

POLLUTION PREVENTION IN THE ARCTIC— NATIONAL AND MULTINATIONAL APPROACHES COMPARED*

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INTRODUCTION

In recent years, the many serious problems threatening our environment have finally begun to receive some of the attention they deserve. One aspect of this issue is ocean pollution, which began to emerge in its proper magnitude in 1967, with the Torrey Canyon disaster, an event which one could say marked the beginning of the Ecological Age, much as Hiroshima ominously portended the Nuclear Age.¹ The reaction to Torrey Canyon in particular and the increasing pollution of our seas in general has been marked by various efforts around the globe, of both a national and international nature. This study is primarily concerned with the recent legislative efforts of Canada to prevent the future destruction of the Arctic by pollution;² we shall also examine the multinational efforts of IMCO at dealing with the problem globally.

Our primary concern is with legal issues which arise as the increasingly serious problems of ocean pollution confront the present body of international maritime law. The interaction of these principles with the demands now being placed upon them also gives an insight into the workings of the international legal process, as attempts are made to deal with the challenges confronting it.

I. CANADIAN ARCTIC WATERS POLLUTION PREVENTION ACT

The Canadian act has two principal thrusts. It first of all prohibits the deposit of waste of any kind into the waters of the Canadian Arctic, except

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¹ Falk, *Inability of the Traditional Forms of Political Order to Adopt to Modern Problems of International Pollution*, in *Conference on International and Interstate Regulation of Water Pollution*, 9 COLUM. J. TRANSNAT'L L. 16 (1970).

² Arctic Waters Pollution Prevention Act, Can. Stat. 1970 c. 47. The Bill (C-202, 28th Parl., 2d Sess.) reprinted in 9 INT'L LEGAL MATERIALS 543 (1970) was introduced on April 8, 1970 and approved by the House of Commons on June 9, 1970 and by the Senate on June 17, 1970. Royal Assent was given on June 26, 1970. As of now the act has not been proclaimed; it is, however, considered law in that it is on the statute books, although not yet in force.

as authorized by regulations to be made [Article 4(1)]; violations by ships of any nationality subjects that violator to both civil and criminal liability, and such liability is absolute (Articles 6, 7). The second thrust attempts to prevent the polluting by the establishment of certain "Shipping Safety Control Zones", from which vessels are banned unless they comply with various regulations dealing with ship construction and safety features (Articles 11, 12). Perhaps the most notable and controversial aspect of the legislation is the area in which it is to be effective:

Except where otherwise provided, this Act applies to the waters (in this Act referred to as the "arctic waters") adjacent to the mainland and islands of the Canadian arctic within the area enclosed by the sixtieth parallel of north latitude, the one hundred and forty-first meridian of longitude and a line measured seaward from the nearest Canadian land a distance of one hundred nautical miles; except that in the area between the islands of the Canadian arctic and Greenland, where the line of equidistance between the islands of the Canadian arctic and Greenland is less than one hundred nautical miles from the nearest Canadian land, there shall be substituted for the line measured one hundred nautical miles from the nearest Canadian land such line of equidistance. (Art. 3(1)).

In attempting to evaluate the validity of this legislation, one is presented with myriad problems, ranging from factual questions of topography and geography to theoretical issues which push at the limits of the present body of international legal theory. With probably the longest coastline in the world, due primarily to the Arctic region, Canada is also presented with perhaps the most problematic region to define and administer of any coastal state. In determining the validity of her authority over the area, we must first consider her sovereignty over the land areas, which is necessary for an evaluation of any rights over water regions. We will then turn to efforts of an international nature which have been made at dealing with the problem of ocean pollution, and finally take a brief look ahead to what one may expect and hope for in the future.

A. *Sovereignty over Land Areas*

In determining the extent of Canadian control over Arctic land areas, it is necessary to make a brief historical survey of this area and its development, in order to trace the steps taken by Canada in securing what sovereignty she now has. Although the area has a most colorful and exciting history, it is not our purpose to explore that here, and the following will be only a brief sketch of the steps she has taken to establish sovereignty over the Arctic land areas by the various methods recognized in international law.

1. *Cession*

Canada's first claim in time over this area came about through cession, "the transfer of sovereignty over State territory by the owner-State to another State."³ This occurred by two grants from Great Britain, in 1870 and 1880.⁴ In the first, Britain ceded the former territory of the Hudson's

³ 1 L. OPPENHEIM, *INTERNATIONAL LAW* 547 (8th ed. H. Lauterpacht 1955).

⁴ G. W. Smith, *Sovereignty in the North: The Canadian Aspect of an International Problem*, in *THE ARCTIC FRONTIER* 194 at 201-4 (R. Macdonald ed. 1966) [hereinafter Smith].

Bay Company, comprising Rupert's Land and the Northwest Territory; and although the international boundaries of this area were well established (forty-ninth parallel north, one hundred and forty-first meridian west), the precise extent of the territory was not otherwise delimited, although it did not include the more remote areas of Baffin Island and other islands to the north, which even the Hudson's Bay Company did not consider within its domain.

In the latter grant, Britain transferred to Canada "all British possessions on the American continent, not hitherto annexed to any colony."⁵ Such sweeping vagueness could likely be explained both by the indefinite state of knowledge about the area at the time, as well as by Britain's desire to include as much as possible in the grant, thereby preventing U.S. claims in the region. However, the value of both grants is questionable for two reasons: Britain's own claims, particularly in the more remote areas of the Arctic, were very weak. Moreover, it is generally recognized, both in theory and practice, that cession must be followed up with occupation of the territory to be effective; this was even more important then than is the case today.⁶

2. *Geographical Bases for Sovereignty*

International law also recognizes claims to sovereignty which are based upon geography; those relevant to this discussion are the "hinterlands" doctrine, as well as continuity and contiguity. These are invoked by a state which, while effectively occupying part of a territory, claims control over adjacent areas, sometimes of great size. The hinterlands doctrine, which was generally invoked as concerned remote areas difficult to occupy, was advanced by the European powers in their scramble for territory in Africa. According to the principle of continuity, a state occupying a small portion of a continuous land mass is deemed to have sovereignty over the whole mass, including less accessible regions; when the same principle is invoked to support claims to islands lying near to a state's territory but outside its territorial sea, it is called contiguity,⁷ which is applicable in the case of the Arctic Archipelago.

In addition to these, another geographical theory peculiar to the earth's polar regions has been proposed as securing the archipelago region for Canada; this is generally known as the sector theory. This unusual hybrid theory has been much discussed and debated, not only in relation to Canada's claims to sovereignty over land areas, but to sea areas as well. The theory, as first announced by Canadian Senator Pascal Poirier in 1907,⁸ claimed that each state with a continental Arctic coastline automatically controls all the islands lying between it and the North Pole which are enclosed by longitudinal lines drawn from its eastern and western extremities to the Pole. Thus, the Arctic region is divided into sectors, like pieces of a huge pie, with each coastal state gaining control over its own sector.

⁵ CANADA GAZETTE, Oct. 9, 1880.

⁶ I. L. OPPENHEIM, *supra* note 3, at 550.

⁷ Waldock, *Disputed Sovereignty in the Falkland Island Dependencies*, 25 BR. Y. B. INT. L. 311, at 341-42 (1948); LINDLEY, *THE ACQUISITION AND GOVERNMENT OF BACKWARD TERRITORY IN INTERNATIONAL LAW* 234-35 (1926).

⁸ Canada, SEN. DEB., Feb. 20, 1907, 266-73.

This theory is not unique to the Arctic; it was also applied in the Antarctic, where several nations advanced sector claims to that continent, although these were much disputed, and have been immobilized by the Antarctic Treaty of 1961.⁹ In any event, the two polar regions are easily distinguishable, Antarctica being a land mass separated from its nearest neighbor by hundreds of miles, whereas the Arctic is largely sea, surrounded by land areas.

As the theory was first stated by Poirier, the principle would apply to all land areas lying in the sector, whether discovered now or in the future, although he was silent as to ice and water. Although the theory was not officially accepted by the government when first proposed, in the following years Canada proceeded to stake out claims in accord with it, and one can find frequent government statements endorsing the theory; indeed, Canada did about everything possible to make it the official position short of passing a statute to that effect.

The Soviet Union has also made sector claims, first in 1916 and more sweepingly in 1926.¹⁰ Between them, these two states control over half the Arctic "pie," which is likely a reason that none of the other Arctic states with a theoretical claim to a sector have advanced it.

The theoretical bases for this principle are vague and muddled. The original proposition of Poirier seemed to be based on a concept of automatic ownership by each state fronting on the Arctic. Arguments have also been based on the idea of contiguity and the hinterlands, as well as on the general notion of "regions of attraction."

Although the theory has been endorsed by a few international jurists, the large majority have been skeptical at best, if not denying its validity outright. The question has never been presented to an international tribunal, but it would almost surely be invalidated if it were. Even Canada's own adherence to it has been by no means unanimous.¹¹ In fact, it can be said that in general, the stature of all the geographically-based theories has been declining in recent decades. The hinterlands doctrine was refuted by the Berlin Conference of 1885;¹² and contiguity as a sole basis for sovereignty was disavowed in the *Island of Palmas* awards.¹³ An apt statement in this regard is the following: "By the end of the 19th century, international law had decisively rejected geographical doctrines as distinct legal roots of title and had made effective occupation the sole test of the establishment of title to new lands. Geographical proximity, together with other geographic considerations,

⁹ Smith at 216-20.

¹⁰ Lakhtine, *Rights over the Arctic*, 24 AM. J. INT. L. 703 (1930).

¹¹ Head, *Canadian Claims to Territorial Sovereignty in the Arctic Regions*, 9 MCGILL L. J. 200, at 207-10 (1963).

¹² "Any pretensions of the hinterland doctrine to give legal title were scotched once and for all by Art. 35 of the General Act of the Berlin Conference of 1885 which recognized an obligation in an occupying state to exercise authority in the areas occupied. For article 35 has ever since been accepted as declaratory of a general rule of international law." Waldock, *supra* note 7.

¹³ 2 U.N. REPORTS OF INT'L ARBITRAL AWARDS 829, 854 (1928).

is certainly relevant, but as a fact assisting the determination of the limits of an effective occupation, not as an independent source of title." ¹⁴

3. Occupation

The importance of actual occupation of a territory as a basis for sovereignty can hardly be overemphasized; indeed, Canadian spokesmen have recognized this fact in relation to the Arctic: "You can hold a territory by right of discovery or by claiming it under some sector theory but where you have great powers holding different points of view the only way to hold that territory, with all its great potential wealth, is by effective occupation." ¹⁵

Two requirements are generally considered necessary for occupation to be effective: possession and administration. Possession "can only be accomplished by a settlement on the territory, accompanied by some formal act which announces both that the territory has been taken possession of and that the possessor intends to keep it under his sovereignty." ¹⁶

As for the second part, "the possessor must establish some kind of administration thereon which shows that the territory is really governed by the new possessor." ¹⁷

Shortly following the cessions by Britain, Canada set out to strengthen her claims through occupation of the area. Beginning in 1895, the government first passed legislation concerning the area and followed this up by dispatching representatives to assert Canadian sovereignty there by the performance of such acts as patrolling certain of the waters, licensing whalers, collecting customs duties, and performing other ceremonial acts. ¹⁸ Initially this activity did not pass without the objection of other interested nations; among the more notable of these were several from the United States, ¹⁹ and as well as Norway ²⁰ and Denmark. ²¹ However, as Canadian activity and authority in the area gradually increased, the interests and claims of other nations diminished correspondingly.

Canada's claims in this area have also been aided by a changing trend in international law, towards a lessening in the amount of actual possession which is required for sovereignty to be considered effective, particularly in thinly settled regions. This trend can be noted in the cases of Bouvet Island

¹⁴ Waldock, *supra* note 7.

¹⁵ Statement of Alvin Hamilton, Minister of Northern Affairs and Natural Resources, 4 H. C. DEB. 35 (Aug. 14, 1960).

¹⁶ Oppenheim, *supra* note 3, at 557.

¹⁷ *Id.*

¹⁸ Smith 204-05.

¹⁹ *E.g.*, the Alaska boundary dispute, settled in 1903; Perry's historic journey to the North Pole, which culminated with his claim of "the entire region and adjacent" for the United States; and the behavior of American whalers in the region. *Id.* at 205-06.

²⁰ Norwegian explorers, notably Amundsen and Sverdrup, made claims in the area. *Id.*

²¹ A dispute arose with Denmark over the control of Ellesmere Island. *Id.* at 207-08.

(1928),²² Palmas Island (1928),²³ Clipperton Island (1931),²⁴ the *East Greenland Case* (1933),²⁵ and most recently, the dispute over the Minquiers and Ecrehos Islands (1953).²⁶ The *East Greenland Case*, a dispute between Denmark and Norway, is particularly useful as an analogy with the Canadian archipelago. In this case, the P.C.I.J. determined that Denmark held a valid claim to all of Greenland even though its actual settlement was small, and the island was over ninety per cent uninhabited. The court here emphasized that the important factors are the intention and will to act as sovereign, along with some exercise and display of such authority. Among the factors noted by the Court were the levying of fines, uncontested claims, grants of trading monopolies and legislation in terms of sovereignty throughout the area.²⁷

Evaluating the Canadian situation against this background, we find that following the Second World War, her activity has continued to expand, as she has spent increasing amounts of money in the area in her efforts to occupy and administer it. In the vast area known as the Northwest Territories, which includes the Arctic Archipelago, the Department of Northern Affairs and Natural Resources (now called the Department of Indian Affairs and Northern Development) was established to manage the area, and it has set up a few schools, medical facilities, and offices to administer and coordinate these services with other government programs, such as social welfare and selling cooperatives. She has also been exercising judicial activity in the Arctic region.²⁸ Detailed accounts of these administrative structures are available,²⁹ but it is not our purpose to describe them here. The important point is that, whether one looks at the questions from the standpoint of some geographical theory or by the more pragmatic standards of effective occupation, the only possible conclusion would seem to be that Canada has by now succeeded in extending her sovereignty not only over her large northern land mass but also to the islands lying to the north of this and extending to the permanent polar icecap. The situation existing in the water and ice to the north of this is somewhat more controversial and difficult to appraise, but in any event, sovereignty over such territory is not vital to the matters to be considered herein. Having established this, we can turn to a consideration of the extent of legitimate Canadian sovereignty over the water areas.

B. *Law of the Sea: Introduction*

The law of the sea is one of the oldest bodies of principles of international law, and despite recent attempts at codification,³⁰ it is still not without

²² 1 G. H. HACKWORTH, DIGEST OF INTERNATIONAL LAW 468-70.

²³ Arbitral Award in the Island of Palmas Case, Hague Court Reports (Scott) 83, at 100-1 (Perm. Ct. Arb. 1928).

²⁴ 134 BRITISH AND FOREIGN STATE PAPERS 842-46 (1931).

²⁵ Legal Status of Eastern Greenland, [1933] P.C.I.J., Ser. A/B, No. 53.

²⁶ The Minquiers and Ecrehos Case (United Kingdom v. France), [1953] I.C.J. 47.

²⁷ *Supra* note 25 at 46-50.

²⁸ E.g., Regina v. Tootalik E4-321, 71 W.W.R. (n.s.) 435 (N.W.T.), *rev'd on other grounds*, 74 W.W.R. (n.s.) 740 (1970).

²⁹ See, e.g., Lantis, *The Administration of Northern Peoples: Canada and Alaska*, in THE ARCTIC FRONTIER 89 (R. Macdonald ed. 1966).

³⁰ Hague Codification Conference (1930); U.N. Conference on the Law of the Sea, U.N. Doc. A/C.13 (1958).

ambiguities and points of contention. Numerous treatises have been written on the international law of the sea,³¹ and it is not our purpose here to attempt to cover this field, but only to give the briefest outline of recent developments and the present state of the subject, as a necessary background for a consideration of the validity of the Canadian claims in the area.

In general, the sea areas of the world are now divided into four general zones: internal waters, the territorial sea, a contiguous zone, and the high seas. Internal waters are all those lying within the baseline of the territorial sea, essentially all fresh water and certain salt water areas, such as bays, ports, and waters surrounding coastal islands in some cases. These areas are completely subject to the jurisdiction of each state, just the same as land areas. The territorial sea is the narrow belt lying just outside the coast of each state, over which states have traditionally exercised certain powers.³² The exact width of this sea, and the extent of the legitimate powers, are both questions which have caused considerable controversy for centuries. The contiguous zone lies outside the territorial sea, and to the extent that it is recognized, is an area in which states can exercise more limited powers than in the territorial sea. The high seas comprise all the rest, and are beyond the regulatory powers of any state.

Many aspects of both the territorial sea and, more recently, the contiguous zone, have been the subject of considerable controversy and attempted codification; included among these are their respective breadth, method of delimitation, and the jurisdictional rights which may validly be exercised therein. The classic formulation for the territorial sea, originating early in the eighteenth century, was that it should extend seaward to the limit of a shore-based cannon. This came to be known as the three-mile rule, and it gradually gained increasing, albeit never universal, acceptance.³³ But until the early part of the 20th century, the range of differing claims tended to be quite limited. The Hague Conference of 1930³⁴ attempted to codify an international rule, and although a majority of states adhered to the three-mile rule, the prevalence of views advocating four, six, or twelve miles prevented codification, and demonstrated that the three-mile rule was not sufficiently marked to warrant categorization as a rule of customary international law.

A later attempt was made to deal with this matter at the Conference on the Law of the Sea at Geneva in 1958. The participants were successful in drafting four conventions concerning the seas,³⁵ but again no agreement was reached regarding the width of the territorial sea. It should be noted that, al-

³¹ A few of the outstanding works are: M. McDUGAL & W. BURKE, *THE PUBLIC ORDER OF THE OCEANS* (1962); C. J. COLOMBOS, *THE INTERNATIONAL LAW OF THE SEA* (6th ed. rev. 1967); H. A. SMITH, *THE LAW AND CUSTOM OF THE SEA* (3d ed. 1959).

³² Smith 231.

³³ *Id.* at 233.

³⁴ League of Nations Conference for the Codification of International Law (1930).

³⁵ Convention on the Territorial Sea and the Contiguous Zone, Convention on the High Seas, Convention on Fishing and Conservation of the Living Resources of the High Seas, and Convention on the Continental Shelf, all adopted by the U.N. Conference on the Law of the Sea, April 29, 1958. U.N. Doc. A/C.13/L.52-L.55 (1958).

though Canada is not herself a party to the Convention on the Territorial Sea and Contiguous Zone, thirty-seven other nations are, which is sufficient to consider it relevant evidence of customary international law. In what was perhaps the major development in this area, the two main supporters of the three-mile sea, the United States and United Kingdom, shifted their support to a Canadian proposal that the territorial sea be standardized at six miles, with a further six-mile contingent zone, in hopes of finding a compromise, and although this received a simple majority, it lacked the necessary two-thirds vote. As no agreement was reached, both countries retreated to their traditional three-mile claim. In 1960, a second Geneva Conference was held to deal only with the questions of the territorial sea and contiguous zones. The six-six proposal again received the greatest popular support, but lacked one vote of the required two-thirds majority, so the question was again left unresolved.³⁶ No subsequent international conference has been held on the subject, although one is planned for 1973.³⁷

It can thus be seen that in recent years there has been a trend toward the widening of the breadth of the sea over which states claim jurisdiction. The chief United States delegate to the Geneva Conference was clearly aware of this trend, as he predicted that, as no agreement was reached, there would be an increasing tendency toward the adoption of the twelve-mile sea, which may ultimately achieve recognition in customary international law.³⁸ This trend has indeed been the case; according to a recent study, there are now more than fifty states claiming a territorial sea of twelve miles or more, including a dozen, mostly in Latin America, claiming 200 miles offshore, as within their jurisdiction, with only twenty-five nations still holding to the traditional three-mile limit.³⁹ It is even more revealing to note that a large number of newly independent states have proclaimed a twelve-mile sea in just the last decade. There can be little doubt that state practice is now establishing the twelve-mile limit, and barring an extreme reversal in this trend, this will likely soon be recognized as the international norm.

In this regard, it is important to note that at the same time as she passed the Arctic Waters Pollution Prevention Act Canada amended her Territorial Sea and Fishing Zones Act; one of the changes involved the extension of her territorial sea from three to twelve miles.⁴⁰ She had previously claimed a nine-mile contiguous zone for the regulation of fishing interests, but this area was assimilated into her enlarged territorial sea. Although this paper is not primarily devoted to a consideration of the validity of this act, it is clear that she has the trend in state practice supporting her, and it would be difficult to launch an effective argument against this move.

³⁶ M. McDUGAL & W. BURKE, at 530-47.

³⁷ Time, August 16, 1971, at 31.

³⁸ Arthur Dean, 42 DEPT. STATE BULL. 251, 259-60 (1960).

³⁹ *Limits and Status of the Territorial Sea, Exclusive Fishing Zones, Fishery Conservation Zones and the Continental Shelf*, in 8 INTL. LEGAL MATERIALS 516 (1969).

⁴⁰ An Act to Amend the Territorial Sea and Fishing Zones Act, Can. Stat. 1970 c. 68. The Bill (C-203, 28th Parl., 2d Sess., reprinted in 9 INTL. LEGAL MATERIALS 553 (1970) has the same dates of introduction, approval, and assent as the Arctic Waters Pollution Prevention Act and those parts requiring proclamation have not yet been proclaimed.

Besides the question of the proper breadth of this area, the even more important question of precisely what powers can be exercised within it has also been controversial, and has obvious relevance to the Canadian act. The general principles upon which such authority rests are the security of the state, and furtherance of its commercial, fiscal, and political interests, and the exclusive exploitation and enjoyment of products.⁴¹ However, the precise legal nature of the territorial sea has been, and still is, somewhat unclear. The most extreme view espoused by a few international jurists, says that it is within the absolute sovereignty of the littoral state, much like the inland waters. However, a larger number of publicists hold to the view that it is only "subject to sovereignty", but not within the states' complete control. A third, slightly different formulation holds that the littoral state holds a "bundle of servitudes" over its territorial sea; the sovereignty is qualified, and certain activities, such as peaceful navigation, can't be excluded.⁴² The theoretical nature of the territorial sea is thus still unclear, and likely will be for some time to come.

The traditional formulation of the right of a foreign vessel to navigate in a state's territorial waters is termed the right of innocent passage; the problem arises in the attempts to define this elusive term. The first explicit international recognition of the competence of a state to legislate vis-à-vis its territorial waters came in the Hague Convention of 1930, which stated that the territorial sea is considered as part of the state's territory, over which the state exercises sovereignty to the extent that it can provide regulations with which passing vessels must comply (Article 6). Moreover, although the right of innocent passage was recognized, it was further provided in Article 3 that "passage is not innocent when a vessel makes use of the territorial sea for the purpose of doing any act prejudicial to the security, public policy, or fiscal interests of that state." Thus, states were left with considerable discretion for classifying passage as non-innocent, and when the preparations began for the later Geneva Conferences, there was a desire to define more precisely the legitimate interests of the coastal state, and to specify the regulations it may impose on passing ships.

However, when the International Law Commission attempted to draft such rules preparatory to the 1958 Convention, its recommendations were so broadly stated that little was left to the right of innocent passage.⁴³ The 1958 Convention drafters recognized this and attempted to reduce the wide discretion given to coastal states to classify passage as non-innocent, but its result, the Convention on the Territorial Sea and Contiguous Zone, ultimately had the opposite effect. Article 14(4) states in this regard that: "Passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal State. Such passage shall take place in conformity with these Articles and with other rules of international law." Thus, the discretion given a coastal state is very broad. Furthermore, another Article states that: "Foreign ships exercising the right of innocent passage shall comply with the laws

⁴¹ C. J. COLOMBOS, *THE INTERNATIONAL LAW OF THE SEA* § 95 (6th rev. ed. 1967).

⁴² *Id.* at § 98.

⁴³ M. McDUGAL & W. BURKE, at 249.

and regulations enacted by the coastal State in conformity with these Articles and other rules of international law, and, in particular, with such laws and regulations relating to transport and navigation." (Article 17.) Thus, the framers of the Convention made an implicit distinction between two types of harmful acts; one type, which qualifies the passage as non-innocent, empowers the littoral state to prohibit passage entirely; whereas, according to Article 17, it would seem to be possible for a vessel to be in non-compliance with certain laws or regulations of the coastal state and yet be within its right of innocent passage. It seems somewhat illogical to have two such categories. It would seem that acts in violation of such regulations are inherently non-innocent; indeed, these are generally considered just two terms for the same concept.⁴⁴

Thus, the restriction of Article 17 is closely linked with the notion of innocent passage, and it is not clear whether there was an intent on the part of the drafters at Geneva to create a separate category of prohibited acts or not. Be that as it may, it is interesting to note Article 6 of the Hague Convention of 1930, which corresponds closely with Article 17. Article 6(b) enumerated various interests which a coastal state may legitimately protect; among them are "the protection of the waters of the coastal state against pollution of any kind caused by vessels." This same statement was listed in the Commentary to Article 17 of the 1958 Convention, rather than in the body of the article, but it is hard to imagine any reason why this interest would be less deserving of protection in 1958 than it was thought to be at that time. If anything, considering the proliferation of shipping in general and oil tankers in particular, the opposite would seem to be the case.

C. *The Canadian Legislation*

Against this framework we can begin to examine the substance and validity of the Canadian legislation. The first thing to note is its scope of application: it applies to waters in the Arctic area extending out one hundred miles from the "nearest Canadian land". However, the extent of this has never been determined, as we have already seen, nor is it further defined in the act. The legislators have thus chosen to leave the precise extent of coverage vague, perhaps purposely. The act could conceivably be interpreted to extend all the way to the Pole, under the sector theory, and depending upon how one chooses to classify ice. However, there can be no doubt that it is meant to apply to that route popularly known as the Northwest Passage,⁴⁵ which is at present the primary reason for shipping interest in this region.

⁴⁴ *Id.* at 259-60.

⁴⁵ The group of straits generally considered as making up the Passage are, from east to west, Lancaster Sound, Barrow Strait, Viscount Melville Sound, and finally, either McClure Strait or Prince of Wales Strait. The latter is more easily navigable, but less desirable politically, in that it is less than six miles wide, and thus clearly within Canada's territorial waters, under even the more limited three-mile territorial sea rule. McClure Strait is wider, but is often impassable; thus, on the historic voyage of the Manhattan, the American crew tried repeatedly to get through this way, but finally were forced to give up and use the narrower strait. In any event, Barrow Strait is less than twenty miles wide, so that under Canada's new territorial sea claim, this is also territorial waters. See *Science News*, April 25, 1970.

The most important aspects of the legislation provide that, but for limited exceptions, all persons and ships are absolutely prohibited from depositing waste of any type in these waters (Article 4(1)) and absolute liability is imposed upon violators (Article 7(1)). Of potentially even broader implications is the provision for the creation of Shipping Safety Control Zones by the Governor-in-Council, within which ships must comply with regulations concerning hull structure, navigational aids, qualifications of personnel and time and route of passage, or be prohibited from passage (Article 12). The Governor-in-Council is also empowered to require evidence of financial responsibility from those wishing to navigate in these areas (Article 8) to certify ships wishing to navigate there, and to order the removal or destruction of ships in distress, which are either depositing waste or are likely to do so (Article 13).

Furthermore, the legislation creates Pollution Prevention Officers (Article 14) with rather broad powers, including that of boarding any ship within a safety control zone to ascertain whether or not it is in compliance with the regulations (Article 15(3a)). If it is not, he can order it to leave the zone, and, if any pollution has resulted, he can order other ships in the vicinity to assist in the clean-up and control of the waste (Article 15(3)c). Moreover, if the officer "suspects on reasonable grounds" that an offense has been committed, including that of not providing evidence of financial responsibility when required, he may seize the ship and its cargo anywhere in the arctic waters "or elsewhere in the territorial sea or internal or inland waters of Canada" (Article 23). Furthermore, the act gives Canadian courts jurisdiction over any offence as if the defendant were a person ordinarily within the court's jurisdiction.

The task of analyzing the validity of the act is made more difficult by the fact that the basis upon which Canada rests her jurisdiction to legislate in this area is never made explicit. Upon an examination of the legislative history of the bill, one can find expressed several viewpoints on this matter, in varying degrees of ambiguity.⁴⁶ It is at least clear that the scope of the act's application goes beyond the area of the territorial sea, and that the claim is for something less than complete sovereignty, but beyond these points, interpretation becomes more difficult. From remarks of legislators and Ministers, it would appear that the most prevalent theories which have been expressed view the act as either a limited functional application of authority over a contiguous zone, or a claim of jurisdiction over the entire archipelago as a single entity.⁴⁷ Indeed, one can find statements supporting these theories, as well as others, in the act's history as well as in later government pronouncements. Of course, the remarks made by Canadian spokesmen need not correctly express international law; the important question is whether the act can be justified under any principle or principles, the question we shall now turn to.

A central issue in this whole question of the act's validity concerns the right of innocent passage. Canadian spokesmen have repeatedly maintained

⁴⁶ *E.g.*, 6 H.C. DEB. 5941-43, 5969 (April 16, 1970).

⁴⁷ *Id.*

that the passage of an oil-laden tanker through the difficult Arctic route, because of the risk of severe damage, is inherently non-innocent,⁴⁸ or, at least, that such passage falls within the Article 17 right of regulation by the coastal state.⁴⁹ A judgment on this question depends in large part upon one's interpretation of the concept of a state's "security"; the idea that environmental protection can be included is rather recent, but not necessarily erroneous. Moreover, it is clear from the history of unsuccessful attempts at the formulation of a more precise definition of the innocent passage concept that there is some consensus that a coastal state should have a wide discretion in deciding which rights it can legitimately protect.

If the Canadian position on innocent passage is accepted, as I feel it should be, at least a substantial part of the act is legitimized, as parts of the Northwest Passage are within Canada's territorial waters, particularly with her expanded twelve-mile territorial sea. Moreover, the geophysical peculiarities of Canada's Arctic arguably increase her territorial waters to the very irregular coastline and the existence of numerous small islands, each of which has its own territorial area.

A factor further complicating an analysis of the area is the presence of large quantities of ice in the region, both connected to the land and floating. Unfortunately, international law says little about these at present. In the case of ice attached to the land (called fast ice), there is authority for subjecting it to the same territorial sea limits as water.⁵⁰ This conclusion could also be supported by considering the chemical similarity between ice and water; but of course, one could just as well stress the physical similarity to land, along with the fact that it can be occupied and controlled. In a recent case involving an Eskimo accused of unlawfully hunting a female polar bear with young on the sea-ice off-shore from Pasley Bay, the Canadian court exercised jurisdiction, the judge holding that sea-ice extending off from the land has been part of Canadian territory since the British transfers of 1870 and 1880.⁵¹ Both positions have some historical support,⁵² but too little has been said about the question to reach any conclusions.

This region also has large quantities of floating ice, ranging from smaller pieces, called pack ice, to huge ice islands, some of which are up to three hundred square miles, which drift around the Arctic Ocean at a slow rate, sometimes running aground in the Arctic Archipelago. Some have already

⁴⁸ "It is the Canadian position that any passage threatening the environment of a coastal state cannot be considered innocent since it represents a threat to the coastal state's security." Statement of Mr. Allan Beasley, on April 29, 1970, in *Minutes of Proceedings and Evidence Before the House Standing Comm. on External Affairs and National Defence No. 25*, at 25: 11 (April 29, 1970).

⁴⁹ "Canada cannot accept any right of innocent passage if that right is defined as precluding the right of a coastal state to control pollution in such waters. The law may be undeveloped on this question, but if that is the case, we propose to develop it." Statement of the Hon. Mitchell Sharp, Minister of External Affairs, 6 H.C. Deb. 6015 (April 17, 1970).

⁵⁰ Smith 236.

⁵¹ *R. v. Tootalik* E4-321, 71 W.W.R. (n.s.) 435 (N.W.T.), *rev'd* on other grounds 74 W.W.R. (n.s.) 740 (1970).

⁵² Smith 237.

been occupied by both Americans and Russians, and both have entered the Canadian sector in so doing.⁵³ Besides being a potential source of friction, these raise further interesting questions for the international lawyer. For example, are such islands subject to sovereignty? If so, under what conditions? What is the result when they drift from high seas to territorial waters, or from one sector to another?⁵⁴ Although the proper treatment for these is no more settled than that for pack ice, some interesting cases have already arisen concerning them. An early one involved an illegal gambling house upon ice just outside the Alaskan territorial limits near Nome. In this case the American authorities ignored the technical question and asserted their authority over the activity.⁵⁵ A much more recent and interesting case involves an alleged murder of an American technician on Fletcher's Ice Island, a United States research station floating in the Canadian sector, about three hundred miles from the North Pole.⁵⁶ The accused, another American, was indicted by the Justice Department, which described the island as "a vessel on the high seas." However, as soon as the case of *U.S. v. Escanilla* began, the Canadian government entered a diplomatic reservation to the effect that it would not consider itself bound by the decision. This case presents several of the questions already raised in this discussion, and if Canada were to claim jurisdiction based on the assertion that the alleged crime took place in her territorial waters, a truly precedent-setting decision could result and many of the questions raised here could be definitively answered. However, Canada has so far chosen not to do so, and we thus have only further additions to the already lengthy list of questions concerning the Arctic area.

Unfortunately, due to the paucity of decisions and even discussion on the question of the treatment of ice, I can do little beyond simply raising these questions. However, I urge that the statement issued by Canada shortly after the legislation was passed certainly bears careful consideration:

It is idle, moreover, to talk of freedom of the high seas with respect to an area, large parts of which are covered with ice throughout the year, other parts of which are covered with ice most of each year, and where the local inhabitants use the frozen sea as an extension of the land to travel over it by dogsled and snowmobile far more than they can use it as water. While the Canadian Government is determined to open up the Northwest Passage to safe navigation, it cannot accept the suggestion that the Northwest Passage constitutes high seas.⁵⁷

Although there may be parts of the arctic waters which are high seas, the passage itself would appear to be in large part within Canada's territorial waters.

Indeed, it would seem that Canada could have protected the Northwest Passage adequately by simply enacting legislation within her broadened terri-

⁵³ *Id.* at 248-50.

⁵⁴ See Pharand, *The Legal Status of Ice Shelves and Ice Islands in the Arctic*, 10 *CAHIERS DE DROIT* 461 (1969).

⁵⁵ Rolland, *Alaska, Maison de Jeu établie sur les glaces au-delà de la limite des eaux territoriales*, 11 *REVUE GÉNÉRALE DE DROIT INTERNATIONAL PUBLIC* 340-45 (1904).

⁵⁶ *Time*, Sept. 28, 1970, at 58.

⁵⁷ Canadian Reply to the U.S. Government, 9 *INT'L LEGAL MATERIALS* 611 (1970).

torial sea, without taking the controversial step of applying the regulations to the vast arctic waters area. Why she chose the more controversial course is open to speculation. Possible explanations could be a strong feeling for the necessity of making a definitive declaration of at least some type of control over the area in the wake of increasing American involvement there, as well as a general frustration with the entire international legal process as it now functions.

D. *Maritime Law and the Canadian Act*

1. *Contiguous Zone*

Beyond those areas in which Canada can regulate navigation by virtue of their status as territorial waters, there also exists an additional contiguous zone in which she can arguably enact certain regulations. As the international law of the sea has developed, this term has come to stand for at least two different concepts. Historically it has been used to refer to an area outside the recognized territorial sea over which states claimed authority for limited purposes. In more recent years, efforts have been made to standardize this belt as to size and types of powers, and hence "contiguous zone" has taken on a more specific, defined meaning. However, as we shall see, states continue to exercise certain powers outside their officially claimed "contiguous zone", a fact which must also be recognized.

Shortly after the earliest claims of territorial sea authority, there followed jurisdictional claims of a less comprehensive nature beyond its limits. The earliest such claims concerned customs and revenue laws; for example, both Great Britain and the United States claimed authority to board and search foreign vessels for such purposes many miles outside the territorial sea as early as the late 18th century.⁵⁸ The United States took particularly stringent measures during the Prohibition Era. A similar example are the "hovering" laws, enacted by many states, which authorize jurisdiction over foreign vessels which may be hundreds of miles offshore.⁵⁹ Of more recent origin is the practice of claiming jurisdiction over a contiguous zone for the purpose of establishing exclusive, or at least regulated, fisheries.⁶⁰ Other examples for purposes of pollution control⁶¹ and nuclear tests⁶² can be found.

As is the case with the territorial sea, the contiguous zone has also been the subject of international conventions. The question of its proper width has already been discussed; no decision was reached after the failure of the six-six proposal at both Geneva Conventions, although it was agreed that its maximum breadth should be no more than twelve miles from the territorial sea baseline (Article 24(2)). As for the permissible jurisdiction over the contiguous zone, the ILC proposed such a zone, to extend not more than twelve miles beyond the territorial sea baseline, for the prevention and punishment of infringements of a state's customs, fiscal, and sanitary regulations within its territory or territorial sea. This position was essentially adopted by

⁵⁸ McDUGAL & BURKE, at 585-87.

⁵⁹ *Id.* at 588.

⁶⁰ *Id.* at 642-43.

⁶¹ Part II *infra*.

⁶² McDUGAL & BURKE, at 771-73.

the Geneva Convention on the Territorial Sea and Contiguous Zone in 1958:

1. In a zone of the high seas contiguous to its territorial sea, the coastal State may exercise the control necessary to:

- (a) Prevent infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea;
- (b) Punish infringement of the above regulations committed within its territory or territorial sea. (Article 24(1).)

Taken literally, this formulation seems to be rather weak, in that it gives the littoral state only the power to prevent harm to its territory and territorial sea, through such means as surveillance, inquiry, and search, with no real power to prescribe proper conduct. Indeed, the United States delegate stated that he would have preferred the adoption of a stronger position, giving the coastal state power to punish activities within the contiguous zone having deleterious effects in the territory or territorial sea, even though the offending vessel never entered the territorial sea itself.⁶³ As it now stands, such a weak formulation of power will likely cause many states to simply broaden their territorial seas in order to protect themselves to the extent they deem necessary; this may be one explanation for the current trend. However, this is one area of sea law where it is particularly true that actual practice, that is, what states actually do and allow, goes far beyond the official codifications. As we have already seen, there are many examples of jurisdiction claims beyond the prescribed distance from shore, although such areas are not generally referred to as "contiguous zones" as such.

2. *Treatment as Archipelagic Unit*

Besides basing her claim of jurisdiction on an expanded contiguous zone theory, there are other constructions upon which Canada can arguably support her legislation. One of these regards the entire area as a sector over which Canada enjoys automatic rights, but as we have seen, this has never received general acceptance in international law. But in addition to this, Canada can also claim that the entire archipelago is properly treated as a single unit or entity, thus making the waters internal, and subject to total Canadian sovereignty. Among the various theories concerning archipelago treatment, this formulation represents an extreme position. At the other extreme, the position taken is that there can be no special treatment for archipelagoes; each island is to be considered independently, with nothing beyond its own territorial sea and contiguous zone. Most of the present theorists and states stand somewhere between these two extremes.⁶⁴

There are many coastal states with archipelagoes of one sort or another, and there seem to be nearly as many different views as to how such an area is to be treated. Neither publicists nor international conventions have been able to reach any form of consensus on this matter, although some generalizations are possible. Most agree that the waters may form a unit so long as the islands are sufficiently close together. For example, following World War I,

⁶³ *Id.* at 628.

⁶⁴ Evensen, *Certain Legal Aspects Concerning the Delimitation of the Territorial Waters of an Archipelago*, U.N. Conference on the Law of the Sea, U.N. Doc. A/C.13 (1958).

the Institut de Droit International set the distance at twice the width of the territorial sea. At the 1930 Hague Conference, the subcommittee considering this question reached the majority view that treatment as a group is permissible so long as the distance between islands doesn't exceed ten miles; however, the Convention as a whole could reach no agreement on this question.⁶⁵ The ILC Report of 1956 gave no opinion on the matter, due to disagreement on the breadth of the territorial sea and a lack of technical information on the subject. The 1958 Geneva Conference had no greater success in this regard; all proposals made were withdrawn, and the only agreement reached was that the question required further study. The apparent consensus was in favor of the continuation of customary development.⁶⁶

In the consideration of archipelagoes, there is generally a distinction drawn between two main types: coastal archipelagoes, and those which are outlying. Probably the best known of the coastal variety in the international law field is Norway's which owes its fame to the *Anglo-Norwegian Fisheries Case*,⁶⁷ which concerned the validity and proper method of drawing straight baselines along Norway's coast. The I.C.J., while noting the fact that there is no set rule for dealing with archipelagoes, upheld Norway's practice of connecting the outermost points of her coastal archipelago with straight baselines, some of which were over forty miles long, with everything within being internal waters. In so doing, the court listed three principles for drawing such baselines when a coastal archipelago is involved: 1) The baselines should follow the general direction of the coast; 2) there must be a close dependence of the territorial sea on the land domain and 3) there should be peculiar economic interests evidenced by long usage.⁶⁸ These criteria have since been adopted by the Geneva Convention on the Territorial Sea (Article 4). The court rejected the contention that the baselines must be limited to ten miles, and in fact some are several times that long.

There are several other states with coastal archipelagoes which follow a similar method: Sweden, for example, as well as Finland, Yugoslavia, Saudi Arabia, Egypt, and Cuba.⁶⁹ Similarly, it would seem that Canada, by drawing straight baselines connecting the outermost points and islands along her deeply indented coast, could include rather large areas of sea as internal, and use the lines thus drawn as the baseline for her territorial sea; she is in fact preparing to do this through her amended Territorial Sea and Fishing Zone Act, in which she has empowered the Governor-in-Council to issue the appropriate list of points.⁷⁰ Such a move would be open to the objection that, according to Article 5(2) of the Geneva Convention on the Territorial Sea: "Where the establishment of a straight baseline in accordance with Article 4 has the effect of enclosing as internal waters which previously had been considered as part of the territorial sea of the high seas, a right of innocent passage, as provided in Articles 14 to 23, shall exist in those waters." However,

⁶⁵ *Id.*

⁶⁶ McDUGAL & BURKE, at 417.

⁶⁷ [1951] I.C.J. 116.

⁶⁸ *Id.* at 133.

⁶⁹ Evensen, *supra* note 64.

⁷⁰ An Act to Amend the Territorial Seas and Fishing Zones Act, Can. Stat. 1970 c. 68 Art. 3, reprinted in 9 INT'L LEGAL MATERIALS 553 (1970).

Canada could respond by pointing out that the legal nature of these waters has never been determined, and they are thus not within the meaning of this article. Moreover, Canada is not a party to the Convention, and thus its binding effect on Canada is at least questionable.⁷¹ Finally, this article is at odds with customary international law as found in the *Fisheries Case*, where it was held that there is no right of innocent passage in the newly-enclosed internal waters.⁷²

Thus, although the Norwegian case may be somewhat helpful to the Canadian situation, the great differences between these countries' archipelagoes, both physical and historical, renders a direct analogy very difficult. A large part of that decision was based on Norway's historic claims over her archipelago, which are much more firmly rooted than those of Canada in the Arctic. Furthermore, whereas Norway's archipelago is clearly of the coastal variety, the formation of Canada's is difficult to classify; large parts of it could as well be considered outlying.

For the outlying, or mid-ocean, archipelagoes, there has been no definitive statement as to what states can properly claim and regulate. As of today, the majority of them claim standing to be treated as a unit. Among these are the Philippines, the Faeroes, Iceland, and Galapagos Islands (for which Ecuador claims baselines up to 147 miles in length). Those claiming only treatment as individual islands are for the most part possessions of the United States and United Kingdom such as Hawaii, the Fijis, and Cook Island.⁷³ However, it is necessary to note in this regard that few of the claims for treatment as a unit are generally recognized by other countries, particularly when the baselines involved are long. Such claims have always been contested, sometimes quite firmly, when they have involved important shipping routes. Thus, we again can draw no firm conclusion, due to the paucity of developed international law in this area.

In evaluating any claim by Canada to special treatment of this area, two additional related theories must also be taken into account: the concepts of historic waters and international straits.

3. *Historic Waters*

As its name suggests, this concept rests on a claim to an area based on the historical exercise of authority over it by the state advancing the claim. General discussion of this concept has been rather limited; one suggested definition says that such waters are "those over which the coastal state or states, or their constituents, have traditionally exercised and maintained their sovereign ownership, either by provisions of internal legislation and jurisdiction, or by deeds and writs of the authorities."⁷⁴

⁷¹ See *North Sea Continental Shelf Cases*, 8 INT'L LEGAL MATERIALS 340, 360 (1969).

⁷² [1951] 1 L.J. 116.

⁷³ Evensen, *supra* note 64.

⁷⁴ Submitted by American Institute of International Law to International Conference of American States, 1933.

Pollution Prevention in the Arctic—National and Multinational Approaches Compared
Gary Sutton**

Although the concept of historic waters has not been a topic of widespread discussion by scholars or conferences, the more specific matter of historic bays has received greater consideration, and as the theories are basically the same, it is useful to consider their treatment. The traditional conception was that usage is the sole root of historic title, and although there is some variation among authorities, it is generally considered that both national usage and acquiescence by other states is necessary. A more recent theory to be advanced places greater emphasis on the role of necessity. If a state's vital interests are sufficiently compelling, this is enough on which to rest claim of right to a bay; however, this view would appear to be a minority position.⁷⁵ The burden of proof of historic title rests on the state making the claim, and there must be shown not only the claim of sovereignty, but also its effective exercise. As for the time factor, there is of course no precise limit, but the terms generally used to describe the time requirement are "of long standing," "universal," "confirmed by time," or "well-established."⁷⁶ Continuity is also important for such a claim.

Evaluating all the factors as best one can, it would seem to be hard to support a Canadian claim to this area on the basis of historic waters. Although she has exercised control over many of the islands for some time, and can assert a valid historic claim over certain of the waters, Hudson's Bay, for example, the sea areas involved here are vast, and she certainly would be unable to show a long history of regulation over them, nor has there been general acquiescence to whatever claims she has made. Moreover, any evaluation of a claim to control over these waters must also consider the doctrine of international straits.

4. *International Straits*

Those bodies of water called international straits have always been considered as a special group in international law, and given some form of special treatment. Their present definition and treatment was influenced rather much by the *Corfu Channel Case*,⁷⁷ a controversy involving the right of British warships to pass through a narrow strait between Albania and some offshore islands. The case was decided in favor of freedom of passage, the Court determining that this was an international strait due to "its geographical position connecting two parts of the high seas and the fact that it is being used for international navigation."⁷⁸ The Court further broadened its definition by stating it to be immaterial that the strait is not a necessary, but only an alternate route between two parts of the high seas concerned. When the ILC met preparatory to the Geneva Conference, the influence of the *Corfu Channel Case* was clearly evident in its definition of an international strait: "one normally used for international navigation between one part of the High Seas and another or the territorial sea of another state."⁷⁹ The Geneva Convention generally followed this definition, the only change being the dele-

⁷⁵ *Historic Bays*, Memorandum by the Secretary-General of the United Nations, U.N. Doc. A/C.13/1 (1958).

⁷⁶ *Id.*

⁷⁷ *Corfu Channel Case*, [1949] I.C.J. 4.

⁷⁸ *Id.*, at 28-29.

⁷⁹ Art. 17(4), Int'l L. Comm'n Report, U.N. Doc. A/3158 (1956).

tion of the word "normally" (Article 16(4)), a change seemingly designed to reduce the amount of international navigation necessary for a strait to be deemed international.

However, even considering this broadened definition, one still has difficulties in showing the Northwest Passage to be such a strait. It has never been so designated in any type of convention or agreement, and in a study done preparatory to the 1958 Geneva Conference purporting to discuss all straits which constitute routes for international traffic, thirty-three such routes were dealt with, but the Northwest Passage was not among them.⁸⁰ Canada, as would be expected, rejects any contention that it is such a strait, pointing out quite correctly that it has not attained such status either by customary usage or conventional international law.⁸¹ However, one must also admit that the passage constitutes one of the most strategic possibilities for international transport, and if it is ever opened up for navigation, as appears likely to be the case in the future, it would seem to be appropriate for categorization as an international strait.

However, even if this should occur, it must be noted that the littoral state is not deprived of all rights for regulation of such an area. The most important fact to note here is that passage still must be innocent. It is again useful to refer to the *Corfu Channel Case*, for although the channel involved there bears no physical resemblance to the Northwest Passage, and that case concerned a warship carrying out a minesweeping operation in conditions of great tension, some of the principles the Court applied are worth noting. The Court showed a strong preference for free passage, stating that, as long as passage is innocent, it can be exercised without the previous authorization of the coastal state. Moreover, the coastal state is not allowed to prohibit innocent passage in peacetime, although in exceptional circumstances it may issue regulations with regard to passage.

The Geneva Convention bears the mark of this case, as an examination of the relevant portions (Article 16) reveals the treatment to be accorded such areas. Assuming the Passage is to be considered an international strait (which, as we have shown, is not at all clear), Canada would still be left with the right to prevent passage that is non-innocent (Article 16(1)), and although innocent passage could not be suspended (Article 16(4)) (see Appendix), foreign ships would still be required to obey the laws and regulations of the coastal state (Article 17). Thus, even if we take the position that the Passage is international, Canada is still left with the power to protect her own interests in the area, one of which would seem to be pollution control.

5. Further justifications

Before leaving our analysis of traditional maritime law, it may be useful to consider some additional principles which, though not directly applicable,

⁸⁰ Kennedy, *A Brief Geographical and Hydrographical Study of Straits which Constitute Routes for International Traffic*, U.N. Conference on the Law of the Sea, U.N. Doc. A/C.13.

⁸¹ Canadian Reply to the U.S. Government, 9 INT'L LEGAL MATERIALS 611 at 612.

have some bearing on the present question. One of these concerns authority for fishing conservation. The 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas⁸² provides that "[a]ll States have the duty to adopt, or to co-operate with other States in adopting, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas" (Article 1(2)). The Canadian legislation is, in large part, an attempt to do precisely this, and it should be emphasized that the above article is phrased in terms of a duty. The article is limited to each state's nationals, but to so limit the act would render it useless as an attempt to safeguard the living resources of this area.

Moreover, another article of this same Convention provides that "[a] coastal State has a special interest in the maintenance of the productivity of the living resources in any area of the high seas adjacent to its territorial sea" (Article 6(1)). Regarding this "special interest", it is further provided that "any coastal State may, with a view to the maintenance of the productivity of the living resources of the sea, adopt unilateral measures of conservation appropriate to any stock of fish or other marine resources in any area of the high seas adjacent to its territorial sea, provided that negotiations to that effect with the other States concerned have not led to an agreement within six months." (Article 7(1)). These regulations are meant to protect fisheries, but to extend the protection to the entire ecological environment, as Canada has done, would seem to be both logical and defensible. The act is broader in scope than what is provided in this Convention, but it seems likely that only through such comprehensive legislation could Canada adequately protect her fishing interests.

One can find further support for this legislation in the Convention on the High Seas,⁸³ which contains two articles dealing specifically with pollution (see Appendix, Article 24, 25). The relevant international organizations and conventions referred to therein are considered in greater depth in Chapter II but I submit that the Canadian legislation is at least within the spirit of those articles.

Of course, an analysis of the act need not be limited to the traditional maritime framework; indeed, it should by now be evident that, due to the uniqueness of the Arctic region, the traditional maritime principles are in many respects not truly apposite here anyway. The act could also be defended on the basis of the ancient but poorly-developed doctrine of self-help, which has been described as a "mass of contradictory precedents, dogmatic assertions, and vague principles."⁸⁴ In any event, this theory was transformed from political excuse to legal doctrine with the *Caroline Case*, in which Webster, in his famous note to Lord Ashburton, required a show "of the necessity of self-defense, instant, overwhelming, leaving no choice of means . . . that they did nothing unreasonable . . . with no other available means to bring about the result needed. . . ." ⁸⁵

⁸² U.N. Conference on the Law of the Sea, U.N. Doc. A/C.13/L.52-L.55 (1958).

⁸³ *Id.*

⁸⁴ Jennings, *The Caroline and McLeod Cases*, 32 AM. J. INT'L L. 82 (1938).

⁸⁵ *Id.*

There have been some claims in recent times that the doctrine has been limited by Article 51 of the U.N. Charter (see Appendix) to situations involving an armed attack, although such a view does not appear valid; the better view would seem to be that Article 51 refers only to self-defense to the extent to which armed force is resorted to in order to repel an attack.⁸⁶

The "overwhelming threat" in this case is, of course, the hazard of oil pollution, and the fact that Canada is claiming extra-territorial jurisdiction can arguably be justified by the principle that states may take measures against acts performed outside their territory having deleterious effects within. The classic statement of this right can be found in the *Lotus* case,⁸⁷ although the P.C.I.J. did not face the problem of getting jurisdiction over the defendant, since the defendant French ship willingly entered Constantinople. More recently, the *Trail Smelter Arbitration*⁸⁸ supports the proposition that damage to a state caused from outside its territory must be compensated for. However, the whole concept of self-help is indeed vague at this point, and has met with considerable criticism.

6. Summary

By this point in the discussion, if not indeed earlier, it is difficult to resist a feeling of confusion and futility in attempting to evaluate the validity of the Canadian legislation through the traditional approach of maritime law. The vagaries and variations in the different concepts of the international law of the sea provide a scanty basis for attempting to delimit national authority in this area, and one can find arguments both for and against almost any of the measures in the act in the present body of maritime law. It is indeed difficult to fault the Canadians for withdrawing from the jurisdiction of the I.C.J. as regards this act, as it is difficult to disagree with their assessment that "where no law exists, or where law is clearly insufficient, there is no international common law applying to the Arctic seas, we're saying somebody has to preserve this area for mankind until the international law develops."⁸⁹ Moreover, it seems inappropriate to judge Canada's attempts at making new law in this area by the standards of the old law. The point is that it is the inadequacy of the old standards that has brought about the need for new principles in this area. Indeed, many of today's accepted principles of maritime law were initiated by unilateral assertions; among these are the present concept of contiguous zone authority, and the Truman Proclamation on the Continental Shelf.

Perhaps the traditional approach of attempting to set precise limits on the width of the territorial sea and contiguous zones, and to define the powers which may be exercised therein, may no longer be a workable method of solving the problem of preserving the ecological balance of the oceans. The destructive powers unleashed by oil tanker spills, as well as other sources of pollution, show no respect for the limits of territorial seas and contiguous

⁸⁶ *Accord*, 1 D. O'CONNELL, INTERNATIONAL LAW 317 (2d ed. 1970).

⁸⁷ Case of the S.S. *Lotus*, [1927] P.C.I.J., Ser. A., No. 10.

⁸⁸ *Trail Smelter Arbitration*, (1938:1941) 3 R.I.A.A. 1905.

⁸⁹ Canadian Prime Minister's Remarks on the Proposed Legislation, April 8, 1970, in 9 INT'L LEGAL MATERIALS 601.

zones. It would seem that a more flexible approach to both the extent of the sea areas and the powers which may legitimately be exercised therein may be a better means for determining the appropriate extent of such protective legislation. Perhaps the distance from shore at which various powers may legitimately be exercised should be determined not by the simple measurement of miles, but by a critical consideration of the requirements of the coastal state and the relation between its needs and the acts performed on the high seas. Such an approach is suggested by Professor McDougall, wherein one evaluates the various needs and interests involved. Among the appropriate factors for consideration, he lists: 1) the interest sought to be protected, 2) the significance of this interest to the coastal state, 3) the scope of the authority asserted, 4) the relation between the claimed authority and the interest at stake, 5) the nature and significance of the inclusive uses affected, and 6) the possibility of alternative measures.⁹⁰

As regards the concept of the contiguous zone, many eminent jurists have noted the futility and impracticality of attempts at setting precise limits on its extent. On his point, McDougal states that: "Until more effective general community institutions of world public order are created, there appears to be no reasonable alternative to a recommendation that the contiguous zone concept be maintained as a highly flexible device, capable of adaptation to secure the reasonable protection of any exclusive interest shared by states."⁹¹ Moreover, [t]he historic function of the contiguous zone concept has thus been that of authorizing coastal states unilaterally to secure a reasonable protection of their limited exclusive interests, without permitting the more drastic expansion of their continuing, comprehensive competence associated with internal waters and the territorial seas."⁹²

When considered from this approach, it is hard to deny Canada's right to enact and enforce this legislation. She clearly has a strong interest in preserving the delicate ecology of the Arctic (as does, to a lesser extent, the rest of the world), and her measures do not appear to go beyond what is reasonable and necessary. Moreover, her claims are for a limited purpose, and are not of the exclusive, comprehensive nature one associates with "sovereignty", whatever that concept may imply in this regard, which is itself not at all clear. McDougal's words would again seem appropriate:

It is sometimes considered important to determine whether the area affected by coastal authority is sufficiently near to the coastal state to warrant honoring the claim. The question for policy in this instance, however, relates not to the number of miles from the coast at which occasional exclusive competence is claimed but to the functional relationship between authority claimed and the exclusive interest allegedly requiring protection. It is familiar knowledge that the effects of interactions at sea may be projected for very considerable distances, and it would seem necessary to take this into account in determining the reasonable reach of coastal authority.⁹³

The Canadian view, or at least some views which have recently been ex-

⁹⁰ McDougal & Burke, at 579-80.

⁹¹ *Id.* at 583.

⁹² *Id.* at 578.

⁹³ *Id.* at 584.

pressed by certain Canadian spokesmen, would seem consistent with such an approach; for instance:

Canada regards maritime sovereignty as a bundle of jurisdictions which is kept whole and complete within the relatively narrow territorial sea but which may be broken up for the purpose of exercising specific limited forms of jurisdiction for specific functional purposes beyond the limits of the territorial sea or even in areas where there may be a claim to territorial sovereignty but where functional requirements do not demand assertion of a full claim to sovereignty.⁹⁴

Canada is indeed attempting to meet a serious challenge here, and it seems overly legalistic to condemn certain of her measures on the basis of an imaginary hypothetical boundary about whose width there is little agreement and in a region whose topography makes such boundaries difficult to draw anyway. Of course, Canada has indeed specified a zone of a particular breadth, but by defining the geographical scope of the legislation as broadly as she has, she is attempting to designate an area sufficiently large to be sure of protecting the interests involved. Moreover, when one also considers the various powers which states have traditionally exercised beyond their territorial seas and officially claimed contiguous zones, the Canadian act acquires greater acceptability. The fact that the regulatory zone extends offshore further than that usually claimed by other states should also be considered in light of the fact that the area is indeed unique, and perhaps more stringent precautions are required to give her the same amount of protection which other states can achieve through slightly less comprehensive regulations.

II. INTERNATIONAL EFFORTS AT DEALING WITH OIL POLLUTION

The first international convention relating to marine oil pollution was signed in 1926 in Washington, but was never ratified. Eight years later, the Communications and Transit Organization of the League of Nations met at Geneva to deal with intentional discharges of oil. There was interest shown in the Conference, but its work was interrupted by the war.⁹⁵ Following the war, the U.N. Maritime Conference, established by the Economic and Social Council of the U.N., met in Geneva in 1948 and adopted, among other things, a Convention for the establishment of an organization to deal with various shipping problems, to be called the Inter-Governmental Maritime Consultative Organizations (IMCO).⁹⁶ Its stated purposes were, among others, "[t]o provide machinery for co-operation among Governments in the field of governmental regulation and practices to technical matters of all kinds affecting shipping engaged in international trade, and to encourage the general adoption of the highest practicable standards in matters concerning maritime safety and efficiency of navigation . . ." (Art. 1(a)). Other stated purposes concerned business practices and restrictive shipping practices. IMCO was given a constitution similar to other specialized agencies of the U.N.: a large Assembly, smaller Council, and Secretariat under the U.N. Secretary-General.

⁹⁴ Remarks by L. H. J. Legault, Canadian Dept. of External Affairs, at Lima Meeting on the Law of the Sea, Sept., 1970.

⁹⁵ *Pollution of the Sea by Oil*, U.N. Doc. ST/ECA/41 (1956).

⁹⁶ Johnson, *IMCO: The First Four Years*, 12 INT'L & COMP. L.Q. 31 (1963).

The first full-scale conference dealing with the problem was held in London in 1954, in which was drafted the International Convention for the Prevention of Pollution of the Sea by Oil,⁹⁷ which was signed by twenty countries and came into force in 1958, at which point IMCO officially came into existence. The original Convention was primarily concerned with the regulation of deliberate discharges of oily wastes in the course of tank-cleaning at sea, providing that it cannot be done within fifty miles off shore, with certain exceptions, and requiring the use of an oil record book, in which is to be recorded incidents concerning the discharge of oil and other pollutants. However, the scope of the Convention was quite narrow.⁹⁸ A second conference was held in London in 1962, and the Convention was amended in significant but hardly adequate ways. It was extended to cover all tankers down to 150 tons, from the previous minimum of 500 tons; the countries agreed to extend its coverage to all ships, as far as practicable; the discharge of persistent oil was strictly prohibited, the prohibited zones were enlarged, and signatory governments were obligated to promote the installation of oil-receiving facilities in their ports.⁹⁹

The inadequacy of these measures became increasingly apparent during the 1960's, as major incidents of serious damage due to oil spills began to proliferate. The problem finally received the widespread attention it deserved with the Torrey Canyon incident, the most disastrous spill to that time, which cost both Great Britain, and France roughly \$10 million, and prompted even Great Britain, long an advocate of freedom of the High Seas, to recognize that:

The international law governing such matters does not take into account adequately the interests of countries which may have no direct interest in ships or cargo but the territory of which may be affected by accident to the ship. In future accidents it may well be that in order to protect its coasts from pollution the Government of a coastal state may wish to take certain measures which might cut across the rights of owners, salvors, and insurers and indeed the government of the flag of the vessel.¹⁰⁰

In the aftermath of Torrey Canyon, many governments sought a clarification of their powers for preventing oil spills from occurring, and for taking swift action after their occurrence. It was against this background that IMCO met in Brussels in November 1969, to attempt to put some teeth in the existing pollution convention. The result of this conference was an amended Convention for the Prevention of Pollution, as well as two new Conventions.

As for the original Convention on the Prevention of Pollution, it was again patched up in several ways; among the changes made were further limitations on the amounts of oil which could be discharged (Article III), and requirements concerning the prevention of escape of oil into bilges

⁹⁷ Done May 12, 1954, 3 U.S.T. 2989, T.I.A.S. No. 4900, 327 U.N.T.S. 4.

⁹⁸ Healy & Paulsen, *Marine Oil Pollution and the Water Quality Improvement Act of 1970*, 1 J. MARITIME L. COMM. 537 (1970).

⁹⁹ IMCO: *The First Four Years*, *supra* note 96, at 54.

¹⁰⁰ *Pollution of the Sea by Oil: Problems Brought to Light by the Loss of the Torrey Canyon*, IMCO Doc. C/ES 113 (1967).

(Article VII).¹⁰¹ Thus, although improved, this Convention still deals only with the intentional discharges of oil, and although we do not want to minimize the destructive power of these,¹⁰² the occurrence of a large-scale disaster is in no way affected by this Convention.

On the other hand, the two new Conventions are both concerned with oil spills of an accidental nature. One of these, the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties¹⁰³ gives states the power to take certain measures on the high seas "to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequences" (Article 1(1)). However, the powers that are created in this regard are rather greatly circumscribed. Only acts and legislation are authorized after the casualty has occurred; there is no provision for preventive legislation, such as Canada has taken. Moreover, no measures are authorized against ships owned or operated by states; before measures can be taken, consultations with the flag-state and other interested persons are required (Article III); and any measures going beyond the Convention and causing damage to any party must be compensated (Article VI). It is indeed difficult to imagine the utility of this Convention where a serious pollution incident is concerned.

The most important measure adopted by the Brussels Conference was the International Convention on Civil Liability for Oil Pollution Damage,¹⁰⁴ which, as its title suggests, deals with the nature and limitation of liabilities imposed. In the following discussion we shall consider the more important aspects of this Convention, and compare it, when feasible, with both the Canadian legislation and with the corresponding United States legislation, the Water Quality Improvement Act.¹⁰⁵ The table on pages 58-59 summarizes the more important provisions of the three pieces of legislation.

As is immediately evident from the table, the Canadian legislation is broader and more effective in many respects than the Convention and the United States legislation. Some of the differences are worth further comment.

One of the more serious inadequacies of the Convention from the Canadian viewpoint is the limitation on the area to which it applies: it covers only damage "caused on the territory, including the territorial sea

¹⁰¹ International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended 12 U.S.T. 2989, 17 U.S.T. 1523, 9 INT'L LEGAL MATERIALS 1.

¹⁰² "The big tanker disasters, as dramatic as they are, are not the major cause of pollution. The most serious pollution comes from the thousands of insidious incidents—small ones, but preventable—incidents of countless minor dumpings, and spills from thousands of tanker operations—from emptying salt water ballast, pumping bilge water, cleaning oil tanks, transferring and handling cargoes." Edwards, *The Role of the Federal Government in Controlling Oil Pollution at Sea*, in OIL ON THE SEA 105 (D. Hunt ed. 1969).

¹⁰³ Reproduced in 9 INT'L LEGAL MATERIALS 25.

¹⁰⁴ Reproduced in 9 INT'L LEGAL MATERIALS 45.

¹⁰⁵ Pub. L. No. 91-221 (April 3, 1970).

of a Contracting State . . ." (Article II). Canada vehemently opposed this article at the conference as too great a limitation on its scope, precluding damage to, for example, fishing interests, vessels, and other property on the high seas and contiguous zone.¹⁰⁶ In her own legislation, the area covered is, as we have seen, much broader.

Another vital aspect of the legislation concerns the standard and placement of liability. The two alternative formulations with greatest support at the Conference were: 1) fault liability with reversal of the burden of proof,¹⁰⁷ which was adopted at the Tokyo Conference of the Comité Maritime International held in April 1969,¹⁰⁸ and 2) a system of strict liability with limited exceptions, which was ultimately adopted by the Brussels Convention. This was in substantial compliance with what the Canadian delegation wanted, although her own act imposes absolute liability, excepting only contributory negligence (Article 7).

Another important question is that of where the liability is to be placed. Should it be on the owner, the shipper, or both? Although Canada wanted joint and severable liability of the owner and shipper, the Convention provides only for owner liability, with the burden on the owner to prove damage caused by a third party. The shortcoming of this approach is that it fails to adequately deal with the frequent situations in which the charterer or operator of a ship exercises much more control over her than does the owner. Moreover, this problem is exacerbated by the widespread practice of oil companies of chartering tankers from undercapitalized "paper" corporate owners, often taking advantage of flags of convenience. The Torrey Canyon is an example of such a practice.¹⁰⁹ The Convention's solution to this lies in its requirement that its parties must issue a certificate to each ship it registers indicating that it carries insurance to compensate oil pollution casualties; it further provides for direct action against the insurer. Of course, the possibility remains that if certain small countries do not adhere to the Convention, large shippers could use non-adhering flags of convenience increasingly to avoid the costs of insurance.

¹⁰⁶ *Observations and Proposals of Governments Concerning Draft Convention Articles of Civil Liability*, IMCO LEG/CONF/4/Add. 3, (1969).

¹⁰⁷ Under this system, the shipowner would be liable if he were at fault, *i.e.*, if the discharge were either willful or due to negligence, but he would have the burden of rebutting a presumption of fault which would arise from the mere fact that oil had escaped from his vessel and had caused pollution of water, shoreline, or other property.

¹⁰⁸ Healy, *The CMI and IMCO Draft Conventions on Civil Liability for Oil Pollution*, 1 J. MARITIME L. & COMM. 93 (1969).

¹⁰⁹ "The Torrey Canyon is illustrative. She was owned by a corporation whose head office is in a filing cabinet in Bermuda, called the Barracuda Tanker Corp. Barracuda had a paid-up capital of \$20,000 immediately before the Torrey Canyon casualty, yet it owned three giant tankers, one of which, the Torrey Canyon, was worth \$22 million after she had been jumboed. How can a company with assets of \$20,000 own three big ships? The answer is simple. The owner's paid-up capital was only \$20,000 but since there was a promise on the part of Union Oil to take a charter party of 20 years, the lease operated as a sufficient collateral for Barracuda to raise a loan from a friendly bank. The bank thereupon paid for the building of the three ships. BTC owned the ships only in order to allow Union Oil to charter them for 20 years." Goldie, *Principles of Responsibility in International Law*, 9 COLUM. J. TRANSNAT'L L. 29 (1970).

Table I
Summary of Legislative Provisions

	Brussels Convention	Canadian Act	U.S. legislation
type of ship and pollutant	seagoing vessels carrying "persistent" oil in bulk	all vessels depositing waste of any type	all vessels, including passenger, carrying any oil that spills
geographical scope of application	damage caused on the territory, including territorial sea, of contracting state	"maritime waters"	into or on navigable waters of the U.S., their adjoining shorelines or waters of contiguous zone
expenses covered	all "clean-up" claims, damages sustained by public and private interests	cost of government in clean-up, and all loss and damage incurred by other persons	only removal costs sustained by U.S. government, no state, municipal, or private claims
nature of liability	strict liability, with exceptions only if damage caused by: 1) act of war or God 2) intentional act or omission by third party or person damaged 3) negligence of Government or other authority responsible for lights or other navigational aids	absolute liability, exception only for contributory negligence	strict liability, exceptions similar to Convention, including negligence of U.S. government
party liable	registered owner, with right of recourse against others reserved to him	owner of ship and cargo, jointly and severably, in proportion to be determined by regulations	"owner or operator", defined as any person owning, operating, or chartering by demise, a vessel

limitation of liability: amount of limitation	2000 francs/ton, adjusted net tonnage = \$121/ton gross, up to \$14 million	no stated limitation, left to regulation	\$100/gross ton, up to \$14 million
when limit waived	owner deprived of limitation if negligence within his privity or knowledge; or if ship fails to comply with requirements of evidence of financial responsibility	left to regulation	no limit if 1) discharge caused by "willful negligence" or "willful misconduct", and 2) such negligence within privity and knowledge of owner
financial responsibility: required of:	only vessels carrying over 2000 tons persistent oil in bulk as cargo	any ship, as required by Governor in Council	all vessels of 300 tons and more of any type using U.S. ports
type required	insurance or other financial security, such as guarantee of bank or certificate delivered by international compensation fund, in sum fixed by applying above limits ship must carry certificate attesting that requirement met, to be issued by state of ship's registry	insurance or indemnity bond, of any other form satisfactory to Governor, in a form that will enable any person entitled to claim to recover directly from the proceeds of the insurance or bond	evidence of insurance, surety bonds, qualification as a self insurer, or other evidence acceptable to the President
direct action against insurer	yes	yes	yes
possible jurisdiction of suit	state where damage occurred	Canada	U.S.

The result under the Canadian legislation, which makes the owner and shipper jointly liable, would presumably be to increase the oil companies' costs, and, ultimately, the price of the oil. Thus, the consumer would pay the increase in cost, which is arguably just, in that he is the ultimate beneficiary of bulk transport of oil. Another proposal was that of Ireland, which holds that if no fault is proved on the part of the ship, the cargo must pay. It would seem that the Canadian approach is preferable, if only because of its greater flexibility.

As for the question of amount of liability, both the Convention and the United States legislation provide high limits, which are likely to come into play only in cases of the most serious spills. However, Canada pushed for compensation to the full extent of credible damages, urging that the proposed limits were not sufficient to compensate a true disaster. When this was rejected, she urged strict limited liability for the ship, with a high residual liability on an international fund, which is to be paid for by all shippers.¹¹⁰ Her efforts were again largely rejected, although the Convention did include a resolution noting the need for full compensation, and calling for the drafting of such a scheme, to be considered at another international conference to be held no later than 1971.¹¹¹ Canada wanted such a fund to be placed as an integral part of the 1969 Convention, and felt the formulation used at Brussels to be too vague. Her own act leaves the matter of liability limits to regulation.

As for the matter of jurisdiction, the Convention provides that suit may only be brought in the courts of the state where the damage occurred (Article 18). Such a limitation has obvious drawbacks, and Canada pushed for greater freedom in determining jurisdiction for such a suit to include the state in which the owner or insurer reside, but was unsuccessful.¹¹² Had she been successful in her attempt to write such a provision into the Convention, a state's adherence would amount to tacit acceptance for a suit by a foreign state of its nationals in its own courts. In her own legislation, Canada gives her own courts jurisdiction over any offending person, who is to be treated as any person within the ordinary limits of her courts' jurisdiction; also there is included authority for seizure of ship and cargo (Articles 22, 27). There is no mention of application of the act in foreign courts, since such a provision would be meaningless without the consent of the foreign state.

Besides these differences in treatment, there are other areas in which the Canadian legislation goes beyond the Convention in attempting to find solutions far beyond the scope of those considered by the international drafters. The Canadian act actually takes measures to prevent the damage from occurring, and herein lies the most striking difference between the Canadian act and any other legislation. The creation of the "Shipping Safety Control Zones", in which the Governor-in-Council can regulate the types of ships allowed to navigate, and the "Pollution Prevention Officers,"

¹¹⁰ *Supra* note 106.

¹¹¹ *Resolution on Establishment of an International Compensation Fund for Oil Pollution Damage*, reproduced in 9 INT'L LEGAL MATERIALS 66.

¹¹² *Supra* note 106.

who have wide-ranging powers to board and examine ships and prevent them from entering the Control Zones, is a new and bold means of attempting to deal with this whole problem, with no comparable provision in the Convention, or, for that matter, any previous legislation. The Convention on Intervention, as already discussed, authorizes measures to be taken on the High Seas, but contains no real preventive measures at all, providing only for action after a casualty has occurred.

It should be noted that the Canadian legislation attempts to deal with sources of pollution other than simply oil spills. It also applies to:

- (a) any person who is engaged in exploring for, developing or exploiting any natural resource on any land adjacent to the arctic waters or in any submarine area subjacent to the arctic waters,
- (b) any person who carries on any undertaking on the mainland or islands of the Canadian arctic or in the arctic waters . . . (Art. 6).

Both of these categories of pollution sources also raise myriad questions of international as well as domestic law and could certainly be the subject of extensive study. Their treatment is beyond the scope of this paper, and they are mentioned here only to point out that the Canadian act deals with more than simply the problem of oil pollution by tankers: it is a comprehensive effort at protecting a whole region from possible destruction by several sources posing serious threats to it.

All in all, it is not difficult to understand why Canada was not satisfied with the Convention. In fact, she has been concerned with this problem longer than most states, and had her legislation ready earlier, but held up its passage in the hope that the Brussels Convention would produce a more far-reaching agreement.¹¹³ Her delegation was bitterly disappointed with the result, and were the only group to vote against the Convention as a whole (ten countries abstained), stating her reasons to be that it failed even to comply with its own Preamble, which gives the Convention's aims: "to ensure that adequate compensation is available to persons who suffer damage caused by pollution resulting from the escape or discharge of oil from ships" Moreover, it restricts the rights of innocent victims of oil pollution incidents.¹¹⁴

On the whole, it seems apparent that the international measures taken up to this point have been far from satisfactory; in an age of rapidly increasing danger from potential disasters, the IMCO Conventions, even as supplemented in Brussels, do little to actually prevent a serious spill from occurring, and furthermore do not assure the damaged party of adequate compensation. Moreover, there are no Conventions at all dealing with pollution from other sources, such as radioactive, thermal, and chemical wastes. Indeed, one could hardly term the Brussels Conventions a success in dealing with this growing threat. This is not altogether unexpected, since IMCO was originally created as primarily a shipper's organization, and is still dominated by shipping interests, who obviously place a high priority on maintenance of traditional

¹¹³ Healy & Paulsen, *Maritime Oil Pollution and the Water Quality Improvement Act of 1970*, 1 J. MARITIME L. & COMM. 537 (1970).

¹¹⁴ *Supra* note 106.

freedom of the seas as opposed to limitations on this freedom for such purposes as pollution control.

Although IMCO isn't the only international organization to be concerned with this problem, it has been the most active up to now. An organization directly concerned with the problem of spills is TOVALOP,¹¹⁵ the Tanker Owners Voluntary Agreement Concerning Liability for Oil Pollution. This association of tanker owners provides that when a spill occurs, if the tanker owner or national government cleans it up immediately, they will be reimbursed for their expenses incurred, up to ten million dollars. This group now includes about seventy per cent of the world's tanker owners.

Several other international organizations have also been concerned with the general issue of ocean pollution in one way or another.¹¹⁶ and there is evidence that the U.N. itself may soon act in this area. The 24th General Assembly adopted a unanimous resolution for a program of activities to promote effective measures for the prevention and control of marine pollution from all sources,¹¹⁷ and the U.N. Conference on the Human Environment, planned for Stockholm in 1972, will hopefully provide a forum for the implementation of this resolution.

A difficult problem to be faced in this regard concerns the type of organization which can best deal with this problem, and the scope of its authority. The Canadian initiative in the Arctic may suggest a regional approach, such as has been used by the Council of Europe in dealing with river pollution on that continent.⁸ as well as by the International Joint Commission, for dealing with United States - Canadian boundary waters.¹¹⁹ However, a global effort in regard to ocean pollution would seem preferable to a combination of several regional schemes. Going beyond this, it also seems clear that what is ultimately required is an International Environmental Authority which could co-ordinate efforts in dealing with not only pollution of the seas, but of fresh water, air, land, and deal generally with conservation and land use.¹²⁰ Such a comprehensive effort is needed not only to eliminate duplication of effort but also because of the ultimate interrelation of all resources; for example the deposit of wastes in rivers, often regarded as a solution for national pollution, obviously gives rise to pollution of the sea. A great amount of international co-operation will obviously be necessary for such an organization to function effectively, but we seem to have little choice at this point.

¹¹⁵ For text of Agreement and other related materials, see 8 INT'L LEGAL MATERIALS 497 (1969).

¹¹⁶ Other such international organizations are the International Oceanographic Commission (IOC), helping to implement the Long-term and Expanded Program of Oceanographic Research (LEPOR); the Joint IMCO/FAO/UNESCO/WMO Group of Experts on Scientific Aspects of Marine Pollution (GESAMP); the Food and Agriculture Organization (FAO), with its Dec. 1970 Conference on Marine Pollution and its Effects on Living Resources and Fishing; the IAEA; and the ECE.

¹¹⁷ G.A. Res. 2566 (XXIV) (Jan. 12, 1970).

¹¹⁸ Baxter, *International Cooperation to Curb Fluvial and Maritime Pollution*, 9 COLUM. J. TRANSNAT'L L. 75 (1970).

¹¹⁹ Welsh, *The International Joint Commission*, 9 COLUM. J. TRANSNAT'L L. 80 (1970).

¹²⁰ *Supra* note 118, at 76.

Indeed, our earlier conception of the compatibility between land and sea use, as well as the inexhaustible margin of excess capacity of the seas, capable of accommodating all human uses, are clearly erroneous, and only through greatly increased co-operation can the seas as well as all our other natural resources now be preserved for the future use and benefit of mankind.¹²¹

Unfortunately, there exists a wide gap between the theoretical formulation of various elaborate international schemes for saving the seas from pollution, and the actual implementation of such grand designs. Anyone familiar with the international legal process is painfully aware of its inexorable slowness, and although there may be times when such a pace is tolerable, all signs indicate that such a luxury is not available to the world in this case. When one considers the Canadian initiative in this context, one is perhaps more likely to see it as a much-needed stimulant to the process of environmental protection through international law, rather than as a possible abridgement of what are at best ambiguous and antiquated principles. One might expect more states with a deep concern for the preservation of our seas to follow the Canadian initiative; indeed, an amendment to Great Britain's Oil in Navigable Waters Bill was recently introduced which would authorize the government to "undertake operations for the sinking or destruction of a ship outside the territorial waters of the United Kingdom." Furthermore, it was made clear in Parliamentary discussion that the government would not necessarily rely on preceding consultation with the flag-state in taking such steps.¹²²

Of course, a potential danger with such a course is the possibility of additional unilateral enactments regarding the regime of the seas of a more sweeping and less responsible nature. For instance, if Canada can expand her off-shore authority for pollution control, another state could claim authority over a similar zone for other, less altruistic, purposes, such as fishing rights. Hopefully, such a development will not occur, but it would seem that the best prevention against such occurrences would be the rapid development of international law in this area, thereby bringing the international norms abreast of current practice and needs. Such development would hopefully either legitimize measures such as Canada has taken, while carefully circumscribing their validity to the area of environmental protection, or else set up an international regime capable of dealing adequately with this problem. Ideally, perhaps both these steps would be taken. Clearly, all interests would be better served if international law would be used in an active, constructive way in regard to this issue, rather than as a conservative force protecting only the status quo.

APPENDIX

The following passages are those of relevance which are cited but not reproduced in the text:

¹²¹ Accord, Falk, *Inability of the Traditional Forms of Political Order to Adapt to Modern Problems of International Pollution*, 9 COLUM. J. TRANSNAT'L L. 16 (1970).

¹²² The Times, April 8, 1971, at 1; International Herald Tribune, April 10, 1971, at 1.

Geneva Convention on the Territorial Sea and Contiguous Zone, U.N. Doc. A/Conf. 13/L. 52, April 28, 1958.

Article 16

1. The coastal State may take the necessary steps in its territorial sea to prevent passage which is not innocent.
2. In the case of ships proceeding to internal waters, the coastal State shall also have the right to take the necessary steps to prevent any breach of the conditions to which admission of those ships to those waters is subject.
3. Subject to the provisions of paragraph 4, the coastal State may, without discrimination amongst foreign ships, suspend temporarily in specified areas of its territorial sea the innocent passage of foreign ships if such suspension is essential for the protection of its security. Such suspension shall take effect only after having been duly published.
4. There shall be no suspension of the innocent passage of foreign ships through straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State.

Geneva Convention of the High Seas, U.N. Doc. A/Conf. 131/53, April 29, 1958.

Article 24

Every State shall draw up regulations to prevent pollution of the seas by the discharge of oil from ships or pipelines or resulting from the exploitation and exploration of the seabed and its subsoil, taking account of existing treaty provisions on the subject.

Article 25

1. Every State shall take measures to prevent pollution of the seas from the dumping of radioactive waste, taking into account any standards and regulations which may be formulated by the competent international organizations.
2. All States shall co-operate with the competent international organizations in taking measures for the prevention of pollution of the seas or air space above, resulting from any activities with radioactive materials or other harmful agents.