

# Toward Regional Arrangements for Regulation of Marine Pollution: An Appraisal of Options

CHARLES ODIDI OKIDI\*

*Abstract* The unilateral decision by Canada in 1970 to extend its jurisdiction for the control of pollution of the Arctic waters outward to 100 mi was attacked by some people as a violation of international law. In this paper that model of unilateralism, a regulatory regime by a global agency, and a regional approach are analyzed and appraised with some recommendations for an effective arrangement for the control of pollution in the high seas.

## Introduction

One of the questions yet to be answered in the current debates on the new law of the sea concerns the kind of institutional arrangement suitable for the regulation and control of marine pollution in the areas beyond the limits of national jurisdiction, or if there should in fact be any universal numerical delimitation to be adhered to under all circumstances. Marine pollution resulting from discharge of wastes and other materials affect two categories of interests that may require different forms of protection: First there are the interests of the general international community, which includes the living resources of the

---

\*Charles Odidi Okidi is Research Fellow at the Institute for Development Studies, University of Nairobi, Kenya, East Africa.

This paper is excerpted and modified from the author's Ph.D. dissertation, "The Prospects for the Establishment of Regional Regulatory Arrangements for the Control of Pollution of the Seas," accepted in the fall of 1975 and deposited at the Fletcher School Library, Fletcher School of Law and Diplomacy, Tufts University, Medford, Massachusetts.

sea on which human beings depend for food and other purposes. At present there is no agency with the standing to ensure protection of these interests against pollution. Second, there are the special interests of the coastal states that may be affected by the effects of pollution carried to the coastal waters and shorelines as a result of the movement of ocean currents and the ocean biota. In both cases, the pollution may result from continued deliberate discharge of small quantities of wastes and oils such as by deballasting and tank washing. (A recent FAO study reported that coastal waters in many areas are already affected by pollution from this source.)<sup>1</sup> Or pollution may result from major spills such as the *Torrey Canyon* incident, in which oil spilled off the British coast polluted the southern English shores and spread eastward to Normandy and Brittany, some 225 mi away.<sup>2</sup>

This paper will analyze and appraise the following three institutional options by which states may control and regulate pollution of the seas to protect the above interests: (1) a continuation of the present decentralized system by which states may take unilateral regulatory measures of the type adopted by Canada in 1970;<sup>3</sup> (2) a global regulatory system centered around a global superagency; and (3) a network of regional regulatory arrangements.

### Unilateral Approach

The present absence of an internationally agreed upon procedure permits an individual coastal state to take selective initiatives by unilaterally extending its regulatory powers into the high seas when such a state considers that its vital interests are threatened by unregulated activities of foreign states. This is precisely what Canada did in 1970 when it adopted the controversial Arctic Waters Pollution Prevention Act, the purpose of which was to control pollution outward to 100 nautical mi from its northern coastlines, alleging that navigation and exploitation of resources in that zone threatened pollution of the Arctic environment.<sup>4</sup>

Various coastal states may be prompted to extend their jurisdiction, depending on the specific local environmental exigencies. The Canadian authorities in the above instance argued that Canada had a right and a duty to enact and enforce the law because of the "uniqueness and fragility of the Arctic ecology."<sup>5</sup> For that reason the Canadian legislature determined the breadth of the area within which they would prescribe and enforce standards regarding (1) pollution by wastes from exploration and exploitation of resources, and (2) the construction specifications and pilotage for all ships that navigate specified zones that would be designated from time to time as "shipping safety zones."<sup>6</sup> Full enforcement powers are conferred on the national pollution prevention officers who may inspect and seize any suspected ships or persons and bring them before Canadian Courts.

Such unilateral measures may lead to the development of customs and procedures for handling problems of pollution of the seas. Even though the Canadian measure may not have necessarily induced widespread claims, Alan Beesley, as a leading spokesman for the Canadian position, once contended that such unilateral "state practice continues to be legitimate and, indeed, an essential means open to states for the progressive development of international law."<sup>7</sup>

In support of such a process in the development of the law of the sea, commentators cite particularly the 1945 Truman Proclamation on the continental shelf, which was later adopted by the 1958 Geneva Convention on the Continental Shelf, and the unilateral determination of baselines by Norway, which was eventually accepted as legitimate in the *Anglo-Norwegian Fisheries Case*.<sup>8</sup> To that list may be added the 200-mi claim originally asserted only by Chile, Peru, and Ecuador, and the new concept of exclusive economic zone now gaining worldwide acceptance.<sup>9</sup> Thus, Iceland found it easy to invoke the widespread trends in the practice of states to support its position in the fisheries jurisdiction dispute with the United Kingdom.<sup>10</sup> It will be recalled that in that case the World Court did not answer in the affirmative the question of whether Iceland had, by that unilateral action, violated international law.<sup>11</sup> On the side of theory, one eminent writer has pointed out that a *first* action may be a violation of law even though it may *later* be seen as a step toward establishing new customary international law.<sup>12</sup>

In the environmental field, Canadian officials expressed the hope that their action "will spur the development of a comprehensive system" as more states recognize the legitimacy of selective unilateral initiatives where special regulatory measures are desirable.<sup>13</sup> Professor Bilder also suggests that "unilateral state action to prevent international environmental injury is likely to play an important and continuing role in efforts to deal with international environmental problems."<sup>14</sup>

That may be so. In fact, Canada decided in 1973 to adopt another special regulation to prohibit supertankers from using the Head Harbour Passage, a narrow channel between Deer Island and Campobello, Canada's east coast islands, leading to Eastport Maine, thus frustrating the plan by a U.S. company to build a huge oil refinery at Eastport, on the ground that Canada had more to lose in case of a major oil spill in that area.<sup>15</sup> And only recently, Oman's Foreign Minister announced that Iran and Oman were drawing up plans to patrol various approaches to the Persian Gulf in order to take measures against oil tankers that spill oil or oily water into the oceans, whatever the nationality of the vessels.<sup>16</sup>

What is immediately apparent from the practice of unilateral extension of jurisdiction is that there is no general understanding of the limits to such coastal state powers with regard to both the breadth of the zone to be claimed and the

substantive rules that the state may impose. For example, there is nothing magical about the 100-mi limit chosen by Canada for its legislation. If, as Paul Nergaard contends, a major spill during a summer may fundamentally affect the entire Arctic aquatic ecosystem,<sup>17</sup> then Canada could decide to extend its regulatory jurisdiction still farther out and still not be able to prevent the environmental damage that would result from a major spill. To take another example along this line of argument, Australia could extend its regulatory powers to protect the Great Barrier Reef, which, according to one IMCO Assembly resolution, constitutes a continuous chain of cays and live corals that extend up to a distance of 1250 mi from Australian shores and must be kept free from pollution because of their unique scientific and ecological importance.<sup>18</sup>

Similarly, Iran and Oman, in their measures referred to above, would determine how far into the Indian Ocean they should take the protective measures to prevent environmental injuries that may result from a polluting incident in the high seas. After all, it will be recalled that when the *Torrey Canyon* went aground in the high seas off the coast of Cornwall, the oil drifted to the shores of France, about 225 mi away. This indicates that even the 200 mi that is now gaining support as an economic zone within which coastal states assert certain special powers does not provide the surest protective distance. As a matter of fact, if there is no regime to control pollution beyond the economic zone, then coastal states may eventually decide to exert measures beyond that zone in order to prevent any pollution there which may affect the resources the coastal state is entitled to protect. Thus, the distance that a coastal state might claim under the model of unilateralism is open-ended.

Under the procedure of unilateralism, the scope of the substantive rules that the coastal states may impose is also left to the reasonable determination of the state taking the measures. In the Canadian Arctic legislation, the law defined what constitutes objectionable waste<sup>19</sup> and applied its regulation to ships and to the exploration and exploitation of resources in the region. Further, that legislation asserted that the Canadian authorities had the power to determine the construction specifications for tankers and other vessels sailing near Canadian territory. The rules relating to the determination of liability for damage caused by pollution to the sea resources or territorial interests is also subject to the national laws of the country taking the measures.

There is no apparent cause-and-effect relationship between Canada's legislation of 1970 and other international measures that came later, but it seems important to note here that in 1971 rules regarding tanker construction standards were adopted as an amendment to the 1954 International Convention on the Prevention of Pollution of the Sea by Oil and that a more comprehensive set of regulations were adopted in the 1973 International Convention on the Prevention of Pollution from Ships.<sup>20</sup> The latter agreement applies also to the wastes that may be discharged from structures and platforms used for explora-

tion and exploitation of marine resources. These were the first global moves to reduce chances of accidents that result from unregulated construction of ships; therefore, these regulations partly addressed the reasons for Canada's legislation.

But the Canadian action, which exemplifies the unilateral model, has been subject to several criticisms, particularly from the United States, where some of the views have primarily reflected the U.S. government's views.<sup>21</sup> To assess the suitability of this unilateral option as a wave of the future in the regulation of pollution in the high seas, let us consider briefly the soundness of the criticisms.

First, the Canadian action was criticized on the ground that the oceans are a shared environment used extensively for navigation and commerce and that any assumption of unilateral regulatory powers under national laws seriously jeopardizes interests of other states and peoples. Professor Louis Henkin argues: "The Truman Proclamation, some think, was mistaken and perhaps unlawful, but whatever law there had been was uncertain, hypothetical and largely irrelevant; the Proclamation responded to a new opportunity in ways that did not affect the rights of others."<sup>22</sup> Professor Henkin's argument does not make a convincing distinction in this regard because it is the continued uncertainty of the law that also gave rise to Canadian action. On the other hand, the extent to which claims over the continental shelf would affect interests of other states is quite different from the effects of the Canadian antipollution regulations. These regulations affect the entire route of navigation in the region and call for a clear understanding of the obligations of the navigators particularly. Canadian authorities recognized that the multilateral approach was indeed preferable for purposes of the Arctic region as shared resources.<sup>23</sup>

Henkin's argument is persuasive only to the extent that he emphasizes the necessity of mutual agreement on regulation over the oceans as a common resource. He adds in subsequent lines that "unilateral regulation of tanker construction in particular would make it possible for one state controlling an important passage to prescribe specifications for the whole world."<sup>24</sup> But that is not possible if there are several contending unilateral standards, because there would be so many unilateral standards that none would prevail or the most stringent regulation would prevail unless it made construction so expensive that alternative shipping routes would seem cheaper than compliance. The real problem is complexity, not unreasonable dictation. Ships are constructed to navigate various oceans of the world. Some oceans or straits evidently require special regulatory standards, but to facilitate efficient and peaceful navigation, both the flag and coastal states need mutually to consider the basis of the specific requirements to avoid unnecessary disparities and inconvenience. It is for this reason that Beesley emphasized that even after their legislation, Canada had not abandoned efforts to achieve a multilateral regulatory formula.<sup>25</sup> The only point of departure is that Canada has argued that "The threat [on the Arctic] could not await the multilateral action."<sup>26</sup>

Second, unilateral extension of jurisdiction to control pollution has been characterized as a politically expedient way of extending sovereignty of the coastal state to the high seas. This is the so-called creeping jurisdiction whereby states may end up controlling activities totally unrelated to pollution, the original evil.<sup>27</sup> In the case of Canadian legislation, Harry Almond contends that because the legislation purports to regulate navigation and the exploitation of resources and to provide applicable definitions of the terms involved, it does, in fact, seek "to extend and perfect a kind of territorial base" that justifies an exclusive competence in the Arctic waters.<sup>28</sup> Professor Manfred Vernon, in a question at the Law of the Sea Institute, put it this way:

Is it not feasible that the word "pollution" in reality might have something of the quality of a political expediency just in order to extend Canadian sovereignty or control over large bodies of water? In other words, might much of the reason for the legal arrangement not be found in the fear of newly developing American interests close to the Arctic Zone? Could there not be an interest to interfere with such developments?<sup>29</sup>

The fears of possible creeping jurisdiction may thus be highly speculative, and if they were not voiced by persons in responsible government policy positions, they might at times be dismissed as irresponsible, and therefore to be ignored. But some people in positions of policy responsibility do believe that it is the speculative imputation of bad faith that is in fact the "truth." Note for example this statement by Leigh Ratiner, then Chairman of the U.S. Defense Advisory Group on Law of the Sea:

The hazard of pollution is real for Canada. So, too, is the danger of irreparable harm. But what was more real to the Canadian Government, I am convinced, was the groundswell of popular sentiment demanding Canadian claims of sovereignty over the entire Arctic. If it is possible to pinpoint the cause or causes for the Canadian action, and I am not sure that it is, I submit that it was this wave of nationalism, and not just the need to protect the Arctic environment from pollution, which caused Canada to make a unilateral claim of this type.<sup>30</sup>

Ratiner did not give any reason why the latter proposition should weigh more than the former, which accepts Canadian's contention about reality and gravity of the pollution hazards in the Arctic zone. If we are to believe his first proposition, then the latter must be considered farfetched. As Professor Bilder, himself critical of unilateral measures of this kind, pointed out, it seems in error to view the Canadian position simply in terms of economic nationalism, because the need to control pollution is not disputed.<sup>31</sup>

The reasons for imputing bad faith to a state's unilateral decision to control pollution may not always be persuasive, but that imputation certainly is wide-

spread and the plausibility of the argument depends on the special circumstances. For example, when in 1972 Indonesia proposed special regulations aimed at preventing tanker accidents in the Straits of Malacca, some commentators were quick to suggest that the "real" reason was partly to make it hard for tankers to go to the Middle East, so that Japanese as a consequence would buy Indonesian oil, and partly because the riparian states wanted to derive some revenue from the ships using the waterway.<sup>32</sup> The measure was successfully resisted. A second example, and one with possible far-reaching implications is the decision of Oman to patrol approaches to the Strait of Hormuz, which was discussed earlier.<sup>33</sup> That announcement, coming at the same time as another statement that Oman and Iran would cooperate militarily to protect that region from any infiltration by an ideologically hostile or unfriendly regime in Iraq, South Yemen, Abu Dhabi, "or some other capital along the gulf,"<sup>34</sup> would raise reasonable suspicions about their motives because the Indian Ocean area is already wrought-up with political rivalry.<sup>35</sup> According to a recent *New York Times* report, "Iran has assigned to her navy the power to search ships within 50 miles of her Coast that are thought to have been causing pollution."<sup>36</sup> In view of the political climate in the area, the line between inspection to prevent pollution and inspection for political or military purposes can be very difficult to ascertain.

Thus, even though some of the reasoning regarding creeping jurisdiction is unconvincing, the ultimate fear that pollution-control jurisdiction may lead to abuse is not altogether unfounded.

Third, the unilateral approach to pollution control is criticized because such programs can never ultimately be successful without similar efforts being taken by other states surrounding the ocean. Commenting on Canada's 100-mi claim, Laird Kirkpatrick said: "[a] ship [could capsize] 150 miles out into the ocean and the oil could flow in and pollute Canada's shores."<sup>37</sup> Indeed, no coastal state can extend its jurisdiction indefinitely, because there is always an opposing claim from the opposite shore. The farthest that one coastal state may claim without encroaching on the interests of the state on the opposite shore is the median line under equidistance principles, which in itself presupposes some form of agreement. However, this would still be an ineffective measure in view of the unity of the ocean space as bound together by water movements. Efficient pollution control must consider ecological boundaries of the sea, and this is not secured by the disparate systems of unilateral regulatory jurisdiction.

Moreover, pollution is not just undesirable in itself. Rather, it relates also to the marine life on which the various states and peoples depend. Fish, for example, may spawn in polluted waters beyond the limits claimed by an individual coastal state, and then they may be caught in a stringently protected area. The consequences are equally adverse. Therefore, if the coastal states want to get the benefits that accrue from regulatory measures for the protection of

marine life, then they must consult with one another to protect the entire ecological area instead of limited areas of national jurisdiction.

Fourth, most uses of the sea, including fishing, mining, navigation, and scientific research are interrelated, and each has certain polluting aspects. It is accepted that the aim of peaceful and efficient activities in these areas can be realized only within the framework of an international agreement. That assumption is at the base of the present long and agonizing debates at the Third United Nations Conference on the Law of the Sea. However, such agreements regarding the activities in the seas cannot be pursued successfully, while coastal states are free to enact and enforce such legislation as that adopted by Canada in 1970. International agreements regarding the exploitation of resources, rights of navigation, and scientific research can be completely frustrated or undermined by coastal states' unilateral measures to control pollution.

Fifth, current international opinions reject unilateralism as an approach to the protection of environmental problems that have international implications. That is evident from some of the views cited already. Particularly important is the following provision expressed in Principle 25 of the Stockholm Declaration on the human environment:

States shall ensure that international organizations play a coordinate, efficient and dynamic role for the protection and improvement of the environment.<sup>38</sup>

This Principle may be understood to urge states to develop their environmental policies in accordance with certain agreed-upon goals.<sup>39</sup>

To recapitulate, a unilateral approach to the regulation of pollution in the high seas is objectionable because it is likely to lead to serious conflicts with other users of the ocean. The approach ought to be used only as a last resort and when circumstances cannot await multilateral initiatives; and then, such unilateral measures should only be interim ones, in order to allow a compromise position that commands consensus of the states interested in the issues involved.

### **Global Regulatory System**

The second option for the regulation of pollution in the high seas is a single agency with the mandate to take comprehensive measures of control.

The reasoning underlying this proposition is that the high seas beyond national jurisdiction are open for use by all states and peoples. This then requires that the control of activities in that area to prevent abuses by pollution be left within the province of the entire world community. This international character of the high seas is certainly not new; the freedom of the seas is an age-old concept. It has made it possible for navigation and fishing in the high seas to be undertaken freely by states and persons from every part of the world, moving



and working in every part of the world ocean. Therefore, rules that apply to those high seas should be those that are generally agreed upon by states at the global level.

From the standpoint of pollution, the position has also been taken that the marine environment is a united ecosystem and that only a global regime is appropriate for effective control of its pollution.<sup>40</sup> A UN report asserted that "marine pollution is a worldwide problem," and that the oceans are "best shared and dealt with as far as possible on a global scale."<sup>41</sup> One proponent of this view recommends that the high seas should be the exclusive domain of the global regime with "powers to study, define and regulate man's use of the entire marine environment."<sup>42</sup>

In this context, therefore, it may be proposed that a global superagency should be responsible for the enforcement of globally determined regulations in the seas beyond national jurisdiction. There is, indeed, a body of antipollution regulations adopted by general international agreements, especially under the auspices of IMCO. The most nearly universal and recent conventions are the 1973 International Convention on the Prevention of Pollution from Ships and the 1972 Convention on the Prevention of the Pollution by Dumping of Wastes and Other Matter.<sup>43</sup> The former deals with pollution from vessels and structures used for exploration and exploitation of marine resources; the latter deals with other forms of deliberate disposal of all types of wastes discharged from vessels and aircraft. Additional rules regarding pollution from exploitation of marine resources may result from the present negotiations at the Third United Nations Conference on the Law of the Sea (LOS III).<sup>44</sup>

It is such globally adopted regulations that some commentators suggest should be enforced in the high seas by the universally constituted agency.<sup>45</sup> They argue that where no applicable regulation exists or where need arises for changes in the permissible standards, a universal agency, through assessments and reviews, should determine proper standards.

There has been, however, no serious consideration of the nature and scope of the global agency that would perform these comprehensive functions. The tendency so far has been to emphasize the capacity of international agencies such as IMCO or the proposed Seabed Authority to set up standards, but enforcement measures have been largely left to the flag states.<sup>46</sup> As far as uses of the sea are concerned, consideration of global institutions has focused largely on the regime for exploration and exploitation of seabed resources. The question of pollution control is mentioned only tangentially and with no provision for an agency responsible for enforcement of the universal pollution standards.<sup>47</sup>

There seems to be clear agreement that while marine pollution is a global problem requiring a comprehensive regulatory system, the regime does not necessarily have to be a single global agency. Prominent supporters of the

comprehensive mechanism have at times dismissed the idea of a monolithic system as illusory.<sup>48</sup> It has been submitted that while it is necessary to have a universal system for setting general minimum standards, it is not feasible to create a single institution for the application of precise rules in the various seas.<sup>49</sup> A recent UN Secretariat report argued that even though a global network is desirable, there are "great difficulties involved in the establishment of such a global system," suggesting, as a first step, that the "schemes at present being developed on a national basis should be used to establish regional networks."<sup>50</sup>

Second, a single global agency is considered unnecessary because, as Schachter and Serwer put it, "There has come to be a greater recognition of need for regional pollution control organs since it is apparent that although pollution is a global problem, it is not uniformly global."<sup>51</sup> Therefore, states within a particular ocean region where a particular problem is dominant ought to concentrate on combating that problem in great detail within a regional forum.

Generally, areas of the sea that are considered ecological units are the semiclosed seas, such as the Baltic, the Mediterranean, and the Red seas. These are obviously so because the waters of those seas are confined within a limited geographic area over many years. Regional arrangements have been or are being worked out in recognition of that ecological factor.<sup>52</sup>

There are also some variations in the degrees and kinds of pollution that should raise particular concerns in the various larger oceans and therefore make them suitable for consideration as regional units. The Atlantic Ocean north of the equator has the highest level of continuing pollution. The FAO reports show that the pollutants in this region "represent all those types produced by industrialized society. Therefore, the problems are of an extremely varied nature."<sup>53</sup> The rate of the increased pollution by oil has also been alarming as testified to by Thor Heyerdahl's "Ra" Expedition<sup>54</sup> and the FAO studies.<sup>55</sup> According to FAO, serious levels of continuing pollution in the Pacific Ocean are concentrated mainly in the northern parts due to the industrial discharges released from the USSR, Japan, and the United States, with high potentials indicated in the extensive continental areas of the Indo-Pacific.<sup>56</sup> Of all the world's oceans, the Indian Ocean bears the heaviest traffic of oil tankers because of the oil resources in the Middle East. Already studies have shown that the coastal states are having their beaches fouled by oily wastes discharged at sea by tankers. The FAO report observes that "since the closure of the Suez Canal this type of pollution has considerably increased, as has the risk of serious accidents involving tankers, which, for lack of skilled personnel and facilities, no African country is prepared to combat."<sup>57</sup>

The pattern and degree of pollution corresponds to the nature of the preoccupation of the coastal states should they decide to combat the problem. In the Indian Ocean area, for example, the immediate danger, as already pointed

out, is the oil transported from the Middle East to Europe, America, and Japan; in the long run some problem may arise from exploitation of the continental shelves.<sup>58</sup> The immediate problem, therefore, relates to the dangers of pollution from the tankers. Some of the coastal states, such as Kenya and Tanzania, depend largely on the tourist economy, and tourists are partly attracted by clean beaches.<sup>59</sup> A *Torrey Canyon* type of incident would be economically disastrous for these countries. Some consideration should also be given to the effect of pollution by oil and other cargoes on the fisheries resources of that ocean, an area in which FAO has launched a special program in view of the present world food problem.<sup>60</sup>

Viewing this special type of problem alone, it must be emphasized that the popular contention that the developing countries do not have serious pollution problems is not really accurate, and perhaps misleading. The fact that a major spill in the high seas or continued small-scale spillage over time would jeopardize the tourist industries of the coastal states or other aspects of their economic and aesthetic interests makes the pollution problem one for these coastal states to heed even though they are not responsible for its generation. The coastal states can ignore this problem only at their eventual disadvantage. What the states require is a mechanism through which they can ensure that shippers navigating that ocean adhere to protective standards; in addition, they should consider a system for taking remedial measures in case of major accidental spills. These tasks are fairly narrow compared to the wide range of methods for disposal of industrial wastes that the industrialized areas of the world must consider.

Third, given the diversity in the nature and degree of the pollution problems to be dealt with and the range of interests in the various regions, a single global agency would have difficulties in adjusting its management to regional differences.

It is one thing to conceive of global agencies to deal with specific problems or issues such as do the specialized agencies of the United Nations; they perform primarily advisory and supportive functions on activities done almost entirely within national jurisdiction of the member states, and these states carry out the major operational functions. But it is quite another thing to imagine a specialized agency assigned the task of controlling all polluting activities in the high seas. It has been realized that even within the limited advisory and support functions of the specialized agencies, the size of the agency and distance from the fundamental problems of concern would impair the effectiveness of the agencies. Thus, Professor Stephen Goodspeed says of the WHO that the existence of the six regional offices "has prevented the development of a large central bureaucracy far removed from the pressing and immediate needs of the people."<sup>61</sup> Similarly, the International Civil Aviation Organization (ICAO) established six regional offices "to seek improvement of details of implementation and opera-

tion” of air navigation procedures.<sup>62</sup> The ICAO decided that besides the regional offices that performed advisory and support functions to the member states, there was a necessity for regional conferences at which all states interested in air navigation in the respective region would convene from time to time to develop “operating procedures designed for application in the specific air navigation regions.”<sup>63</sup> All these point to a recognition that many special regional peculiarities of the various global problems require being on the spot, or at least a concentration of functions within the region, to know how to best deal with each region.

The control of pollution in the high seas presents a far more complex and extensive task than the advisory and support task of the specialized agencies such as ICAO and WHO. But because pollution control is a global concern in the same sense as the functions dealt with by the specialized agencies, it is still necessary that the general regime and principles be developed at the global level. Several such global principles are already in existence; for example, IMCO has functioned as a forum for the promulgation of the global rules regarding the special problems of pollution from ships. For the effective application of the rules to specific circumstances and for the development of detailed principles that relate to any regional peculiarities, it is necessary to think in terms of regional arrangements. A superagency necessary to perform the full range of regulatory functions would be so complex in structure and so large in size that its efficiency would be doubtful.

For all of these reasons, it is emphasized first that a global regulatory regime is necessary because the high seas are open to use and activities by states and persons from every part of the world. A universal agency provides all states with an equal forum in which to determine the regulations that affect them. In connection with regulating polluting activities that affect the common environment, a global mechanism is considered essential. With regard to the global character of marine pollution, it is believed that there are regional peculiarities of the pollution problem, in which case, it is not essential that all aspects be approached through a centralized global superagency. Moreover, such an agency is unlikely to agree on anything beyond the basic global standards, and the special regional problems would give rise to disagreements on the application of detailed rules. Finally, the single global agency would simply be too big to be responsive to the various local needs.

### **Regional Approach**

Regional regulatory arrangements as a third option for controlling pollution have been referred to several times in the preceding pages. This concept has also been suggested in general terms by several legal scholars,<sup>64</sup> nations,<sup>65</sup> and in interna-

tional instruments concerned with pollution regulation.<sup>66</sup> The IMCO Council, meeting in an extraordinary session after the *Torrey Canyon* disaster, also addressed the theme. Among the subjects on which the Council recommended "study as a matter of urgency" was a mechanism "whereby states regionally or inter-regionally where applicable," could pool their resources and

cooperate at short notice to provide manpower, supplies, equipment, scientific advice to deal with discharge of oil and other noxious or hazardous substances including consideration of patrols to ascertain the extent of the discharge and the manner of treating it both on sea and on land.<sup>67</sup>

At a New York Conference in 1971, Thomas Mensah, the head of IMCO's legal division struck the same note.<sup>68</sup> He lamented the absence of an international body with the power to enforce measures on individual states. He emphasized that "to be successful, control and regulation of marine pollution must be regarded not as a national but rather in most cases as a regional or sub-regional problem." In 1973, the UN Committee on Peaceful Uses of the Sea-Bed, charged with preparatory work for LOS III "stressed that marine pollution could be effectively dealt with by a combination of global, regional and national rules and standards with the global ones fixing the minimum provisions . . . and the regional ones laying down particular and stricter provisions" as may be necessary in every region or country.<sup>69</sup>

The summer 1974 session of LOS III gave very little attention to marine pollution. However, it has as one of the tabled proposals a "Draft article on global and regional cooperation" requiring states to endeavor "to participate actively in regional and international programmes," cooperating with competent international organizations, to study the seas and formulate rules and standards for the prevention of pollution.<sup>70</sup>

Although these suggestions have not been sufficiently fleshed out to show their institutional and functional aspects with regard to the pollution problem, the following reasons may be advanced to show why the regional approach merits serious consideration (some of these reasons have been alluded to in the last two sections).

First, *differences in the degrees and kinds of pollution in the various regions require differences in approaches to be followed in pollution control.* As noted earlier, some regions are threatened by a greater diversity of pollution problems than are others. But no ocean region is entirely free from the prospects of serious pollution. For example, the Indian Ocean states may find that their most immediate problem is to establish (1) a special system of patrol to combat deliberate spillage of oil and (2) centers for combating accidental oil spillage in the same manner as recently proposed by Malta for the Mediterranean Sea.<sup>71</sup> On

the other hand, the North Atlantic states have only partly commenced the establishment of mechanisms for dealing with the great diversity of industrial and urban wastes that reach the sea by dumping and wash-ups.<sup>72</sup>

Some of the states in the Indian Ocean area may argue that it is not their responsibility to control pollution in the high seas because it is not of their making and they are not maritime states.<sup>73</sup> This argument is of course fallacious, because the pollution incidents may affect the interests of coastal states much more than the flag state, which may be located thousands of miles away. In fact, it is precisely when interests of the flag state may not be directly affected that the coastal states should band together and protect their own interests against pollution perpetrated by an outside state. Indeed, the coastal states are entitled to take the conservation measures under the 1958 Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas.<sup>74</sup> Article 6 of that 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," adding:

2. A Coastal State is entitled to take part . . . in any system of research and regulation for purposes of conservation of the living resources of the high seas in that area, even though its nationals do not carry on fishing there.

It is within the parameters of the term conservation, which in its ordinary usage refers, among other things, to preservation from injury, that the coastal states might arguably commence regulatory programs to ensure the prevention of pollution that may endanger living resources of the high seas.

Still, even if there were an ocean region that was not immediately threatened by serious pollution of any kind, the states would still need to consider a regional system of their own for two reasons: first, baseline studies of the ocean water seem already to be needed in all regions to facilitate determination of the subsequent changes in the water quality.<sup>75</sup> Regional organizations seem the obvious ones to undertake such studies. Second, pollution may not have so far required an institution within certain regions; however, pollution has proved to be a concomitant of economic growth that can be controlled only by deliberate efforts. As economies grow in various parts of the world and as activities in the oceans expand, including possible dumping of wastes and river runoffs of agricultural wastes (such as fertilizers) as well as industrial wastes, the regulatory mechanisms will be essential. This applies also to the present consideration of exploitation of resources of the seabed and continental shelves. Areas that have not up to now been affected by pollution are likely in fact to need preventive as well as remedial infrastructure in the very near future. This should then be a part of the long-range planning.<sup>76</sup> As Eugene Skolnikoff put it, if those institutions

and procedures will be needed in the 1980s, they should be established now, because international institutions cannot be created overnight.<sup>77</sup>

Second, regional mechanisms lead to distribution of the remedial technology and facilities close to where incidents may occur, making them accessible in cases of sudden ecological catastrophe. To that extent the mechanism may also provide for transfer of the relevant technology to areas that do not already have it.

Again the Indian Ocean is an ideal illustration because of its being a heavily traveled tanker route. Most of the states in that area are hardly as well equipped as the United Kingdom was when it confronted the *Torrey Canyon* oil disaster. Most of the states would have to rely on help that would have to come from thousands of miles overseas. Obviously, when there is a catastrophe of that kind, it is always a question of how fast the remedial action can be taken. Regarding the *Torrey Canyon*, Professor Goldie<sup>78</sup> has pointed out that the extent of environmental damage would not have been so vast if Britain had not acted as hesitantly as it did. Such lack of promptness may have resulted from surprise and from uncertainty as to the best counteraction following an unprecedented incident. But Britain was technologically capable of taking measures when it decided what to do. The situation is entirely different where decision is to be followed by a request for help from thousands of miles away.

Like FAO,<sup>79</sup> Schachter and Serwer have pointed out that very few states are equipped to execute the range of measures such as

capping blow-outs, detecting oil spills and identifying their origins, bombing of wrecked tanker to set oil on fire, sinking oil slicks, skimming oil from the surface of the sea and any other number of measures . . . all of which require a considerable degree of technical expertise and financial resources.<sup>80</sup>

An economical and efficient method of utilization of resources would be through pooling of national and international resources on a regional basis, thus making those available for dispatch to any scenes of actual or suspected catastrophe. That is the mechanism currently under consideration by the Mediterranean states. At their recent Barcelona meeting, these states requested the Executive Director of UNEP to

have early consultation with the Governments of the region on the possibility of establishing a regional oil-combating centre to deal with the ever-present and growing threat of a major oil spillage in the Mediterranean, taking note of the proposal of Malta to host such a centre.<sup>81</sup>

The recent grounding of the Dutch tanker *Metula* in the Strait of Magellan reminded Chile of the *Torrey Canyon*, at which point the Chilean delegation to

the Caracas Law of the Sea Conference (first phase) proposed establishment of regional organizations for pollution control in case of incidents leading to threat of pollution. Among other things, the proposal said:

- (4). Although IMCO has dealt with such pollution in its conventions, the Chilean delegation considers it extremely important for regional stations to be established under the supervision of that organization; the stations should be technically equipped not only to prevent fuels from catching fire but also and above all to eliminate the effects of pollution of the marine environment by the spillage of large quantities of fuel ensuing from such accidents.
- (5). Regional stations should be set up in such a way that the scene of the accident may be reached with the speed usually called for under such circumstances.
- (6). These stations should be financed through the contributions from the oil consortia and related agencies connected with such activities.<sup>82</sup>

Chile called on the Conference to recommend the establishment of such centers as a part of the new regime of the seas.

Third, regionalization encourages the participation of the maximum number of states, including developing states that may otherwise remain at the periphery in a globally centralized system using high-level technology. At present, only the developed states have the high technical expertise and financial resources needed for effective pollution control.<sup>83</sup> Currently, some of these resources and functions are dispensed through institutions belonging to the developed countries and international agencies such as the Joint Group of Experts on the Scientific Aspects of Marine Pollution. Any attempt to regulate laissez-faire scientific activities meets with strong protests from the scientists in the developed countries.<sup>84</sup> People of the developing areas know very little about various scientific activities taking place beyond their own coasts, even though these coastal states are supposed to conserve and exploit resources there.<sup>85</sup>

Besides, in a regional forum the industrialized countries will have more incentive to explain themselves to the representatives of the less-developed countries than is the case in the large global conferences where issues generally lack focus. In this case, the countries within a region determine the focus of their regulatory interests for the protection of their marine environment, whereas other nonregional states interested in the ocean for other reasons make their case as they may see fit for consideration.

The idea of broad participation through a regional mechanism performs also the function of transfer of technology from the developed to developing regions much in the same sense that distribution of the resources does. By participating in the regional mechanism, the local people have the opportunity to learn the techniques.



This form of participation may also be cheaper because only the countries that see their interests as being particularly involved do attend any regional meeting. The states within an ocean region, on the other hand, would attend activities close to home, thereby taking advantage of shorter travel distances and shorter time away from home offices for expert staff.

*Fourth, efforts to establish a single global regime have been considered either futile or illusory, at the same time unilateral procedures as a means of developing a new custom have been found objectionable.* Therefore a regional regime is considered ideal to limit unilateralism and to provide an impetus for global initiatives. As Lawrence Lanctot has written, most of the legal controls can be carried out at regional level, with the global institutions performing "an interstitial function, filling gaps where no controls exist or if ineffective ones exist at the regional level."<sup>86</sup>

Regional organizations can provide special impetus, for example, in dealing with flag-state problems that have been difficult to overcome at global level. Options are available for countries within an ocean region, for instance, to deny port facilities to a persistent polluter or to ships flying the flag of a state known for its noncooperation in the regulation of pollution.<sup>87</sup> Data on most major casualties to tankers are available for any group of states that may wish to take the collective initiative.<sup>88</sup>

Increased efforts of this kind by various regions may finally overcome the problem presented by flag-state rule at the global level. Alternatively, where the regional organization affects the interests of other states not geographically located there, the regional agreement may be open for signature by those other states, thus facilitating development of control standards through broad acceptance.

*Fifth, implicit in the above reasons, but significant in its own right, is the function of regional organizations as a forum for consultation and confrontation in matters related to pollution of the sea.* Factors that affect marine environment originate from diverse sources, and most of the effects require long-range considerations. These aims cannot be satisfactorily achieved within the framework of ad hoc global agreements.

A few dramatic instances illustrate the need for such a forum: the U.S. decision to sink coffins of nerve gas in the Atlantic in 1970 is one. As will be recalled, there was considerable protest and opposition aired both within and outside the United States, but the only place where the matter was given a hearing was in the U.S. courts, even though the shores of the Caribbean states were closer to the scene of the dumping. Perhaps an emergency meeting of an Atlantic Ocean or a Caribbean Sea organization would not have been able to persuade the United States to desist from dumping the nerve gas into the sea.

Some writers are convinced that such a mechanism would have made a difference,<sup>89</sup> or even that the United States is often responsive to protests from other states on matters concerning environmental protection.<sup>90</sup>

The Arctic region is another example; Canada's decision to protect its Arctic coast was one unilateral measure. Quite a different danger was threatened by the Soviet proposal to reverse the flow of two of its country's northern rivers, which, according to Western scientists and environmentalists, would have had drastic consequences on the entire Arctic environment and on climate in the Northern Hemisphere.<sup>91</sup> Although it had been suspected that the Soviet Union would ignore the protests, two Soviet scientists recently told Ron Moxness that the project "has been abandoned on the recommendation of the USSR Academy of Sciences."<sup>92</sup> Canada, the United States, and the Soviet Union, among others, are interested in conservation of the Arctic and could have discussed the issues in joint forum. It was after Canada's unilateral legislation in 1970 that the United States was reported to be convening a conference of 20 states with interests in the Arctic.<sup>93</sup> But the conference was never held, presumably because some of the controversial issues in Canadian legislation were being negotiated for a comprehensive treaty to prevent pollution from ships, which was then scheduled for a universal convention in 1973. In any case, it is easier to construct a forum for consultation before, rather than after, a crisis has been precipitated.

Two recent successful ad hoc regional protests directed against dumping of toxic wastes in the high seas may, however, be pointed out. The first one occurred in July 1971 when the Dutch ship *Stella Maris* was loaded with some 600 tons of chemical wastes for dumping in Northeastern Atlantic. A series of protests from Norway, Denmark, Sweden, Ireland, and the United Kingdom forced the Dutch Foreign Ministry to order the recall of the ship with its cargo.<sup>94</sup> The second incident occurred in March 1975 when the Finnish tanker *Enskeri*, loaded with about 16,000 pounds of toxic arsenic wastes, was bound for an unspecified dumping site in the southern Atlantic. Stiff protests from Argentina, Brazil, Uruguay, and South Africa forced the Finnish officials to recall the tanker with its cargo.<sup>95</sup>

But in either case, if the Dutch or Finnish government had adopted a defiant attitude, as did the United States in the nerve gas incident, there was still no international machinery through which the regional states could have intervened in the high seas to stop the dumping, because individual states lacked the clear authority to take such measures.

The region that is particularly ripe for a forum for consultation and for regulatory machinery is the Indian Ocean where, as discussed already, Oman and Iran have decided to take individual measures to stave off possible dangers of oil pollution occurring in the high seas. Instead of individual states commencing preventive patrols and inspections in the high seas, which is almost certain to

lead to conflict with neighboring as well as outside states, the measures could be determined within a forum comprised of all states interested in the ocean for resources and navigation.

There seem, indeed, to be satisfactory reasons why regional arrangements for pollution regulation are worthy of more serious consideration than either unilateral state action or the global superagency approach. From the preceding discussions, it is evident that the regional regime does not imply complete abandonment of the global mechanisms for setting uniform standards. Rather, the function of the regional agencies is to define in precise details the rules applicable to an ocean or "ecological" region and to determine the procedure for application of the measures, including how such measures relate to the global standards, because it has been accepted that marine pollution has a significant global component.

There is, however, a major difficulty in international law relating to regionalism. The regulations adopted by the regional organization are intended for application in the high seas beyond national jurisdiction where states and people have freedom of various activities under general international law. In other words, an agreement in the regional arrangement would be *res inter alios acta* not enforceable against third parties. It may be contended that there is already an evolving international rule to declare that those who pollute the seas are enemies of all people and states and to make them subject to certain limited enforcement powers by any state that catches them; or at least that such a polluter should be reported to the flag state or state of his nationality, which, in turn, is under obligation to investigate the matter and impose the necessary sanctions.<sup>96</sup> Such a rule of universality of jurisdiction is only now evolving, and it therefore requires strengthening through wider acceptance in treaties in order for it to be invoked as a basis for enforcement of regional standards against third states. Therefore, regional organizations should be open to participation of all states that are interested in the ocean region, regardless of where the states are geographically located.

The second problem is that there may be conflicts between some regional regulations and global ones to the extent that users of the sea may in fact be subjected to harassment as they operate in different areas. This means then that a regional regime for the promulgation of regional standards ought to provide mechanisms for coordination of legislative processes of the global and regional organizations to facilitate harmony of the various standards adopted by the regional organizations where such standards present genuine problems to users of the sea.

Third, the regional regulations may differ from region to region, thus permitting possible transregional pollution injuries. In that case, there must be provision for intervention by competent global institutions to harmonize the regional

standards. Alternatively, the system should provide for interregional conferences or consultations to deal with problems that do not require global institutions.

Fourth, the regional initiatives may in some areas be frustrated by preexisting political differences. For example, the Baltic was for a long time considered to be ripe for regional treatment, but one of the impediments was how to handle the participation of East Germany, a nation that some other states, including West Germany, did not recognize; this situation made diplomatic intercourse impossible.<sup>97</sup> Similar problems would arise in the Indian Ocean where the racial policies of the South African government have been condemned by the majority of the coastal states.

At times, such problems are short-lived, as evidenced by the changes in diplomatic relations in Europe that made possible the concluding of a Baltic Sea agreement with the participation of all surrounding states.<sup>98</sup> However, in constructing a regional system, serious considerations ought to be given to ways of dealing with the problem of recalcitrant states and states that are engaged in some form of political dispute with other states in the region.

### Acknowledgment

The author is grateful to Professors W. S. Barnes and A. P. Rubin who read earlier drafts of this paper and made useful comments.

### Notes

<sup>1</sup> *Pollution: An International Problem for Fisheries* (Rome: Food and Agricultural Organization of the United Nations, 1971).

<sup>2</sup> J. C. Sweeney, "Oil Pollution of the Oceans," 37 *Fordham Law Review* 155, 158 (1968).

<sup>3</sup> Text of legislation reprinted in 9 *Int'l. Leg. Mats.* 543 (1970). For some discussion see L. C. Green, "International Law and Canada's Anti-Pollution Legislation," 50 *Oregon Law Review* 462 (1971); R. B. Bilder, "The Canadian Arctic Waters Pollution Prevention Act," *The Law of the Sea: The United Nations and Ocean Management*, ed. Alexander (Kingston: University of Rhode Island, 1971), p. 294.

<sup>4</sup> *Ibid.*

<sup>5</sup> J. Alan Beesley, "The Arctic Pollution Prevention Act: Canada's Perspective," 1 *Syr. J. Int'l. Law and Com.* 226, 235 (1973). Beesley was then the Legal Advisor to the Canadian Ministry of Foreign Affairs. L. H. J. LeGault, also of the legal office, quotes Prime Minister Trudeau as saying with regard to the Arctic: "Its continued unspoiled form is vital to all mankind." See LeGault, "Canadian Arctic Waters Pollution Prevention Legislation," in *The United Nations and Ocean Management: Proceedings of the Fifth Annual Conference of the Law of the Sea Institute, 1970*, ed. Lewis M. Alexander (Kingston: University of Rhode Island, 1971), pp. 294, 295.

<sup>6</sup> Articles 4 and 18.

<sup>7</sup> Beesley, "The Arctic Pollution Prevention Act," p. 232.

<sup>8</sup> Harry T. Almond, Jr., "Canada's Legislative and Regulatory Scheme to Control Pollution in the Arctic Waters," 1 *Syr. J. Int'l. Law and Com.* 236, 243 (1973).

<sup>9</sup> See "Informal Single Negotiating Text," Third United Nations Conference on the Law of the Sea. Second Committee UN Doc. A/Conf.62/WP.8/Part II. Article 46 states that "The

exclusive economic zone shall not extend beyond 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.”

<sup>10</sup> *Iceland and the Law of the Sea* (Reykjavik: Government of Iceland, 1972), p. 14.

<sup>11</sup> The Court avoided ruling directly on the issue of whether Iceland had acted contrary to international law by unilaterally violating its 1961 agreement with Britain. Instead, the Court held that Iceland's regulations were not opposable to the United Kingdom; then the Court proceeded to emphasize the principle of preferential rights and equity. See “Fisheries Jurisdiction Case,” (*United Kingdom v. Iceland*), 1974, *I.C.J. Reports* 3, 22–27.

<sup>12</sup> See the lucid analysis by Anthony D'Amato in *The Concept of Custom in International Law* (Ithaca, N.Y., and London: Cornell University Press, 1971).  
s,13LeGault, “Canadian Arctic Waters Pollution Prevent Legislation,” p. 299; Beesley, “The Arctic Pollution Prevention Act,” p. 235.

<sup>14</sup> Richard B. Bilder, *The Role of Unilateral State Action in Preventing International Environmental Injury* (Madison: University of Wisconsin, Sea Grant College Program, September 1973), p. 37.

<sup>15</sup> Canada decided on the unilateral measures, the so-called right of innocent passage notwithstanding. They have the support of the environmentalists, including Kenneth Curtis, former governor of Maine who testified before the Canadian Senate, calling the plan to build the refinery at Eastport “a terrible idea,” and urged Canada to take measures to prevent passage by supertankers through the Head Harbour Passage. See *The Boston Globe*, 21 February 1975, p. 1; *The New York Times*, 5 March 1975, p. 12. Rufus Smith, the U.S. Assistant Secretary of State for Canadian Affairs, testified before the Maine Environmental Protection Board on 7 September 1973 saying: “. . . Canada does not have authority under international law arbitrarily to prohibit the passage of vessels through Head Harbour Passage. That is not to say, however, that Canada may not have the right reasonably to regulate traffic and navigation through the passage.” Copy of statement of Rufus Smith obtained from the U.S. Department of State, p. 2. See also *The Globe and Mail* (Eastport, Maine), 8 September 1973, p. B3; *The Maine Times* 13 July 1973, p. 5.

<sup>16</sup> *The New York Times*, 16 February 1975, p. 2.

<sup>17</sup> Professor Nergaard is a geologist at Temple University. See his “Ecological Problems of the Canadian Arctic,” 1 *Syr. J. Int'l. Law and Com.* 223, 225 (1973).

<sup>18</sup> IMCO Doc. A/VII/Res.232, November 1971. IMCO Resolution 232 was adopted in 1971 as an amendment to the 1954 International Convention on the Prevention of Pollution of the Sea by Oil.

<sup>19</sup> Article 2(h) defines “waste” to mean: “(i) Any substance that if added to any waters would degrade or alter or form part of a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by man or by animal, fish or plant that is useful to man, and (ii) Any water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any waters, degrade or alter or form part of a process of degradation or alteration of any of those waters to an extent that is detrimental to their use by man or by any animal, fish or plant that is useful to man, and without limiting the generality of the foregoing, includes anything that, for purposes of the Canadian Water Act, is deemed to be waste.”

<sup>20</sup> 12 *Int'l. Leg. Mats.* 1319 (1973).

<sup>21</sup> For the U.S. statement, see 9 *Int'l. Leg. Mats.* 605 (1970).

<sup>22</sup> Louis Henkin, “Arctic Anti-Pollution: Does Canada Make—or Break—International Law?” 65 *Am. J. of Int'l. L.* 131, 133 (1971).

<sup>23</sup> Beesley, “The Arctic Pollution Prevention Act,” p. 233. See also L. C. Green, “International Law and Canada's Anti-Pollution Legislation,” 50 *Oregon Law Review* 462, 484 (1971).

<sup>24</sup> Henkin, "Arctic Anti-Pollution."

<sup>25</sup> Beesley, "The Arctic Pollution Prevention Act." Canada participated at the November 1973 London Conference that adopted the elaborate Convention on the Prevention of Pollution from Ships. Recently it accepted the 1971 Amendment to the 1954 London Convention on the Prevention of Pollution of the Sea by Oil; see 14 *Int'l. Leg. Mats.* 303 (1975).

<sup>26</sup> Albert E. Utton, "International Environmental Law and Consultation Mechanism," 12 *Colum. J. Transnat'l. L.* 56, 61 (1973).

<sup>27</sup> Robert B. Krueger, "An Evaluation of the United States Ocean Policy," 17 *McGill Law Journal* 652 (1971). K. Hjertonsson, *The Law of the Sea: Influence of the Latin American States on Recent Developments of the Law of the Sea* (Leiden: A. W. Sijthoff, 1973), pp. 20-39.

<sup>28</sup> Almond, "Canada's Legislative and Regulatory Scheme," p. 242.

<sup>29</sup> See Alexander, ed., *The United Nations and Ocean Management*, p. 23.

<sup>30</sup> *Ibid.*, p. 307.

<sup>31</sup> *Ibid.*, p. 231.

<sup>32</sup> *The Manchester Guardian*, 25 March 1972, p. 8.

<sup>33</sup> *The New York Times*, 16 February 1975, p. 2.

<sup>34</sup> *The New York Times*, 21 February 1975.

<sup>35</sup> For a short and concise presentation of the contending interests, see R. M. Burrell and Alvin J. Cottrell, eds., *The Indian Ocean: A Conference Report*, 18-19 March 1971 (Washington, D.C.: The Center for Strategic and International Studies, Georgetown University, 1971). For some recent reports, see Drew Middleton, "Soviet Said to Expand Air and Naval Activities in the Persian Gulf Area," and Leslie Gelb, "U.S. Nuclear Deal with Iran," both in *The New York Times*, 8 March 1975, p. 2.

<sup>36</sup> *The New York Times*, 16 February 1975, p. 2.

<sup>37</sup> Conference discussions at University of Oregon. See 50 *Oregon Law Review* 493 (1973).

<sup>38</sup> UN Doc. A/Conf.48/14 (1972), p. 7; L. B. Sohn, "The Stockholm Declaration on the Human Environment," 14 *Harvard Int'l. L. J.* 423, 506 (1973).

<sup>39</sup> Sohn, "The Stockholm Declaration," pp. 507-508.

<sup>40</sup> "Draft Ocean Space Treaty," Malta's Working Paper, and UN Doc. A/AC.138/53 (1970), Introduction.

<sup>41</sup> United Nations, *The Sea: Prevention and Control of Marine Pollution*, UN Doc. E/5003, 7 May 1971, p. 9 (hereafter referred to as UN Doc. E/5003).

<sup>42</sup> Lawrence R. Lanctot, "Marine Pollution: A Critique of Present and Proposed Agreements and Institutions—A Suggested Global Environmental Regime," 24 *Hastings L. J.* 67, 90 (1972).

<sup>43</sup> When it enters into force, the 1973 Convention will supersede the 1954 Convention on the Prevention of Pollution of the Sea by Oil as between parties to both.

<sup>44</sup> Forty-four draft articles on marine pollution were produced at the end of the second substantive session of the Conference. UN Doc. A/Conf.62/WP.8/Part III, 6 May 1975.

<sup>45</sup> See above, notes 22 and 42.

<sup>46</sup> Proposals of Kenya, UN Doc. A/Conf.62/C.3/L.2 (1974); of Greece, UN Doc. A/Conf.62/C.3/L.2 (1973); of the Federal Republic of Germany, UN Doc. A/Conf.62/C.3/L.7 (1974); statement of the British representative, UN Doc. A/Conf.62/C.3/SR.4 (1974), pp. 23-24, and of the representative of Sweden, UN Doc. A/Conf.62/C.3/SR.5 (1974), pp. 3-4; also the "Informal Single Negotiating Text," UN Doc. A/Conf.62/WP.8/Part III (1975).

<sup>47</sup> This is true of the resolution moved by Claiborne Pell in the U.S. Senate in January 1969 calling for an international treaty for ocean space, reprinted in Shigeru Oda, *International*

*Law of Ocean Development: Basic Documents* (Leiden: Sijthoff, 1972), p. 272; The World Peace Through Law Center, "Treaty Governing the Exploration and Exploitation of the Sea-Bed," in *International Law of Ocean Development*, p. 244; Elizabeth Mann Borgese, *The Ocean Regime: A Suggested Statute for the Peaceful Uses of the High Seas and the Sea-Bed Beyond National Jurisdiction* (Santa Barbara: The Center for the Study of Democratic Institutions, 1968); "Malta's Draft Ocean Space Treaty," cited in note 40 above; and U.S. "Draft United Nations Convention on International Sea-Bed Area," UN Doc. A/AC.138/25 (1970).

<sup>48</sup> O. Schachter and D. Serwer, "Marine Pollution Problems and Remedies," 65 *Am. J. of Int'l. L.* 110 (1971). Prof. William Barnes calls it the "global Gobbledygook" (private conversation).

<sup>49</sup> Lanctot, "Marine Pollution," p. 108.

<sup>50</sup> UN Doc. E/5003 (1971), p. 9.

<sup>51</sup> Schachter and Serwer, "Marine Pollution Problems and Remedies," p. 111.

<sup>52</sup> For example, "Agreement for Cooperation in Dealing with Pollution of the North Sea," 704 *UNTS* (1969); "Convention on the Protection of the Marine Environment of the Baltic Sea Area," 22 March 1974, 13 *Int'l. Leg. Mats.* 544 (1974). The Barcelona Meeting of 28 January–5 February 1975 commenced active negotiations, under auspices of UNEP, for an agreement on the Mediterranean Sea. See UN Press Release HE/232, 5 February 1975; and UNEP/WG.211-4 (1974).

<sup>53</sup> See map on marine pollution around the world in *Pollution: An International Problem for Fisheries*, pp. 4–5.

<sup>54</sup> "Atlantic Ocean Pollution Observed by 'Ra' Expedition: Report and Samples Delivered to the Permanent Mission of Norway to the United Nations by Thor Heyerdahl," UN Doc. E/5003 (1971), Annex II.

<sup>55</sup> *Pollution: An International Problem for Fisheries*, p. 48.

<sup>56</sup> *Ibid.*, pp. 4–5; 49–51, 54.

<sup>57</sup> *Ibid.*, p. 58.

<sup>58</sup> D. P. O'Connell, "The Legal Control of the Sea: Preparation for the 1973 Conference," 28 *Round Table* 415 (1972); *Pollution: An International Problem for Fisheries*, pp. 4–5, 55.

<sup>59</sup> See "Focus on the Environment," 36 *The Weekly Review* (Nairobi), 13 October 1975, pp. 21, 25.

<sup>60</sup> See FAO, Indian Ocean Fisheries Commission studies issued in 21 Monographs IOFC/DEV/71/1-21 in March 1971, especially *A Plan for Fisheries Development in the Indian Ocean Countries: Problems, Policies, Prospects*, IOFC/DEV/71/12; *Economic Planning for Fisheries Development*, IOFC/DEV/71/19; and *Survey of Resources in the Indian Ocean and Indonesia Area*, IOFC/DEV/71/2.

<sup>61</sup> Stephen S. Goodspeed, *The Nature and Function of International Organization* (New York: Oxford University Press, 1967), p. 426.

<sup>62</sup> Thomas Buergenthal, *Law Making in the International Civil Aviation Organization* (Syracuse, N.Y.: Syracuse University Press, 1969), p. 113.

<sup>63</sup> *Ibid.*, p. 115.

<sup>64</sup> A. Chayes, "International Institutions for the Environment," in ed. J. L. Hargrove, *Law, Institutions and the Global Environment* (Dobbs Ferry, N.Y.: Oceana Publications, 1972), pp. 6–7; L. R. Lanctot, "Marine Pollution," pp. 108–109; Schachter and Serwer, "Marine Pollution Problems and Remedies," pp. 84, 111; Utton, "International Environmental Law and Consultation Mechanism." Also, Thomas A. Mensah, "The IMCO Experience," in *Law, Institutions and the Global Environment*, pp. 237, 240; Ved P. Nanda, "The 'Torey Canyon' Disaster: Some Legal Aspects," 44 *Denver L. J.* 400, 422 (1967).

<sup>65</sup> "Declaration of Santo Domingo" signed by ten Caribbean states and Mexico in June

1972, UN Doc. A/AC.138/80, reprinted in United Nations, *Official Records of the General Assembly: Twenty-Seventh Session*, Suppl. 21 (A/8721), p. 70. "Organization of African Unity: Declaration on the Issues of the Law of the Sea," adopted by the Council of Ministers in May 1973, UN Doc. A/AC.138/89, reprinted in United Nations, *Official Records of the General Assembly: Twenty-Eighth Session*, Suppl. 21 (A/9021), vol. 2, p. 6.

<sup>66</sup> Article VIII of the 1972 London Convention on the Prevention of Pollution by Dumping of Wastes and Other Matter.

<sup>67</sup> IMCO Council, Third Extraordinary Session Agenda, Item 3, IMCO Doc. C/ES.III/5, 8 May 1967.

<sup>68</sup> Mensah, "The IMCO Experience," p. 240.

<sup>69</sup> United Nations, *Official Records of the General Assembly: Twenty-Seventh Session*, Suppl. 21 (A/8721), p. 53.

<sup>70</sup> UN Doc. A/Conf.62/C.3/L.15, p. 4.

<sup>71</sup> Malta proposed the idea of a regional "oil-combating centre" to deal with incidents in the Mediterranean Sea. UN Press Release HE/232, 5 February 1975, p. 6.

<sup>72</sup> The Oslo Convention, UN Doc. ST/LEG/SER.B/16 (1974), p. 457; and Paris Convention, 13 *Int'l. Leg. Mats.* 352 (1974).

<sup>73</sup> Somalia and Singapore joined the club of the flags of convenience in 1968. By 1 July 1971, Somalia had a total of 109 ships and Singapore 185 ships, which includes tankers, ore and bulk carriers, general cargo ships, fishing vessels, and research vessels. This is a minute fraction of the world's shipping. See "Facts Behind Flags of Convenience," in the *OECD Observer* no. 59 (March 1972), pp. 12-15.

<sup>74</sup> 599 *UNTS* 285 (1966) entered into force 20 March 1966.

<sup>75</sup> UN Doc. E/5003 (1971), p. 9. See also some recent studies on changes on ~~PBC~~ <sup>PCB</sup> concentration in the North Atlantic in *The Times* (London), 30 November 1974, p. 16.

<sup>76</sup> In several areas the continental shelf may extend beyond the coastal-state jurisdiction over the superjacent waters. See O'Connell, "The Legal Control of the Sea."

<sup>77</sup> Eugene B. Skolnikoff, "Policy Note: An 'ACDA' for U.N. Policy," 27 *International Organization* 100 (1973).

<sup>78</sup> L. F. E. Goldie, "Book Review Note," 1 *Journal of Maritime Law and Commerce*, 155, 158 (1969).

<sup>79</sup> "Pollution: An International Problem for Fisheries," pp. 4-5.

<sup>80</sup> Schachter and Serwer, "Marine Pollution Problems and Remedies," p. 94.

<sup>81</sup> UN Press Release HE/232, 5 February 1975, p. 4.

<sup>82</sup> Chile's working paper on "Regional Organization to Provide Assistance in Case of Accidents Resulting in Pollution of Marine Environment," UN Doc. A/Conf.62/C.3/L.5, 28 August 1974.

<sup>83</sup> UN Secretariat, "Problems of Acquisition and Transfer of Marine Technology," UN Doc. A/Conf.62/C.3/L.3, 25 July 1974.

<sup>84</sup> See Maechling, Jr., "Freedom of Scientific Research: Stepchild of the Oceans," 15 *Virginia J. of Int'l. L.* 539 (1975).

<sup>85</sup> See C. Pinto, "Problems of Developing States and Their Effects on Decisions on Law of the Sea," *The Law on the Sea: Needs and Interests of Developing Countries*, ed. Lewis M. Alexander (Kingston: University of Rhode Island, 1973), pp. 3-4.

<sup>86</sup> Lanctot, "Marine Pollution," p. 188; see also Chayes, "International Institutions for the Environment," pp. 6-7.

<sup>87</sup> Of course, the underlying economic consequences for the port state that refuses entry to some ships are clear; most economies depend on shipped goods. But the important factor is whether the states are committed to control of pollution of their seas.



<sup>88</sup> Arthur McKenzie, Director of the Tanker Advisory Center in New York writes: "The Tanker Advisory Center has maintained a register of all reported casualty on every seagoing tanker in the world since 1964. And the U.S. Coast Guard has records of reported casualties to every tanker in the world since 1969"; *The New York Times*, 30 December 1974, p. 22.

<sup>89</sup> Utton, "International Environmental Law and Consultation Mechanism."

<sup>90</sup> F. L. Kirgis, "Technological Challenge to the Shared Environment: United States Practice," 66 *Am. J. of Int'l. L.* 29 (1972).

<sup>91</sup> S. A. Bleicher, "An Overview of International Environmental Regulation," 2 *Ecology Law Quarterly* 1, 74 (1972).

<sup>92</sup> See "Ecology—Soviet Style," *The Christian Science Monitor*, 20 November 1974, P. 5.

<sup>93</sup> Bilder, "The Canadian Arctic Waters Pollution Prevention Act," p. 204, 222.

<sup>94</sup> *The New York Times*, 23 July 1971, p. 66; 3 *The Netherlands Yearbook of International Law* 266 (1972).

<sup>95</sup> *The New York Times*, 18 and 23 March 1975; *The Denver Post*, 1 April 1975; *The Times* (London), 18 March 1975.

<sup>96</sup> The rule of universality of jurisdiction as it relates to the evolving international environmental law is discussed by me in "The Prospects for the Establishment of Regional Regulatory Arrangements for the Control of Pollution of the Seas" (Ph.D. diss., Fletcher School of Law and Diplomacy, Tufts University, 1975).

<sup>97</sup> Robert E. Stein, "The Potentials of Regional Organization in Managing Man's Environment," in *Law, Institutions and the Global Environment*, Hargrove (ed.), p. 257.

<sup>98</sup> The parties to this agreement are Denmark, Finland, West Germany, East Germany, Poland, Sweden, and the USSR. See 13 *Int'l. Leg. Mats.* 544 (1974).