in light of the legal state of affairs which will apply after the treaty terminates. Although the treaty does not provide for any specific termination date *per se*, it has been the practice of most contracting parties to regard the treaty regime as a tem-

44. 1958 Convention on the Territorial Sea and Contiguous Zone, 15 U.S.T. 1606, T.I.A.S. 5639, 516 U.N.T.S. 205, art. XIV (6).

porary one and to interpret article XII(2)(a) of the treaty as one signifying the termination of the present regime 30 years after the entry into force of the treaty. Article XII(2)(a) of the treaty provides:

> If after the expiration of thirty years from the date of entry into force of the present Treaty, any of the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX so requests by a communication addressed to the depository Government, a Conference of all the Contracting Parties shall be held as soon as practicable to review the operation of the Treaty.[45]

In addition to this contemplated date, the complementary provisions of article XII(1)(a) and (2)(c) provide for possible withdrawal by any contracting party:

> XII (1)(a). The present Treaty may be modified or amended at any time by unanimous agreement of the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX. Any such modification or amendment shall enter into force when the depository Government has received notice from all such Contracting Parties that they have ratified it.
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> . . . .
>
> XII (2)(c). If any such modification or amendment has not entered into force in accordance with the provisions of subparagraphs 1(a) of this Article within a period of two years after the date of its communication to all the Contracting Parties, any Contracting Party may at any time after the expiration of that period give notice to the depository Government of its withdrawal from the present Treaty; and such withdrawal shall take effect two years after the receipt of the notice by the depository Government.[46]

It can be seen from an interpretation of the last two provisions that it would be an extremely straightforward matter for any contracting party whose interests dictated disassociation from the treaty regime to release itself therefrom. Either it could fail to ratify a modification or amendment by another contracting party, or on its own initiative, it could submit a modification or amendment which could not fail to elicit disapprobation by another contracting party. In either case the result would be the same: release from the treaty regime within two years of the submission

45. The Antarctic Treaty, *supra* note 1, art. XII 2.(a).

46. The Antarctic Treaty, *supra* note 1, arts. XII 1.(a); XII 2.(c).

of the amendment. This, it should be remembered, is entirely independent of the thirty year term intimated in article XII(2)(a), and could theoretically occur within two years of the present.

If, however, there remains any doubt as to the interim nature of the treaty and the effect of article XII(2)(a), any modicum of reflection dictates that no state has permanently surrendered its claims to Antarctica.[47] Article IV of the treaty, the single article perhaps most responsible for the signing of the treaty by the original contracting parties in 1959, confirms the fact:

> 1. Nothing contained in the present Treaty shall be interpreted as:
>
> (a) a renunciation by any Contracting Party of previously asserted rights of or claims to territorial sovereignty in Antarctica;
>
> (b) a renunciation or diminution by any Contracting Party of any basis of claim to territorial sovereignty in Antarctica which it may have whether as a result of its activities or those of its nationals in Antarctica, or otherwise;
>
> (c) prejudicing the position of any Contracting Party as regards its recognition or non-recognition of any other State's right of or claim or basis of claim to territorial sovereignty in Antarctica.
>
> 2. No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim, to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force.[48]

The primary justification dictating the preparation of this article is embodied within the terms of these last provisions. They are the operative ones with respect to the entire sovereignty question in Antarctica for the present and envisageable future, and with respect to the past as that may be interpreted in the present and future.

Having considered the general reservation of the *status quo ante*, the first point to be noted is that article IV(b) provides that nothing in the treaty shall be interpreted as a renunciation or a

47. Especially given the host of conflicting national claims to Antarctica during the 1959 Conference and the dormant claims still voiced in the more sensational irredentist-inspired legal publications by certain contracting parties.

48. The Antarctic Treaty, *supra* note 1, art. IV.

diminution of a claim which a party *may* have.[49] It is possible that the use of the word "may" could be construed so as to signify a possibility or likelihood in the future.[50] It is clear that activities initiated after the treaty is in force can be used as a basis for asserting sovereign claims on the continent. The executed nature of continuing activities initiated during the treaty regime lends itself to a similar interpretation. Also, if it is recognized that only such claims as are continuing after termination could be used successfully to assert sovereign claims on the basis of occupation given the present situation in Antarctica, and that it is unlikely that bases found under the present regime will be abandoned or not continue to be the scene of continuing activities, the real-world effect would be the same regardless of time of initiation of such activities. However, due to the executed nature of such activities, the following explanation indicates that such a treaty provision cannot have any effect after termination.

Two articles in the 1969 Vienna Convention on the Law of Treaties are pertinent to any discussion of Article IV of the Antarctic Treaty. Aricle 43 of the Vienna Convention states:

> The invalidity, termination, or denunciation of a treaty, the withdrawal of a party from it, or the suspension of its operation, as a result of the application of the present Convention or of the provisions of the treaty, shall not in any way impair the duty of any state to fulfill any obligation embodied in the treaty to which it would be subject under international law independently of the treaty.[51]

Article 70 of the Vienna Convention provides:

> Unless the treaty otherwise provides or the parties otherwise agree, the termination of a treaty under its provisons or in accordance with the present Convention: (a) releases the parties from any obligation further to perform the treaty; (b) does not affect any right, obligation or legal situation of the parties created through the execution of the treaty prior to its termination.[52]

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49. *Id.*, art. IV(b) (emphasis added).

50. This interpretation is validated by referring to the parallel French text, which reads "*qui pourrait résulter de ses propres activités ou celles de ses ressortissants dans l'Antarctique.*" The use of the conditional tense is more closely linked with the future tense than with the present.

51. Vienna Convention on the Law of Treaties, May 23, 1969, art. 43, 63 AM. J. INT'L L. 875 (1969) at 889.

52. *Id.*, art. 70, at 897.

Article 43 creates no problem for contracting parties whose obligations under the Treaty have terminated, as there is clearly no obligation under international law either to refrain from acts of discovery or occupation in *terra nullius*, or in areas in which the state justifiably fails to recognize sovereign claims put forward by other states. Article 70, however, presents more difficulty. Is there any obligation or legal situation incumbent on a party created during the time the treaty is in force which perforce continues after termination? To answer this question there must first be an examination of the nature of the activity in question, such as future construction of bases on Antarctica.

Lord McNair indicates the appropriate distinction to be drawn:

> In so far as the provisions of a treaty have already been executed and have had their effect before the termination, they have passed beyond the sphere of the operation of the termination; something has been done; for instance, territory has been ceded, persons or movables have been surrendered, and in many cases new rights and statuses have been created which, although they owe their origin to the treaty, have acquired an existence independent of it; the termination cannot touch them. On the other hand, other provisions take the form of continuing obligations and operate *de die in diem* so long as the treaty remains in existence, for instance, to surrender alleged criminals of certain types, to attribute a particular nationality to persons born in certain circumstances; upon termination no further rights of this type can accrue. If we may borrow the terminology of English law, this is the difference between executed and executory obligations; . . . .[53]

Some doubt might be raised as to whether erecting sites are activities which "have already been executed and have had their effect before the termination."[54] However, doubt is removed upon reading the second part of the compound beginning "on the other hand,"[55] as it seems clear that such activities are quite unrelated to Lord McNair's given examples. Such an act is therefore beyond the sphere of application of the treaty. Such acts, while "non-rights" during application of the treaty, must become vested ones after the treaty termination, for it would be impossible to

53. L. MCNAIR, THE LAW OF TREATIES 531-32 (1961) [hereinafter cited as MCNAIR].

54. *Id.*

55. *Id.*

ignore the existence of such bases and continuing activities associated with them.[56] However, after lapse of the treaty regime it would perhaps be politic *pro forma* to make a new formal declaration as to such bases and send new teams to them in order to disassociate such continuing activities from those conducted under the treaty, thereby giving them an independent, *de novo*, existence.

Sir Gerald Moore supports Lord McNair's reasonings:

> It is an accepted rule of treaty law that the termination of a treaty, for whatever cause and in whatever way, can only affect its continuing obligations and cannot *per se* affect or prejudice any right already definitively and finally acquired under it, or undo or reverse anything affected by any clause of an executed character in the treaty. Thus a payment made under the treaty does not become repayable; a settlement of a dispute affected by a treaty does not become reopened because the treaty terminates or is denounced; demarcated frontiers are not rendered indeterminate; cessions of territory are not cancelled, etc.[57]

Lord McNair's explanatory footnote to the first sentence of Sir Gerald's observation is most germane:

> [W]hich would, as I understand it, denote not only rights acquired at the time of, and as a result of, the conclusion of the treaty but also rights which a party has acquired later, for itself or its nationals, during the currency of the treaty and before termination, in pursuance of a power conferred upon it by that treaty; for instance to acquire concessions upon a defined area of the other party's territory.[58]

Both Lord McNair and Sir Gerald, in discussing the nature of the obligation, had occasion to refer to the word "rights," a nebulous term of art. Taken in a broad concrete sense, a right signifies a power, privilege, faculty or demand, inherent in one person and incident upon another, or as "powers of free action." In a narrower sense and one more appropriately suited to our examina-

56. If the existence of bases cannot be gainsaid, and if the right to such bases can be said to inure to any state, the logical recipient of such a right would perforce be the building and occupying state. And as the Treaty was *ab initio* but a temporary arrangement, it would be irrational to presume that any state would consent upon signing the Treaty to surrendering the investments of the "Treaty years" upon termination of that instrument.

57. MCNAIR, *supra* note 53, at 532-33.

58. *Id.*, n.4 at 532.

tion, the term denotes an interest or title in an object of property.[59]

A distinction should be observed here. Lord McNair speaks concurrently of both obligations and rights. In the example posited for discussion, that is, the construction and maintenance of Antarctic bases, we are talking of two separate problems: first, the obligations, if any, of the contracting party to refrain from using bases constructed during the treaty regime as a basis for post-treaty sovereign claims, and second, the status of the base itself. The first obligation is a right *in personam*, one imposing obligations on a definite person natural or juridical; the second is a right *in rem*, being one which imposes an obligation on persons generally. If one, for the purpose of discussion, treats the treaty parties as being all the world, Lord McNair's analysis of article IV(2) of the treaty would translate the latter as both a right *in rem* and *in personam*: the former, as the right to property erected in *terra nullius* can only amount to a right *in rem* (in the claimant's view) as against all the world (and given the temporary nature of the treaty); the latter, as the obligation owing the other treaty parties to refrain from using such bases as claims to sovereignty during the treaty regime. Therefore, it is submitted that there is indeed a right attaching to the establishment of bases and related activities thereto in Antarctica, that the right is in large part executed although executory in nature, and that article IV of the treaty would not preclude the contracting parties from continuing to utilize bases constructed during the period in which the treaty was in force and to lodge claims to territorial sovereignty thereon.[60]

V. TRADITIONAL MODES OF ACQUISITION OF TERRITORY APPLICABLE TO ANTARCTICA

Having concluded that article IV of the treaty does not jeopoardize the previously asserted rights or claims to territorial sovereignty in Antarctica, and that activities initiated during the treaty regime may, after its termination, provide the basis of sov-

59. *See* BLACK'S LAW DICTIONARY 1558 (3d ed. 1933).

60. It is more reasonable to maintain that such activities are executed in nature. None could state that the erection of a permanent installation (apart from the activities which are of a continuing nature, although there is no obligation on the administering State to continue them) is executory in nature. If the law of treaties recognizes that there are but two forms of obligations, executed and executory, and if, as stated, the activity in question is not executory, it can be but executed.

ereign territorial claims in Antarctica, the modes of acquisition of territory in Antarctica must be examined.

A. Territorial Acquisition in General

"The sovereignty of territory may be acquired by occupation, prescription, cession, conquest, and accretion."[61] Of these five, only two actually apply to Antarctica. Cession, a mode of transferring title to territory from one state to another, has not occurred in Antarctica and need not be discussed. Given the Charter of the United Nations and the duties incumbent on its members thereunder, it is highly doubtful whether conquest is still a valid means of acquiring title to territory. Certainly it has not been a form of title evoked in Antarctica to date; it would not be allowed under the treaty, and it is highly improbable after its termination. As already discussed, accretion occurs in Antarctica only in a related and reverse form (calving).[62]

The primary mode of acquiring sovereignty in Antarctica is *occupatio*, coupled with discovery.[63] Diverse problems associated with the history of Antarctica and continuing into the present time —problems to a large degree dictated by the severe climatic conditions of that continent—have created certain exceptions to the traditional *occupatio* doctrine. Before applying it to Antarctica, therefore, an examination of the nature of the doctrine and of its historical antecedents is warranted.

James Cook was the first explorer of modern times to be associated with Antarctica when he circumnavigated that continent during the years 1772-75.[64] Although open to conjecture, Gottlieb von Bellingshausen, a Russian, is credited with first sighting the continent in 1820.[65] Thereafter, the coasts of Antarctica were the subject of whaling and sealing expeditions by many nations. The first notable historic claim *per se* to Antarctica was forwarded by Dumont D'Urville in 1837-1840, when he claimed Adélie Land for France.[66]

Most discoveries and formal claims were espoused during the first two decades of the twentieth century. Scott and Shackleton

61. BRIERLY, *supra* note 16, at 163.
62. *See* discussion in text accompanying notes 21-24, *supra*.
63. *See* text accompanying notes 82-87, *infra*.
64. ENCYCLOPEDIA BRITANNICA, 1 MACROPAEDIA 961 (1974).
65. *Id.*
66. *Id.*

led three expeditions deep into the Antarctic hinterland, with Scott attaining the South Pole in 1911-1912.[67] The Norwegian Roald Amundsen also reached the Pole in 1911.[68] Admiral Richard Byrd in several expeditions from 1926-1947 introduced airplanes into Antarctic exploration, and in 1926 was the first to fly over the Pole.[69]

The activities which occurred during the early twentieth century led to conflicting claims among seven states to areas of Antarctica, especially in the Palmer Peninsula (Graham Land) area. However, no permanent settlements or continuous activities colored the claims forwarded until the 1950's.[70] Since 1924, it has been the policy of the United States to refrain from espousing any claims itself and from recognizing those made by other states, due to the lack of actual settlement in the areas claimed.[71]

Because of the nature to date of Antarctica as *terra nullius*, the principal mode of acquisition to territory in the continent has been *occupatio*, usually coupled with discovery as previously stated. As the remaining part of this section will largely concern this concept, one of fundamental importance in Antarctica, it is important to understand the nature and reasoning behind the concept. Vattel, in *Le Droit des Gens*, has given what perhaps is the best description of the role *occupatio* performs in international law:

> [B]ut it is questioned whether a nation can, by the base act of taking possession, appropriate to itself countries which it does not really occupy, and thus engross a much greater extent of territory than it is able to people or cultivate. It is not difficult to determine that such a pretension would be an absolute infringement of the natural rights of men and repugnant to the views of nature, which, having destined the whole earth to supply the wants of mankind in general, gives no nation a right to appropriate to itself a country except for the purpose of making use of it, and not of hindering others from deriving advantage from it.[72]

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67. *Id.*
68. *Id.*
69. *Id.* at 962.
70. *Id.* at 962-63.
71. *Id.* at 963.
72. VATTEL, LE DROIT DES GENS, at 98 (Pitty transl.). *Accord*, BLUNTSCHIL, LE DROIT INTERNATIONAL CODIFIÉ, at 281 (Landy transl.):

> [N]o State has the right to incorporate with itself more territory uninhabited or inhabited by barbarous tribes, than it can civilize, or that it

This analysis emphasizes the basic logic behind the doctrine: utilizing the resources of territory as efficiently as possible and permitting only those persons best in a position to utilize them to do so. The argument has been voiced in connection with the polar regions however, that due to their distant, inhospitable, and unique nature, an exception to the general rule should be made. Smedal replied to this contention:

> [I]n the theory and practice of international law it is laid down that sovereignty over a no man's land must be acquired by occupation if all the interested powers are not agreed to place such land under the single State. As mentioned several times before, there is no valid reason for departing from the rule in the polar regions. In fact, it cannot be dispensed with, for it cannot be replaced by any other rule to which the comity of nations is willing to adhere. There can be no doubt that the States are unwilling to renounce in the polar regions the role of occupation.[73]

The *occupatio* doctrine is the basic mode of acquisition of territory today, having its origin in the Roman law of property in which the element of control exercised by the owner was essential. It has enjoyed a steady and continuous development after its resuscitation by the discovery of the New World and promulgation of the Papal bull *Inter Caetera* (the latter actually being a precedent on which certain South American States base their sector claims to Antarctica).[74] The continued emphasis on effective control, whatever form it may take, has always been present.

According to Oppenheim:

> Theory and practice agree nowadays upon the rule that occupation is effected through taking possession of, and establishing administration over, the territory in the name of, and for, the acquiring State. Occupation thus effected is *real* occupation, and, in contradistinction to *fictitious* occupation, is named *effective* occupation. Possession and administration are the two essential facts that constitute an effective occupation.

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can organize politically. The sovereignty of the State exists only if it is exercised as a fact.

73. SMEDAL, *supra* note 30, at 64. *See* OPPENHEIM, *supra* note 10, at 554-63, which continues to concede in the law no exception to the "sole occupation" test.

74. This Bull, and others issued during the period, may be found in THE CARNEGIE INSTITUTION, EUROPEAN TREATIES BEARING ON THE HISTORY OF THE UNITED STATES AND ITS DEPENDENCIES (F. Davenport ed. 1917).

> (1) *Possession.*—The territory must really be taken into possession by the occupying State . . . .
>
> (2) *Administration.*—After having, in the aforementioned way, taken possession of a territory, the possesor must establish some kind of administration thereon which shows that the territory is really governed by the new possessor. If, within a reasonable time after the act of taking possession, the possessor does not establish some responsible authority which exercise governing functions, there is then no effective occupation, since in fact no sovereignty is exercised by any State over the territory.[75]

If, then, we are cognizant of the nature of sovereignty and of *occupatio*, and if we are convinced of the strict applicability of the latter to Antarctica, an examination of its basic elements is in order.

B. The Necessity of State Action

As only states are properly the subject of international law, only acts of acquisition to territory undertaken by them in their sovereign capacity or through the acts of their agents, actively and contemporaneously supported by the state, are recognized by the family of nations. Regardless of the special bond of nationality existing between a state and its subjects, the latters' discovery and occupation of *terra nullius* will not validate subsequent state claims to such lands without prompt endorsement of them. In the words of Smedal:

> [S]overeignty can only be exercised by a State, not by private persons or companies, *e.g.*, colonization companies. This fact has not always been clearly recognized. Colonists may, however, form their own State, and this State can then exercise authority.[76]

In the case of the United States, all early major discoveries were the acts of private citizens not officially endorsed at that time by the United States. The classic statement of positive disavowal by the United States was made by Secretary of State Hughes in 1924 concerning Admiral Byrd's expedition to the South Pole. When he presented the South Pole to the United States, the Secretary of State said:

> It is the opinion of the Department that the discovery of lands unknown to civilization, even when coupled with a formal

75. 1 L. OPPENHEIM, INTERNATIONAL LAW 509-10 (7th ed. 1948).

76. SMEDAL, *supra* note 30, at 10.

> taking of possession, does not support a valid claim of sovereignty unless the discovery is followed by an actual settlement of the discovered country.[77]

What are the legal consequences of such a course of action? At best, it could give the United States an inchoate title, a state of affairs also engendered by the failure of the state effectively to occupy territory discovered by it.

> If, however, the latter [*i.e.*, a state with inchoate title] omits to take effective possession of the land during the time in which the prior right is valid, the land is again considered to be without a master and can be occupied by another State.[78]

Admiral Byrd's 1929 flight over the South Pole and purported attempt to claim the area for the United States, which for many years thereafter did not man expeditions to the area, has become a *locus classicus* as to the effect of an inchoate title by right of discovery not followed by subsequent occupation or administration. Contemporary comments attendant to Byrd's flight and purported claim to the Pole show the world's interest and amazement. As one observer said, "he [Byrd] has seen things [the South Pole lands] as we all have seen the moon."[79]

The question may arise as to whether subsequent activities of states whose earlier activities gave rise to inchoate titles can revalidate the earlier inchoate title. This depends on several facts. First of all, if in the ensuing interval no second state intervened in the area by way of discovery, administration, or settlement, the problem is academic as subsequent activities of the original state will in themselves revalidate the title, If, however, a second state did intervene, the inchoate title of the original state, if not coupled with *occupatio*, may well have lapsed and have been superseded. But the same rules would in turn apply to the second state. The real difficulty appears when an inchoate title established by discovery without settlement or administration by state

77. G. HACKWORTH, 1 DIGEST OF INTERNATIONAL LAW 399 (1940); Letter from Secretary of State Hughes to A.W. Prescott, May 13, 1924, M.S. DEPT. STATE file 811. 014/101.

78. SMEDAL, *supra* note 27, at 48.

79. Dundee Courier and Advertiser, April 6, 1929, cited in SMEDAL, *supra* note 30, at 74. *Cf.* 1 L. OPPENHEIM, INTERNATIONAL LAW 278 (1st ed. 1920) as to the effect of an inchoate title:

> [I]f such period lapses without any attempt by the discovering State to turn its inchoate title into a real title of occupation, such inchoate title perishes, and any other State can now acquire the territory by means of an effective *occupatio*.

A is shortly thereafter contested by state B, which also "discovers" the area. What is the period of grace accorded an inchoate title? The period varies according to the authority selected. Fauchille states one year.[80] Some have stated twenty-five. The Russians, for practical reasons, regard the period an indefinite one, thus repudiating the inchoate title doctrine. As one scholar relates:

> The Soviet practice, however, seems to exceed all the other views. As stated by Professor Kalesnik, the validity of the prior right, based on Russian discoveries in the Antarctic, is considered to be valid for more than 130 years. In his own words:
>
> > Russia has never renounced her rights, and the Soviet government has never given its consent for anyone to dispose of territory discovered by Russian navigators.[81]

C. *Effectiveness of Occupation*

Effectiveness of occupation is not only the touchstone on which all title to territory is based, but also is that element of *occupatio* which presents the greatest difficulty in analyzing the Antarctic experience. Although conceptually difficult to disassociate effectiveness of occupation from an integral discussion dealing with *animus occupandi*[82] (evaluted objectively in examining acts of display of sovereignty), for the purpose of analysis an artificial dichotomy is made here.

Effectiveness should be viewed as the objective manifestation of a continuous development of control commencing with discovery and subsequent inchoate title and continuing by permanent settlement and administration. Given the situation prevalent in Antarctica today, no valid claim to territory can be enjoyed without such effective exercise. In matter of fact, the most difficult question concerning Antarctic sovereignty is whether or not exceptions should be made for such an inhabitable area and if so, the form of and degree to which they should be articulated.

Grotius wrote:

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80. P. FAUCHILLE, 1 TRAITÉ DE DROIT INTERNATIONAL PUBLIQUE 720-21 (1925).

81. P. Toma, *Soviet Attitude Towards the Acquisition of Territorial Sovereignty in the Antarctic*, 50 AM. J. INT'L L. 611, 616-17 (1956) [hereinafter cited as Toma] (footnote omitted).

82. This term refers to the intent to occupy.

> No one is a sovereign of a thing which he himself has never possessed and which no one else has ever held in his name . . . . To discover a thing is not only to capture it with the eyes but to take real possession thereof . . . . The act of discovery is sufficient to give a clear title of sovereignty only when it is accompanied by actual possession.[83]

In contrast to its antecedent in the Roman Law of Property, contemporary effectiveness is generally associated with non-absolute degrees of possession. To maintain that actual continuous possession is required in a largely uninhabited land is to misconstrue the real nature of *occupatio*. Effective possession requires only that degree of control which is necessary under the totality of the circumstances prevalent in the area to make the presence of authority of the occupying state felt by and against all others. It is therefore a flexible and comparative standard:

> Effective occupation as generally required does not imply its extension to every nook and corner. It is sufficient to dispose at some places within the territory of such a strong force that its power can be extended if necessary over the whole region in order to guarantee a certain minimum of legal order and legal protection within the boundaries, and to exclude any interference from a third State . . . .[84]

By far the best philosophical explanation of effective occupation is that of Van der Heydte:

> Effectiveness then seems to be best illustrated by actual display of sovereign rights, the maintenance of order, and protection. But as a matter of fact sovereign rights can be exercised only over human beings, in inhabited lands; . . . and protection too can be granted only to human beings. It would be a misconstruction of the doctrine of effectiveness to say that sovereignty over completely uninhabited land presupposes in every case actual occupation.[85]

This definition, then, indicates clearly how the scope of effective control over largely uninhabited lands can be circumscribed without jeopardizing the effectiveness of that control; for political control is but a relative concept in that a human relationship is required. Political control over territory cannot be said to exist without the existence of either a permanent or transient popula-

83. H. GROTIUS, MARE LIBERUM II 52 (1911).

84. Van der Heydte, *Discovery, Symbolic Annexation and Virtual Effectiveness in International Law*, 29 AM. J. INT'L L. 448, 463 (1963).

85. *Id.*

tion or occasional influx of human beings. The same principle applies both to a nation, which cannot exist without a people, and to the very principle of territorial sovereignty itself, which is meaningless without reference to the nation-state concept. Thus it should be kept in mind that when exceptions to the effectiveness principle for Antarctica are discussed, what is really at issue is not its extreme climate and latitude, but rather its lack of population. This then in itself will vitiate the sector principle, which is only an inept application and special case of *occupatio*. Therefore, Soviet jurists are incorrect and fail to observe the real nature of effective occupation when they maintain that an additional argument in opposition to the principle of "effective occupation" is the notion that, with regard to occupation of polar areas, it is not justifiable to maintain the demand for effective occupation.[86]

Recent judicial interpretation of the doctrine of *occupatio* corroborates this new approach that effective occupation is distinctly governed by the circumstances of each case.

As Waldock states:

> [T]he three cases cited above [*Eastern Greenland, Palmas* and *Clipperton Island*] mark a change in the concept of effective occupation which has taken place during the past century and especially since the African Conference of Berlin in 1885. The emphasis has shifted from the taking of physical possession of the land and the exclusion of others to the manifestation and exercise of the functions of government over the territory. This change is a natural consequence of the recognition that in modern international law occupation is the acquisition of sovereignty rather than of property.[87]

The basic elements of occupation just discussed can perhaps most succinctly be summarized in the words of the Permanent Court of International Justice in its decision in the *Legal Status of Eastern Greenland*: "[A] claim to sovereignty must be based on two elements: the intention and will to act as a sovereign, and some actual continued display of such authority."[88]

In applying these coefficients of traditional international law to the case of United States sovereignty over Antarctic, it can

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86. Toma, *supra* note 81, at 618.

87. Waldock, *Disputed Sovereignty in the Falkland Island Dependencies*, 25 BRIT. Y. B. INT'L L. 311, 317 (1948) [hereinafter cited as Waldock] (parentheticals added).

88. Legal Status of Eastern Greenland, [1933] P.C.I.J. ser A/B, No. 53, cited in GREEN, INT'L LAW THROUGH THE CASES 128 (2d ed. 1959).

be seen that the United States is unable to satisfy either. First, it is moot whether or not the United States ever exercised its prerogative by espousing the activities of early United States' discoverers and explorers in a timely manner as needed to satisfy the requirement of state action.[89] Second, even if the requirements were met, it is clear that the United States has never had the *animus occupandi* requisite to any claim of territorial sovereignty, in accordance with the first coefficient in the *Eastern Greenland* case.[90] In fact, it has been the consistent policy of the United States to refrain from making any claims to Antarctica for over half a century.[91] Third, until recent years the United States refrained from fulfilling the second coefficient of the *Eastern Greenland* test—actual display of authority.[92] The first really significant official United States-sponsored expedition of any meaningful scope was conducted immediately after the Second World War in an expedition which far outstripped anything that had earlier transpired.[93] However, it is questionable whether such presence

89. *See* text accompanying notes 76 through 79, *supra.*

90. Legal Status of Eastern Greenland, [1933] P.C.I.J. ser A/B No. 53, at 46.

91. For example, Acting Secretary of State Welles, in a letter dated August 8, 1939, to the diplomatic officers in the American Republics, stated:

> The Government of the United States has in the past asserted no claim of its own to sovereignty over areas in the Antarctic region, although the activities and explorations of its citizens date back considerably more than a century. On the other hand, the United States Government has not recognized the Antarctic sovereignty claims of any other nation and has made formal reservation of such rights as it or its citizens may possess in that region.

2 M. WHITEMAN, DIGEST OF INTERNATIONAL LAW 1247 (1963).

Secretary of State Hughes earlier stated:

> It is the opinion of the Department that the discovery of lands unknown to civilization, even when coupled with a formal taking of possession, does not support a valid claim of sovereignty unless the discovery is followed by an actual settlement of the discovered country. In the absence of an act of Congress assertative in a domestic sense of dominion over Wilkes Land this Department would be reluctant to declare that the United States possessed a right of sovereignty over that territory.

1 G. HACKWORTH, DIGEST OF INTERNATIONAL LAW 399 (1940). *Cf.* Hayton, *The 'American' Antarctic* 50 AM. J. INT'L L. 583 (1958) [hereinafter cited as Hayton]:

> At first, ability to perfect title in the polar regions was denied altogether by some writers. These latitudes were judged completely unsuitable for the settlement believed required for 'effective occupation.' This remains, despite occasional or recent signs of vacillation, part of the official United States position.

Id. at 599 (footnote omitted).

92. Legal Status of Eastern Greenland, [1933] P.C.I.J. ser A/B No. 53, at 46.

93. This refers to the United States Naval Antarctic Developments Project of 1947. *See* 2 M. WHITEMAN, DIGEST OF INTERNATIONAL LAW 1248, 1249 (1963).

actually amounted to the display of authority to which the Permanent Court of International Justice referred. The Court, in referring to the intention and will to act as sovereign, modified that intention with the words "by some actual exercise or display of *such* authority."[94] Thus, the authority exercised must be an exercise of *sovereign* authority. Any state in theory enjoys, by virtue of the subjective nationality principle, authority over its own subjects wherever they may be. Thus, United States' assertion of authority over its nationals in Antarctica, without any attempt by the United States to exercise authority over foreign nationals, would in all probability not fulfill the standard enunciated in the *Eastern Greenland* decision. Therefore, the United States practice of "formally reserving such rights as it or its citizens may possess" in Antarctica is an empty reservation.[95]

D. Display of Authority and Relaxation of Standards in Polar Regions

Closely connected to the issue of effectiveness is that of the display of authority, for display is the tangible expression of effectiveness in sovereignty claims. De Martens has effectively stated the basic nature of the display of authority required:

> [T]he limits of the occupation are determined by the material possibility to cause to be respected the authority of the government throughout the extent of the occupied country. Where the power of the state does not make itself felt there is not an occupation. In order that it may be effective it must receive its entire execution.[96]

Another important factor to bear in mind is that display of authority is a relative and not an absolute concept; that is, the requisite degree depends on the activities of other states in the disputed area. As the Permanent Court of International Justice enunciated in *Eastern Greenland*:

> [I]t is impossible to read the records of the decisions in cases of territorial sovereignty without observing that in many cases the tribunal has been satisfied with very little in the way of the actual exercise of sovereign rights, provided that the other

94. Legal Status of Eastern Greenland, [1933] P.C.I.J. ser A/B No. 53, at 46.

95. *See* Lissitzyn, *The American Position on Outer Space and Antarctica*, 53 AM. J. INT'L L. 126 (1959).

96. E. DE MARTENS, 1 TRAITÉ DE DROIT INTERNATIONAL 463 (Alfred Leo transl. 1802).

> State could not make out a superior claim. This is particularly true in the case of claims to sovereignty over areas in thinly populated or unsettled countries.[97]

The display of authority most often contemplated is that of administration. With regard to *Eastern Greenland*, Smedal wrote:

> [W]hether any of the members of the settlement [in Eastern Greenland] have been vested with Danish police authority, and whether inspection and control is exercised in the territory, we do not know. If, however, we assume that there are persons belonging to the settlement who can be said to represent Danish State authority, and that the surrounding land is regularly under the inspection of these persons, we are of the opinion that Danish sovereignty must be recognized.[98]

Having described the display of sovereignty principle and the elements most associated with it, the issue of exceptions to the general proposition must be further examined. While no one doubts the validity of the fact that exceptions should be made, the question is the degree to which the exceptions should extend, an issue which, in the Antarctic situation particularly, has been the subject of excess and abuse.

> Any attempt to alter the formula of *effective occupation* because of special geographic and climatic conditions can be of only dubious value. It would seem that any territorial title, whether based on original discovery or the "sector principle," in the absence of effective occupation, would tend to widen rather than bridge the gap between reality and law.[99]

Smedal is of the same opinion with regard to polar areas in particular:

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97. Legal Status of Eastern Greenland, [1933] P.C.I.J. ser A/B No. 53 at 46. Brierly, in commenting on this decision, states:

> On this they pointed out [the Court] that the absence of any competing claim by another State (and until 1931 no State other than Denmark had ever claimed title to Greenland) is an important consideration; a relatively slight exercise of authority will suffice when no state can show a superior claim. They held, too, that the character of the country must be regarded; the arctic and inaccessible nature of the uncolonized parts of Greenland made it unreasonable to look for a continuous or intensive exercise of authority.

BRIERLY, *supra* note 16, at 164.

98. SMEDAL, *supra* note 30, at 127. *Cf.* Hayton, *supra* note 91, at 590:

> Argentina fully realizes that administrative organization of territory is considered a major act of sovereignty in the perfection and maintenance of titles.

99. Hayton, *supra* note 91, at 606. (Quoting Svarlien) (emphasis in original).

> We would at once point out that, in our opinion, it is, broadly speaking, not the case that other rules than those applying to occupation in other parts of the world would apply to occupations in polar regions. When the rules are to be applied in polar regions, however, questions of a special nature may arise.[100]

For perspective, it should be observed that when the issue of sovereign claims in Antarctica first presented itself at the beginning of the present century, the fact that climatic conditions in the continent precluded the possibility of any permanent Antarctic settlement was for many writers conclusive of the issue:

> [A]s the regions of both the North and South Poles are incapable of permanent settlement, they do not appear to be "territory" susceptible of acquisition by occupation.[101]

In the same year in which Hall rendered the above view, Secretary of State Hughes unwittingly tied the hands of future U.S. policy makers and stated, in agreement with Hall:

> It is the opinion of this Department that the discovery of lands unknown to civilization, even when coupled with a formal taking of possession, does not support a valid claim of sovereignty unless the discovery is followed by an actual settlement of the discovered countries. In the absence of an act of Congress assertative in a domestic sense of dominion over Wilkes Land the Department would be reluctant to declare that the United States possessed a right of sovereignty over that territory.[102]

The international thought on the subject, no doubt abetted by the technological advance in explorative techniques and the introduction of aerial navigation to the field in 1926 by Admiral Byrd, was soon to change. As Hayton wrote:

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100. SMEDAL, *supra* note 30, at 68. *Cf.* G. JEZE, ÉTUDE THÉORIQUE SUR L'OCCUPATION COMME MODE D'ACQUÉRIR LES TERRITOIRES EN DROIT INTERNATIONAL (1896):

> [W]hen, therefore, effective possession is rightly demanded also in polar regions as a condition of occupation, it should be realized that the remedies necessary for submitting a limit onto the control of a State will not be the same in all cases.

101. W. HALL, A TREATISE ON INTERNATIONAL LAW, 103 n.1 (7th ed. 1924); *Cf.* 1 L. OPPENHEIM, INTERNATIONAL LAW 450 (4th ed. 1928) who states that the taking of possession with the intention of acquiring sovereignty can only be done by a settlement on the territory.

102. 1 G. HACKWORTH, A DIGEST OF INTERNATIONAL LAW 399 (1940); Letter from Secretary of State Hughes to A.W. Prescott, May 13, 1924, Department of State file 811.014/101.

> [S]ubsequently, [to 1924] however, the presence intermittently of official personnel or licensed commercial enterprises, for example, during the summer months, was deemed sufficient . . . . At the same time, less exacting standards were introduced for uninhabited desolate or polar regions. Title could be completed with acts of sovereignty of less frequency and less magnitude. Each case apparently must be judged on its own merits.[108]

Concomitantly, the new approach received its initial judicial approbation internationally in Max Huber's Arbitral Award in the *Island of Palmas*:

> [M]anifestations of territorial sovereignty assume, it is true, different forms, according to conditions of time and place. Although continuous in principle, sovereignty cannot be exercised in fact at every moment on every point of a territory. The intermittence and discontinuity compatible with the maintenance of the right necessarily differ according as inhabited or uninhabited regions are involved, or regions enclosed within territories in which sovereignty is uncontestably displayed, or again regions accessible from, for instance, the high seas.
>
> . . . .
>
> If, however, no conventional line of sufficient topographical precision exists, or if there are gaps in the frontiers otherwise established, or if a conventional line leaves room for doubt, or if, as for example, in the case of an island situated in the high seas, the question arises whether a title is valid *erga omnes*, the actual continuous and peaceful display of State functions is in case of dispute the sound and natural criterium of territorial sovereignty.[104]

Judge Huber thus was the first to circumscribe the exceptions doctrine by putting relative bounds on it. Hence, exceptions notwithstanding, the minimum degree of effective control required to perfect title with such relaxed standards would be the actual continuous and peaceful display of state functions.

The decision received further judicial endorsement in the *Clipperton Island Arbitral Award*:

> It is beyond doubt that by immemorial usage having the force of law, . . . the actual, and not the nominal, taking of possession is a necessary condition of occupation. This tak-

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103. Hayton, *supra* note 91, at 599.

104. Island of Palmas Case, Hague Court Reports 2d (Scott), 83, at 92, 94 (Perm. Ct. Arb.), 2 U.N.R.I.A.A. 829 (1928).

> ing of possession consists in the act, . . . by which the occupying state reduces to its possession the territory in question and takes steps to exercise exclusive authority there. Strictly speaking, and in the ordinary case, that only takes place when the state establishes in the territory itself an organization capable of making its laws respected. But this step is . . . but a means of procedure to the taking of possession, and, therefore, is not identical with the latter. There may also be cases where it is unnecessary to have recourse to this method. Thus, if a territory, by virtue of the fact that it was completely uninhabited, is, from the first moment when the occupying state makes its appearance there, at the absolute and undisputed disposition of that state, from that moment the taking of possession must be considered as accomplished, and the occupation is thereby completed.[105]

The arbiter thus prescribed a further condition to the new approach. In addition to Huber's "actual, continous, and peaceful display of State function,"[106] Victor Emmanuel, arbiter in the *Clipper Island Arbitration*, stated that, in the case of *terra nullius*, if the land is "at the absolute and undisputed disposition of that State,"[107] then "from that moment the taking of possession must be considered as accomplished, and the occupation thereby complete."[108]

Applying these two judicial criteria to Antarctic history, can any single state claim to have perfected title before entry into force of the treaty regime? The answer would clearly be in the negative. Until the treaty regime, no state was able to assert a continuous display of authority in Antarctica throughout the year, and by the time effective year-long occupation was achieved, its concomitant, peaceful and uncontested display, had been ruled out by competing claims of other states. In applying the *Clipperton* criteria to Antarctica, the dangers inherent in applying formulae developed for a particular geographical entity (such as an island) to another area (such as a continent) must be recognized. While Clipperton Island is completely isolated and uninhabited, small, and capable of effective territorial occupation and administration

105. Clipperton Island Arbitral Award (Italy v. Clipperton Island) (1931) in 26 AM. J. INT'L L 390, 393-94 (1932).

106. Island of Palmas Case, Hague Court Reports 2d (Scott), 83, at 94 (Perm. Ct. Arb.), 2 U.N.R.I.A.A. 829 (1928).

107. Clipperton Island Arbitral Award (Italy v. Clipperton Island) (1931) in 26 AM. J. INT'L L. 390, 394 (1932).

108. *Id.* at 394.

in its entirety with only a few official representatives, the occupation of a continent is not amenable to so cavalier a treatment. In any case it could not be said that Antarctica was ever "at the absolute and undisputed disposition"[109] of any state within the present century, given the many diverse and often simultaneous expeditions mounted there. It therefore fails to fulfill the exceptions enunciated in the *Palmas* and *Clipperton Island* decisions.

The only acceptable "exception", if indeed it can be classified as such, would be the degree of administration which would be found sufficient to perfect title. This was recognized as a varying standard in the *Legal Status of Eastern Greenland* case, the major international decision concerning effective occupation previously discussed. It has been commented that despite the extreme leniency shown by the Permanent Court of International Justice in the *Eastern Greenland* case, authority in the Antarctic must be exercised at least as and when the occasion demands.[110] In formulating this standard, the court endorsed the view maintained by the Allies after the First World War as expressed in the Treaty of St. Germain-en-Laye: that the territories in question, that is, those primarily in the former Austro-Hungarian Empire, "are provided with administrative institutions suitable to the local conditions."[111]

Further support for this position was exhibited by Lindley during the inter-war years:

> [W]hat is sufficient will depend on all the circumstances. If the territory contains a large population or is one to which a good many traders resort, elaborate administrative machinery may be necessary. If, on the other hand, it is remote or small or incapable of accommodating more than a small or transitory population, a rudimentary organization may be all that is required; while in the case of small islands used merely for the purpose of a particular business, such as the catching

109. *Id.*

110. Waldock, *supra* note 87, at 334 *et. seq.* The only authority who has rejected the necessity of administration as a manifestation of effective occupation and necessary means of perfecting title to polar territories has been Toma (and to some extent Lakhtine):

> An additional argument in opposition to the principle of 'effective occupation,' advanced by the Soviet jurists, is the notion that, with regard to occupation of polar areas, it is not justifiable to maintain the demand for effective possession.

Toma, *supra* note 81, at 618 (citing Molodtsov).

111. Société des Nations. VIII RECUEUIL DES TRAITÉS 267 (1922), Armistice with Austria-Hungary. 42 Stat. 106 (1919).

> or curing of fish or the collecting of guano, the presence of an official or two may be sufficient.[112]

Finally, Smedal specifically endorsed this approach with reference to Antarctica:

> [F]or occupation in polar regions, there will not at present be any question of using military force. These regions are so sparsely peopled that orderly conditions can be maintained by much more simple measures.[113]

In summary, the only broadly accepted exception to the effective occupation doctrine is effective administration. While it is true that permanent settlement of polar regions is no longer an indispensable adjunct to perfecting sovereign title to territory in those areas, administration must still be adequate under the totality of the circumstances. Although this is not a satisfactory and easily applicable standard on which to conclude, the inherent inability to enunciate a more precise doctrine is evident.

VI. THE SECTOR PRINCIPLE

The sector principle is the one non-conventional mode of acquisition of territory in international law which is used to support the claims of some states in the Antarctic. However, it is submitted that regardless of the postures assumed by many of the treaty claimants, the sector principle is misapplied to Antarctica. First, it is an unjustified application of an Arctic principle itself misconstrued historically by the original proponents. Second, its modern application is based on what amounts to imperfect application in varying degrees of the *occupatio* mode. Finally, it is misapplied because where the sector principle is based on the continuity, contiguity, or Hinterland principle, these latter modes of claim, while espoused during the nineteenth century, are now rejected as valid principles in international law.

The Soviets have defined polar sectors as:

> [P]olar territories, delimited by definite co-ordinates, while all lands and islands within the sector, clear to the Pole, are considered the territory of the State which claims the sector as its own. The apex of the sector is the Pole, the lateral boundaries [are] determined by longitude (from the pole to the eastern and western borders of the corresponding State), the arc [is] someone's coastline or a certain parallel latitude.[114]

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112. Waldock, *supra* note 87, at 336 (citing Lindley).

113. SMEDAL, *supra* note 30, at 34.

114. Mezhdunarodnoe Pravo GOSUDARSTVENNOE IEDATEL'STUO YURIDICHESKOI LITERATURY, INTERNATIONAL LAW 269 (1951).

The supposed historic underpinnings of the sector principle were embodied in the 1825 Treaty between the United States and Russia,[115] the pertinent language of which was reincorporated in article 1 of the 1867 Treaty Concerning the Cession of the Russian Possessions in North America by His Majesty the Emperor of All the Russias to the United States of America.[116] Article 1 of that treaty provides that the eastern limit of Russian territory with that of United States (Alaskan) territory is as described in articles 3 and 4 of the 1825 Convention:

> [C]ommencing from the southernmost point of the island called Prince of Wales Island, which point lies in the parallel of 54 degrees 40 minutes north latitude, and between the 131st and 133rd degree of west longitude (meridian of Greenwich), the said line shall ascend to the north along the channel called the Portland Channel . . . and finally, from the said point of intersection, the said meridian line of the 141st degree, in its prolongation as far as the Frozen Ocean.[117]

Whereas the English text "as far as the Frozen Ocean" is ambiguous in that we do not know the extent of the term "as far as," the French parallel text fortunately leaves no doubt. It provides that the meridian line envisaged at the time did not continue right up to the North Pole through the frozen Arctic, but rather stopped at the ice barrier.[118] It can readily be appreciated that if this is the historical basis of Arctic sector claims, such as those posited by Russia and Canada, the basis is a poor one indeed.[119]

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115. Convention as to the Pacific Ocean and Northwest Coast of America, *signed* April 17, 1824, 8 Stat. 302, T.S. 298 (effective January 11, 1825).

116. Convention ceding Alaska, *signed* March 30, 1867, 15 Stat. 539, T.S. 301 (effective June 29, 1867).

117. Convention as to the Pacific Ocean and Northwest Coast of America, *signed* April 17, 1824, 8 Stat. 302, T.S. 298, art. 3, 4 (effective January 11, 1825).

118. The French text states, "et finalement du dit point d'intersection la même ligne meridienne du 141ème degré formera, dans son prolongement jusqu'à la mer glaciale, . . ." (emphasis added). Taking the primary meaning of the French "jusqu'à" as "up to" rather than "as far as," the meaning of the phrase becomes clear.

The author acknowledges with thanks the contribution of Mr. Gerald Schatz of the National Academy of Sciences who noted this textual dissimilarity between the two texts and provided him with a draft text of his article, *Transnational Science and Technology in the Absence of Defined Sovereignty; Developments in the Polar Regions and in Legally Similar Situations*, appearing in G. SCHATZ, SCIENCE, TECHNOLOGY AND SOVEREIGNTY IN THE POLAR REGIONS (1974).

119. Smedal indicates that such is indeed the case:

> [A]s a special argument in favor of the sector claim of the Soviet Union, reference has been made to the Treaty between the United States

The state responsible for enunciating the sector principle in its modern context was Canada. On February 20, 1907, N.P. Poirier, a Canadian Senator, recommended to the Senate that Canada should declare it had taken possession of the lands and islands lying between its northern coast and the North Pole.[120] This direct reference to the North Pole with respect to area claims of the Arctic led to a proliferation of other claims, including the Russian (Sturmer) Declaration of December 20, 1916,[121] which gave notice to the allied and friendly powers that Russia laid claim to several Arctic islands[122] which formed a northern extension of the Siberian continental mainland.[123]

> and Russia of 1867. In this Treaty it was stipulated that the boundary between the two States shall be the aforesaid meridian . . . and it is stated with regard to the boundary that it '. . . remonte en ligne direct [sic] sans limitation, vers le Nord jusqu'à ce qu'elle perde dans la Mer Glacial. [sic]'

SMEDAL, *supra* note 30, at 80. The French text cited by Smedal re-emphasizes the earlier conclusion as to meaning of "jusqu'à" for a meridian which "loses itself" or "disappears" when it reaches the "frozen seas" is hardly to be construed as one intended in the minds of its drafters as ending in the North Pole. *Cf.* SMEDAL, *supra* note 30, at 66-7:

> [I]n favor of the Canadian sector claim, a special reason has been stated which does not apply to sector claims generally. Reference has been made to the Treaty between Russia and Great Britain of 1825 relating to the boundary line between Alaska and Canada, where the expression is used that the meridian 141 degrees west shall be the boundary line 'right up to the Arctic' (jusqu'à la Mer Glacial). Whether this term means 'to where the Arctic begins.' or, 'as far as the Arctic extends,' is perhaps not quite clear, but the former interpretation seems to be the right one. If the term is understood to mean that a division of the Arctic regions was made by the Treaty, the division was in that event a matter between Great Britain and Russia which foreign States are not bound to respect if they have not consented to it.

Although not discussed in the article, it is clear that Smedal's last observation would weaken the historic argument even further by any application or construction of the principle *res inter alios acta.* See also PHARAND, *supra* note 30, at 87:

> More specifically, is the sector theory, invoked by Senator Pascal Poirier in 1907 in support of Canada's claim to Arctic islands north of the mainland, to be relied upon now to claim sovereignty right up to the Pole? On this point it might be recalled that Prime Minister Trudeau stated, in reply to a question in the House of Commons on March 10, 1969, that in his opinion, the sector theory did not apply to the waters or ice. This opinion is quite sound, considering the physical realities of the Arctic Ocean (footnotes omitted).

Id.

120. [1906-07] Debates of the Senate of the Dominion of Canada, 226-73 (1907).

121. *See* Lakhtine, *supra* note 24, at 708.

122. *E.g.*, Wilkitski, Czar Nicholas II, Tsarevich Alexsi Island, Starokademski and Novopashenni Islands and Henrietta, Jeannette, Bennett, Herald and Ouiedinenie, New Siberia and Wrangel.

123. *See* Lakhtine, *supra* note 24, at 708. A claim reasserted by the Russian Soviet Federated Socialist Republic by a Special Memorandum of November 4,

The British were the first to apply the principle to the Antarctic, promulgating the British declaration on the Falkland Sector of March 28, 1917, which, in Letters Patent of March 28, 1917, stated that the dependencies in question were deemed to include all islands and territories whatsoever between Longitude 20.00° W and 50.00° W, south of Latitude 50.00° S, and between Longitude 50.00° W and 80.00° W, south of Latitude 58.00° S.[124] Great Britain made a further sector decree in 1923, pursuant to Order in Council of July 30, 1923, stating that Ross Sector included all islands and territories between Longitude 160.00° E and 156.00° W, south of Latitude 60.00° S.[125] However, as in the Canadian example, it was stated that "Ross Sea must be considered to be part of the high seas, and it is not necessary to have a concession in order to carry on whaling there."[126]

The Soviets, while not recognizing sector claims in the Antarctic, have consistently maintained their initial claims in the Arctic. They have referred to the British examples already cited in substantiation of their own sector, maintaining that the reaffirmation of 1926 was based on the British, Falkland, and Ross sectors.[127] Lakhtine goes equally far in concluding:

> The question, then, of the legal status of the undiscovered arctic territories may be regarded as solved not only as a theory but by positive law. That is to say, *the said lands and islands being still undiscovered are already presumed to belong to the national territory of the adjacent Polar State in the sector of the region of attraction in which they are to be found.*[128]

Whatever the contentions of the various claimants may be, it must be pointed out that no matter what the purported extent of these several claims may be, a handful of states cannot legally contravene or nullify a well-established principle of law.

Another fundamental must be recognized in using Arctic sec-

1924 (both as to the above islands and as to the eastern boundaries of the 1867 Convention). The Soviet Decree of April 15, 1926, used similar language as its predecessors, stating: "toutes terres et îles découvertes ou qui pourraient être découvertes à l'avenir." *Id.* at 711.

124. SMEDAL, *supra* note 30, at 75.

125. *Id.*

126. *Id.*

127. BREITFUSS, DIE TERRITORIALE SEKTORENEINVERTEILUNG DER ARKTIS IM ZUSAMMENHANG MIT DEM ZU ERWARTENDEN TRANSANTARKTISCHEN LUFTVERKEHR, at 28 (1928). See also Toma, *supra* note 81, at 620.

128. Lakhtine, *supra* note 24, at 711.

tors as a benchmark in comparing them to Antarctic counterparts. First, as pointed out in the earlier discussion, the Arctic is a frozen ice cap without any geologic basement, whereas Antarctica is quite the opposite. Second, and perhaps most significantly, given the true nature of the sector theory, no continental mainland exists at any point near the Antarctic coasts, the nearest one being in South America at the Cape of Good Horn, opposite Palmer Peninsula, many hundreds of sea miles away. Were it not for this fortuitous conjunction of two opposing peninsulas, the nearest continental mainland would be hundreds of miles even further away.

In comparing the two regions, it is significant to note that a Russian, Molodtsov, stated clearly that "it would be a mistake to anticipate that the sector system should also be extended to the Antarctic."[129] This statement was in large part based on geographic continuity and the socio-economic implication that such proximity naturally entailed:

> [T]hese claims were justified as extensions northward to the pole of continental land masses which already project into the Arctic Circle . . . . In the Antarctic region there is no well-established State with a land mass extending into the Antarctic Circle and no islands offshore which a State could claim unto itself. In the Antarctic there is an isolated continent and each State claiming land there has chosen an area defined by longitudinal lines drawn from the South Pole at an angle sufficiently large to cover the continental territory covered.[130]

Such geographical contiguity was associated with certain natural socio-economic consequences which are completely lacking in the Antarctic example:

> [I]n the north there are narrow "ice" seas . . . close to the population centers of Europe and America, representing for the coast lands, aside from an economic, also a strategic interest . . . . In the south, there is a special ice-bound unpopulated continent . . . distant from population centers . . . .[131]

Smedal, in reviewing the facts marshalled above, rejects whatever substantiation there may exist in international law sup-

129. Toma, *supra* note 81, at 619 (citing Molodstov) (footnote omitted).

130. *Id.*

131. V. DURDENEVSKY, THE PROBLEM OF THE LEGAL STATUS IN THE POLAR REGIONS 111-114 (Moscow University, July, 1950).

porting the application of the rationale of Arctic sector claims to sector claims in the Antarctic:

> [T]urning now to the Antarctic regions, we find that no State has a territory continuing so far to the south that it is cut by the polar circle; nor is there, so far to the south, any territory effectively taken possession of by any State. It should therefore not be possible to make a sector claim, if it be based on the same foundation as used in the Arctic regions.[182]

Two other rationales lend support to this conclusion. First is a socio-ecnomic fact earlier enunciated by the Russians in differentiating the two antipodes. Although perhaps no longer valid, it involves the state experience in the Arctic. "The . . . line of reasoning is that only States subjacent to polar regions are sufficiently experienced to be equipped for work in the Arctic."[133] This, of course, would not apply to the Antarctic. The other point is a policy reason, similar to the *occupatio* rationale, which explains why the sector principle should not be accorded status:

> [T]he sector principle is not a legal principle having a title in the law of nations. This is partly admitted by those who uphold it. Nor should the principle be embodied in international law, for one reason because it aims at a monopoly which will doubtless delay, and partly prevent, any exploitation of the polar regions.[134]

It should further be observed that even were the fundamental differences not present, the Antarctic would not be suited to sector claims. For unlike the Arctic, the Antarctic has been, and promises to be, the center of increasing human endeavors of a permanent nature. Such presence would augur ill for states whose claims are not furthered by their effective presence in the continent. Even were sector claims recognized as inchoate titles, the activities of other states would render the later claims null and void. Further, the sectors themselves as presently constituted are contradictory and impractical:

> [I]n the Antarctic regions the basis of sector claims, as previously mentioned, is not clear. If we assume discoveries to be a consistent basis and let the State that can refer to discoveries plot their respective sectors on the map, we shall undoubtedly soon realize that principle is not practical; for the

132. SMEDAL, *supra* note 30, at 58.
133. PARACOUZIOK, SOVIETS IN THE ARCTIC 323 (1928) (citing Lakhtine).
134. SMEDAL, *supra* note 30, at 64.

> sectors will, in part, cover each other. A territory may lie in more than one sector.[135]

It is equally indefensible that a special sector regime should be established for the polar regions due to their inaccessible nature. Although discussed at some length under special exceptions to *occupatio*, the same exception theory has been utilized as the basis for the sector theory. It should suffice to point out that on no other terrestrial area of the earth have exceptions to the traditional modes of acquisition to territory been forwarded, no matter how inaccessible or inhospitable the area may be. The Sahara and the Himalayas are two excellent examples of this fact. In neither instance has some distant state been able to enter a claim to either area by a watered-down concept of acquisition; rather, the adjacent and surrounding states have asserted sovereignty over them by effective control and by propinquity thereto. The beauty of the inherent flexibility of *occupatio* and its adaptability to such circumstances is yet another reason for its application to Antarctica.

The two bases underyling all sector claims, no matter what theoretical base may be voiced in their support, is hopefully clear at this juncture. It is simply a recasting of the *occupatio* regime. This apparent fact is emphasized by the later action of sector claimants within their sectors:

> [I]t is of interest to observe how States that claim sovereignty in sector areas nevertheless attempt to take charge of lands lying in those areas by effective occupation. By so doing they show they fully realize that a territorial sovereignty which they may rightfully require to be respected by foreign States must be based on a more solid foundation than the sector principle.[136]

Thus, it can be concluded that the sector principle has not achieved the status of a legal principle in international law. However, it is possible that with the passage of time the principle may by custom become an accepted one. But as pointed out earlier, the practice of only a few States of the international community will not create a change in the international legal norm.[137]

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135. *Id.* at 62-3.

136. *Cf.* Dundee Courier and Advertiser, April 6, 1929, cited in SMEDAL, *supra* note 30, at 74.

137. *Cf.* Hayton, *supra* note 91, at 606-07. *But see* Waldock, *supra* note 87, at 338; Reeves, Antarctic Sectors, 33 AM. J. INT'L L. 519 (1939):

VII. OTHER RELATED THEORIES AND THE QUESTION OF EXTENT

As stated earlier, the sector theory has been based on other independent theories, the principle ones being contiguity, continuity, the *hinterland*, *uti possidetis*, national patrimony, and the "region of attraction." Some are developments of the past century, while others were first enunciated in the present one. Most are in themselves related, and often confused in the minds of their proponents. At times they are used interchangeably. With the exception of *uti possidetis* or national patrimony theories, it is submitted that as in the case of the sector principle, all have as their true basis the effective occupation rationale. For the sake of analysis each theory has been treated individually. However, it must be pointed out that much interplay and overlap exists not only among those principles under discussion, but also with the sector principle.

A. Contiguity Doctrine

The contiguity principle was sired during the colonial period of the past century.[138] When states laid down claims to new lands, as particularly in Africa after the 1880's, they did so initially on the strength of lands on the coasts of the areas claimed. As the security needs of coastal settlements required protection from incursions from adjacent coastal islands, it became a recognized custom among the imperial powers that such islands would be taken as subsumed under the power of the coastal occupying power. This entente was in reality a revival of an earlier practice whereby a discovering state claimed all islands along the coasts of the new land, and is attested to in the colonial charters granted by the English Crown to the American Colonies in the seventeenth and eighteenth centuries.

A perfect example of this trend was an exchange of notes November 2, 1911, between Secretary of State Lansing and Viscount Ishii, Ambassador of Japan:

> Whatever may be the economic and strategic factors ultimately to be disclosed, the adoption of the sector principle may assist greatly in the regulation and preservation of the whale industries. The United States has shown its interests in the matter by its ratification of the temporary treaty for the regulation of whaling. One may assert that the sector principle as applied at least to Antarctica is now a part of the accepted international legal order.

Id. at 521.

138. See notes 139 and 140, *infra.*

> The Governments of the United States and Japan recognize that territorial propinquity creates special relations between countries, and consequently, the Government of the United States recognizes that Japan has special interests in China, particularly in the part to which her possessions are contiguous.[139]

However, even in the nineteenth century it was understood as part of the entente that the islands had to be within some reasonable distance from the coast in order to be included within the contiguous area:

> Peru, following a suggestion of Lord Palmerston in 1834, asserted the proximity of the Lobos Islands to Peru would give her a prima facie claim to them, although they were over twenty miles distant. A similar basis was offered by Venezuela as a claim to the Aves Islands, by Haiti to Navassa, and among others, by Spain and later Argentina to the Falklands, although the latter are almost 250 miles from the mainland. All of these claims give rise to considerable controversy, the result of which seems to support Mr. Fish's contention in the *Navassa* case that the utmost to which the argument amounts "is a claim to a constructive possession, or rather to a right of possession; but in contemplation of international law such claim of a right to a possession is not enough to establish the right of a nation to exclusive territorial sovereignty."[140]

Lakhtine offers a second rationale in favor of contiguity. While supporting the theory's application to the Arctic areas, he injected it with a new rationale:

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139. Wright, *Territorial Propinquity*, 12 AM. J. INT'L L. 519 (1918) [hereinafter cited as Wright]. And further:

> In its recognition of territorial propinquity, the Lansing-Ishii agreement does not stand alone. An inspection of the cases shows then that they may be classified according as geographic proximity has been mentioned to justify (1) the annexation of territory, (2) the enjoyment of special economic privileges, (3) the exercise of extraterritorial jurisdiction, or (4) the protection of special political interests.

Id.

140. *Id.* *Cf.* Cole, *supra* note 43, at 40:

> [D]uring the period when the colonial powers recognized the creation of sovereignty by discovery and symbolic annexation, it was considered sufficient to claim an entire continuous region by symbolic annexation, by symbolic acts performed at some place along the coast of the new territory. Even after the need for effective occupation and settlement appeared the practice of States evolved various doctrines of constructive occupation of new areas based on the idea that extension of sovereignty to surrounding territory was incidental to the natural development of the settlement and was necessary for its military protection. This is known as the doctrine of continuity; where the same principle was applied to the islands offshore but beyond the territorial waters the doctrine was contiguity.

> The first is that no other proper apportionment of the Arctic can effectively be made. The second line of reasoning is that only states subjacent to polar regions are sufficiently experienced to be equipped for work in the Arctic.[141]

A third, more modern reason given in justification of the contiguity principle is a socio-economic one: that the contiguous mainland depends on offshore islands for subsistence. However, it would be difficult to make this argument for the Antarctic as Molodtsov indicates:

> [T]he Arctic has also an exclusive . . . economic value: For the population of the Arctic States the Arctic regions represent sources of existence. Therefore, the Arctic territories are inseparable from their base, that is, the territory of the adjoining State. The Antarctic regions, however, do not possess such a base and, therefore, cannot have such economic importance for any one of the world States, which certain regions of the Arctic may have for each of the adjoining countries.[142]

The closest possible argument that could be made would be in favor of Chile and Argentina. However, the Palmer Peninsula is so remote and divorced from any traditional economic connection of any standing with either country as to render any proponent argument almost negligible.

In summation, the contiguity principle should be seen only as an expression of effective occupation, having no intrinsic merit *per se*. Van De Heydte, *arguendo*, states:

> [I]f one considers on the contrary the so-called rule of contiguity to be the necessary consequence of a logical interpretation of the very principle of effectiveness and only a special case of applying that general principle, then one cannot regard geographic contiguity as conferring only an inchoate sovereign title. One has to admit that geographic continguity with an occupied region gives the same full and perfect sovereign rights as any actual occupation.[143]

But in conclusion he states unequivocably:

> The natural boundary lines of any application of the rule of contiguity are drawn, precisely, by its very origin from the general principle of effectiveness. Admitting the existence of such a rule, we only assert the existence of an individual

141. Toma, *supra* note 81, at 620 (citing Lahktine).

142. S. MOLODTSOV, SOUREMENNOE MEZHDUNARODNO-PRAVOVOE POLOZHENIE ANTARKTIKI (Contemporary International Legal Status of the Antarctic) 36-7 (1954).

143. Van der Heydte, *supra* note 84, at 470.

> case of applying the principle of virtual effectiveness as defined above. It is proper, therefore, to speak of contiguity only as far as one can speak also of virtual effectiveness.[144]

Finally, it must be recognized that an adjacent state's application of the contiguity principle to Antarctica, even were it not to founder on the great distances involved, would be inapposite in that the contiguity principle has traditionally embraced islands with continental coastlines. In the Antarctic example, it is either a projection of a continental coast to a continent or, conceptually worse, a projection from an island or islands to a *continent*. Applying the contiguity principle to the Antarctic would be an unwarranted extension of an already overstretched idea.

The Russians, in their sector decrees already discussed, specifically related their claims to the then undiscovered Arctic Islands. The Russian decree of September 20, 1916, claimed islands north of Siberia because they "formed a northern extension of the Siberian continental upland."[145] With the Russian minority view apart, the contiguity principle has now for all practical purposes fallen into desuetude and has no adherents in modern international law. In the *Palmas Island Arbitral Award*, it was stated, "the title of contiguity, understood as a basis of territorial sovereignty, has no foundation in international law."[146]

B. Continuity and Hinterland

Continuity and *Hinterland* are nearly identical principles and must be discussed together. They are of all the theories in this section the ones most intimately related to the issue of how far a settlement should extend inward. The only substantial differentiating feature between the two is that one has been applied in a majority of cases to claims in the temperate zones, the other to claims in the polar regions.

Generally speaking, both theories maintain that coastal settlements extend inward for varying reasons whether or not they

144. *Id.* See his earlier comment, *id.*, at 468:

> Yet to a more thorough observation, the so-called rule of contiguity (*Grundsatz der Geographischen Enheit*) is in no way opposed to the general principle of effectiveness, but it is on the contrary the logical consequence and natural application of that very principle in its intrinsic sense.

145. Lakhtine, *supra* note 24, at 708.

146. Palmas (Miangas) Island Arbitral Award, 22 AM. J. INT'L L. 867 (1928).

are occupied. It was contended that when a state took possession of a territory, it obtained sovereignty over the adjacent areas as being of importance for the occupying territories.[147]

The question of penetration of the interior of a new continent arose as early as the American colonial era and the early years of the Republic when the frontier boundaries of the former American colonies were found administratively inadequate to deal with westward expansion.[148] On the basis of estuarine occupation, the former American colonies, having attained independence, claimed sovereignty over the entire area in which the rivers, tributaries, and estuaries ran to the watersheds of such rivers, often including areas in the Appalachian and Blue Ridge Mountains several hundred miles inland. In similar manner the United States, in registering territorial claims with Spain after the Louisiana Purchase, forwarded the proposition that in demarcating portions of the Louisiana boundary, settled coastline areas extended inland up to the watershed of all rivers emptying into the coastline.[149]

As under the contiguity principle, the necessity for defense was also given in justification, as "effective occupation of a territory makes the sovereignty of the possessor extend over the neighbouring territories as far as is necessary for the integrity, security, and defense of the land actually occupied."[150]

The burgeoning of the principle was primarily associated with the last quarter of the nineteenth century, and an examination of its history in these decades is revealing. Again, as with the contiguity principle, the political etiquette of the colonial era dictated the establishment of some practical norm to govern the post-Berlin Conference land rush. As the interior of the dark continent proved difficult to penetrate, avoidance of rivalries among the occupying Powers gave rise to the emergence of the continuity/*Hinterland* principle in a meaningful way. As stated by Smedal:

> [W]hen the States, because of the demands for efficient occupation, were prevented from approaching territories which they did not control, it became usual in the nineteenth cen-

147. SMEDAL, *supra* note 30, at 43. See also the definition of "Hinterland" by Toma, *supra* note 81, at 620:

> "Hinterland" is generally understood to mean the land behind a coast, and not areas stretching from the continent towards the sea.

148. SMEDAL, *supra* note 30, at 43.

149. 1 L. OPPENHEIM, INTERNATIONAL LAW 511-512 (7th ed. 1948).

150. *Id.* at 512.

> tury to conclude agreements relative to so-called "spheres of influence and interest." Such a sphere means a territory in which a foreign State is politically interested. A contributory cause of the making of such conventions was the desire to evade conflicts. The States, for instance, agreed on dividing an unoccupied territory between themselves in such a way that each of them renounced its exercise of political influence in the part of the territory which was reserved to the other party. Frequently, the territory was situated behind a coast already occupied and it was called *Hinterland*. This term is also used to designate any sphere of interest.[151]

Far from becoming an accepted principle of international law, tacit *compromises* reached by the states in such cases were merely administrative agreements, never elevated to any more encompassing treatment.

The effect of exclusion of the continuity concept from the corpus of the law was evident in the Declaration of the West African Conference of 1885 emanating from the Berlin Congress of the same year:

> The present law, in view of the generally accepted Declaration of the West African Conference of 1885, would seem to justify no claims to territory beyond that effectively controlled, although the adjacent state may justly claim the right of notification, with an option to make good the *constructive* claim by actual occupation.[152]

In another contemporary observation on the "principle," Lord Salisbury, in a dispute between Portugal and Great Britain as to a region of Central Africa between Angola and Mozambique, stated:

> [T]he fact that the act of the Berlin Conference laid down certain conditions in Articles XXXIV and XXXV in relation to new occupations on the coast of Africa, did not in any way affect the well-established principles of international law in regard to the occupation of land in the interior.[153]

Far from being lax in prescribing duties incumbent on the occupying powers, the Conference stated that there was an obligation on the Powers to maintain in regions subject to their jurisdiction an authority and police force sufficient to ensure protection of per-

151. SMEDAL, *supra* note 30, at 44.

152. Wright, *supra* note 140, at 522 (footnote omitted).

153. M. LINDLEY, THE ACQUISITION AND GOVERNMENT OF BACKWARD TERRITORY UNDER INTERNATIONAL LAW 151 (1926).

sons, property and necessary freedom of trade and transit.[154] This clearly refers to the necessity of establishing effective control over the area claimed versus actual occupation, as already discussed. It can thus be inferred that even during its vogue as a governing norm in the nineteenth century, continuity and the *Hinterland* principles were not recognized as such.

Applying both principles to Antarctica, whether independently or in justification of the sector theory, no validity can be accorded them. It should furthermore be observed that several states, including Great Britain, have rejected attempts to apply the *Hinterland* principle in reverse (that is, in lieu of the extension from the discovered coast inland, an extension of the sector seaward from the coast so as to encompass islands in the high seas). Such an application is unwarranted and without precedent, especially given the dubious nature of Antarctic coast settlements themselves.

C. *Patrimony and Uti Possidetis*

The patrimony theory, with reference to Antarctica, is confined in practice to several South American states, notably Chile, Argentina, and Brazil. It is the South American version of the *uti possidetis* principle of international law. The "legal" precedents often given for the concept are the Papal bulls "*Inter Caetera*" of 1493 and "*Dudum siquidem*" of 1494.[155] The former divided the new world into two spheres, the line being one hundred leagues west of the Azore and Cape Verde Islands. The latter, elaborating the former, covered "all islands and mainlands whatever, found or to be found . . . in sailing or traveling towards the west and south, whether they be in regions occidental or meridianal, and oriental and of India." John II of Portugal agreed to accept *Inter Caetera* if the line were moved 270 leagues further west, which was agreed to in the Treaty of Toredesillas in 1494.[156]

Chile, relying on more recent history, has maintained that she succeeded to these rights, earlier vested in Spain, by right of "*uti possidetis* of 1810", at the time of the break with Spain.[157] *Uti possidetis* in international law has been defined as "a phrase

154. *Id.*
155. *See* note 74, *supra*; *see also* 1 C. HYDE, INTERNATIONAL LAW 165 (1922).
156. *Id.*
157. Hayton, *supra*, note 91, at 585.

used to signify that the parties to a treaty are to retain possession of what they have acquired by force during the war."[158] If such is the history and the definition, several problems immediately arise. First, at the time of the break with Spain, neither Spain nor her former colonies even knew of the existence or location of Antarctica, which was first sighted by von Bellingshausen ten years later. It is therefore not possible to maintain that Chile or Argentina obtained any part of Antarctica *vi et armis* as required. Second, under the general theory of state succession:

> Inasmuch as the principle is really a claim of "succession," Argentina or Chile cannot succeed to something the parent state did not have in her possession to give. In any case, it is extremely doubtful whether title to all lands held or discovered in the "general international neighborhood" passes automatically to a freed colony.[159]

Even were such claims to pass automatically, Chile and Argentina would be placed in the position of Spain and thus required to follow the prevailing mode of acquiring title to *terra nullius*: discovery followed by effective occupation.

With regard to the Antarctic, the national patrimony or *uti possidetis* principles should be discounted. As Hayton observed: the thrust of this therefore tries to get away from a *terra nullius* concept and therefore avoid the problems of discovery and occupation, for the patrimonialists traditionally have assumed a low profile in any substantial Antarctic undertaking.[160]

A related hybrid to the patrimonialist doctrine is evident in the current law of the sea negotiations taking place under the auspices of the United Nations in the Third United Nations Conference on the Law of the Sea, in which certain Latin and South American States, in the Santo Domingan Declaration, enunciated

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158. H. WHEATON, INTERNATIONAL LAW 627 (7th ed. 1944). *And see* Hayton *supra* note 91, at 585, who provides a broad description of the Argentine claim:

> [A]rgentine sovereignty . . . is based, among other reasons, on the aggregate of the historical antecedence of its title . . . maintained firmly in all circumstances by the Argentine Government [and] spiritually identified with the feeling of the nation's entire population; in the insuperable geographical position of the Republic; in the geological continuity of its land with the Antarctic lands; and the climatological influence that the neighboring polar zones exercise over its territory; and the rights of first occupancy; and the pertinent diplomatic measures; and, finally, in its uninterrupted activity in the same Antarctic terrain.

159. *Id.* at 601 (footnote omitted).

160. *See generally id.*

the patrimonial sea concept, another vague claim forwarded by the same group of states.

In conclusion, unless the patrimonial claimants color their aspirant titles to Antarctica with the traditional requisite activities, there is little merit and less logic in recognizing any of their claims.

D. Region of Attraction

This concept has been voiced only by Soviet jurists, in connection with Soviet sector claims in the Arctic. It is somewhat similar to the spirit behind the guidelines enunciated by the International Court of Justice in the *Anglo-Norwegian Fisheries Case*,[161] in that the theory stresses socio-economic links between the mainland and the offshore islands, and the interdependence of the mainland and island areas. Of course, the application of such ideas to undiscovered islands and lands uninhabited by the claimant state's nationals goes a great deal further in its import than the inclusion in the territorial sea of discovered islands inhabited by nationals of adjacent claiming states.

The major proponent of the doctrine, the Soviet jurist Lakhtine, saw it, as did the patrimonialists, as a means of avoiding the otherwise embarrassing requirements of effective occupation. In description and support thereof he states:

> Quite independently of this reasoning, the physical conditions and the policy of the Polar States compel this renunciating doctrine. We see indeed, that *regardless of discovery and regardless of effective occupation, the discovered lands and islands belong as a matter of fact to States* in the region of attraction in which they are situated.
>
> Hence, the third conclusion is inevitable, namely that *the doctrine of occupation of Polar territories must be replaced by the doctrine of region of attraction*.[162]

Hayton, in commenting on the theory, discounts its validity both as to the Arctic and to the Antarctic:

> It cannot be presumed that the rest of the international community has given up to states which are accidentally the closest all rights to unoccupied lands of possible strategic importance, whether or not currently susceptible of settlement or exploitation. Therefore severe limitations must be placed

161. [1951] I.C.J. 116.

162. Lakhtine, *supra* note 24, at 17. It should be noted, however, that the Soviets do not apply the principle to the Antarctic.

> on the use in international law of any concept involving "region of attraction," propinquity or contiguity. As an obvious consequence of the decentralized, semi-anarchical conditions of nation-state life, each state is concerned defensively, economically and otherwise with the area (land or sea) adjacent to its present territory. But if applied generally, the absurdity, even the impossibility of such a principle *in law*, seems clear. Argentina or Chile cannot claim Antarctic territories *merely* for reasons of "attraction." If the territory in question is *terra nullius*, then the ordinary mode of acquisition must be employed, though the *motivation* for prosecuting such acquisition may well reflect strategic considerations. If it is not *terra nullius*, the sovereign is not displaced because of another's continguity. "Attraction" of itself yields no title to the Antarctic or elsewhere.[163]

VIII. CONCLUDING REMARKS

The Eighth Antarctic Treaty Consultative Meeting, to be held in Oslo in 1975, shall address as an agenda item the question of mineral resource exploration and exploitation in the continent.[164] As a consequence of the curtailment of Near East oil shipments to the West and the artificial rise in cost to the developed and industrialized states occasioned by the reduced supply, Antarctic treaty partners shall seriously address the resources issue for the first time since 1959. The 1975 session of the Third United Nations Conference on the Law of the Sea shall give added impetus to the treaty partners to find a practicable interim, if not long range, solution to the resouces problem. Most probably the political desire to arrive at a workable solution will lead to the resolution of the issue in a political, if not strictly legal, manner. Given the fact that it would in all probability be more advantageous for the treaty partners to preserve the treaty regime and find a solution to the issue within its confines rather than risk the chance of opening a heretofore virtually closed frontier to the law of the sea arena and to possible eventual administration and control under the auspices of the United Nations, the partners will find themselves in accord. But ultimate long-range agreement can only be predicated upon a careful and traditional interpreta-

163. Hayton, *supra* note 157, at 604 (footnote omitted).

164. State Agenda as Adopted at Preparatory Conference to the VIII Antarctic Treaty (1974).

tion and understanding of the basis of sovereignty in Antarctica. Failure to reach such an agreement might well lead to the eclipse of a viable treaty regime, the demise of the *status quo*, and the application of the nascent "common heritage of mankind" concept to all of the last remaining frontier on earth.