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ALBERTO SZÉKELY*

The International Law of Submarine Transboundary Hydrocarbon Resources: Legal Limits to Behavior and Experiences for the Gulf of Mexico

INTRODUCTION

This article will analyze the emerging international law which applies to submarine transboundary hydrocarbon resources. It seeks to determine, on the one hand, the legal limits to the behavior of Mexico and the United States when facing the matter as neighboring States and, on the other, what experiences they can draw from the practice of other States for the rational and equitable utilization of such resources.

The purpose is dictated chiefly by the desire to foresee the alternatives available to Mexico and the United States, before they become critical political issues in their bilateral relations, which often makes it all the more difficult to handle the issues properly. Whether it is fisheries, migrant workers, narcotics traffic, trade restrictions, pollution, or other difficult border affairs, all too often both countries do not face the issue until they have reached the level of crisis, or even exploded into full-sized disputes.¹ Neither side benefits from such situations whose solution usually becomes all the more difficult to attain, as they become tainted with intransigence and exacerbated nationalistic attitudes. Thus, an attempt at preventive diplomacy seems to be a much better approach. In this particular field such preventive diplomacy would require both countries to envisage, through negotiations and a decided political will, a plan for the way they intend to face an issue. This plan must acquire great relevance and influence in their relations as neighbors.

Few States in the world community have as much experience as Mexico and the United States in dealing efficiently with resources at either side of their border.² The work of the International Boundary and Water Com-

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1. See generally M. OJEDA, *ALCANCES Y LÍMITES DE LA POLÍTICA EXTERIOR DE MÉXICO* (1976), *MEXICO-UNITED STATES RELATIONS* (S. Kaufman Purcell ed. 1981), and *RULES OF THE GAME AND GAMES WITHOUT RULES IN BORDER LIFE* (M. Miranda & J. Wilkie ed. 1983).

2. See generally *Symposium on U.S.-Mexican Transboundary Resources* (pts. 1 & 2), 17 NAT. RES. J. 543 (1977), 18 NAT. RES. J. 1 (1978).

mission has in many ways been a model for other States in the field. As this article will describe, the potential for the presence of a wide variety of transboundary resources between Mexico and the United States is almost staggering.³ Among them, groundwater seems to be the resource in the greatest need of attention, linked as it unavoidably is to the elementary needs of an expanding border population.⁴ Although the constantly fluctuating nature of the world's energy situation makes it now more risky to predict, present trends point to a continuing need for hydrocarbon resources, which are often found in the transboundary region between two countries. Irrespective of the role they will play in their national economies and of the impact they will eventually have on the satisfaction of their energy needs, hydrocarbons will surely be very much on the agenda of bilateral relations between Mexico and the United States. Up to now, the abundance of the resource on each side of the border, subject to the unquestionable sovereignty of each of the two countries, has made the issue primarily a commercial one. But whenever either of them attempts to exploit a deposit situated in an area crossed by their political boundary, the rights of the other will be at stake. Sooner or later the affected country will seek to protect those rights.

The new international legal ocean regime which has emerged from the Third United Nations Conference on the Law of the Sea, as well as the development of more suitable and sophisticated technology, has brought attention to those hydrocarbon deposits which are located in the maritime boundary areas. This is a natural result of the fact that the new regime has recognized the right of coastal States to extend their national marine jurisdiction, principally by establishing 200 mile exclusive economic zones, and by setting the outer limit of their continental shelves far beyond the 200 meter depth to the point where the resources are exploitable. The formula for determining exploitable resources was contained in the 1958 Convention on the Continental Shelf,⁵ which gave coastal States sovereign rights over vast amounts of resources which were formerly not theirs.

Even if Mexico and the United States intelligently muster the political will to negotiate the regime they will choose to apply to submarine transboundary hydrocarbons, their difficulties will be considerable. They will be dealing with a resource quite different from those with which they are more familiar, such as international river water. Their legal systems for oil exploitation are particularly at variance, and the role of natural resources as part of their domestic and foreign policy is quite distinct,

3. See *infra* note 124 and accompanying text.

4. See Utton, *International Groundwater Management: The Case of the U.S.-Mexican Frontier*, 57 NEB. L. REV. 633 (1978).

5. See Convention on the Continental Shelf, April 29, 1958, 15 U.S.T. 471, T.I.A.S. No. 5578, 450 U.N.T.S. 311.

especially when it comes to protecting them from foreigners. If these apparently insurmountable problems are overcome, but primarily if the political will is there, they will embark on a new venture. For this venture it will be necessary, on the one hand, to settle on the rules of the game as to the limits for their behavior in order to respect their reciprocal rights and duties and, on the other, to define the operation instruments, mechanisms, arrangements, and institutions through which they will jointly go about rationally and equitably utilizing those resources, under a framework of international bilateral cooperation. In order to successfully pass through the above two stages, they will undoubtedly have to reach out and ascertain the practice of States that may have already shaped a body of applicable rules defining correlative rights and duties, and which may have already gone through experiences as to the proper mechanisms and arrangements adequate for resources with the peculiarities of submarine transboundary hydrocarbon deposits. It is the aim of this article to contribute to the determination of those limits to behavior and to the identification of previous experience in the field in other parts of the world.

THE INTERNATIONAL LAW OF TRANSBOUNDARY RESOURCES

The regime applicable to transboundary resources still constitutes a mere emerging branch of international law, as many of its principles remain propositions *de lege ferenda*. Julio A. Barberis, a recognized authority on the subject,⁶ ventures that natural resources should be considered "shared" when they are neither those belonging to a single State nor those which belong to the international community. Instead, they are those resources which find themselves under the jurisdiction of two or more States, with the exclusion of everyone else. Such a definition is unfortunate because, even accepting the inevitable natural unity of a given deposit of resources, the sovereignty of a State over its territory and natural wealth cannot be fragmented, much less "shared." Barberis' concept is prejudiced because in both international and domestic State practice that part of a transboundary resource which is within a State's border, whether it is solid or fluid, belongs to and is the property of that State. Whether for economic or ecological reasons, it makes much more sense for a State with such resources to cooperate with its neighbor in the utilization and conservation of the resources through joint planned action. The question of joint planning is quite distinct from the question of property, which is not necessarily put at stake by whatever cooperation scheme is put into operation. Thus, even when they may be regarded as

6. See generally J. BARBERIS, *LOS RECURSOS NATURALES COMPARTIDOS ENTRE ESTADOS Y EL DERECHO INTERNACIONAL* (1979).

shared from a purely physical, natural, or ecological point of view, legally they are not. Consequently, the term "transboundary" is more appropriate and nonprejudicial than the "shared" concept.

Barberis' definition is also incomplete because it does not take into consideration all possibilities of transboundary resources, and neglects those which do not necessarily exist in the boundaries between the two States. There are also boundaries between the jurisdiction of a State and either a zone which is legally open to the community of States as a whole, such as the high seas, or between the jurisdiction of a State or the high seas and a zone which is reserved for mankind as part of its common heritage, that is, the international seabed area, which is the seabed and ocean floor and the subsoil thereof beyond the limits of national jurisdiction. In all such instances, transboundary resources may be found.

A more acceptable definition of transboundary resources may be the following: they are those natural resources located in an area through which a land or territorial, fluvial, lacustrine or maritime border runs, separating two sovereign States or a State and a marine zone which is beyond the limits of national jurisdiction, namely, either the high seas or the international seabed area. Those volumes or portions of such resources located within the territorial or marine sovereignty of the State are, in general, legally subject to unilateral appropriation by that State. Those resources which are in the high seas, mostly living resources, are subject to the customary regime of freedom of fishing by each and all vessels flying the flag of any of the recognized States members of the international community. Those resources which are in the exclusive economic zone or continental shelf of a State are subject to the "sovereign rights" of that State, although the exploitation of migratory species, such as tuna, is to be carried out in cooperation with the competent regional international organization. Finally, those resources in the international seabed area belong to mankind as part of its common heritage, and can only be exploited through the international regime and mechanism which was agreed on at the Third United Nations Conference on the Law of the Sea.⁷ In all such cases, however, cooperation between the owners is essential to protect reciprocal rights and ensure the fulfillment of mutual duties. However, it is clear that the definition proposed above does away with the "shared" concept.⁸

The need to elaborate a general legal regime for transboundary resources has only recently attracted international attention, through the

7. Draft Final Act of the Third United Nations Conference on the Law of the Sea, Oct. 21, 1982, U.N. Doc. A/CONF. 62/121 (1982), *reprinted in* 21 I.L.M. 1245 (1982) [hereinafter cited as *Law of the Sea Convention*].

8. *See generally* Székely, *Transboundary Resources: A View from Mexico* (to be published in *VIEWS ACROSS THE BORDER* (S. Ross ed.)).

1972 Stockholm United Nations Conference on the Human Environment.⁹ The first time the concept of shared natural resources was used was in General Assembly Resolution 3129 of 1973, which had as its sole precedent the Declaration approved by the Fourth Conference of the Non-Aligned countries of the same year in Algiers. Previous precedents in international practice, mostly at the bilateral level, can be found, even if they have not generated widely acceptable principles among the rest of the international community. Even when the general rule is that the agreed boundary between two States is also valid in the subsoil, in a vertical fashion, there have been cases in which one party allows the other to undertake mining under the surface of its territory. The oldest case in point involved the salines of Salzburg, which the Duke of Bavaria donated in part to the Bishop of Salzburg. Also, through the 1816 Aquisgran Treaty, the Netherlands ceded to Prussia a part of the coal mines in the subsoil under Dutch territory adjacent to the border. Later, through a 1952 treaty, an "exploitation boundary," different from the political one, gave the Netherlands jurisdiction over the subsoil in two zones under the surface of the territory of the Federal Republic of Germany. Article 3 of the treaty even establishes that the two zones are subject to municipal Dutch law. Further, in 1950 Belgium and the Netherlands agreed to a boundary for the exploitation of mines along the Mosa River. The treaty establishes that the jurisdiction over the subsoil belongs to the State to whose surface the coal is taken, and not to the superjacent State.¹⁰

Returning to the multilateral level, Point Four of the historical United Nations General Assembly Resolution on Permanent Sovereignty over Natural Resources, adopted December 14, 1962,¹¹ and which resulted from a Mexican proposal, established quite clearly that the exploitation of natural resources in each country shall be in accordance with its national laws and regulations. However, the principle has not been incompatible with a recent concern by the General Assembly with transboundary resources. Its subsidiary organ entrusted with the codification and progressive development of international law, the International Law Commission (ILC), has been working on a scheme for a draft convention to deal with international water courses as "shared natural resources," in order to rule their non-navigational uses. The work of the ILC has been the subject of deliberation by States at the Sixth Committee of the General Assembly, where the concept of a "system of an international watercourse" has been developing over which two or more States exercise sovereignty. The draft articles so far produced by the ILC are designed to provide for the man-

9. See BARBERIS, *supra* note 6, at 143.

10. Barberis, *Los Recursos Minerales Compartidos entre Estados y el Derecho Internacional*, in 8 DERECHO DE LA INTEGRACIÓN 45-58 (1975).

11. Resolution 1803/XVII.

agement and conservation of such systems, on the basis of the principle that there is a duty to utilize them equitably and reasonably, and that unilateral activities are prohibited if they cause harm to the other States in the system.¹²

On December 14, 1979, the General Assembly adopted its Resolution 34/99, originated in its First Committee, on the development and strengthening of good neighborliness between States, an item which had been initiated by a group of States under the leadership of Romania. The concept, which is to be eventually developed through a "proper international document," and which has been taken up by the Sixth Committee, is based on the general principle of cooperation—such as economic cooperation in the border zone—on the basis of equality of right, equity, and mutual benefit in the exploitation of "common resources." It goes further to call on neighboring States to cooperate on maritime problems, such as the delimitation of maritime zones, where common exploration and exploitation of common resources, which constitute a physical unity, will prove to be more advantageous than individual exploitation.

Such is the way in which general international law seems to be slowly and progressively developing on the question of transboundary resources. It now becomes convenient to examine the way this development of emerging rules is taking place in the realm of the law of the sea, specifically as applied to submarine transboundary hydrocarbon resources.

TRANSBOUNDARY RESOURCES AND THE 1982 LAW OF THE SEA CONVENTION

Amazing as it may seem, the Convention adopted at the Conference which, after one and one-half decades, was supposed to contain a new legal regime to cover all uses of the sea, entirely neglected the issue which is the subject matter of this article.¹³ The United Nations Convention on the Law of the Sea¹⁴ does deal specifically with some transboundary marine resources, even with submarine hydrocarbon deposits, but not those in the boundaries between two States.

Article 63 of the convention deals with living stocks occurring within the exclusive economic zones of two or more coastal States or both within the exclusive economic zone and in an area beyond and adjacent to it. For these areas it establishes a duty of those involved, either directly or through appropriate regional or subregional organizations, to seek to agree upon the measures necessary to coordinate and ensure the conservation

12. See Evensen (Special Rapporteur), *Primer Informe sobre el Derecho de los Usos de los Cursos de Agua Internacionales para Fines Distintos de la Navegación*, Comisión de Derecho Internacional, U.N. Doc. A/CN.4/367 (1983).

13. See Friedheim & Bowen, *Neglected Issues at the Third United Nations Law of the Sea Conference*, in 5 OCEAN MANAGEMENT 309 (1979).

14. Law of the Sea Convention, *supra* note 7.

and development of such stocks of associated species. It is important to note that, though this article clearly deals with transboundary living resources, it also expressly establishes that the duty is without prejudice to the provisions of the part of the convention in which it is included. That particular part of the convention deals precisely with the exclusive economic zone, which in turn recognizes the right of the coastal State to sovereignty over all living resources within it. This means that the duty does not affect the property right of the coastal State over the part of the resources inside its zone of marine jurisdiction.

Article 64 deals with highly migratory species, and provides for basically the same duty as for stocks of associated species covered by the previous article, together with the non-prejudice clause already described. The important element here is that these resources, precisely because of their highly migratory pattern of movement, are transboundary regarding more, and sometimes many more, than just two neighboring States. Such is the case, for instance, of yellow fin tuna, which travel from northern Mexico to northern Chile in the eastern Pacific Ocean.

Article 66 deals with anadromous stocks,¹⁵ and Article 67 with catad-

15. The full text of Article 66 provides as follows:

1. States in whose rivers anadromous stocks originate shall have the primary interest in and responsibility for such stocks. 2. The State of origin of anadromous stocks shall ensure their conservation by the establishment of appropriate regulatory measures for fishing in all waters landward of the outer limits of its exclusive economic zone and for fishing provided for in paragraph 3(b). The State of origin may, after consultations with the other States referred to in paragraphs 3 and 4 fishing these stocks, establish total allowable catches for stocks originating in its rivers.

3. (a) Fisheries for anadromous stocks shall be conducted only in waters landward of the outer limits of exclusive economic zones, except in cases where this provision would result in economic dislocation for a State other than the State of origin. With respect to such fishing beyond the outer limits of the exclusive economic zone, States concerned shall maintain consultations with a view to achieving agreement on terms and conditions of such fishing giving due regard to the conservation requirements and the needs of the State of origin in respect of these stocks.

(b) The State of origin shall co-operate in minimizing economic dislocation in such other States fishing these stocks, taking into account the normal catch and the mode of operations of such States, and all the areas in which such fishing has occurred.

(c) States referred to in subparagraph (b), participating by agreement with the State of origin in measures to renew anadromous stocks, particularly by expenditures for that purpose, shall be given special consideration by the State of origin in the harvesting of stocks originating in its rivers.

(d) Enforcement of regulations regarding anadromous stocks beyond the exclusive economic zone shall be by agreement between the State of origin and the other States concerned.

4. In cases where anadromous stocks migrate into or through the waters landward of the outer limits of the exclusive economic zone of a State other than the State of origin, such State shall co-operate with the State of origin with regard to the conservation and management of such stocks.

5. The State of origin of anadromous stocks and other States fishing these stocks shall make arrangements for the implementation of the provisions of this article, where appropriate, through regional organizations.

Law of the Sea Convention, *supra* note 7, at 1282-83.

romous species.¹⁶ Both articles regulate several possibilities of transboundary resources, primarily because those resources migrate from one zone of marine jurisdiction to the other. They also provide that the criteria of conservation and jointly planned management constitute the elements of cooperation expected from the States involved. Once again, however, the sovereign rights of the coastal State over the resources are preserved.

Article 82 contemplates the other instance of transboundary resources which the convention regulates, and it is the only article concerned with non-living resources. It deals with payments and contributions with respect to the exploitation of the continental shelf beyond 200 nautical miles. A coastal State exploiting non-living resources beyond that limit must make such payments and contributions on an annual basis, starting with the sixth year of production from a site, and at the rate of one percent of the value or volume of the production, to be increased by an additional one percent each year until the twelfth year, after which the rate will remain at seven percent. Only developing States which are net importers of the mineral resource produced are exempted from the above duties. The boundary counterpart being mankind's international seabed area, payments and contributions are to be made to the International Seabed Authority established by the convention, to be distributed to the States parties to it on the basis of equitable sharing criteria, taking into account the interests and needs of developing States, particularly the least developed and the landlocked among them.

The above provisions are a form of taxing duty in favor of an international seabed area reduced in its dimension by quite extended continental shelves allowed by the convention. This revenue sharing system implies that mankind has an established right over a portion of the resources of the outer edge of the shelf, which turns them into transboundary wealth.

As described above, no other provision is included in the convention to regulate the regime applicable to submarine transboundary hydrocar-

16. Article 67 provides:

1. A coastal State in whose waters catadromous species spend the greater part of their life cycle shall have responsibility for the management of these species and shall ensure the ingress and egress of migrating fish.

2. Harvesting of catadromous species shall be conducted only in waters landward of the outer limits of exclusive economic zones. When conducted in exclusive zones, harvesting shall be subject to this article and the other provisions of the Convention concerning fishing in these zones.

3. In cases where catadromous fish migrate through the exclusive economic zone of another State, whether as juvenile or maturing fish, the management, including harvesting, of such fish shall be regulated by agreement between the State mentioned in paragraph 1 and the other State concerned. Such agreement shall ensure the rational management of the species and take into account the responsibilities of the State mentioned in paragraph 1 for the maintenance of these species.

Id. at 1283.

bon, or even mineral, resources. This does not at all mean that those resources did not play any role in the negotiations at the conference. But in the delegations' minds the primary concern was to ensure the codification and progressive development of rules which would ensure that any substantial resources in their region would be, through the process of delimitation, entirely within their national jurisdiction, and not in the midst of the boundary line. As the International Court of Justice recognized in the Libya-Malta Continental Shelf case, "... resources are the essential objective envisaged by States when they put forward claims to sea-bed areas containing them."¹⁷ Moreover, one might say that a State, aware of the existence or potential of resources in the vicinity of the outer limit of its national marine zones, would have felt compelled at the conference's negotiations to ensure that the rules adopted resulted in the resources being entirely within its own zones. Such a selfish attitude always finds an apologetic foundation on one or another technical, geographical, geological, or morphological criterion to justify it. Nonetheless, it is surprising that the States participating at the conference still did not feel inclined to develop the law of the sea progressively to provide for a regime applicable to submarine transboundary hydrocarbon resources. It is all the more surprising if one recalls that, as early as five years before the beginning of substantive negotiations at the conference, the International Court of Justice clearly recognized the problem of such transboundary wealth and, more importantly, its legal, economic, and ecological consequences.¹⁸

These consequences were not dealt with at the conference and, thus, no regime was provided to deal with them. Instead, States seem to have followed the more selfish approach of creeping jurisdiction, and during the negotiations they camouflaged their greed for resources with the costume of the rules of delimitation to be agreed on. Thus, the negotiation for such rules could also be seen as a bargaining process to secure exclusive rights of sovereignty over natural resources in an area as wide as possible, even at the expense of neighbors, with little interest in sharing any of them. It is not strange then, as Professor Brown observed, that at the latter stages of the conference the negotiation on the rules of delimitation between States with adjacent or opposite coasts became one of the most "... hard-core issues in the entire proceedings of UNCLOS III."¹⁹ Professor Brown also wisely warned that the conference would

17. Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta), 1985 I.C.J. No. 68, reprinted in 24 I.L.M. 1189, 1203 (1985) [hereinafter cited as Libya-Malta Case].

18. See generally North Sea Continental Shelf Cases (W. Ger./Den; W. Ger./Neth.) 1969 I.C.J. Nos. 51 & 52, reprinted in 8 I.L.M. 340 (1969) [hereinafter cited as North Sea Cases]. See *infra* notes 28-40 and accompanying text.

19. Brown, *Delimitation of Offshore Areas: Hard Labour and Bitter Fruits at UNCLOS III*, 5 MARINE POL'Y 172, 179 (1981).

end up producing a delimitation formula “. . . so vague and contentious as to be virtually worthless.”²⁰ It is not the purpose of this article to enter into an analysis of the difficult battle that ensued at the conference to make one delimitation criterion prevail over the others, whether it was sustained by the so-called “equidistance group” or defended by the “equitable principles group.” However, in the end the provisions incorporated in Articles 74 and 83 of the convention, dealing respectively with the delimitation of the exclusive economic zone and of the continental shelf between States with opposite or adjacent coasts, proved Professor Brown’s prophecy right.²¹ The lack of legal clarity and precision of these articles has already resulted in the taking of several delimitation disputes to the International Court of Justice (ICJ). The conference disregarded the opportunity to make a clear pronouncement on the issue, an opportunity inherited by the Court, which through a handful of cases has had the chance to progressively develop the international case law of submarine transboundary hydrocarbon resources.

When the conference adopted the convention on April 30, 1982, 130 States voted in favor and only four States against. Two of those four States, Turkey and Venezuela, voted against the adoption of the convention because of their fundamental disagreement with its provisions on marine boundary delimitation as applied to their exclusive economic zones and continental shelves. They felt that those provisions did not adequately protect their claims *vis-a-vis* their neighbors, Greece and Columbia respectively.

It is also possible that the slow process of ratification of the convention, standing at twenty-five States at the end of 1985, or still thirty-five short of the number needed for entry into force, is at least in part due to the uncertainty of its provisions on boundary delimitation. This uncertainty may affect, among other things, the fate of natural resources located in the midst or in the vicinity of the delimitation area.

The rush of delimitation agreements, particularly on the continental shelf, which occurred during the conference may have resulted from the urgency many States felt not to be trapped by provisions in the convention which were the product of too much political bargaining. Professor Brown envisaged that the provisions would become meaningless because they were drafted merely for the sake of obtaining an apparent consensus. The rush of agreements slowed down considerably once the convention was adopted. A few States unsuccessfully negotiated on the basis of its provisions, and finally decided to submit their delimitation differences to the International Court of Justice.

20. *Id.*

21. *See id.* at 172-184 for precisely such an analysis.

THE INTERNATIONAL CASE LAW OF SUBMARINE
TRANSBOUNDARY RESOURCES

Continental shelf boundary delimitation case law has been developing toward greater certainty and comprehensiveness in the definition of more precise and, at the same time, diversified delimitation criteria available to adjacent or opposite coastal States. From the vagueness and ambiguity of the North Sea Continental Shelf Cases²² to the more clarifying Anglo-French Arbitration,²³ and the more pragmatic Jan Mayen,²⁴ Gulf of Maine,²⁵ and Libyan²⁶ cases, the precedents deriving from disputes submitted to third party solution have already formed, in a relatively short time, a considerable body of applicable principles. Except for the North Sea Continental Shelf cases, all of the cases were submitted, and some of them even decided, during the Third United Nations Conference on the Law of the Sea. They "... are considered to express the new customary international law of the sea that has emerged over the past decade."²⁷

Unfortunately, such a positive trend has not taken place regarding submarine transboundary resources as a part of the delimitation process, where case law has remained, to a certain degree and with isolated exception, quite stagnant. Some of the ICJ's early pronouncements on the matter, limited as they were, have not gained in content or strength through the several subsequent cases, except for the Iceland-Norway Jan Mayen Conciliation Case, where the issue of transboundary resources was a central issue that deserved and received direct attention in the delimitation process. This portion of the article will review each of the continental shelf boundary delimitation cases.

The North Sea Continental Shelf Cases

As a result of bilateral agreements between the Federal Republic of Germany and the Netherlands in 1964,²⁸ and between Germany and Den-

22. North Sea Cases, *supra* note 18.

23. France-United Kingdom: Arbitration on the Delimitation of the Continental Shelf, *reprinted in* 18 I.L.M. 397 (1979) [hereinafter cited as France-United Kingdom Arbitration]. *See infra* notes 41-49 and accompanying text. *See also* Colson, *The United Kingdom-France Continental Shelf Arbitration*, 72 AM. J. INT'L L. 95, 97 (1978).

24. Conciliation Commission on the Continental Shelf Area Between Iceland and Jan Mayen: Report and Recommendations to the Governments of Iceland and Norway, *reprinted in* 20 I.L.M. 797 (1981) [hereinafter cited as Conciliation Commission Report]. *See infra* notes 56-62 and accompanying text.

25. Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (U.S. v. Can.) 1984 I.C.J. No. 67, *reprinted in* 23 I.L.M. 1197 (1984) [hereinafter cited as Gulf of Maine Case]. *See infra* notes 73-80 and accompanying text.

26. Libya-Malta Case, *supra* note 17.

27. Legault & Hankey, *From Sea to Seabed: The Single Maritime Boundary in the Gulf of Maine Case*, 79 AM. J. INT'L L. 961, 961-62 (1985).

28. Treaty Concerning the Lateral Delimitation of the Continental Shelf in the Vicinity of the Coast, Dec. 1, 1964, Netherlands-Federal Republic of Germany, 550 U.N.T.S. 128 [hereinafter cited as Netherlands-F.R.G. Treaty].

mark in 1965,²⁹ a partial delimitation had been effected on the basis of equidistance from the nearest points on the baselines of the territorial seas of the respective parties. However, no agreement could be reached on the remainder of the boundaries because of differences over the rules of delimitation. Denmark and the Netherlands asserted that, due to a lack of agreement between the parties and the absence of special circumstances, the principle of equidistance described in Article 6 of the 1958 Geneva Convention on the Continental Shelf³⁰ should govern the delimitation. The Federal Republic of Germany, on the other hand, stated that the equidistance method would not lead to a just and equitable apportionment in this particular case, and that the delimitation should be governed by the principle that each coastal State is entitled to a just and equitable share by reaching an agreement in light of all relevant factors. Consequently, on February 2, 1967, Special Agreements were concluded to submit the dispute to the ICJ,³¹ asking it to decide the following question:

What principles and rules of international law are applicable to the delimitation as between the Parties of the areas of the Continental Shelf in the North Sea which appertain to each of them beyond the partial boundary determined . . . [by the above-mentioned bilateral agreements].³²

The Court disregarded the equidistance method as not being obligatory to the parties, and instead identified two principles and rules:

(1) delimitation is to be effected by agreement in accordance with equitable principles, and taking account of all the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other;

(2) if, in the application of the preceding sub-paragraph, the delimitation leaves to the Parties areas that overlap, these are to be divided between them in agreed proportions or, failing agreement, equally, unless they decide on a regime of joint jurisdiction, user, or exploitation for the zones of overlap or any part of them.³³

29. Treaty Concerning the Delimitation, in the Coastal Regions, of the Continental Shelf of the North Sea, June 9, 1965, Denmark-Federal Republic of Germany, 570 U.N.T.S. 96 [hereinafter cited as Denmark-F.R.G. Treaty].

30. Convention on the Continental Shelf, *supra* note 5.

31. I.C.J.: Submission to Court of Continental Shelf Disputes Between Denmark and Germany and the Netherlands and Germany, *reprinted in* 6 I.L.M. 391 (1967).

32. *Id.* at 392.

33. North Sea Cases, *supra* note 18, at 384.

In the instant decision, the Court did not provide for any such joint jurisdiction regime. Much to the contrary, a definite characteristic of the judgment, and one quite compatible with the terms of the submission of the question by the parties, is that it left the final solution of all delimitation problems between them to negotiation and agreement. Therefore, the Court limited itself to providing criteria that the parties would take into account in such negotiations and agreements. Nonetheless, the Continental Shelf cases provided an indication as to the role of natural resources in the boundary area in the delimitation process; a role which has to be labeled, from the time of the decision, as being secondary. In specifying the "factors" to be taken into account in the course of the negotiations, the Court indicated that they should include "... so far as known or readily ascertainable, the physical and geological structure, and natural resources, of the continental shelf areas involved."³⁴ In a previous paragraph, the Court pronounced the first jurisprudential authoritative statement on continental shelf transboundary resources:

In a sea with the particular configuration of the North Sea, and in view of the particular geographical situation of the Parties' coastlines upon that sea, the methods chosen by them for the purpose of fixing the delimitation of their respective areas may happen in certain localities to lead to an overlapping of the area appertaining to them. The Court considers that such a situation must be accepted as a given fact and resolved either by an agreed, or failing that by an equal division of the overlapping areas, or by agreements for joint exploitation, the latter solution appearing *particularly appropriate when it is a question of preserving the unity of a deposit* (emphasis added).³⁵

The jurisprudential impact of such an important view of the law was undoubtedly minimized by the fact that it had absolutely no influence on the instant cases. E. D. Brown, in asserting that "decisions of the International Court of Justice do not of course constitute formal precedents. . ."³⁶ quotes Judge Padilla Nervo in remarking that the North Sea cases judgment "will also be a guide for similar controversies."³⁷ Such impact was largely exaggerated, as proved in later cases, perhaps because the Court itself further and simultaneously minimized it in the same North Sea judgment by stating that "[t]he Court does not consider that unity of deposits constitutes anything more than a factual element which it is

34. *Id.*

35. *Id.* at 383.

36. E. BROWN, *THE LEGAL REGIME OF HYDROSPACE* (1971).

37. North Sea Cases, *supra* note 18, at 393-96 (Nervo, J. dissenting). For several reasons which Professor Brown proceeds to explain, the impact of the instant cases on future ones would be a "... regrettable development." See Brown, *supra* note 19, at 179.

reasonable to take into consideration in the course of the negotiations for a delimitation."³⁸

Together with that statement, the Court recognized that:

The natural resources of the subsoil of the sea . . . are the very object of the legal regime established subsequent to the Truman Proclamation. *Yet it frequently occurs that the same deposit lies on both sides of the line dividing a continental shelf between two States, and since it is possible to exploit such a deposit from either side, a problem immediately arises on account of the risk of prejudicial or wasteful exploitation by one or the other of the States concerned* (emphasis added).³⁹

Despite its crystal clear recognition of the problem of Continental Shelf transboundary resources and of its consequences, the Court resorted to evoking the precedents of other States which had dealt with the problem by negotiation and agreement on the apportionment of the products extracted, with a view to ensuring the most efficient exploitation. The Court stopped short by indicating that the parties in the instant cases were thus ". . . fully aware of the existence of the problem as also of the possible ways of solving it."⁴⁰

Such was the extent of the Court's contribution on the subject in the North Sea Continental Shelf cases, which in all honesty was perhaps more than what was to be expected from the mandate the parties had given it in the Special Agreements for their submission to it. The conclusion is quite unequivocal: the presence of transboundary resources does not necessarily by itself constitute a special circumstance which would alter the line or boundary to be delimited, and the parties must negotiate, subsequent to the delimitation, any joint schemes they may wish to agree upon for their exploitation.

United Kingdom/France Arbitration

The United Kingdom and France had engaged in a negotiating process with a view to delimiting the continental shelf between them. The negotiations took place between 1970 and 1974, resulting only in limited agreement in principle, but fundamental differences subsisted concerning a portion of the area to be divided.

On July 10, 1975 the two parties signed an Arbitration Agreement,⁴¹ establishing an *ad hoc* Court to unanimously decide, in accordance with the applicable rules of international law, the continental shelf boundary.

38. North Sea Cases, *supra* note 18, at 383.

39. *Id.* at 382.

40. *Id.* at 383.

41. France-United Kingdom Arbitration, *supra* note 23, at 400.

After the Court delivered its decision on June 30, 1977,⁴² the United Kingdom requested, on the basis of the Arbitration Agreement, correction of a few technical errors in the definition of the boundary. The Court rendered a decision on March 14, 1978,⁴³ which partially satisfied the British contentions.

The case was submitted, argued, and decided on geographical, geological, and legal characteristics of a purely technical nature. For David A. Colson, "[t]he Arbitration Agreement itself deserves study because its form is a model which lends itself to easy application in a variety of situations."⁴⁴ He further notes, "[p]resumably, the legal theory of the Court, comparison of this case with the *North Sea* cases, and analysis of this case in specific geographical situations will provide jurists and the academic community with fruit for comment for some time to come."⁴⁵

As with most similar disputes submitted to international adjudication, the possible or confirmed existence of natural resources under the shelf played no role in this arbitration. Professor Brown, in commenting on this particular case, seems to indicate that such a non-resource oriented approach to continental shelf boundary dispute resolution is proper.⁴⁶ He states that the Court of Arbitration properly clarified the guideline set by the International Court of Justice in the *North Sea Continental Shelf* cases, that there "... is no legal limit to the considerations which States may take account of for the purpose of making sure that they apply equitable procedures. . . ."⁴⁷ For Professor Brown, if that passage is read in isolation and understood literally, it might be taken as authority for invocation of a limitless variety of considerations as constituting factors productive of inequity. He indicated that with its decision the Court contributed to a clarification of the above quoted "... ambiguous and somewhat misleading ICJ passage."⁴⁸

The matter at issue in the arbitration had to do with the meaning of "special circumstances," deriving from the presence of the Scilly Isles and with effects on the justification for a strict median line. However, in another part of his analysis, Professor Brown puts forward his view that the presence of natural resources in the shelf cannot be regarded as constituting special circumstances, unless the parties so provide by voluntary agreement, or where a coastal State had acquired exclusive rights to such resources "... independently of, and prior to, the development

42. *Id.* at 397.

43. *Id.* at 462.

44. Colson, *supra* note 23, at 97.

45. *Id.* at 110-11.

46. See Brown, *The Anglo-French Continental Shelf Case*, 16 SAN DIEGO L. REV. 461 (1979).

47. *North Sea Cases*, *supra* note 18, at 381.

48. Brown, *supra* note 46, at 507.

of the Continental Shelf doctrine,"⁴⁹ that is, before 1945. However, if it is true that the Court of Arbitration in the Anglo-French case restricted the possibilities for parties in a dispute to liberally regard as "special circumstances" anything they wish, then it is only to be hoped that such limitation is not applicable to the influence of the presence of natural resources, especially in the midst of the boundary area, in the delimitation process.

Greece/Turkey Aegean Sea Continental Shelf Case

At the end of 1973 Turkey granted petroleum research permits in the Aegean seabed outside the territorial sea of islands belonging to Greece. Through its action, Turkey claimed that particular portion of the shelf of those islands as its own, a claim not recognized by Greece. The parties engaged in unsuccessful negotiations regarding Turkey's claims. However, the Turkish announcement of further scientific research activities in the same area, escorted by warships, prompted Greece to unilaterally submit the dispute to the International Court of Justice on August 10, 1976,⁵⁰ together with a request for interim measures.⁵¹ Greece simultaneously brought the matter to the attention of the United Nations Security Council as a dangerous situation threatening international peace and security.⁵² The Council's resolution on the matter⁵³ called on the parties to resume direct negotiations and invited them to submit their dispute to the International Court of Justice for peaceful resolution.⁵⁴

Greece instituted the proceedings at the Court on a dispute concerning not only the delimitation of the continental shelf of the two countries in the Aegean Sea, but also relating to their respective legal rights to explore and exploit that shelf. The latter element of the Greek application promised to deliver a highly influential judicial precedent for the development of the international law of transboundary continental shelf resources. The influence of the decision would have been a direct result of the very peculiar geopolitical location of the territories of both parties in the Aegean Sea and its shelf.

The very presence of Greek islands enclaved inside the adjacent Turkish coastal area would have surely made it inevitable for the Court to directly address the question of the regime applicable to the utilization of trans-

49. *Id.* at 492.

50. Aegean Sea Continental Shelf Case (Greece v. Turkey), 1976 I.C.J. No. 62, *reprinted in* 15 I.L.M. 985 (1976) [hereinafter cited as Aegean Sea Case].

51. *Id.* at 986.

52. Letter, 10 Aug. 1976 from the Permanent Representative of Greece to the U.N. addressed to President of Security Council, U.N. Doc. S/12167 (1976).

53. U.N. Security Council Resolution 395 (1976).

54. See generally Gross, *The Dispute Between Greece and Turkey Concerning the Continental Shelf in the Aegean*, 71 AM. J. INT'L L. 31 (1977).

boundary resources within the enclave. In the institution of these particular proceedings the matter had been more than indirectly raised. Unfortunately, Turkey avoided the proceedings raising jurisdictional grounds. On December 19, 1978, the Court precisely found that it was without jurisdiction to entertain the Greek application of 1976.⁵⁵

Iceland/Norway Conciliation Recommendations on the Continental Shelf Area Between Iceland and Jan Mayen Island

A more definite and highly important precedent of the potential existence of transboundary oil deposits as a determining factor in the continental shelf delimitation process was the dispute between Iceland and Norway in the area located between the the former State and Jan Mayen Island. On May 28, 1980, the two countries concluded an agreement concerning fishery and continental shelf questions. The Preamble recognized Iceland's 200 mile economic zone, even when the shortest distance between the two islands is about 290 nautical miles. During the negotiations, Iceland claimed to be entitled to a continental shelf area extending beyond the 200 mile economic zone, and in the end the parties agreed to refer the matter to a conciliation commission of three members, of which each party would appoint a national member and the chairman was to be selected jointly. Its mandate was to recommend the dividing boundary, taking into account Iceland's strong economic interests in those sea areas, and the existence of geographical and geological factors and other special circumstances.⁵⁶ Its recommendations would not be binding, but the parties would, during further negotiations, ". . . pay reasonable regard to them."⁵⁷

The Commission was established on August 16, 1980, and in order to obtain information on the geology and on the probability of resources in the area, a meeting of experts was conducted, focusing especially on the potential for hydrocarbons.⁵⁸ The only drilling that had been so far carried out in the area had exclusively scientific purposes, so data was fragmentary, but there was enough to deduce areas which could almost be excluded from hydrocarbon exploration. The experts' report regarded the hydrocarbon potential as more favorable in the northern part of the ridge between the two islands, the Jan Mayen Ridge. Because of the characteristics of the ridge, the Conciliation Commission disregarded the natural prolongation principle as a suitable basis for solution, as well as those principles regarding proportionality, the median line, and special circumstances.⁵⁹

55. I.C.J. *Communiqué* N. 78/9 of Dec. 19, 1978.

56. Conciliation Commission Report, *supra* note 24, at 798-99.

57. *Id.* at 799.

58. *Id.* at 800-01.

59. *Id.* at 805-24.

To be able to come to a conclusion, then, the Commission recalled a passage of the International Court of Justice judgment in the North Sea Continental Shelf cases, which stated:

In fact there is no legal limit to the considerations which States may take account of for the purpose of making sure that they apply equitable procedures, and more often than not it is the balancing-up of all such considerations that will produce this result rather than one to the exclusion of all others. The problem of the relative weight to be accorded to different considerations naturally varies with the circumstances of the case.⁶⁰

Taking advantage of such an open statement by the Court, the Commission concluded that an approach should be used which takes into account both the fact that agreement by Iceland and Norway on Iceland's 200 mile economic zone had already given Iceland a considerable area beyond the median line, and the fact that the uncertainties with respect to the oil potential of the area create a need for further research and exploration. Consequently, the Commission recommended the adoption of a detailed joint development agreement, covering substantially all of the area offering any significant prospect of hydrocarbon production, and which would take the following into account: Iceland's dependence on imports for oil; the fact that the shelf surrounding that country had a very low hydrocarbon potential; and the fact that the ridge did offer possibilities. The Commission suggested even the form such a joint cooperation agreement might take, including concession contracts with joint venture arrangements, service contracts, production sharing contracts, and entrepreneur contracts.⁶¹

This precedent derives its invaluable importance from the fact that, on the basis of the Conciliation Commission's recommendations, the two countries adopted an agreement on the continental shelf between Iceland and Jan Mayen. The agreement established a joint venture exploitation scheme based precisely on the principle of "unitization."⁶²

Tunisia/Libya Continental Shelf Case

After a decade of unsuccessful bilateral negotiations and following various incidents,⁶³ on June 10, 1977, Tunisia and Libya signed a Special Agreement to submit the question of the continental shelf between the

60. *Id.* at 825.

61. *Id.* at 825-40.

62. Agreement on the Continental Shelf Between Iceland and Jan Mayen, Oct. 22, 1981, Iceland-Norway, reprinted in 21 I.L.M. 1222 (1982) [hereinafter cited as Jan Mayen Treaty].

63. See the communication of the Minister of Foreign Affairs of the Republic of Tunisia to the Registrar of the International Court of Justice, dated Nov. 25, 1978, transmitting a copy of the Special Agreement with Libya to submit the dispute to the court, reprinted in 18 I.L.M. 49 (1979).

two countries to the International Court of Justice.⁶⁴ Article 1 of the Special Agreement requests the Court to render its judgment on the following matter:

What are the principles and rules of international law which may be applied for the delimitation of the area of the continental shelf appertaining to the Republic of Tunisia and the area of the continental shelf appertaining to the Socialist People's Libyan Arab Jamahiriya and, in rendering its decision, to take account of equitable principles and the relevant circumstances which characterize the area, as well as the recent trends admitted at the Third Conference on the Law of the Sea. Also, the Court is further requested to specify precisely the practical way in which the aforesaid principles and rules apply in this particular situation so as to enable the experts of the two countries to delimit those areas without any difficulties.⁶⁵

The contentions of the parties in the memorials and counter memorials, as well as the judgment of the Court, rendered on February 24, 1984,⁶⁶ faithfully reflect the purely physical and legal, technical scope each gave to the analysis and possible solution of the dispute. The entire case focused on geographical, geological, and morphological features in the area to be delimited, including the contours of the coasts and the seabed, as well as the presence of islands, islets, low-tide elevations, shoals, ridges, and other physical and geological structures of the region.⁶⁷ All of these features were invoked as relevant to legal concepts such as the governing principle of delimitation stated by the Court in the North Sea Continental Shelf cases,⁶⁸ that is, the principle of the "natural prolongation of the land territory," as well as the constituent components of that principle, "equitable principles" and "all the relevant circumstances."⁶⁹

In this particular case the Court reiterated the natural prolongation

64. Libya-Tunisia: Agreement to Submit Question of the Continental Shelf to the International Court of Justice, *reprinted in* 18 I.L.M. 49 (1979).

65. *Id.* at 51.

66. Case Concerning the Continental Shelf (Tunisia-Libyan Arab Jamahiriya) 1982 I.C.J. No. 63, *reprinted in* 21 I.L.M. 225 (1982) [hereinafter cited as Tunisia-Libya Continental Shelf Case].

67. The same general trend permeated Malta's application for permission to intervene in the case, dated Jan. 30, 1981, *reprinted in* 20 I.L.M. 329 (1981). The court decided unanimously not to grant the application in its judgment of April 14, 1981, *reprinted in* 20 I.L.M. 569 (1981). The court also rejected Tunisia's application for revision and interpretation of the Court's judgment of Feb. 24, 1982. See I.C.J. *Communique* N. 85/21 of Dec. 10, 1985.

68. North Sea Cases, *supra* note 18.

69. In the North Sea Continental Shelf Cases, the court stated:

Delimitation is to be effected by agreement in accordance with equitable principles, and taking into account all of the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other.

Id. at 384.

principle, thus confirming the concept that "the land dominates the sea." The Court also indicated that the geology, as a significant factor for delimitation, should effect also a reasonable degree of proportionality between the areas appertaining to the coastal States and the length of their respective coasts. However, it did not specify the all too general concepts of "equitable principles" and of "relevant circumstances," which would have provided useful guidance for future cases. For that reason two judges criticized the judgment as lacking in legal principle.⁷⁰

However, the Court did provide one extremely useful indication as to what "equity" or "equitable principles" may mean as delimitation criteria which is directly relevant to the present analysis. The opportunity was presented to the Court by Tunisia in an extra-legal and non-technical paragraph of its memorial. In it, Tunisia urged the Court to consider its relative poverty *vis-a-vis* Libya in terms of the absence of natural resources such as agriculture and minerals, and especially of oil and gas. In its pleadings and oral arguments, Libya had also accepted the idea that the presence of oil and gas in the continental shelf area appertaining to either party should play an important part in the delimitation process, although it dismissed as irrelevant Tunisia's argument of economic poverty as a factor of delimitation.

It is of particular interest to note that, in the face of the above contentions, the Court embraced the following position:

The Court is, however, of the view that these economic considerations cannot be taken into account for the delimitation of the continental shelf areas appertaining to each Party. They are virtually extraneous factors since they are variables which unpredictable national fortune or calamity, as the case may be, might at any time cause to tilt the scale one way or the other. A country might be poor today and become rich tomorrow as a result of an event such as the discovery of a valuable economic resource. As to the presence of oil wells in an area to be delimited, it may, depending on the facts, be an element to be taken into account in the process of weighing all relevant factors to achieve an equitable result.⁷¹

In siding with Libya, the Court opened the door for the possible consideration of "equitable resource sharing" as a continental shelf delimitation criterion. Unfortunately, the Court did not go beyond the above quoted statement, and left without clarification whether the "presence" to which it referred related to wells or deposits at either side of the boundary, or also to those transected by it. Thus, the Court stopped short

70. See *Tunisia-Libya Continental Shelf Case*, *supra* note 66, at 288 (Gros, J., dissenting), and at 295 (Evensen, J., dissenting).

71. *Id.* at 255.

of addressing the question of the influence of a transboundary deposit in the delimitation of a boundary. Most importantly, it failed to address the question of establishing specific rights and duties pertaining to each side in the case of such a deposit, as an integral part of the delimitation process, in order to ensure its adequate and rational conservation and utilization for the benefit of both.

In the present case, the matter was not academic. Mark B. Feldman reports that a significant amount of oil exploration and drilling had occurred in the boundary area since the first offshore oil concession was granted by Tunisia in 1964.⁷² It is not clear, however, whether any such activities took place precisely in any deposit located at both sides of the boundary area to be drawn as a result of the settlement of the adjudicated dispute.

United States/Gulf of Maine Case

Perhaps more than any recent precedent in the international case law of continental shelf boundary delimitation, the Gulf of Maine case was motivated by a desire to delineate natural resources in the boundary area. Paradoxically, this is simultaneously one of the cases which has given greater strength to the influence of geographical, rather than non-geographical, factors as delimitation criteria to take into account on a priority basis.

At stake was the control over one of the world's most productive fishing grounds, the Georges Bank. Consequently, thanks to the innovative "single boundary" approach which, because it applied to both the shelf and to the water column, permeated it throughout, the Gulf of Maine case is, as Jan Schneider has correctly put it, a case about fish more than a traditional continental shelf delimitation.⁷³ This situation decreases the great possible importance that the case might otherwise have had on the international law of submarine hydrocarbon transboundary deposits utilization. It is unfortunate because the case became important, for the parties and for the development of international delimitation law in general, only as a result of the parties' interest in the living resources in the area to be divided. Nonetheless, the potential for non-living resources in the same area does give relevance to the case for the purposes of the

72. See generally Feldman, *The Tunisia-Lybia Continental Shelf Case: Geographic Justice or Judicial Compromise*, 77 AM. J. INT'L L. 219 (1983). Feldman failed to understand the Court's position, as described above, relating to the economic considerations invoked by the parties in the case. He understood the Court's rejection of Tunisia's "relative poverty" argument as indicating a reiteration by the Court of its North Sea Cases concept of "no equitable sharing of resources" as part of the delimitation process, thus overlooking that the Court did expressly endorse the Libyan view.

73. Schneider, *The Gulf of Maine Case: The Nature of an Equitable Result*, 79 AM. J. INT'L L. 539, 539 (1985).

present analysis since, after all, once the dispute was solved, Canada and the United States are to share Georges Bank. Canada has jurisdiction over approximately one-sixth of the Bank, including the resource rich "North-east Peak" and most of the "Northern Edge," and the United States over the remaining area. The Canadian claim was a modified equidistance line that would have allocated to it about forty percent of the Bank, whereas the United States laid claim to the whole of the Bank, giving priority to other geographical principles.⁷⁴ Some observers have suggested that the Chamber of the International Court which decided the case simply "split the difference" between the United States and Canadian claims.⁷⁵

Thus, it is significant and useful for the subject matter at hand that in submitting the dispute for adjudication, both parties had very clear and precise economic concerns in mind. Once again, this usefulness is limited because it dealt with fishery resources. One of the equitable principles enunciated by the United States was the "single-State management" principle, according to which the extension of fisheries jurisdiction to 200 nautical miles and the development of the exclusive economic zone constituted, in part, a response to difficulties engendered by joint management of resources. Accordingly, it argued that the new 1982 Law of the Sea Convention set forth a general rule of exclusive management of fisheries by a single State whenever possible.⁷⁶ On its part, Canada relied principally on the economic dependence of its coastal communities on the fishery resources of Georges Bank,⁷⁷ as well as on the previous issuance by each of the two governments of permits and leases for oil and gas exploration and exploitation.⁷⁸ Such arguments did not at all lend the case to a decision having anything to do with transboundary resource distribution or joint management schemes. And this is precisely where the case takes a high "exclusivity" tone clearly incompatible with the subject matter of this article.

On March 29, 1979 the United States and Canada signed a Treaty to Submit to Binding Dispute Settlement the Delimitation of the Maritime Boundary in the Gulf of Maine Area, whose annex contained a Special Agreement to Submit the Dispute to a Chamber of the International Court of Justice.⁷⁹ Whether in the Special Agreement or in the arguments resorted to throughout the case, the parties, and therefore the Chamber itself, were not concerned with the possibility that some of the shelf

74. Legault & Hankey, *supra* note 27, at 963.

75. Bernstein, *World Court Settles Dispute on U.S.-Canadian Boundary*, N.Y. Times, Oct. 13, 1984, § 1, at 3, col. 5.

76. Gulf of Maine Case, *supra* note 25, at 1223.

77. *Id.* at 1229.

78. *Id.* at 1227.

79. Canada-United States: Treaty on Gulf of Maine Boundary Dispute Settlement, Mar. 29, 1979, reprinted in 20 I.L.M. 1371 (1981).

resources would find themselves across the boundary to be drawn; consequently, they had no interest as to how the resources would be utilized. Thus, the interest in this case is perhaps restricted to the fact that, in one way or another, the existence of natural resources in the area of delimitation played an important role. However, the Chamber's judgment of October 1984 made absolutely no provision other than to draw the single maritime boundary dividing the continental shelf and the fishery zones of the United States and Canada. If any, the judgment attached secondary importance to natural resources in the delimitation process.

The great problem arising out of this tendency in the case law is that the question of sound and rational management of the delimitation area is mostly overlooked, for the sake of reaching the sacred objective of drawing a boundary. As Peter Underwood has signaled concerning the Gulf of Maine case:

Once the dust of post-decision reaction has settled and both countries have had the chance to examine, in detail, the impact of the decision on their respective resource bases, they will be back at the bargaining table to face once again the difficult challenges of allocation and management of transboundary resources. The big difference this time is that neither party can leave the table and threaten to go to court.⁸⁰

Libya/Malta Case

On May 23, 1976 in Valletta, the Republic of Malta and the Socialist People's Libyan Arab Jamahiriya signed a Special Agreement for the Submission to the International Court of Justice of a Continental Shelf Dispute. The Special Agreement came into force on March 20, 1982, and was notified to the Court the following July.⁸¹

Article I of the Special Agreement was substantially the same as the first paragraph of Article I of the Tunisia-Libya Agreement to submit their dispute to the Court. It read:

The Court is requested to decide the following question: What principles and rules of international law are applicable to the delimitation of the area of the continental shelf which appertains to the Republic of Malta and the area of the continental shelf which appertains to the Libyan Arab Republic, and how in practice such principles and rules can be applied by the two Parties in this particular case in order that they may without difficulty delimit such areas by an agreement as provided in Article III.⁸²

80. Underwood, *Beyond a Line: Georgia's Bank Management*, 4 NEW DIRECTIONS IN OCEAN LAW, POLICY AND MANAGEMENT 1 (1984).

81. Libya-Malta: Special Agreement for the Submission to the International Court of Justice of a Continental Shelf Dispute, May 23, 1976, *Reprinted in* 21 I.L.M. 971 (1982).

82. Libya-Malta Case, *supra* note 17, at 1191.

With the exception of two brief instances during the course of the litigation, the case was handled both by the parties and the Court, as well as by Italy in its unsuccessful application for permission to intervene,⁸³ with many of the same technical, legal, and physical criteria which predominated in the Tunisia-Libya case, and without an effective influence of economic factors such as the presence of natural resources as relevant delimitation elements.

In the first instance, previous activities relating to the location of areas for the exploration and exploitation of the resources of the shelf were claimed as indicative of the conception of each party as to the general dimension or limits of its continental shelf. In its judgment of June 1985 the Court found that nothing of moment turned on the history of the dispute, and of the legislative and exploratory activities in relation to the continental shelf.⁸⁴ It further noted that:

The Court has considered the facts and arguments brought to its attention in this respect, particularly from the standpoint of its duty to "take into account whatever indicia are available of the [delimitation] line or lines which the Parties themselves may have considered equitable or acted upon as such" (*I.C.J. Reports 1982*, , p. 84, para. 118). It is however unable to discern any pattern of conduct on either side sufficiently unequivocal to constitute either acquiescence or any

83. *See id.* at 1195.

84. *Id.* at 1197. The court further stated:

It is not argued by either Party that the circumstances in this case gave rise to the "appearance on the map of a *de facto* line dividing concession areas which were the subject of active claims" which might be taken into account as indicating "the line or lines which the Parties themselves may have considered equitable or acted upon as such" as the Court was able to find in the case concerning the *Continental Shelf (Tunisia/Libyan Arab Jamahiriya)* (*I.C.J. Reports 1982*, p. 84, paras. 117-118). In its pleadings, however, Malta recounted how it had in 1956 informed Libya of its intention to delimit its continental shelf by means of a median line, and stated that until Libya made a counter-proposal in 1973, Libya remained silent in face of Malta's claim to such a delimitation; Malta contended that this pattern of conduct could be viewed "either as a cogent reflection of the equitable character of Malta's position or as evidence of acquiescence by Libya in Malta's position or as precluding Libya, in law as in fact, from challenging the validity of Malta's positions." Malta referred also to the question of the northern boundaries of certain Libyan concessions, and the exemption of the licensees from the duty to carry out petroleum activities north of the median line, and contended that these also confirmed Malta's submission that "by their conduct, the Parties have indicated that the median line is, to say the least, very relevant to the final determination of the boundary in the present case." Libya disputes the allegation of acquiescence; it has also contended that Maltese petroleum concessions followed geomorphological features in a manner consistent with the "exploitability criterion," which is denied by Malta. It also contended that Malta, at the time of the enactment of its 1966 Continental Shelf Act, implicitly recognized the significance of an area described as the "rift zone" area, which Libya, as will be explained below, regards as significant for the delimitation; this contention Malta also rejects.

Id.

helpful indication of any view of either Party as to what would be equitable differing in any way from the view advanced by that Party before the Court. Its decision must accordingly be based upon the application to the submissions made before it of principles and rules of international law.⁸⁵

The second instance was reminiscent of Tunisia's argument of "relative poverty," and Libya's argument upheld by the Court in that dispute in the sense that, depending on the facts, the presence of oil wells may be a factor in the continental shelf boundary delimitation process. In the instant case, the matter was noted by the Court as follows:

It was argued by Malta, on the other hand, that the considerations that may be taken account of include economic factors and security. Malta has contended that the relevant equitable considerations, employed not to dictate a delimitation but to contribute to assessment of the equitableness of a delimitation otherwise arrived at, include the absence of energy resources on the island of Malta, its requirements as an island developing country, and the range of its established fishing activity. The Court does not however consider that a delimitation should be influenced by the relative economic position of the two States in question, in such a way that the area of continental shelf regarded as appertaining to the less rich of the two States would be somewhat increased in order to compensate for its inferiority in economic resources. Such considerations are totally unrelated to the underlying intention of the applicable rules of international law. It is clear that neither the rules determining the validity of legal entitlement to the continental shelf, nor those concerning delimitation between neighbouring countries, leave room for any considerations of economic development of the States in question. While the concept of the exclusive economic zone has, from the outset, included certain special provisions for the benefit of developing States, those provisions have not related to the extent of such areas nor to their delimitation between neighbouring States, but merely to the exploitation of their resources. The natural resources of the continental shelf under delimitation "so far as known or readily ascertainable" might well constitute relevant circumstances which it would be reasonable to take into account in a delimitation, as the Court stated in the *North Sea Continental Shelf* cases (*I.C.J. Reports 1969*, p. 54, para. 101(D)(2)). *Those resources are the essential objective envisaged by States when they put forward claims to seabed areas containing them. In the present case, however, the Court has not been furnished by the Parties with any indications on this point* (emphasis added).⁸⁶

85. *Id.*

86. *Id.* at 1203.

It will be noted that the last part of the above quotation was an addition not included by the Court in the Tunisia-Libya case when dealing with the same arguments. More importantly, the two constituent parts of that portion of the paragraph are of special interest here. First, the Court for the first time plainly disengages itself from the coldness of the technical aspects of continental shelf boundary delimitation by simply recognizing that, after all, the whole process of delimitation is dictated by the interest of the neighboring parties in the resources in the seabed and subsoil thereof. On the other hand, the Court states, almost with a complaining or resigned tone, that it was not furnished by the parties with any indication as to their willingness to have it resolve the dispute by taking into account their respective interests in the resources of the shelf. This may also be contemplated as an apologetic statement, which aims at making clear that it has been the parties in the different cases submitted to the Court on the same matter which have abstained from injecting into the delimitation process the question of the possible or already identified existence of natural resources. This has been the case not only for resources which may be located at either side of the possible boundary, but also for those which lay across it. The latter are of direct interest here, for only if the parties had injected the above question to the Court would the whole issue as to the equitable utilization of such resources, and not only of their division or distribution, have been relevant and of necessary concern.

THE INTERNATIONAL CONVENTIONAL LAW OF SUBMARINE TRANSBOUNDARY RESOURCES

Perhaps the inclination of the International Court of Justice to leave the determination of the regime applicable to submarine transboundary resources directly in the hands of States with adjacent or opposite coasts, through bilateral negotiation and agreement, instead of allowing the problem of such resources to become a significant factor in the delimitation process, has merely reflected the practice of States on the matter. What is clear from an analysis of the texts of fifty-eight treaties on continental shelf matters is that whenever it comes to devising a regime for transboundary shelf resources, even when States may be willing to submit a dispute over the drawing of the boundary to third party resolution, they are more prone to deal directly with their neighbors, precisely through negotiation as directed by the Court.

From the above evaluation one may advance that, in the field of submarine transboundary resources, treaty law is much richer in precedents, State practice, and experience than case law is. The treaties concluded so far also offer a much wider array of alternative joint cooperative schemes than the cases, with the Jan Mayen case being the only practical example of such a scheme found in case law. It is significant that both treaty and case law come together in this subject, particularly with the

Jan Mayen case, for after the Conciliation Commission's decision, the parties entered into perhaps the most important treaty from which the most relevant experience for the law of submarine transboundary resources can be extracted.⁸⁷

As this article will describe, most States have been willing and ready to include clauses in their bilateral continental shelf treaties dealing, at least in general and in some instances with a great deal of detail, with known or potential submarine transboundary resources. Those States would not have been prepared to insert such clauses in special agreements for the submission of their shelf disputes to adjudication or arbitration. Of fifty-eight bilateral agreements on continental shelf boundary delimitation analyzed to determine the extent to which State practice derives from them, and which yield principles of conventional international law, the following results are obtained.

Delimitation Agreements

Approximately thirty percent, or sixteen, of the delimitation agreements examined make no reference whatsoever to resources in the delimitation area, but restrict themselves to providing directly for the delimitation boundary agreed on.⁸⁸ Of these, only three specifically mention the de-

87. See Jan Mayen Treaty, *supra* note 62, and Law of the Sea Convention, *supra* note 7.

88. See e.g., Trinidad and Tobago-Venezuela: Treaty Relating to the Submarine Areas of the Gulf of Paria, Feb. 26, 1942, United Kingdom-Venezuela, U.N. Doc. ST/LEG/SER.B/1, *reprinted in* 1 THE INTERNATIONAL LAW OF THE OCEAN DEVELOPMENT 432 (S. Oda ed. 1972); Netherlands-F.R.G. Treaty, *supra* note 28; Agreement Concerning the Boundaries of Sea Areas and of the Continental Shelf in the Gulf of Finland, May 20, 1965, Finland-U.S.S.R., 566 U.N.T.S. 31; Denmark-F.R.G. Treaty, *supra* note 29; Agreement Relating to the Delimitation of the Continental Shelf Under the North Sea, Oct. 6, 1965, United Kingdom-Netherlands, 595 U.N.T.S. 115 [hereinafter cited as Netherlands-U.K. Treaty]; Agreement Concerning the Delimitation of the Continental Shelf Under the North Sea, Mar. 31, 1966, Netherlands-Denmark, 604 U.N.T.S. 214 [hereinafter cited as Netherlands-Denmark Treaty]; Agreement Concerning the Boundary of the Continental Shelf Between Finland and the Soviet Union in the North-Eastern Part of the Baltic Sea, May 5, 1967, Finland-U.S.S.R., 640 U.N.T.S. 111; Treaty on the Course of the Boundary of the Continental Shelf in the Gulf of Gdansk and the Southeastern Baltic Sea, Aug. 29, 1969, Poland-U.S.S.R., *reprinted in* 1 THE INTERNATIONAL LAW OF THE OCEAN DEVELOPMENT 409 (S. Oda ed. 1972) [hereinafter cited as Poland-U.S.S.R. Treaty]; Agreements Delimiting the Continental Shelf in the North Sea, Protocol, Jan. 28, 1971, Denmark-Federal Republic of Germany-Netherlands, *reprinted in* 10 I.L.M. 600 (1971); Agreement Delimiting Maritime Boundaries in the North Atlantic Ocean, June 4, 1975, Gambia-Senegal, *reprinted in* 8 NEW DIRECTIONS IN THE LAW OF THE SEA 104 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980); Agreement on the Maritime Boundary in the Gulf of Mannar and the Bay of Bengal and Related Matters, Mar. 23, 1976, Sri Lanka-India, *reprinted in* 8 NEW DIRECTIONS IN THE LAW OF THE SEA 99 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980); Agreement Concerning Certain Maritime Boundaries, Nov. 24, 1976, United States-Mexico, 19 U.S.T. 196, T.I.A.S. No. 8805 [hereinafter cited as United States-Mexico Agreement]; Maritime Boundary Agreement, Dec. 16, 1977, United States-Cuba, *reprinted in* 8 NEW DIRECTIONS IN THE LAW OF THE SEA 66 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980) [hereinafter cited as United States-Cuba Agreement]; Maritime Boundary Treaty, Mar. 28, 1978, United States-Venezuela, *reprinted in* 8 NEW DIRECTIONS IN THE LAW OF THE SEA 84 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980) [hereinafter cited as United States-Venezuela Treaty]; and Treaty on the Delimitation of Marine and Submarine Areas, Mar. 3, 1979, Dominican Republic-Venezuela, *reprinted in* 8 NEW DIRECTIONS IN THE LAW OF THE SEA 80 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980).

limitation criterion which was used to determine the boundary line; in these cases the criterion happened to be the "equidistance principle."⁸⁹ No special regional or subregional trend of real significance could be identified among these sixteen conventional instruments, except for the four to which the United States is a party with States of the Gulf of Mexico (including Mexico) and the Caribbean as counterparts.⁹⁰ Another three were North Sea coastal State agreements, which are not indicative because it is known that they have been supplemented by perhaps the most sophisticated agreements for submarine transboundary hydrocarbon resources. Peter R. Odell has alleged that "the North Sea has become the world's most active region of offshore oil and gas development, with the possible exception of the Gulf of Mexico."⁹¹ C. M. Mason, on the other hand, gave relevance to the fact that in less than seven years, fifteen different but interrelated international agreements were proposed, negotiated, and ratified regarding the exploitation of the resources in the North Sea shelf.⁹²

Transboundary Resource Agreements

The remainder of the international agreements do address the question of the potential or known resources in the delimitation area. Most of them refer to the former, and simply provide the very general principles that the parties should apply regarding their utilization and conservation. But it is exceedingly interesting to classify them in six different, albeit similar, categories of provisions which can be identified from their analysis.

(a) The most widely followed, in many instances to the letter, is the provision included in Article 6 of the Australia-Papua New Guinea Treaty on Sovereignty and Maritime Boundaries in the Area Between the Countries, Including the Area Known as Torres Strait and Related Matters, signed in Sidney on December 18, 1976:

Exploitation of certain seabed resources: If any single accumulation of liquid hydrocarbons or natural gas, or if any other mineral deposit

89. Netherlands-U.K. Treaty, *supra* note 88; Netherlands-Denmark Treaty, *supra* note 88; and Poland-U.S.S.R. Treaty, *supra* note 88.

90. United States-Mexico Agreement, *supra* note 88; United States-Cuba Agreement, *supra* note 88; United States-Venezuela Treaty, *supra* note 88; and Treaty on Maritime Boundaries Between the United States of America and the United Mexican States, May 4, 1978 (not yet in force), *reprinted in* 8 NEW DIRECTIONS IN THE LAW OF THE SEA 63 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980) [hereinafter cited as United States-Mexico Treaty of 1978].

91. Odell, *Oil and Gas Exploration and Exploitation in the North Sea*, in 1 OCEAN YEARBOOK 139 (1978).

92. See generally C. M. MASON, *THE EFFECTIVE MANAGEMENT OF RESOURCES: THE INTERNATIONAL POLITICS OF THE NORTH SEA* (1979).

beneath the seabed, extends across any line defining the limits of seabed jurisdiction of the Parties, and if the part of such accumulation or deposit that is situated on one side of such a line is recoverable in fluid from wholly or in part from the other side, the Parties shall *consult* with a view to reaching *agreement* on the manner in which the accumulation or deposit may be *most effectively exploited and on the equitable sharing of the benefits* from such exploitation (emphasis added).⁹³

An almost identical clause is included in as many as twelve other bilateral continental shelf boundary delimitation agreements, mostly for the North Sea and the southeast Asia-southwestern Pacific regions.⁹⁴

(b) Four Persian Gulf bilateral agreements add another important element to the previous formula, since they go so far as to agree on the principle of exploitation itself that will rule the cooperative action of the neighbors. The principle was originally designed for the Iran-Qatar Agreement Concerning the Boundary Line Dividing the Continental Shelf,⁹⁵

93. Treaty Concerning Sovereignty and Maritime Boundaries in the Area Between the Two Countries, Including the Area Known as Torres Strait, and Related Matters, Dec. 18, 1978, Australia-Papua New Guinea, *reprinted* in 8 NEW DIRECTIONS IN THE LAW OF THE SEA 215, 227 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980).

94. Agreement Delimiting the Continental Shelf Boundary, Mar. 10, 1965, Norway-United Kingdom, *reprinted* in 1 NEW DIRECTIONS IN THE LAW OF THE SEA 120 (S. H. Lay, R. Churchill & M. Nordquist ed. 1973); Agreement Dividing the Continental Shelf, Dec. 8, 1965, Denmark-Norway, *reprinted* in 1 NEW DIRECTIONS IN THE LAW OF THE SEA 123 (S. H. Lay, R. Churchill & M. Nordquist ed. 1973); Agreement Relating to the Delimitation of the Continental Shelf, Mar. 3, 1966, United Kingdom-Denmark, 592 U.N.T.S. 209; Agreement on the Delimitation of the Continental Shelf, July 24, 1968, Norway-Sweden, U.N. Doc. ST/LEG/SER.B/16, at 413; Agreement Relating to the Delimitation of the Continental Shelves Between the Two Countries, Oct. 27, 1969, Indonesia-Malaysia, *reprinted* in 1 THE INTERNATIONAL LAW OF THE OCEAN DEVELOPMENT 424 (S. Oda ed. 1972); Agreement Relating to the Delimitation of the Continental Shelf, Nov. 25, 1971, Denmark-United Kingdom, T.S. No. 35, Cmnd. 3278; Agreement Relating to the Delimitation of the Continental Shelf Under the North Sea, Nov. 25, 1971, Federal Republic of Germany-United Kingdom, T.S. No. 24, Cmnd. 3254; Agreement Relating to the Delimitation of a Continental Shelf Boundary in the Northern Part of the Strait of Malacca and in the Andaman Sea, Dec. 17, 1971, Indonesia-Thailand, U.N. Doc. ST/LEG/SER.B/18, at 437; Agreement Relating to the Delimitation of the Continental Shelf Between Greenland and Canada, Dec. 17, 1973, Denmark-Canada, *reprinted* in 4 NEW DIRECTIONS IN THE LAW OF THE SEA 105 (R. Churchill & M. Nordquist ed. 1975); Agreement Concerning the Establishment of a Boundary in the Northern Part of the Continental Shelf Adjacent to the Two Countries, Feb. 5, 1974, Japan-Republic of Korea, *reprinted* in 4 NEW DIRECTIONS IN THE LAW OF THE SEA 113 (R. Churchill & M. Nordquist ed. 1975); Agreement Concerning Certain Boundaries Between Papua New Guinea and Indonesia, Feb. 12, 1973, Australia-Indonesia, *reprinted* in 4 NEW DIRECTIONS IN THE LAW OF THE SEA 100 (R. Churchill & M. Nordquist ed. 1975); and Agreement Regarding the Delimitation of the Continental Shelf in the Great Channel Between Great Nicobar Island and Sumatra, Aug. 8, 1974, India-Indonesia, *reprinted* in 5 NEW DIRECTIONS IN THE LAW OF THE SEA 265 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

95. See Agreement Concerning the Boundary Line Dividing the Continental Shelf, Sept. 20, 1969, Iran and Qatar, *reprinted* in 5 NEW DIRECTIONS IN THE LAW OF THE SEA 226 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977) [hereinafter cited as Iran-Qatar Agreement].

and was later imitated in the Iran-United Arab Emirate, Iran-Oman, and Bahrain-Iran agreements.⁹⁶ Article 2 of the Iran-Qatar Agreement reads:

If any single geological petroleum structure or petroleum field, or any single geological structure or field of any other mineral deposit, extends across the boundary line. . . , and part of such structure or field which is situated on one side of that boundary line could be exploited wholly or in part by directional drilling on either side of the boundary line, then: (a) *no well shall be drilled on either side of the boundary line, so that any producing section thereof is less than 125 meters from the said boundary line, except by mutual agreement between the two Governments,* (b) both Governments shall endeavor to reach *agreement* as to the manner in which the operations on both sides of the boundary line could be *co-ordinated or unitized* (emphasis added).⁹⁷

Attention must be paid both to the buffer zone established in paragraph (a) of Article 2, as well as to the concepts of coordination and unitization.

(c) Five Caribbean or Latin American bilateral treaties, all of them involving Columbia, are more modest since they merely stress the principle of cooperation.⁹⁸ Typical of them is the Columbia-Costa Rica Treaty on Delimitation of Marine and Submarine Areas and Maritime Cooperation, Article III of which reads:

To develop the *broadest cooperation* between the two countries for the *protection* of the renewable or non-renewable resources found within the marine or submarine areas over which they exercise or may in the future exercise sovereignty, jurisdiction, or supervision and to use those resources for the *welfare of their peoples and their national development* (emphasis added).⁹⁹

96. Agreement Concerning the Boundary Line Dividing Parts of the Continental Shelf, Aug. 13, 1974, Iran-United Arab Emirates, *reprinted in 5 NEW DIRECTIONS IN THE LAW OF THE SEA* 242 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977) [hereinafter cited as Iran-U.A.E. Agreement]; Agreement Concerning Delimitation of the Continental Shelf, July 25, 1974, Iran-Oman, *reprinted in 5 NEW DIRECTIONS IN THE LAW OF THE SEA* 235 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977) [hereinafter cited as Iran-Oman Agreement]; and Agreement Concerning Delimitation of the Continental Shelf, June 17, 1971, Bahrain-Iran, *reprinted in 5 NEW DIRECTIONS IN THE LAW OF THE SEA* 230 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977) [hereinafter cited as Bahrain Iran Agreement].

97. Iran-Qatar Agreement, *supra* note 95, at 227.

98. See Convention on Delimitation of Marine and Submarine Areas and Maritime Co-operation, Aug. 23, 1975, Colombia-Ecuador, *reprinted in 5 NEW DIRECTIONS IN THE LAW OF THE SEA* 12 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977); Treaty on Delimitation of Marine and Submarine Areas and Maritime Cooperation, Mar. 17, 1977, Colombia-Costa Rica, *reprinted in 8 NEW DIRECTIONS IN THE LAW OF THE SEA* 93 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980) [hereinafter cited as Colombia-Costa Rica Treaty]; Agreement on the Declaration of Marine and Submarine Areas and Maritime Cooperation, Jan. 13, 1978, Dominican Republic-Colombia, *reprinted in 8 NEW DIRECTIONS IN THE LAW OF THE SEA* 78 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980); and Maritime Limits Agreement, Feb. 18, 1978, Colombia-Haiti, *reprinted in 8 NEW DIRECTIONS IN THE LAW OF THE SEA* 76 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980).

99. Colombia-Costa Rica Treaty, *supra* note 98, at 94-95.

(d) Two North Sea bilateral agreements, between precisely the same parties which had participated in the North Sea Continental Shelf cases at the International Court of Justice, were signed two years after the Court's judgment which, in dealing with submarine transboundary deposits, make an exaggerated express effort to make it quite clear that the part of a deposit on one side of the boundary belongs precisely to the coastal State on that side.¹⁰⁰ Article 2 of the agreement between Denmark and the Federal Republic of Germany provides that if a deposit extends to the other side of the boundary, agreement is needed for its exploitation "... taking into account the *interests of both Contracting Parties* on the principles that *each Contracting Party is entitled to the mineral resources located on its continental shelf*" (*emphasis added*).¹⁰¹

(e) Two Mediterranean bilateral agreements which limit themselves to stressing the concept of consultation, were concluded in 1968 between Italy and Yugoslavia,¹⁰² and in 1971 between Italy and the Tunisian Republic.¹⁰³ Article 2 of the first instrument provides:

In case it is ascertained that natural resources of the sea bottom or under the sea bottom extend on both sides of the demarcation line of the continental shelf with the consequence that the resources of the shelf belonging to one of the contracting parties can be in whole or in part exploited from the part of the shelf belonging to the other contracting party, the competent authorities of the contracting parties will themselves *be in contact with one another* with the intention of reaching an understanding of the manner in which the foresaid resources shall be exploited previous to consultations by the holders of any eventual concessions (*emphasis added*).¹⁰⁴

(f) The elements contained in the previous three formulas were basically compiled and integrated in two other conventions in Europe, concluded by Italy and Spain and by France and Spain in 1974.¹⁰⁵ Article 4 of the latter instrument establishes:

100. See Treaty on the Delimitation of the Continental Shelf Under the North Sea, Jan. 28, 1971, Netherlands-Federal Republic of Germany, *reprinted in* 10 I.L.M. 607 (1971), and Treaty Relating to the Delimitation of the Continental Shelf Under the North Sea, Jan. 28, 1971, Federal Republic of Germany-Denmark, *reprinted in* 10 I.L.M. 603 (1971) [hereinafter cited as Denmark-F.R.G. Treaty of 1971].

101. Denmark-F.R.G. Treaty of 1971, *supra* note 100, at 604.

102. Agreement on the Continental Shelf Boundary, Jan. 8, 1968, Italy-Yugoslavia, *reprinted in* 1 NEW DIRECTIONS IN THE LAW OF THE SEA 112 (S. H. Lay, R. Churchill & M. Nordquist ed. 1973).

103. Agreement Relating to the Delimitation of the Continental Shelf Between the Two Countries, Aug. 20, 1971, Italy-Tunisia, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 247 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

104. Italy-Yugoslavia Agreement on the Continental Shelf Boundary, *supra* note 102, at 115.

105. See Convention on Delimitation of the Continental Shelf Between the Two States, Feb. 19, 1974, Italy-Spain, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 261 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977), and Convention on the Delimitation of the Continental Shelves of the Two States in the Bay of Biscay, June 29, 1974, France-Spain, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 251 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977) [hereinafter cited as French-Spanish Convention].

1. If a deposit of natural resources is divided by the boundary line of the continental shelves and the part of the deposit situated on one side of the boundary line is exploitable, wholly or in part, from installations situated on the other side of that line, the Contracting Parties shall, in *consultation with the licensees*, if any, seek to reach *agreement* on the conditions for the exploitation of the deposit, in order that this exploitation may be the *most profitable possible* and so that each of the Parties *preserves the whole of its rights* over the natural resources of its continental shelf. In particular, this procedure shall be applied if the method of exploitation of the part of the deposit situated on one side of the boundary line affects the conditions of exploitation of the other part of the deposit.

2. In the event of the natural resources of a deposit situated on both sides of the boundary line of the continental shelf already having been exploited, the Contracting Parties should, in consultation with the licensees, if any, seek to reach agreement on *appropriate compensation* (emphasis added).¹⁰⁶

In addition to the extreme concern that this convention has for the acquired rights, previous to its conclusion, of licensees, its Article 3 has a most advanced clause on an agreed regime for transboundary resources which constitutes an important precedent on the matter. It provides that the parties will exploit and equally divide the resources of a well defined square in the delimited area.

(g) The most advanced precedent of bilateral agreements provided for a concrete regime for joint cooperation in the utilization of submarine transboundary deposits. These are contained in seven instruments, which are also worth classifying:

(1) Two North Sea agreements specifically include the principle of "unitization." One of them was concluded between the United Kingdom and Norway Relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas Therefrom to the United Kingdom.¹⁰⁷ The other was the Iceland-Norway Agreement on the Continental Shelf Between Iceland and Jan Mayen, and stemmed directly from the recommendations of the Conciliation Commission to which they submitted the dispute.¹⁰⁸

(2) Three other agreements, one by Kuwait and Saudi Arabia Relating to Partition of the Neutral Zone,¹⁰⁹ another by Sudan and Saudi Arabia

106. French-Spanish Convention, *supra* note 105, at 253.

107. Agreement Relating to the Exploitation of the Frigg Field Reservoir and the Transmission of Gas Therefrom to the United Kingdom, May 10, 1976, United Kingdom-Norway, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 398 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

108. See Jan Mayen Treaty, *supra* note 62. See also *supra* notes 56-62 and accompanying text.

109. Agreement Relating to Partition of the Neutral Zone, July 7, 1965, Kuwait-Saudi Arabia, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 212 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

Relating to the Joint Exploitation of the Natural Resources of the Sea-Bed and Sub-Soil of the Red Sea in the Common Zone,¹¹⁰ and the remaining one by Japan and the Republic of Korea Concerning Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries,¹¹¹ establish equal rights over the resources and, as their titles indicate, "joint exploitation."

(3) Finally, two Persian Gulf Agreements, between Bahrain and Saudi Arabia,¹¹² and between Abu Dhabi and Qatar,¹¹³ expressly provide for equal sharing in the income deriving from the exploitation of the transboundary resources in their continental shelves.

Four other conventional instruments include some other limited formulas, which are only partially comprehensive of some of the elements of the above agreements which relate to submarine transboundary resources. The Cuba-Haiti agreement of 1977¹¹⁴ contemplated joint conservation, the Iran-Saudi Arabia agreement of 1968¹¹⁵ merely established a buffer zone, which is similar to the four other agreements in the same sub-region already mentioned.¹¹⁶ A sole tripartite agreement among the German Democratic Republic, Poland, and the Soviet Union¹¹⁷ has the peculiarity of reserving the exploitation of the resources in their portions of the continental shelf in the Baltic, exclusively for nationals and firms of the Baltic States. Finally, the Abu Dhabi-Dubai Agreement on the Offshore Boundary¹¹⁸ modifies a previously drawn line in the continental shelf so that the Fateh wells lie on the Dubai side, since Abu Dhabi recognized that country's ownership of such wells.

110. Agreement Relating to the Joint Exploitation of the Natural Resources of the Sea-Bed and Sub-Soil of the Red Sea in the Common Zone, May 16, 1974, Sudan-Saudi Arabia, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 393 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

111. Agreement Concerning Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries, Feb. 5, 1974, Japan-Republic of Korea, *reprinted in* 4 NEW DIRECTIONS IN THE LAW OF THE SEA 117 (R. Churchill & M. Nordquist ed. 1975).

112. Continental Shelf Boundary Agreements in the Persian Gulf, Feb. 22, 1965, Bahrain-Saudi Arabia, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 207 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

113. Continental Shelf Boundary, Mar. 20, 1969, Abu Dhabi-Qatar, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 223 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

114. Agreement Regarding the Delimitation of the Maritime Boundaries Between the Two States, Oct. 27, 1977, Haiti-Cuba, *reprinted in* 8 NEW DIRECTIONS IN THE LAW OF THE SEA 69 (M. Nordquist, S. H. Lay & K. R. Simmonds ed. 1980).

115. Continental Shelf Boundary, Oct. 24, 1968, Iran-Saudi Arabia, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 216 (R. Churchill, M. Nordquist & S. H. Lay ed. 1977).

116. See Iran-Qatar Agreement, *supra* note 95; Iran-U.A.E. Agreement, *supra* note 96; Iran-Oman Agreement, *supra* note 96; and Bahrain-Iran Agreement, *supra* note 96.

117. Declaration on the Continental Shelf of the Baltic Sea, Oct. 23, 1968, German Democratic Republic-Poland-U.S.S.R., *reprinted in* 7 I.L.M. 1393 (1968).

118. Offshore Boundary Agreement, Feb. 18, 1968, Abu Dhabi-Dubai, *reprinted in* 5 NEW DIRECTIONS IN THE LAW OF THE SEA 214 (R. Churchill, M. Nordquist & S. H. Lay 1977).

EMERGING PRINCIPLES OF CONVENTIONAL LAW

Approximately forty coastal States who have neighbors with opposite or adjacent continental shelves have consented to apply a regime of cooperation when a delimitation line separates submarine transboundary resources. These include ten western European States, four from eastern Europe, ten from the Middle East, two African nations, five from south-east Asia and the southwestern Pacific, three from Asia, and six from Latin America. Their arrangements justify the assertion that the precedents they have established point toward the emergence of a State practice, resulting from existing international conventional law, which is progressively developing the following principles regarding submarine transboundary hydrocarbon resources: (a) the principle of consultation and negotiation toward the conclusion of agreements for joint cooperation; (b) the principle of adequate and effective exploitation; (c) the principle that the coastal State may enter into joint cooperation schemes without relinquishing its rights over the part of the transboundary deposit on its side of the delimitation line; (d) the slowly emerging principle of equal sharing in the benefits derived from the exploitation of the transboundary deposit; and (e) the promising emergence of the principle of unitization.

One may appreciate the fact that applicable conventional law is not only richer than international case law, but it is also clearer in its tendencies toward the future establishment of well defined principles of customary law on the matter. Even if that State practice has not yet produced such firmly established customary legal principles, most of the analyzed treaties and agreements offer, individually and jointly, rich experiences from which other countries can draw in embarking either in their own delimitation processes, or in negotiations with their neighbors to decide the fate of their transboundary submarine wealth.¹¹⁹

CONCLUSION

On November 24, 1976, in Mexico City, after short negotiations which sharply contrasted with the more typical century-long territorial boundary disputes between the two countries, Mexico and the United States ex-

119. The objective of this article has not been to precisely analyze the institutional arrangements discussed herein. However, many have been carefully and exhaustively studied by several authors and experts whose works appear in the Selected Bibliography included in this volume. Special attention is recommended to the following research works: P. SWAN, *OCEAN OIL AND GAS DRILLING AND THE LAW* (1979); Lagoni, *Oil and Gas Deposits Across National Frontiers*, 73 AM. J. INT'L L. 215 (1979); Lagoni, *Interim Measures Pending Maritime Delimitation Agreements*, 78 AM. J. INT'L L. 345 (1984); Utton & McHugh, *An Institutional Arrangement for Developing Oil and Gas in the Gulf of Mexico*, in this volume; Onorato, *Apportionment of an International Common Petroleum Deposit*, 17 INT'L & COMP. L. Q. 85 (1968); E. D. BROWN, *SEA-BED ENERGY AND MINERAL RESOURCES AND THE LAW OF THE SEA* (1984); and Utton, *Institutional Arrangements for Developing North Sea Oil and Gas*, 9 VA. J. INT'L L. 66 (1968).

changed diplomatic notes agreeing on their 200 mile sea, seabed, and subsoil boundaries.¹²⁰ No reference whatsoever was made in this agreement as to the resources in the area of delimitation, whose boundary was drawn on a provisional basis. On May 4, 1978, both countries agreed to formalize the exchange of notes through a definite treaty on maritime boundaries.¹²¹ The Mexican Senate approved the treaty, but it has so far faced obstacles in receiving the advice and consent of the United States Senate.

When the Senate Foreign Relations Committee conducted hearings on June 12, 1980, a problem developed when geologist Hollis Hedberg stated that the treaty was against the best interests of the United States. The drawing of the line from certain Mexican islands off the Yucatan Peninsula, he alleged, was inappropriate, as it gave Mexico an important sector of the central Gulf of Mexico with great potential for deposits of minerals and hydrocarbons, especially in the Sigsbee Knolls. He claimed that the Mexican 200 mile zone should be measured from the continental coast, and that the remaining area between the U.S. line (which he did not propose to change) and the Mexican line should be divided between the two countries. The result would be that much of the part that belongs to Mexico under the drawing of the line from Mexican islands, in accordance with the treaty, would pass to the United States side.

Hedberg's preposterous proposal, amazingly enough, attracted the attention of some senators. If the drawing of the Mexican line from its islands had been illegal under international law, —which it is not, as proved by the fact that the United States has drawn the limits of its national marine jurisdiction zones from innumerable similar U.S. islands—the result would have been that the water column of the central part of the Gulf would have become a part of the high seas, and the underlying soil and subsoil would have become part of the international seabed area. Neither the high seas nor the international seabed area is legally available for appropriation by any State. Hedberg was thus inviting both countries to violate international law. More importantly, he was inviting the United States to violate Mexico's legitimate rights under international law. Although the Committee eventually sent the treaty to the full Senate for approval, it has been delayed there ever since, becoming one of the major points of irritation in the bilateral relations of the two countries.¹²²

The Senate requested the Geological Survey of the United States Gov-

120. United States-Mexico Agreement, *supra* note 88.

121. United States-Mexico Treaty of 1978, *supra* note 90.

122. See Székely, *A Commentary with the Mexican View on the Problem of Maritime Boundaries in U.S.-Mexican Relations*, 22 NAT. RES. J. 155 (1982), and Schmitt, *The Problem of Maritime Boundaries in U.S.-Mexican Relations*, 22 NAT. RES. J. 139 (1982).

ernment to produce a study on the resources in the delimitation area. In 1981 the department completed the work entitled *Geologic Framework, Petroleum Potential, Petroleum Resource Estimates, Mineral and Geothermal Resources, Geologic Hazards, and Deep-Water Drilling Technology of the Maritime Boundary Region in the Gulf of Mexico*.¹²³ That document confirmed the potential and the existence of resources in the area, which had been known since the time of the negotiation of the treaty. That fact, though, has not and could not give the United States any argument whatsoever to detract from the treaty or to question the rights of Mexico which it had already recognized.

In the meantime, as the exchange of notes of 1976 remains in force, it should be clear that the resources Hedberg would have liked to have taken away from Mexico are either entirely inside Mexico's continental shelf or, perhaps in a small sector, transboundary. They belong not to the United States, but instead to the international seabed area, which is the common heritage of mankind. Hedberg's desired resources are not within the scope of this article, for it deals only with those which are found in the transboundary area, where there is in fact and in law adjacency or overlapping, whether or not the treaty is formalized. The scope of this article excludes the very central part of the Gulf of Mexico and the Sigsbee Knolls, which were the subject of the U.S. Geological Survey study.

Ross L. Shipman and Carmen Pedrazzini, drawing upon data in existing literature, have written on the existence of hydrocarbon resources in the area of adjacency or overlap.¹²⁴ Their writings suggest that Mexico and the United States may soon find it necessary to sit down and negotiate a regime of cooperation for the utilization and conservation of those resources. The lessons learned from International Court of Justice cases and others submitted to arbitration and conciliation, and the conventional practice of States, especially the North Sea, Jan Mayen, Torres Strait, and Persian Gulf experiences, and the principles emerging from them should provide beneficial alternatives for both countries, if the political will is there.

123. Open-File Report 81-265 (R. B. Powers ed. 1981).

124. See Shipman, *Energy on the U.S./Mexico Border*, in *RULES OF THE GAME AND GAMES WITHOUT RULES* 271 (M. Miranda & J. Wilkie eds. 1983), and C. Pedrazzini & J. Teyssier, *Hydrocarbon Deposits of the Border Region Between Mexico and the United States and Potential Exploitation Problems in Transboundary Deposits: A Preliminary Report* (in this volume).