The legal regime of the continental shelf and associated areas

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THE LEGAL REGIME OF THE CONTINENTAL SHELF AND ASSOCIATED AREAS

THESIS SUBMITTED FOR THE DEGREE OF

BACHELOR OF CIVIL LAW

IN THE UNIVERSITY OF DURHAM

BY

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May, 1969.

ACKNOWLEDGMENTS

I am immensely grateful to Dr. David Gilmour, who supervised this work, for his invaluable guidance and sustained encouragement. I am also indebted to my friend and colleague, Mr. Nawaz Dawood, Senior Lecturer in Laws at Westminster College, London, for his useful suggestions. I would like to express my deep gratitude to Judge Fouad Ammoun of the International Court of Justice who sent me a copy of the Court's decision in the North Sea Continental Shelf Cases.

My thanks to the staff of the University Library who assisted me in obtaining from other Libraries the reports and other periodicals that I needed. I would like to express my appreciation of the work of Mrs. A. Robinson who typed the manuscript.

Finally, the preparation of this thesis was made possible by the generosity of my brother Abdulla who ungrudgingly supported me during my post-graduate studies in the United Kingdom.

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ABSTRACT

It is probable that no new doctrine of international law has received universal recognition so rapidly as has that of the Continental Shelf. Its being an extension of the outer limit of coastal state sovereignty endeared it to nationalistic pride, a matter evidenced by the time spent in discussing the nature of the rights, which ended by according the coastal state sovereign rights over its natural resources. These were further defined as being exclusive and unshared rights.

As in the case of the territorial sea, the area of control was difficult to define. The present seaward limit of national sovereignty is defined as the edge of the Continental Shelf at 200 metres isobath or the depth to which the submarine areas can be exploited. Exploitability appears to be a poor criterion in these days of rapidly expanding marine technology.

All reasonable geological boundaries of the sea floor (shore line, shelf edge, base of Continental Slope, toe of continental rise, axes of trenches, deepest parts of abyssal plains, and the mid ocean rift) are described

according to their origin and value as seaward limits of national sovereignty for exploitation purposes. All contain uncertainties or deficiencies stemming from present inadequate knowledge of bathymetry, ambiguity of definition, or unreasonable relationship to areas of possible mineral resources. Accordingly a more precise definition of seaward boundaries for the areas under present national jurisdiction is most desirable, with some form of international regime applied to the deeper areas of ocean floor.

For the purposes of this study the subject is divided into three main parts, namely:-

(1) The theory of the Continental Shelf in international law.

(2) The legal regime of the Continental Shelf, and

(3) The legal regime of the deep-sea floor.

Before considering the legal norms of the new doctrine, a geological and geographical study of the nature, origin and formation of the Shelf is given in Section One of Part One. This study is relevant to the legal aspects of the Shelf area in that it provides full data about the geophysical structure of the Shelf and associated areas. It also helps to determine how far jurists were willing to establish the legal framework of the Shelf in accordance with its geographical limits. A comparison between the geophysical and legal definitions of the Shelf is a good evidence of the limited extent to which the two concepts are uniform.

In Part Two the question of the legal regime of the Shelf is examined from the point of view of the legal basis of claims to the Shelf area which, until recently, was regarded, like the waters above it, res communis. The nature of the rights asserted is also explored under both the unilateral claims of coastal states and the provision of the Geneva Convention on the Continental Shelf. The third item, which is examined under this heading, is the problem of delimitation. Here, a special consideration is given to the decision of the ICJ in the North Sea Continental Shelf Cases.

Part Three deals with proposals de lege ferenda on the question of the legal regime of the deep-sea floor. The limited scope of this thesis did not allow more than recording the results achieved by the U.N. General Assembly and other international and national bodies.

I have attempted in this study to present, in an inductive fashion, the work of all those who contributed to the establishment of the doctrine of the Continental Shelf. My task did not go further than displaying the various opinions on the subject, adding my own views where necessary. I am relieved to find that Dr. Mouton, in the introduction to his great work "The Continental Shelf," states,".... one can not solve a new problem alone. One has to put the opinions next to each other in their original wording, in

order to be able to attain a certain amount of progression in thought and give the reader the chance, without forcing him to go through all the sources, to compare the arguments and judge whether he can or can not agree with the conclusions we have reached."

Finally, as I read and re-read the manuscript and corrected the proofs, the words of a twelfth century Syrian judge repeatedly came to my mind:

> "Never have I met an author who is not ready to proclaim on the morrow of finishing his book, 'O, had I expressed this differently, how much better would it have been! Had such a statement been added, how much more correct, it would have been! Had this been moved forward, it would have read better and had that been omitted, it would have certainly been preferable.' In such experience there is indeed a great lesson; it provides full evidence that defect characterizes all works of man."

H. B. KOZAK

Van Mildert College,
April, 1969.

ABBREVIATIONS

Amer.Assoc.Petrol.Geol.:	American Association of Petroleum Geologists
A.C.:	Appeal Cases
Amer.Geog.Soc.:	American Geographical Society
Amer.Geol.Soc.:	American Geological Society
AJIL:	American Journal of International Law
Amer.Jour.Sci.:	American Journal of Science
ALI:	American Law Institute
BYIL:	British Year Book of International Law
CLP:	Current Legal Problems
ENDC:	Eighteen-Nation Disarmament Committee
Geol.Soc.Amer.:	Geological Society of America
IBA:	International Bar Association
ICJ:	International Court of Justice
ICLQ:	International and Comparative Law Quarterly
ILA:	International Law Association
ILC:	International Law Commission
ILM:	International Legal Material
ILQ:	International Law Quarterly
ILR:	International Law Reports
PCIJ:	Permanent Court of International Justice
QB:	Queen's Bench
UAR:	United Arab Republic
UK:	United Kingdom
USA:	United States of America
USSR:	Union of Soviet Socialist Republics
V.:	Versus
YBILC:	Year Book of International Law Commission
YBWA:	Year Book of World Affairs
ZAORVR:	Zeitschrift fur auslandisches offentliches Recht und Volkerrecht
add. OAS:	Organisation of American States.

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PART ONE

The Theory of the Continental Shelf in International Law

Section I - Geological and Geographical Study of the Continental Shelf

1. General Outlook

From a geological and geographical point of view, the history of the Continental Shelf started from the middle of the last century when an increasing number of soundings in the seas and oceans were carried out for scientific purposes.[1] In law, the point of departure with regard to the use of the term "Continental Shelf" is usually the Truman Proclamations of September, 1945.[2]

It is a geological fact that continental-land masses do not terminate abruptly at the sea shore, nor always at

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1. Dr. Otto Krummel, in his "Handbuch der Oceanographie, Band 1, Stutgart, 1907, pp.103-104, refers to the Geographer Hugh Robert Mill as the first to use the term "Continental Shelf" in his "Realm of Nature" published in 1887.

2. Green, L. C., "The Continental Shelf," CLP, 1951, pp.54-57.

a reasonable distance therefrom. Frequently the sea bed slopes off gradually and represents a continuation of the continent which in former ages was above the sea level.[3]

Generally speaking, it was found that the land shelves away to the sea with a small angle to an average depth of 200 metres, after which the gradient increases rather rapidly to a steeper slope going down to ocean depth. The isobath of 200 metres forms in this simplified picture an edge.[4] The part of the sea bottom between the shore and this edge is called the Continental Shelf, and the part

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3. This is the view of most geologists such as Krummel, Umbgrove, Visser, and others (see Dr. Mouton, M.W. 'The Continental Shelf,' The Hague, 1952 pp.34-35). However, in U.S.V. Texas, 1950, the Attorney-General of Texas argues the other way; he maintains that much of the present land territory of that state was formerly submerged, and he contends that much of what is now submerged will in the future be a dry ground (see Daniel, P. "Sovereignty and Ownership in the Marginal Sea," 1950, Joint Memorandum of Ten Counsel, p.5, published in Baylor Law Review, Vol.III, No.2, 1951); both theories will be discussed later when dealing with the 'operations of nature' as a mode of losing or acquiring state territory.

4. In 1957, an arbitrary depth of 300 fathoms (550 metres) was chosen for the outer limit of the shelf by a group of marine geologists in making a report to the U.N. (see comments by Shepard, F.P. 'Submarine Geology', 2nd ed. 1963, p.206).

between the edge and the bottom of the ocean is called the Continental Slope.[5]

The extent and the geographical form of the Continental Shelf is not always the same in every part of the world. According to Kossina,[6] the shelves all over the world cover 27,500,000 square kilometres, i.e. 7.6 per cent of the surface of the oceans. As Umbgrove makes a distinction between inner shelves and outer shelves, the figure for the outer shelves is 9,900,000 square kilometres, i.e. 3.1 per cent distributed as follows:-

	Sq. Km. (in millions)	Percentage of sea surface
Atlantic Ocean	4.6	5.6
Indian Ocean	2.4	3.2
Pacific Ocean	2.9	1.7

The distinction made by Umbgrove between inner and outer shelves is of great importance for the subject we are dealing with. He leaves "The origin and history of inner shelf regions out of consideration since they do not belong to the marginal zone proper of the continents."[7]

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5. This is the geological nomenclature of the Shelf and associated areas in its simplest form; for more specific definitions, see infra pp. 39-40.

6. Dr. Kossina 'Die Erdoberflashe Handbuch der Geophysit,' Berlin, 1933; also cited by Umbgrove, J. H. F. 'The Pulse of the Earth,' 1947, p.99.

7. Ibid, Umbgrove, p.99; Krummel, supra, p.105 makes a similar distinction when he speaks of "echte oder randschelfe" (real or margin shelves) and "folsche schelf" (false shelves) such as inner shelves of which he mentions those in the Baltic, the Arabian-Persian Gulf and the Hudson Bay.

It seems that he does not include the inner shelves under the notion "Continental Shelf." In other words, certain shallow terraces belong geologically speaking, rather to the continental masses proper than to the part which geologists call the "Continental Shelf."

This means that vast areas of shallow seas such as the North Sea, the Arabian-Persian Gulf and the Gulf of Mexico would be excluded from the scientific terminology and definition of the Continental Shelf. Such exclusion caused much diversity of opinion in the ILC and at the Geneva Conference on the law of the sea in regard to the juridical meaning of the shelf; and that is why the geological concept was abandoned in favour of a more comprehensive juridical definition which includes all "The submarine areas adjacent to the coast but outside the area of the territorial seas to a depth of 200 metres (100 fathoms) or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas."[8]

Whereas the above definition refers to the geological limit of 200 metres depth, it deviates from that in two respects: (a) it does not make any distinction between inner and outer shelves as it refers to all submarine areas

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8. See Article 1(a) of the Convention.

outside the territorial sea, and (b) it extends the limit to exploitable areas beyond the 200 metres depth. In fact, as it is explained later, the 200 metres in the definition was adopted for practical considerations of exploitability.[9]

It is concluded that the concept of the Continental Shelf is a concept of geology and indicates the fact that land masses do not normally terminate abruptly at the water's edge off the coast line, but tend to slope away gradually, finally falling away to the deep-sea floor when the superjacent waters reaches a depth of about 100 fathoms (200 metres, or 600 feet).

2. Origin and Formation of the Continental Shelf

Soundings by geophysical methods and geological and geophysical explorations carried out in this century have revealed many features which were unknown about the nature and structure of the shelf and its outer slopes.

Geologists and geographers are divided on the issue concerning the origin of the shelf. As to inner shelves, Umbgrove believes that regions like the North Sea and the Sunda Sea have been a land area during low stands of the sea-level in pleistocene times.[10] He supports his view by referring to bathymatric charts which show those areas to be furrowed by river like trenches. Their course, he remarks, can be followed towards the debouchement of present-day rivers. This theory is further supported by

9. Infra, p.49.
10. Supra, p.98.

the frequent finding of remains of large vertebrates as far as the Dogger Bank.

In regard to outer shelves, Umbgrove is of the opinion that the surface of the shelf is built up by the dual processes of erosion and accumulation. He states that "waves laden with sediment and shingle attack the shore. Their continual bombardment undermines the coast. Gradually the sea encroaches upon the land, abrades and invades it. Undertwo transports the abraded material seaward, and tidal currents assist in the submarine distribution of the sediments ..... the surface of the shelf, therefore, seems to be a plane of equilibrium between two anatognistic forces. One of these is the demolishing, erosive and transporting action of the sea. The other is the accumulating action of the same medium ..... the surface of the shelf expresses a balance between two opposing sets of factors which in short might be indicated by the terms submarine erosion and aggradation."[11] Figure 1 represents part of the shelf of Saint Helena Island which, according to Umbgrove, was formed by the processes of erosion and accumulation.

This theory was first anticipated by Nansen,[12] the

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11. Supra, p.100.

12. Nansen, F., quoted by Rudmoss Brown, 'The Polar Regions,' pp.67-71, Mathuen and Co. Ltd., London, 1927; see also Pratt, W. E. 'Petroleum on Continental Shelves,' Bull. Amer. Assoc. Ptrol. Geol., vol.31, No.4 (April 1947) p.659.

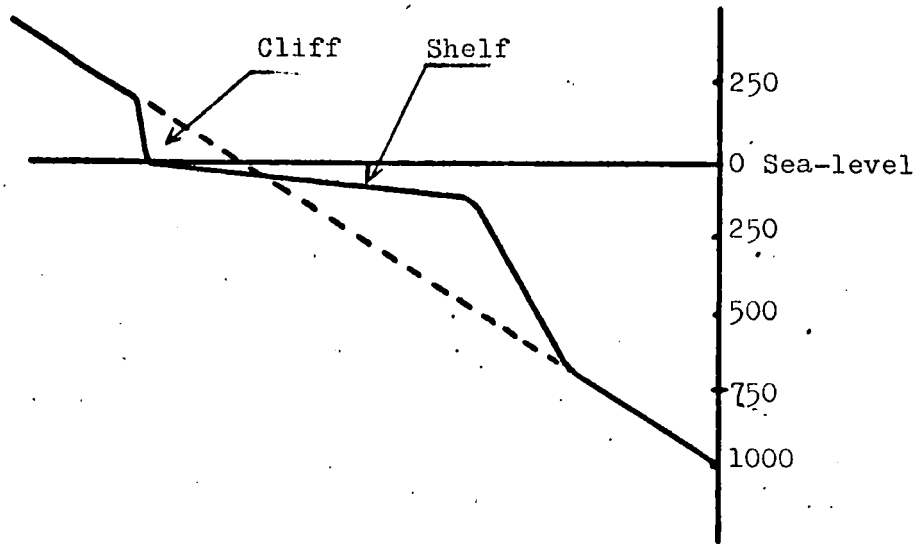

Figure:1- Formation of a gradation-plane along the coast of Saint Helena (after Umbgrove).

Umbgrove explains,on page 100,how the small shelf round the island St. Helena was formed as follows:From the cliffed coast over some distance seaward the surface of the submarine bank consists of an abrasion-plane formed by the erosive action of the breakers.The more distant surface of its surface,however,is built up by the accumulation of sediments derived largely from the land.From the edge of the shelf,situated here at a depth of 100 metres,the outer slope of the small shelf may be followed down wards to a depth of 700 metres.At that depth the slope diminishes;the reason for this seems obvious:on that level the normal slope of the St. Helena volcano is reached,as is suggested by the broken line in fig. 1.

Norwegian zoologist whose Arctic explorations made him famous a generation ago. Nansen was a pioneer in the study of the Continental Shelf. He concluded that the landward portion of the Arctic shelf had been planed off by tides and currents to become a surface of marine abrasion, while the seaward portion is built up by the accumulation of the material swept out toward the Continental Slope by the same forces.[13] He perceived also that on the inner, abraded portion of the shelf, little deposition takes place, except in local downwarps or depressions. The general surface of the shelf became a "base level" of erosion and a "top level" of deposition. Nansen, however, attached much importance to the deposition of sediments as a cause of subsidence.[14]

On the other hand, according to the theory of Jessen, Novak, and others the formation of the entire shelf surface is controlled exclusively by the demolishing action of waves and currents.[15] According to their theory the shelf is considered to be a feature which originated mainly by abrasion;[16]

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13. Loc. cit.

14. This theory was advocated by Pratt, above No.12, to prove that great petroleum and gas resources are located in coastal and adjacent submarine areas as a result of deposition of fine-grained sediments which are rich in organic material.

15. Cited by Umbgrove, supra, p.101.

16. Ibid, p.101.

so that its whole surface was carved out of the continental blocks. In order to explain the frequent occurrence of the Shelf edge at a depth of 200 metres, those authors put forward hypothetical theories which, for several reasons, are untenable.[17]

In fact the whole idea of the shelves being carved into the continental blocks is rendered out of date since the geophysical explorations carried out by Ewing's team.[18] For they made it highly probable that the Atlantic shelf of North America is composed of an accumulation of sediments ranging from triassic to recent times resting on the submerged part of the former continent and attaining a thickness of 4,000 metres at a distance of 60 miles off the shore-line. Similar results were obtained by Bullard for the Shelf to the west of the English Channel.[19]

Shepard, in his book "Submarine Geology," 2nd ed. 1963, suggests a multiple origin of Continental Shelves. Figure 2 represents several modes of origin for Continental Shelves, put forward by him. His conclusions on this matter may be summarized as follows:-

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17. Ibid, p.102.

18. Ewing, M., Crary, A. P., Rutherford, H. N., and Miller, B. L. 'Geophysical investigations in the emerged and submerged Atlantic coastal plain,' Bull. Geolog. Soc. Amer. vol.48, 1947.

19. Bullard, E. C., and Gaskell, T. F., 'Submarine Seismic Investigations' (Royal Society of London, Series A, No.471, vol.177, 1941).

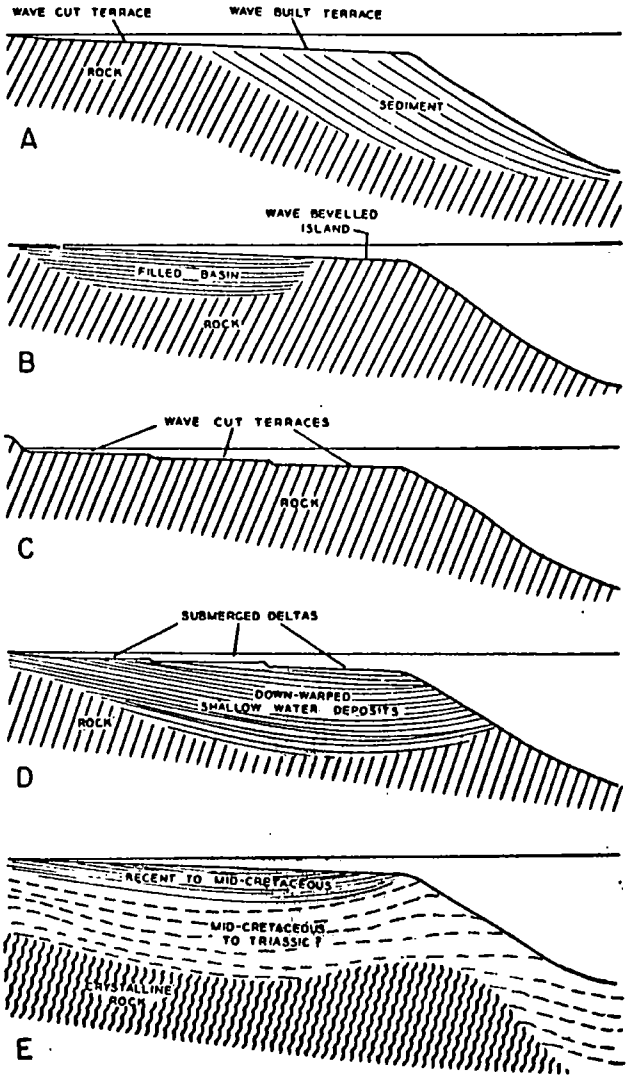

Figure:2— **Several modes of origin for continental shelves.** (After Shepard).

1. Most of the outer terraces of the shelves can be accounted for as either the result of low-level wave abrasion or as deltas built during the low stands.
2. As to wide shelves, some must have resulted from the filling of relatively deep basins, some must have undergone a long history of submergence, and some others are probably in part the result of down warping processes along the continental margins.

It is concluded that the Continental Shelf must not be regarded as a huge step incised in the continental block. On the other hand, the theory of Umbgrove, that the Continental Shelves represent a combination of wave-cut and wave-built terraces, must not be generalised. Hence, Shepard's views, which comprise the best views of the two classical schools of thought, seem to be based on solid grounds.

3. Variations in the Surface of the Shelf

(a) Different Shelf-Surfaces

According to Weaver,[20] there are two types of Continental Shelf, and each is associated with a corresponding type of topography of the land inshore. Examination of Continental Shelf areas in the world lead to the fact that the Shelf

20. Weaver, P., 'Variations in History of Continental Shelves,' Bull. Amer. Assos. Petrol. Geolog., vol.34 (March, 1950) pp.351-352.

forms a physiographic unit with its adjacent coastal plain.[21] In other words, it was found that the broader the Continental Shelf, the broader the coastal plain inland from it; the narrower the Continental Shelf, the steeper the Continental Slope of it seaward, and the land rise inland from it.

Beyond the Continental Shelf seaward is the Continental Slope. There are also two types of Continental Slope, as there are of Continental Shelf. In one type, Weaver states, the Continental Slope has a single steep slope from the Continental Shelf's outer edge to the ocean deep. In the other, it is compound, and part way down the slope is a plateau, or at any rate a lessening of the slope rate, so that it consists of a steeper upper segment and a gentler lower one.[22]

Extreme cases of these types were cited by Nansen.[23] Drawings of the profiles of the two examples of Nansen are shown in Figure 3. The shorter one is from the west coast

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21. Ibid, p.353; however, slight differences are admitted by Weaver due to differences between marine agencies and aerial agencies.

22. It has been suggested that this lower slope be called the continental rise, and that it be separated from the much steeper upper continental slope. In some places the continental rise is "relatively narrow band that is rather closely related to the Continental Slope, but elsewhere it extends for hundreds of miles out into what clearly seems to be a part of the deep ocean territory: See Shepard, supra, No.4, p.279.

23. Nansen, F. Amer. Geog. Soc. Spec. pub. 7 (1928) pp.4-7.

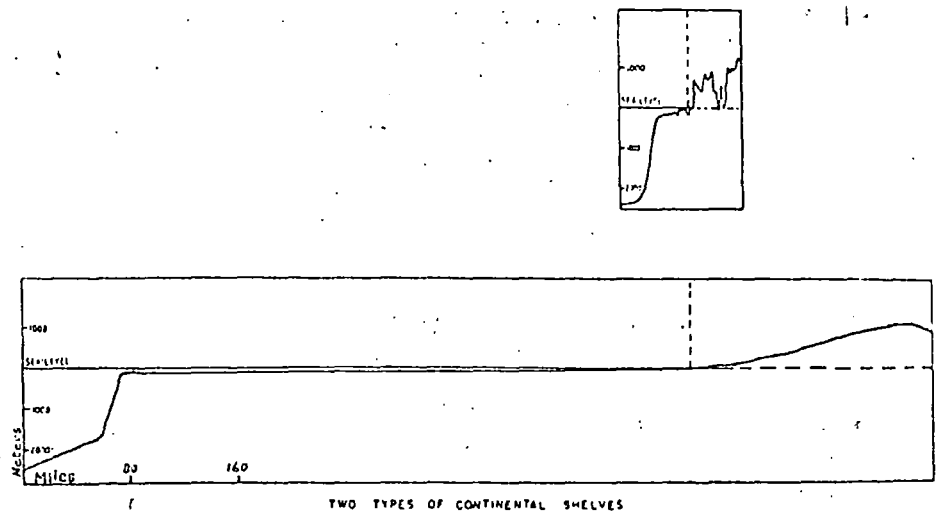

Figure : 3 — —Contrast in profiles of different continental shelves. Vertical exaggeration 48X.

of Norway, the longer one from the north coast of Siberia near the mouth of the Lima River. It is apparent that the Continental Shelf is narrow off Norway and the land is mountainous down to the sea shore; off Siberia a wide Continental Shelf adjoins a wide coastal plain and a very gently sloping hinterland. It is also obvious that the Continental Slope in the shorter profile is steep and nearly uniform; in the longer profile the slope consists of two segments.

(b) Formations on the Outer Shelf-Surface.

Continental Shelf areas are not as simple as maps show them. Topographic features, ranging from ordinary roughness to a variety of elevations and depressions, appear in the surface of most shelves and slopes. Figure 4 shows three profiles, cited by Weaver, from the north Gulf of Mexico.[24] It is obvious that much of topographic roughness appears on the slope of the two upper ones, and it may be observed from the profile of Houston that this roughness extends upon the Continental Shelf. However, it is a geological phenomenon that topographic features are mostly found in the Continental Slope.

Geologists are by no means in agreement as to the nature and origin of topographic features on the Continental Slope. Shepard interprets the topographic plugs off Louisiana as

24. Weaver, supra, p.356.

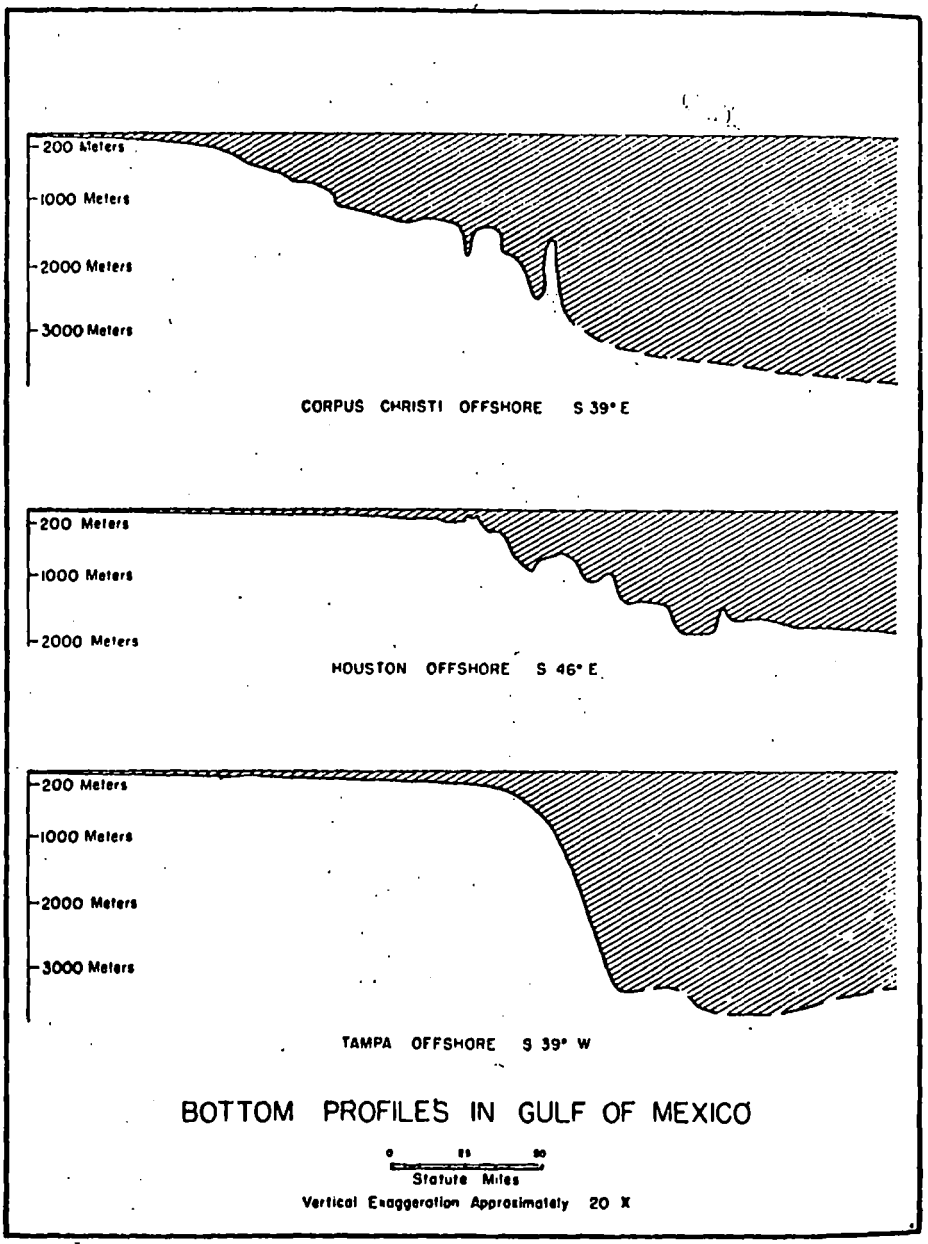

Figure :4 —Representative types of continental shelf and continental slope in north Gulf of Mexico.

(After Weaver).

piercement salt domes. He found that most of these features on the Continental Slope correspond in size, shape and number with some of the subsurface salt domes, folds and faults which have been outlined by drilling on land in Texas and Louisiana, and more recently have been shown to be present off shore from these states, at least for a few miles in the Continental Shelf zone.[25] In regard to the interpretation of local roughness on the Continental Shelf, offshore from Houston, shown in Figure 4, both Weaver and Pratt suggest that these rugged features have been active tectonically in recent geologic time, when the depth of water was like it is today.[26] Had they been formed by differential erosion on land before submergence they should have been degraded, as to the elevations, and filled up, as to the depressions. Such modification would not be expected if they were formed in water of the present depth, because in deep water neither erosion nor sedimentation is active. They also agree that these topographic contours are really structural contours indicating very active tectonic forces in the area.[27]

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25. Shepard, F. P. 'Salt domes related to Mississippi Submarine Trough,' Bull. Geol. Soc. Amer., vol.48, pp.1349-62.

26. Weaver, supra, p.355.

27. Ibid., p.357.

Pratt, however, making no distinction between the Continental Shelf and Continental Slope, considers that "The region of the Continental Shelf takes on the character of an extremely mobile segment of the earth's crust,"[28] and develops the theory that this mobility has resulted in downwarping (including also faulting and folding) of the Continental Shelf outside the shore line relative to the land area inside the shore line. In other words, his theory is to the effect that the submergence of the Continental Shelf (including the Continental Slope) is tectonic.

Weaver challenges the theory just summarized as far as the shelf area is concerned.[29] To him the physiography of the Continental Shelf is due to erosion, and therefore that it is in the same geologic province as the adjacent land. He does believe that one border of the Continental Shelf is tectonic, but that is the outer one, and is localized in the Continental Slope rather than in the shelf area.[30]

In fact, Pratt's views are mainly based on explorations and surveys carried out in the Gulf of Mexico, an area well known by its active movement of tectonic nature. Therefore,

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28. Pratt, supra No.12, p.658; This theory was first suggested by Nansen as it is admitted by Pratt himself on p.659.

29. Weaver, supra, p.352.

30. Loc. cit., p.352.

that local area cannot be recommended for test of the two theories.

It would be wise to come to the same cautious conclusion as Keunen that "The problem of the shelf is still far from being definitely solved."[31] The problem, however, may be solved when we get to know more about submarine canyons, which remain to be examined here.

Finally, the two theories - one that the coast line is a hinge line, and the other that the zone of active movement is on the Continental Slope - will be reconsidered when dealing with the two notions of continuity and contiguity or adjacency as a legal basis of claims to the Continental Shelf.[32]

(c) Submarine Canyons

Another concept supplied by the geologists in regard to the surface of the shelf is "submarine canyons."[33] Kuenen describes this geomorphological feature as follows:

> "A typical canyon starts as a steep narrow gorge cutting across the continental shelf for a few dozen kilometres and running straight down the continental slope to great depths. At the edge of the shelf the bottom may lie many hundreds to a thousand metres

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31. Kuenen, ph.H. 'Marine Geology,' p.169.

32. Infra, p.65.

33. The most recent study on the subject is given by Shepard, supra No.4, Chapter XI.

below the adjoining sea floor ..... The transverse section is V-shape, and in ground plan a moderately sinuous course is followed ..... tributaries, generally heading well into the shelf or beginning at the top of the Continental Slope, come in, forming a dendritic pattern."[34]

Umbgrove tentatively distinguishes three types of canyons:[35]

(i) As a first group submarine gorges originating near the edge of the shelf and running downward to great depth have to be mentioned. In many places they were found crowded together in great numbers. They are cut back only a short distance into the platform of the shelf, the headward extensions being seldom more than 5 to 10 miles.

(ii) A few gorges of the type mentioned just now extend across the continental platform, their much shallower headward extensions reaching the vicinity of the shore near or at the debouchement of a large river.

(iii) Another type of submarine canyon was revealed by soundings off the coast of California. They are characterized by a dendritic river-like

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34. Keunen, supra, p.487.

35. Supra, pp.122-125.

pattern, deeply incised in the surface of the Continental Shelf and thence continuing towards the great depth of the Pacific Ocean.

In spite of the amount of writings on the subject, the origin of canyons remains shrouded in mystery. However canyons cannot be older than the Continental Shelf and Slope, since they are cut into it. Some twenty years ago there was a large number of hypotheses used by geologists as canyon explanations.[36] In recent years most of these hypotheses have been discarded, leaving only the following theories which are also subject to criticisms in one way or another:

(i) Subaerial erosion:- This theory was advocated by Veatch and Smith.[37] To explain the effect of subaerial river erosion they allege that the sea was lowered 12,000 feet and again restored to its former level in the last 20,000-25,000 years. There are many objections to this theory, especially the enormous biological changes which should have resulted from such a shrinking of the oceans, and the impossibility of explaining in this way the Mediterranean canyons as this sea could not have been lowered below the level

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36. For further details, see Shepard, supra No.4, pp.337-338.

37. Veatch, A. C., and Smith, P. A. 'Atlantic submarine canyons of the U.S. and the Congo submarine valley,' Geol. Soc. Amer. Spec., paper 7 (1939) p.101.

of sea-floor in the Strait of Gibraltar.[38]

(ii) Submarine erosion or turbidity currents:- In contrast to the idea of subaerial erosion, Daly[39] Kuenen,[40] and Heezen[41] concluded that the bottom currents in the ocean itself caused this topography. This theory is also untenable since it is impossible that canyons thousands of feet deep in hard rock walls could be cut by density currents. They would be more likely to form isolated closed depressions than canyons. However, the results of an intensive study of canyon heads, by Dill, appeared recently in a thesis on "submarine erosion."[42]

(iii) The flexure theory:- According to Bourcart,[43] canyons are quaternary river valleys submerged by a recent movement of the continental marginal flexure. This hypothesis has the advantage of

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39. Daly, R. A., 'Origin of Submarine Canyons,' Amer. Jour. Sci. Vol.31, 1936, pp.401-402.

40. Kuenen (ph.H) considered currents actions as one of the major causes: 'Origin of submarine canyons,' Bull. Geol. Soc. Amer., vol.64, 1953, pp.1295-1314.

41. Heezen (B.C.) considered the currents actions as the sole cause of submarine canyons: 'Corrientes de Turbidez del Rio Magdalena,' Bol. Soc. Geogr/of, Colombia, 1956, nos. 51 and 52, pp.135-42.

42. Dill, R. F., cited by Shepard, supra No.4, p.348; see Dill's basic work on the subject "Sedimentary and Erosional Features of Submarine Canyons," 1962, editor: National Science Foundation and Office of Naval Research.

43. Bourcart, J. 'La Theorie de la flexure continentale,' C. R. Cong. inter. geog., Lisbonne, 1949, vol.11, pp.167-90.

> offering an explanation of the canyons which are abnormally steep for river valleys. However, the explanation would be easier to accept if canyons of apparently recent origin were all concentrated in regions where large scale earth movements are known to have occurred. Therefore, it is impossible to invoke this theory in some regions, notably on the Atlantic coast of the U.S., where canyons are cut into the pliocene and where there is no evidence of recent movements of any importance.[44]

To conclude, from the foregoing discussion it will be evident that there is much yet to be learned about submarine canyons. The detailed study of the valleys of the sea bed makes it constantly more evident that they cannot be explained by any one process alone.

Finally, this lack of simplicity and uniformity in the geophysical structure of the Continental Shelf causes problems in the attempt to delimit the Shelf and ways have to be found to overcome these difficulties.[45]

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44. See Guilscher, A. 'Coastal and Submarine Morphology,' 1958, p.223; also Shepard, supra No.4, p.344-5.

45. Mr. R. Young who devoted several years to the study of this subject suggested a method of delimitation where the submarine area is interrupted by canyons, depressions and other features. His method was recommended to the ILC when dealing with this question. See Young 'The Legal Status of Submarine Areas Beneath the High Seas,' AJIL, vol.45(2), 1951, p.235; also YBILC, 1951, vol.1, p.271, paragraph 65.

Section II - The Legal History and Resources of the Continental Shelf

1. The Continental Shelf from lex lata to lex ferenda

In the forties, more than twenty-five proclamations were made by coastal states to the adjacent submarine areas of their coasts.[46] These enactments largely differ to the extent of the area claimed, the rights asserted and the terms used.[47] Such claims were most influenced by the economic interest of the claimant in the natural resources of the area claimed, commonly known by the name 'Continental Shelf.' This economic interest of some states motivated earlier jurists to propound the right of a state to assume jurisdiction and control over certain areas of what was

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46. These states are: Argentina, Chile, Costa Rica, Dominica, Equador, Guatemala, Iran, Mexico, Nicaragua, Panama, Peru, Philippines, U.K. (on behalf of Bahamas, Jamaica, Trinidad and Tobago, and nine Sheikhdoms in the Arabian-Persian Gulf), Saudi Arabia, and the U.S.A.

47. The contents of such claims will be discussed later in Part Two of this work.

formerly regarded as part of the high seas.[48]

From the late forties and onward the regime of the Continental Shelf as lex lata has been discussed by many scholars.[49] Their works have no doubt contributed a great deal to the cause of the shelf doctrine. While these theoretical discussions were taking place, the ILC set out to establish a lex ferenda for the exploitation of the

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48. To mention a few lawyers, Sir Cecil Hurst "Whose is the bed of the sea" BYIL 1923-24, pp.34-43, where he advocates the theory of the ownership of the natural resources of the seabed by occupation based on enactment made to that effect by the adjacent state; see also his comments on Vattel's statement "Who can doubt that the pearl fisheries of Bahrein and Ceyloh may lawfully become property," p.40. Suarez, J. L., "Report on the Exploitation of the Products of the Sea," 20 AJIL, 1926, Supp.2, pp.230-241. This Argentinian jurist proposed, in his report to the sub-committee of experts on the topic of the exploitation of the resources of the sea, the extension of the marginal sea to include the Continental Shelf, which, according to him, is the only natural limit for the territorial sea. He justified his proposal by the necessity of adapting international law to the needs of maritime industries. See comments on that report by Anderson C. P., 'Exploitation of the Resources of the Sea,' 20 AJIL (1926) pp.752-3. See further Borchard E., 'Jurisdiction over the littoral bed of the sea,' AJIL 35 (1941) pp.515-19; also by the same writer 'The Resources of the Shelf,' 40 AJIL, 1946,p.59.

49. The reading list on the subject is rather extensive. However, the following articles and text books are most informative: Vallat, F. A.,'The Continental Shelf,' 23 BYIL 1946, pp.333-338; Hurst, 'The Continental Shelf,' Transactions of the Grotius Society, 34 (1948); Green, L. C.,'The Continental Shelf, CLP 4 (1951); Waldock, 'Legal Claims to the Continental Shelf,' Transactions of the Grotius Society, 35 (1950); Young, R. 'Recent Developments with respect to the Continental Shelf,' AJIL 42 (1948) 849-857; also 'The Legal Status of Submarine Areas Beneath the High Seas,' AJIL 45 (1951) 225-239; Kunz, J. 'The Continental Shelf and International Law: Confusion and Abuse', AJIL 50 (1956) 828-853; Mouton, M. W.,'The Continental Shelf,' The Hague, 1952; Anninos, P. C. L.,'The Continental Shelf and Public International Law' The Hague, 1953.

submarine resources. In his report to the ILC, Professor Francois, special rapporteur on the regime of the high seas devoted a full chapter for the question of the Continental Shelf.[50] After extensive discussions and long debates for a period of seven years, the ILC prepared its final draft articles on the Continental Shelf in 1956.[51]

Apart from independent writers and the ILC, various governmental and non-governmental organizations have also endeavoured to work towards the codification of the regime of the shelf.[52] The resolutions passed by these organizations,

50. Report on the High Seas by Francois, YILC, 1950 - II, Chapter III - Le Plateau Continental, pp.87-113.

51. ILC Report with commentary to the General Assembly, Articles 67-73, YILC, 1956 - II, pp.295-301.

52. The Inter-American Council of Jurists, at its third meeting held at Mexico City in 1956, agreed upon the idea of the Continental Shelf; see MacChesney; Situation, Documents and Commentary on Recent Developments in the International Law of the Sea, 1957, pp.244-45. The OAS, at its conference held at Ciudad Trujillo in 1956, unanimously supported the concept of the Continental Shelf and passed a resolution in that respect; see also MacChesney op.cit. p.256. The ILA, at its 1948, 1950 and 1952 conferences studied the problem of the Continental Shelf; In 1954, the Conference passed a resolution that the ILA would be in favour of the ILC draft on the Continental Shelf: see ILA report 43 (1948) p.168, 44 (1950), pp.87-138, 45 (1952), pp.143-163 and 46 (1954), pp.411-442. Furthermore, the International Law Bar Association, El Congresso Hispano-Luso-Americano de Derecho International and the American Law Institute all passed resolutions in support of the ILC draft: see IBA Report of the Third Conference (London) 1950, p.184 and the Fourth Conference (Madrid) 1952, p.279. The resolution of El Congresso Hispano-Luso-Americano is reprinted at Universidad de Buenos Aires, Rivista de la Facultad de Derecho Y Ciencias Sociales, Ano 9 (1954) p.252. The ALI report is published in The Foreign Relations Law of the U.S.: A Restatement, Tentative Draft No.1, 1957, p.50, para.23.

so far as the concept of the Continental Shelf is concerned, are almost identical to that of the ILC. Therefore, and as Oda remarks, "it is not an over statement to say that the concept of the Continental Shelf can be properly understood by reference to the work of the ILC."[53]

At the Geneva Conference of 1958, the draft articles of the ILC relevant to the Continental Shelf were intensively examined by the Fourth Committee before being submitted to the plenary meeting.[54] The Convention on the Continental Shelf was adopted on 26th April, 1958. Several comprehensive works, which mainly deal with deficiencies and other shortcomings in the convention, have already been published.[55]

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53. Oda, S., 'International Control of Sea Resources,' 1963, p.161.

54. Geneva Conference 1958, Vol.II (Plenary Meetings): Vol.VI (Continental Shelf).

55. Consult: Dean, A.,'The Geneva Conference on the Law of the Sea: What was Accomplished,' AJIL, 52 (1958); Gutteridge, 'The 1958 Geneva Convention on the Continental Shelf, BYBIL 35 (1959); Whiteman, 'Conference on the Law of the Sea: Geneva Convention on the Continental Shelf,' AJIL 52 (1958); Young, 'The Geneva Convention on the Continental Shelf: A First Impression,' AJIL, 52 (1958); Garcia Amador, 'The Exploitation and Conservation of the Resources of the Sea,' 1959.

Recently, in the light of technical advancement and the increasing demand on the exploitation of deep-sea resources, discussions on the Convention took a new turn. Matters left unsolved, by the Convention rather than in the Convention, are considered the contemporary problems by most observers. Their main concern is to find a proper solution to crucial points such as the legal regime of the deep sea floor, and the future status of Mare Liberum. The answers to most of these problems belong to another part of this work.[56] However, the key answer to any question connected with the status of the bottom of the oceans depends largely on what is legally meant by the term "Continental Shelf."

2. The Concept of the Continental Shelf in International Law

From a legal point of view the theory of the Continental Shelf is dealt with under three main headings which represent the whole body of literature on the subject. These are:-

(a) Proclamations and decrees

(b) Publications and writings, and

(c) Judicial decisions

(a) Proclamations and decrees

The point of departure with regard to state practice is normally the Truman Proclamations of September, 1945. There

56. One ~~section~~ Part is devoted to the question of the legal regime of the deep-sea floor and its relation to the doctrine of the Continental Shelf.

were, in fact, earlier acts which served a similar purpose, but these made no reference to the Continental Shelf eo nomine.

The 1858 Cornwall Submarine Mines Act cannot be taken as the earliest state instrument dealing with the question of the Continental Shelf.[57] The Act applies only to minerals won from mines and workings below low water mark under the open sea adjacent to the county of Cornwall. This has nothing to do with the regime of the Continental Shelf since the Convention does not affect the right of the coastal state to exploit the subsoil by means of tunnelling, whatever may be the height of the waters above the subsoil.[58]

It has been suggested that the first reference to the Continental Shelf in a state instrument was a decree of the Imperial Russian Government circulated to the powers in 1916 and reissued by the Soviet Union in 1924.[59] According to this Russia claimed certain Arctic islands as forming "a northern extension of the Siberian continental platform." In his comments on the Russian decree, Professor Francois says

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57. See the story of this Act in Sir Cecil Hurst's article 'Whose is the Bed of the Sea,' BYIL, 1923-1924, p.34.

58. Article 7 of the Convention.

59. An English translation of the 1924 decree appears in J. Degras, Soviet Documents on Foreign Policy, 1951, p.476; see also Lakhtine, AJIL 24 (1930) pp.703-708.

"the term 'continental platform' is clearly not used in the same sense as that employed today: it does not refer to an underwater plateau. The rights claimed by the Soviet Union in Polar waters should be considered in relation to the 'Theory of Sectors[60]..... The Soviet Government has not submitted any claims on the basis of the 'Continental Shelf Theory' nor has it replied to the claims of other states."[61]

In the same year, 1916, at a Fisheries Conference in Madrid, de Bruen, who became Director General of Fisheries in Spain, proposed the extension of territorial waters to include the Continental Shelf.[62] Nothing came of this at the time. However, in 1925, Ceylon issued a Pearl Fisheries Ordinance which made no actual reference to the Continental

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60. 'Sectors Theory' or the 'sector principle' was applied by states asserting sovreignty in Arctic and Antarctic regions: Oppenheim's International Law, Vol.1, p.556, note 6. Green, No.49 above, equated the sectors theory under international law with the political concept of spheres of influence. "Sphere of influence" is the name of territory exclusively reserved for future occupation by a power which has effectively occupied adjoining territories: Oppenheim's International Law, 1955, Vol.1, p.562.

61. Report on the High Seas to the ILC, 1950, U.N. Doc. A/CN.4/17, p.34.

62. Report of Committee of Experts for the Progressive Codification of International Law, League of Nations Doc. L.N.C. 196, M.70, 1927, p.63.

Shelf, but defined the pearl banks as a "determinate area between the three, or in some places five, fathom line and the 100 fathom line;"[63] which is in fact the Continental Shelf. Finally, in 1942, the U.K. and Venezuela signed a treaty relating to the submarine areas of the Gulf of Paria.[64] By the terms of the treaty the two powers agreed not to assert any claim to sovereignty or control over the submarine areas, defined as the seabed and subsoil outside territorial waters, lying outside of specified demarcation lines, and each undertook to recognise any claim put forward by the other on its own side.

One is therefore left with the conclusion that the concept of the Continental Shelf appeared for the first time in a State document in the U.S. Proclamations of 1945.

The legal aspects of the various proclamations and decrees shall be dealt with in another chapter. Our only concern here is to find out whether any distinction has been made by states as to the notion of the area claimed when the Continental Shelf became a subject of national claims.

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63. Cited by Francois, Second Report on the High Seas, ILC, Third Session, A/CN.4/42, 10th April, 1951, p.54; See also U.N. Legislation Series, Laws and Regulations on the High Seas, ST/LEG/SER.B/1, 11th January, 1951, p.61, (Note under No.5(C)).

64. Treaty Series No.10(1942), Cmd.6400; This Gulf is a narrow stretch of water lying between Trinidad and Venezuela and is not normally used by international shipping.

The proclamation by President Truman, to start with, only used the term "Continental Shelf."[65] In a press release of the same date, a depth limit of 100-fathom was mentioned.[66] The declaration of the President of Mexico of October, 1945, mentions the Continental Shelf which is delimited by 200 metres isobath.[67] The Decree Law of Costa Rica, November, 1949, refers to the submarine platform on the continental and insular coasts of the national territory at whatever depth it is found.[68] The Royal pronouncement of Saudi Arabia with respect to the seabed and subsoil of areas in the Arabian-Persian Gulf of May, 1949, speaks of those areas in the Gulf seaward from the coastal sea of Saudi Arabia but contiguous to its coasts.[69] Nine sheikhdoms on the Gulf followed the

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65. 40 AJIL, 1946, Official Doc., p.45-48; The President issued two proclamations and two executive orders with regard to fisheries and the natural resources of the Continental Shelf. The executive order connected to the proclamation of the Continental Shelf merely placed its natural resources under the control and jurisdiction of the Secretary of the Interior.

66. 13 Department of State Bulletin, 30 Sep., 1945.

67. Law and Regulations on the Regime of the High Seas, Vol.I., ST/LEG/SER.B/1, 1951, p.13.

68. Ibid, p.9; The Congressional Decree No.102 of Honduras, 1950, Ibid, p.11, uses the same wording, adding however "and whatever its extent."

69. 43 AJIL, 1949, Supp. p.154-156.

same line of the Royal pronouncement in their proclamations.[70]

From this summary record three main groups of proclamations and decrees emerge, namely:-

(i) Those of the western hemisphere where the Continental Shelf is used with or without further delimitation.

(ii) Those of Costa Rica and Honduras where the term insular shelf is mentioned along with the Continental Shelf, and

(iii) Those of Saudi Arabia pronouncement and the proclamations of the Arabian-Persian Gulf Sheikhdoms where no Continental Shelf is mentioned.

(b) Publications and Writings

The basic issue with regard to theoretical discussions on the subject was whether the geological term "Continental Shelf" is adequately applicable to certain adjacent submarine areas. This was expressed by Hudson at the very beginning of the ILC debates on the subject. While Mr. Hudson admits that in the Arabian-Persian Gulf there is no Continental

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70. These sheikhdoms are: Bahrein, Qatar, Abu Dhabi, Kuwait, Dubei, Sharjah, Ras-al-Khaimah, Ajmon, and Umm-al-Qaiwain; see Laws and Regulations on the High Seas, supra, pp.23-29.

Shelf, he, nevertheless, felt that lawyers had no right to prevent the exploitation of the resources of that gulf for the benefit of mankind.[71] Mr. Young, who was always a big opponent to the use of the term "Continental Shelf," states "as a factual matter, no Continental Shelf exists in the Persian Gulf, which is merely a basin much less than 100 fathoms deep on the Asian continental mass."[72] In a later article, he is more precise in saying "in the Persian Gulf, in which there is, strictly speaking, no Continental Shelf ....."[73] According to him, the bottom and subsoil of the Arabian-Persian Gulf must be classified under the group "seabed and subsoil beneath shallow seas and gulfs." Rinton also states that "the theory of jurisdiction on which the Arabian claims are based is necessarily somewhat different from that supporting the American policy due to the fact that there is no Continental Shelf in the Persian Gulf."[73a]

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71. YBILC, Vol.1, 1950, The 66th Meeting, p.214, para.73; at the 67th meeting, Ibid, p.218, para.11, Hudson declared that if it was desired to use the expression "Continental Shelf," he would ask for shallow waters to be assimilated to it.

72. Young, R. 'Saudi Arabian off-shore Legislation,' 43 AJIL, 1949, pp.530-31.

73. Ibid, 'Further claims to areas beneath the high seas,' pp.790-91.

73a. Rinton, J. Y. B.,'Jurisdiction over sea-bed resources and recent developments in Persian Gulf Area,' Revue Egyptienne de droit international, vol.5, 1949, p.133.

Professor Francois, in his report to the ILC, referred to these statements and added "in point of fact there is no Continental Shelf in the Persian Gulf."[74] However, as a solution to the problem, he suggested "..... where the depth of the waters permitted exploitation it should not necessarily depend on the existence of a Continental Shelf."[75]

It appears that the denial of the existence of a Shelf in the Arabian-Persian Gulf and similar areas is based on the distinction made by Umbgrove between inner and outer shelves.[76] In fact, unless we accept this distinction, the argument that there is no edge in the Arabian-Persian Gulf would be rebutted by the fact that the edge of the Continental Shelf of the Asian continental mass lies outside that Gulf, in the Gulf of Oman.[77]

It is still more doubtful whether we can speak about a Continental Shelf when the coast of a continent is dented into bays or into gulfs, or where there is a drop to the bottom of the ocean from the coastline. As a result, Young suggested use of the term "submarine areas" which was employed

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74. Supra, note 61, p.31.

75. Ibid.

76. Umbgrove, supra, pp.3 and 4. above.

77. This was suggested by Dr. Mouton, supra, p.11; presumably it is this view which the Iranian Bill of May, 1949, had adopted when it talked about 'The Continental Shelf of the Iranian Coasts in the Persian Gulf and Oman Sea,' Revue Egyptienne de Droit International, vol.5, 1949.

in the British-Venezuelan Treaty on the Gulf of Paria, 26th February, 1949.[78] In his opinion, this term does not only apply to places where no edge exists, but it would also include that land portion of the Continental Shelf lying within territorial waters, as well as "insular shelves."[79]

Young's view was suggested by Mr. Amador, the Chairman, to the ILC, but for reasons other than those mentioned by Young.[80] In fact, Young's suggestion to include the seabed and subsoil lying within the territorial waters is meaningless since the coastal states' sovereignty over that area is part of the main domain. What the Chairman had in mind was the continental terrace which is not included in the Continental Shelf according to the definitions approved by the International Committee on the Nomenclature of Ocean Bottom Features adopted by the International Committee of Scientific Experts at Monaco in 1952.[81] These definitions and Mr. Amador's proposal will be discussed later.

(c) Judicial Decisions

From a judicial point of view the distinctive character of the term "Continental Shelf" was brought out in this

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78. Supra, note 64.

79. Young 'The Legal Status of Submarine Areas Beneath the High Seas,' Supra, note 49, p.227.

80. Infra, p. 36.

81. Infra, pp. 39-40.

passage of Lord Asquith award in Abu Dhabi Arbitration:[82]

> "..... it follows, if I am right, that the claimants succeed as to the subsoil of the territorial waters (including the territorial waters of islands) and that the Sheikh succeeds as to the subsoil of the shelf; by which I mean in this connection the submarine area contiguous with Abu Dhabi outside the territorial zone."[83]

It is not without risk to assume that Lord Asquith asserts the existence of a Continental Shelf stricto sensu in the Persian Gulf where he says "The sheikh succeeds as to the subsoil of the shelf," because it follows immediately the explanatory line "by which I mean in this connection the submarine area contiguous with Abu Dhabi outside the territorial zone." However, one cannot read the judgment without assuming that the main point of dispute was in regard to the so-called Continental Shelf area. Lord Asquith studied in his award the origin, history and development of the expression "Continental Shelf." He examined with an enormous amount of care the legal norms of the new doctrine before he arrived at a conclusion. Therefore, it is supposed that he was influenced by the notion "Continental Shelf."

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82. ICLQ, Vol.1, 1952, pp.247-261.

83. Ibid, p.260.

Such conclusion, however, is inconsistent with another part of the judgment where Lord Asquith says "The claims (of the Latin and American Republics) were often not limited to the shelf as a geological entity or even to the area ending where the depth of the sea began to exceed 100 fathoms, but sometimes extended to a zone 200 miles from the mainland; an area quite unrelated to the width of the physical shelf."[84] The fact that Lord Asquith can speak about "a shelf in the Persian Gulf," on one hand, and "The shelf as a geological entity" and "The physical shelf," on the other hand, does not elucidate our problem in the least. Instead, he complicated the issue by using these two sets of inconsistent terms. Hence, it is more likely to suggest that Lord Asquith referred to a Continental Shelf in the Arabian-Persian Gulf by fiction of law rather than as a geological reality.

Finally, in the Ruler of Qatar Award, Lord Radcliffe avoided using the term "Continental Shelf" and talked of seabed and subsoil beneath the high seas in the Arabian-Persian Gulf.[85]

Conclusion

From these various views a picture of the Continental Shelf as a legal notion emerges. By relating them to the articles of the Convention on the Shelf, we find that this

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84. Ibid, pp.254-255.

85. ILR, 1953, p.534; See comments on this case by Lord Asquith in his conclusion on Abu Dhabi Arbitration supra, p.261.

legal notion differs from the geological one in many respects:-

1. Unlike the geological concept, it includes shallow water areas,
2. The legal edge will not always be parallel with the real edge, and
3. The exploitation of the submarine areas does not depend on the existence of a Continental Shelf.

This last point follows immediately from Professor Francois' proposed solution.[86]

As a result, we are going to use this term in a legal sense. This means that we have to find a new definition since the issue involved represents more than an academic dispute as it relates directly to a newly established right which, if not defined specifically, would lead to a major dispute between states.

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86. Supra, no.75. See also Amador's comments in 1YBILC, 1956, p.131.

Section III - Attempt to Define the Continental Shelf

1. Terminology and Definition

(a) Terminology

Before defining the term 'Continental Shelf,' it is highly important to study the different names under which this notion appeared in various instruments. It is necessary to inquire into the significance of the fact that these instruments do not invariably refer to the Shelf by name; that those which refer to it do not necessarily use it in the same meaning, and that the expression 'Continental Shelf' has become no more than a convenient formula covering a diversity of titles to the seabed and subsoil adjacent to the territorial waters of the state.

The term 'submarine areas' was suggested by Mr. Young as a more appropriate term to cover shallow water areas and areas whose depth is more than 200 metres off the coast-line.[87] In the light of the terminology and definitions approved by the International Committee on the Nomenclature of Ocean Bottom Features adopted at Monaco in 1952, the term 'submarine areas' was raised again by Mr. Amador in the ILC.[88]

87. Young, R. 'The Legal Status of Submarine Areas Beneath the High Seas,' 45 AJIL 1951, pp.225-237, (227-228).

88. YBILC, Vol.1, 1956, pp.130-140.

He submitted three objections to the use of the 'Continental Shelf':-

(1) The term Continental Shelf does not include the continental terrace according to the nomenclature adopted at Monaco. He explained to the Commission that the continental terrace was formed by the right-angled triangle, the hypotenuse of which was the Continental Slope, the other two sides being the perpendicular dropped from the outer edge of the Continental Shelf and the horizontal line joining the base of that perpendicular and the base of the Continental Slope.[89] Mr. Amador reminded the Commission of the vitality of the natural resources of that area which is formed by sediments and currents.[89a] Furthermore, the continental terrace has been the subject of a resolution which was unanimously adopted by all American states.[90] Therefore, the distinction drawn between the two areas was no arbitrary one and was not at variance with scientific facts.

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89. But see the definition of the "continental terrace" as given by the International Committee on Nomenclature of Ocean Bottom Features; infra, 6(i).

89a. This theory was advocated by Pratt in his article 'Petroleum on Continental Shelves,' Bull. Amer. Petrol. Geol., Vol.31, No.4 (April, 1947), pp.657-72; also referred to in Section I; see also Amador, YBILC, Vol.1, 1956, p.138, paragraph 26.

90. Infra, note 110.

(2) Another objection was the problem of coastal states whose adjacent submarine areas, owing to their configuration, did not constitute a Continental Shelf.[91] It was a matter of elementary justice that such states should also be entitled to exploit those areas. Equally important was the question of coastal states who did not possess a Continental Shelf in its geological sense.[92]

(3) Finally, similar difficulties had been experienced in expressing the term 'Continental Shelf' in Russian as in rendering it into Arabic.[93]

Mr. Amador rejected Professor Francois' contention that the term 'Continental Shelf' was in common use and generally recognised. He referred to the fact that about 50 per cent of national legislations referred to both Continental Shelf and continental terrace: and that the term 'submarine areas' was used in a treaty between the U.K. and Venezuela and other official documents. It was a generic term which included the Continental Shelf, the continental terrace and other areas which, on account of their depth, did not fall within either of those categories.

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91. Such as Chile, Peru, Dominican Republic, and Norway.

92. Such as countries on the Arabian-Persian Gulf and the North Sea.

93. The term 'Continental Shelf' was expressed in Arabic by words conveying the idea of 'continental terrace,' or 'continental projection.'

On the other hand it has been argued that governments preferred the term 'Continental Shelf' because it possessed a certain fixity and was a conventional one which had a clear connotation in the mind of the public.[94]

In fact, and as we have seen, the term 'Continental Shelf' is scientific in its origin. Its pecularity of being an identifiable physical feature throws doubt on the status of certain important areas of adjacent seas which would be excluded if the term is applied stricto sensu. Therefore, the decisive point in law is the definition applied rather than the terminology used on the principle 'falsa demonstratio non nocet.'

(b) Definition

The Continental Shelf, though a physical term long recognised by geographers, geologists and oceanographers, has come to gain strong legal significance in Law of the Sea matters. At the Geneva Conference it was associated with a rather indefinite off-shore area beyond the outer limit of the territorial sea. Nevertheless, the actual physical description of the Continental Shelf should be one of the motivating factors in the formulation of legal texts pertaining to the off-shore area in question. Therefore, it is worthwhile to start with definitions on the physical characteristics of the Continental Shelf before we pass to any legal definition of this term.

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94. Francois ~~and Amador~~ on page 132 of the 1956 YBILC, Vol.1.

(i) Geophysical Definitions of the Continental Shelf and Allied Features

A large measure of international agreement on the definitions of the Continental Shelf and associated areas of the ocean floor was achieved at a meeting of the International Committee on the Nomenclature of Ocean Bottom Features.[95] The terms and definitions agreed upon by the Committee are based to a large extent on earlier definitions given by Boggs.[96] Those that pertain to the Continental Shelf are as follows:-

"Continental shelf, shelf edge and continental borderland - the zone around the continents, extending from the low water line to the depth at which there is a marked increase of slope to greater depth. Where this increase occurs the term shelf is appropriate. Conventionally its edge is taken at 100 fathoms (or 200 metres) but instances are known where the increase of slope occurs at more than 200 metres or less than 65 fathoms. When the zone below the low water line is highly irregular, and includes depths in excess of those typical of continental shelves, the term continental borderland is appropriate.

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95. Wiseman and Ovey, 'Definitions of features on the deep-sea floor: Deep-sea Research, Vol.1, 1953, p.14; also International Union of Geodesy and Geophysics, Bulletin of Information, Vol.2, 1953, p.555.

96. Boggs, S. W.,'Delimitation of Seaward Areas under National Jurisdiction,' 45 AJIL, 1951, pp.240-245.

"Continental slope - the declivity from the outer edge of the Continental Shelf or continental borderland into great depths.

"Continental terrace - the zone around the continents extending from low water line to the base of the Continental Slope.

"Island shelf - the zone around an island or island group, extending from the low water line to the depths at which there is a marked increase of slope to greater depths. Conventionally its edge is taken at 100 fathoms (or 200 metres).

"Island slope - the declivity from the outer edge of an island into great depths."

On the basis of the foregoing terminology and definitions, Dr. Amador classified the submarine areas adjacent to continents and islands into three broad categories, namely:-

(1) The "continental and insular shelf," or simply "Submarine shelf," which is the zone between the low-water mark and the point at which the slope begins a rapid descent to the great oceanic depths, conventionally determined by the 100-fathom line.

(2) The "continental and insular terrace," which is the mass enclosed between the limits of the shelf, the continental slope and an imaginary

straight line drawn horizontally from the base of the slope to a corresponding point in the terrestrial subsoil of the continent or island.

(3) The third category embraces all those submarine areas contiguous to a continent or island whose extension cannot be determined with the same degree of accuracy as in the case of the first two categories because of their irregularity and difference in depth.[97]

(ii) The Juridical Definition of the Continental Shelf

The members of the ILC gave much consideration to the definition of the Continental Shelf in their debates on the subject.[98] The two main theories which attracted much attention from the Commission relate to the criterions of (a) depth, and (b) exploitability.

Two preliminary definitions were prepared by the ILC in 1951 and 1953 before adopting the third and final definition in Article 67 of the 1956 draft articles concerning the law of the sea. Article 67 became Article 1 of the convention on the Continental Shelf.

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97. Garcia Amador, "The Exploitation and Conservation of the Resources of the Sea," 1959, p.88.

98. The Commission's debates on the Continental Shelf are reported in the YBILC of 1950, Vol.1, pp.214-239, 1951 Vol.1, pp.267-301, 1953, Vol.1, pp.72-163, and 1956, Vol.1, pp.130-159.

The 1951 draft of the ILC had defined the Continental Shelf as follows:-

> 'As here used, the term 'continental shelf' refers to the seabed and subsoil of the submarine areas contiguous to the coast, but outside the area of territorial waters, where the depth of superjacent waters admits of the exploitation of the natural resources of the seabed and subsoil.'[99]

This meant that the Commission had undertaken to do something for states which did not possess a Continental Shelf in the geological sense.[100] This was expressly provided for by Mr. Brierly's proposal to the Commission. He suggested that 'the area for such control and jurisdiction will need definition but it need not depend on the existence of a Continental Shelf.'[101] It is also supported by Professor Francois' proposal, which was referred to earlier.[102]

In view of the comments of some governments and of the consideration that the 1951 text was not specific enough and might give rise to uncertainty and disputes, the Commission abandoned the criterion of exploitability in

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99. YBILC, 1951, Vol.II, p.141.

100. Commentary, Ibid.

101. Brierly, YBILC, Vol.1, 1950, p.222.

102. Francois, Supra, No.75.

favour of the depth limit of 200 metres, a depth which was sufficient for all practical needs then.[103] Accordingly, the corresponding article of the 1953 draft of the ILC reads:-

> 'As used in these articles, the term Continental Shelf refers to the seabed and subsoil of the submarine areas contiguous to the coast, but outside of the area of the territorial sea, to a depth of 200 metres.'[104]

In comment on this definition, Colombos stated '..... the practical reason for adhering to this limit (200 metres or approximately 100 fathoms) is obvious, as it is usually marked on nautical charts. There is a further advantage in adopting this limit since it is at this depth that the Continental Shelf, in the geological sense, generally comes to an end and begins to fall steeply to a much greater depth.[105]

In 1953, when the above definition was adopted by the ILC, it was thought that the criterion of 100 fathoms depth found support from both geologists and national claims to the shelf.[106] The edge of the shelf, which is the important

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103. See comments by Egypt and France on p.249 of YBILC, 1953, Vol.II; also the Commission's comments on p.213, loc.cit.

104. Ibid., p.212.

105. Colombos, 'International Law of the Sea,' 1954, p.61.

106. See a press release from the White House following Truman's proclamations and the declaration of the President of Mexico, notes 66 and 67 above.

feature for boundary purposes, has commonly been spoken of as occurring at the average depth of 100 fathoms and this view has been encouraged by the fact that most maps and charts giving ocean depths indicate one or the other of these lines with a good deal of assurance.[107]

However, one must admit that, in reality, the edge of the shelf does not appear to be as simple a phenomenon as the maps may lead one to suppose. In addition, as a result of more recent geological surveys, the theory of 100 fathoms shelf edge is no longer universally accepted by modern geologists.[108] Apart from that, the criterion of the 100-fathom line would exclude from the definition a considerable part of the continental and insular terraces and also any other submarine area adjacent to a state's territory which had a special configuration of the coast, as in the case of Chile.

Consequently, at the Commission's eighth session in 1956, the members found themselves facing crises from inside and outside the Commission.[109] While they were

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107. See a recent map of 'The World', Amer. Geogr. Soc.,1947.

108. Supra, Section 1, No.4. For other considerations in adopting this limit see infra No.120.

109. Inside the Commission, Dr. Amador presented his proposal, which has been discussed at the beginning of this section; he was also backed by the results of Ciudad Trujillo Conference, March, 1956.

debating the subject in May of that year, a copy of the resolution which was passed by the Inter-American Specialized Conference at Ciudad Trujillo one month earlier, was circulated to them.[110] The formula of the definition adopted in that resolution is designed to place all coastal states on an equal footing with respect to the submarine areas adjacent to their respective territories. Furthermore, where the geographical configuration of the bed of the sea contiguous to the coast is so irregular that it cannot be defined in terms of the shelf or terrace concepts, the coastal state may exercise the same exclusive rights enjoyed by those which have a continental or insular shelf and terrace, provided the depth of the superjacent waters admits of the

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110. Final Act, Inter-American Specialized Conference on 'Conservation of Natural Resources: The Continental Shelf and Marine Water,' Ciudad Trujillo, March 15-28th, 1956 (Pan American Union, 1956) 13; paragraph 1 of the Resolution states:-

> 'The sea-bed and subsoil of the Continental Shelf, continental and insular terrace, or other submarine areas, adjacent to the coastal state, outside the area of the territorial sea, and to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the sea-bed and subsoil, appertains exclusively to that state and are subject to its jurisdiction and control.'

exploitation of the natural resources of the seabed and subsoil and that the submarine area be adjacent to the territory of the coastal state.[111]

The ILC was impressed by this conclusion and, as a result, agreed to amend the 1953 definition so as to include the seabed and subsoil of other areas beyond the limit of 100 fathoms "to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas."[112] Clearly, this is not quite the same as the criterion of exploitability pure and simple which the Commission had adopted in the 1951 draft. As Dr. Amador remarks: "There is now a distinction between the broad categories of submarine areas and also, as in the conclusion of the Inter-American Conference, between two classes of rights: an existing right with regard to the Continental Shelf proper, and a potential right with respect to the other areas covered by the definition."[113] Therefore, the net result of this combined definition is that the element of arbitrariness in the 1953 definition had been mitigated by the principle of equality which was imported from the Ciudad Trujillo resolution.

At the Geneva Conference, there were numerous proposals to change or amend the 1956 draft of Article 67 as it came

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111. Ibid.
112. YBILC, Vol.II, 1956, p.296.
113. Amador, No.97 above, p.111.

from the ILC.[114] In spite, however, of considerable dissatisfaction voiced in Committee IV with the ILC draft, the only proposal obtaining a majority vote in Committee IV was a proposal by the Philippines to add a second paragraph to the ILC text to read: 'All references in these articles to "Continental Shelf" shall be understood to apply also to similar submarine areas adjacent and surrounding the coasts of islands."[115] This amendment is in conformity with the general rule which assimilates islands to the mainland whether under the convention on territorial sea and contiguous zone,[116] or in the nomenclature of ocean bottom features.[117] Therefore, the assimilation by the U.S. Government of the seabed and subsoil of the territorial sea to those of the high seas, up to the limits of the shelf, is not justified by the historical development of the law in the matter.[118]

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114. U.N. Conference on the Law of the Sea, off.rec., Vol.VI, Fourth Committee.

115. Ibid., p.47.

116. Article 10(2).

117. Supra, No.95; but Oda, loc.cit., p.168, regards the proposal of the Philippines to be redundant since the term 'Continental Shelf' was not defined as only meaning the shelf contiguous to continents.

118. See Hudson's comment on pp.267-268 of the YBILC, Vol.1, 1951, para.21; however, the effect of the bill is merely national as it relates to disputes between some federal states and the union over the Continental Shelf area.

Conclusion

To sum up, in its first draft, prepared in 1951, the Commission defined the Shelf by the criterion of possible exploitation pure and simple. It followed from this definition that areas in which exploitation was not technically conceivable by the reason of the depth of the water were excluded from the Continental Shelf. In 1953, the Commission had considered the possibility of adopting a fixed limit for the Continental Shelf in terms of the depth of the superjacent waters. It seemed likely that a limit fixed at a point where the sea covering the Continental Shelf reaches a depth of 200 metres would at that time be sufficient for all practical needs. This depth also coincides with that at which the Continental Shelf in the geological sense generally comes to an end. In 1956, the Commission felt, however, that such a limit would have the disadvantage of instability. Technical development in the near future might make it possible to exploit the resources of submarine areas at a depth of over 200 metres. Moreover, the members realised that this arbitrary depth would deprive coastal states in Latin America and somewhere else of the right to exploit submarine areas adjacent to their coasts. Hence, the Commission decided to amend the 1953 draft so as to include in the definition both the 200 metres depth and the criterion of exploitability. As a result, the system of ostensible inequality in the 1953 text was eliminated. With an

additional paragraph, this definition became Article 1 in the convention on the Continental Shelf.[119]

This is not, however, the end of the story. By attempting to solve a problem, this combined definition inherited problems of its own, which are not less dangerous to the regime of the shelf and the doctrine upon which it is based.

2. The Main Problems of the Existing Definition

(a) Exploitability versus 200 Metres Depth: How Should the Definition be Best Construed?

The first impression which one might get from this combined definition is that the criterion of exploitability does not leave much place for the operation of the criterion of depth, especially when it becomes conceivable to exploit areas at greater depths in the light of technical advancement. However, it appears from the ILC discussions that the adoption of 200 metres limit is not the outcome of the geological situation of the shelf only, but it also reflects the practical exploitability of the area concerned.[120] On the other hand, it has been suggested that the formula of exploitability was not brought into the definition to cope

119. Article 1 reads: "For the purposes of these articles, the 'Continental Shelf' is used as referring (a) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands."

120. YBILC, Vol.1, p.137, Francois' comment (Paragraph 14); also his comment in YBILC, Vol.1, 1951, p.270, para.55, and Hudson, loc. cit., para.50.

with the future advancement in technology; but as a safeguard for the rights of those states which do not have a Continental Shelf in the geological sense of the term.[121]

This means that the limit of 200 metres depth bears a meaning to the criterion of exploitability and restricts its application to that limit except where no Continental Shelf exists. In the latter case, where no Continental Shelf exists, a distinction must be made between areas of shallow seas where the depth of waters does not exceed 200 metres, and areas where the depth exceeds 200 metres off the coastline. Areas falling under the first category are covered by the limit of 200 metres, where our only concern would be delimitation between the neighbouring states, a problem which belongs to another part of this work. It is only in regard to areas of the second category that the criterion of exploitability receives full and unrestricted application as long as exploitation is practicable[122] and tenable.[123]

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121. In the Commission's commentary on p.296 (paragraph 4) of the 1956 YBILC, Vol.II, this point was not made clear; however, it is apparent that this provision comes originally from the resolution of Ciudad Trujillo Conference which adopted it as a principle of equality between coastal states.

122. As to what is 'practicable,' see Amador, infra, Nos. 124 and 125.

123. It depends on whether a coastal state could invoke the depth achieved by another coastal state, to extend its jurisdiction and control to adjacent areas lying at such depth; see further details below, No.128.

Such interpretation to the meaning of Article 1 would invite crises and chaos into the convention and the doctrine which it embodies. It is, indeed, against the spirit of the doctrine of the shelf that coastal states having no shelf area should be given a free hand for exploitation, while other coastal states, with more natural and technical ability, ought to be tied down to a fixed limit. If it is a matter of elementary justice that the former states should be allowed to exploit submarine areas adjacent to their coasts without regard to waters depth, it is equally important that the latter states should have the same right.

The only correct conclusion is to give the criteria of 'exploitation' in Article 1 a free interpretation for all. As some coastal states are now technically prepared to penetrate beyond the physical boundaries of the shelf, the limit of 200 metres depth would be meaningless. As a result, 'exploitability' becomes the sole order of the definition.

(b) Exploitability versus Continental Shelf: Expansionist Move to the Oceanic Floor

The concept of exploitability admitted by the ILC seems too vague. Neither the Commission nor the Fourth Committee attempted to reflect on what they actually thought they were approving. To reveal some of the ambiguity, one must follow the text of the convention and the individual opinions of some leading scholars.

With regard to 'possible exploitation,' recent technical information shows that the place where the depth admits of exploitation is not exclusively determined by the technical ability to build in that depth of water an installation or to use a device for exploitation.[124] According to Dr. Amador, 'In this respect one needs to take into account the interaction between three different elements, i.e. technical, geological and commercial considerations. Exploitation is only proven possible if it actually takes place, and this does not depend only on the technical possibility but also on the presence and character of the minerals and a consideration of whether the exploitation will be a paying proposition.'[125] Dr. Mouton is also of the opinion that if a technician invented an installation whereby resources could allegedly be exploited at a depth of, say, 300 metres, but the apparatus failed to function after it had been installed, the state concerned would have committed an illegal act.[126]

This means that the potential right of a coastal state to extend its jurisdiction and control to submarine areas of Class II (areas beyond the 200 metres) depends on the accumulation of the three elements mentioned by Amador.

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124. Mouton, M. W., 'Recent Developments in the Technology of Exploiting the Mineral Resources of the Continental Shelf,' preparatory document No.20, U.N. Conference on the Law of the Sea (A/CONF.13/25); see also Amador, supra, p.89.

125. Ibid.

126. Mouton, Fourth Committee, No.114 above, p.37, para.28.

Further, if Mouton's conclusion, in the example referred to above, is correct, then it may well be said that this potential right depends rather on geological and commercial considerations than on technical possibilities.[127]

Another difficulty is the question whether, once exploitation has been achieved at a record depth by one state in one locality, this fact operates to extend the shelf areas of all other states irrespective of their technological capacity or the physical obstacles present off their coasts. Most writers believe that logically the answer must be in the affirmative; however, the point is controversial and remains unsettled.[128]

In fact, two provisions in the Shelf Convention confirm the view expressed above: first, the criterion of possible exploitation in Article 1 is an objective one indicating the most advanced standards of technology in the world and not the technical ability of the particular coastal state.[129]

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127. Amador, supra, p.90.

128. Supporting the view expressed in the text are: Young, 'The Geneva Convention on the Continental Shelf,' 52 AJIL 1958, pp.733, 735, Oda, supra, p.167, Gutteridge, 'The 1958 Geneva Convention on the Continental Shelf,' 35 BYIL, 1959, pp.102-110, Verzjil, 'The U.N. Conference on the Law of the Sea,' 6 Notherlands Tijdschrift voor International Recht, 1959, pp.115-134, Amador, supra, p.121, and Green, CLP, 1959, pp.224, 232; But see contra, Ely, 'The Administration of Mineral Resources underlying the High Seas,' paper presented at the Conference of the American Bar Association, Institute of Marine Resources, Long Beach, California, June, 1967.

129. The objectivity is in the words '..... to where the depth of the superjacent waters admits of the exploitation....'

Secondly, by the terms of the convention each coastal state is free to grant to any foreign country or foreign nationals the right to explore its Continental Shelf or exploit its natural resources. This is inferred from Article 2(2) which expressly declares that the rights are exclusive and if the coastal state does not explore the Continental Shelf or exploit its natural resources, any claim or exploitation by another state is dependent upon the express consent of the coastal state.

Since the rights over the Continental Shelf belong to the coastal state ipso jure so long as the seabed or the subsoil is exploitable, it would appear that every coastal state has an inchoate title to an unlimited area of the seabed and subsoil notionally attached to its land territory. This title vests as soon as any state anywhere is technologically able to exploit the seabed or subsoil neighbouring its own territory, regardless of whether the particular coastal state is able to exploit that adjacent to itself.

However strange it may look, such interpretation leads to the proposition that this Geneva Convention has divided all the areas of the oceans among coastal states irrespective to the intentions of the ILC and the delegates to the Geneva Conference.[130]

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130. This is the view of Oda, supra, p.167-168, where he suggests that, whatever the delegates at the conference had in mind, the only logical interpretation of the provision is that it effected an allocation among coastal states of all submarine areas of the world; this (contd.)

If this conclusion is correct, and there seems no reason to dispute it, then it would mean that the high seas are going to be another scene of rivalry between maritime nations. This might give rise to international conflict over the richer sites, and it might encourage 'gold rush' tactics and uneconomic exploitation activities. As only few countries are now possessing the technology and capital required for such undertakings, charges of 'neocolonialism,' unjust advantage and the like might well be raised by most nations. Finally, the freedoms of the high seas, which have been defended since the early days of Grotius, would be handed to the forces of anarchy instead of being preserved to the international community at large.

Therefore, before the advances of coastal states penetrate beyond the physical boundaries of the shelf, it is advisable to work toward modification of the shelf convention in terms of substituting some fixed limit for the present indefinite standard. The desirability of such a step has been widely recognised, and in 1969 the Convention by its own terms becomes open to revision.[131]

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contradicts what the delegates had, in fact, in mind. Dr. Mouton expressed their opinion by saying in the Fourth Committee, 'beyond the outer limit of the submarine areas over which the coastal state enjoyed limited sovereignty, the situation was governed solely by the regime of the high seas; there was no longer any question of exclusive rights .....' 6 Official Records, 44 (U.N. Doc. A/Conf.13/42). This statement passed without challenge.

131. Article 13(1); for further details, see infra 'The Legal Regime of the Deep-Sea Floor.'

PART TWO

The Legal Regime of the Continental Shelf

Section I - The Legal Basis of Claims to the Continental Shelf

1. Juristic Opinion

In dealing with the legal basis of claims to the Continental Shelf, all writers make a distinction between the seabed and subsoil. However, for the purposes of this study, I shall deal first with the status of submarine areas, seabed and subsoil, beneath the high seas. Then, the subsoil shall be given a special consideration on the account of mines and tunnels.

A. The Various Theories of Acquisition of Land Territory and the Status of Submarine Areas Beneath the High Seas

In his article on the status of submarine areas beneath the high seas, Young put forward the following points of view:-[1]

1. That submarine areas are incapable of exclusive appropriation by any state;

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1. Young, R., Supra, No.45 in Part One, pp.225, 229.

2. That submarine areas may be acquired by occupation, which according to some is only fictitious, and
3. That submarine areas appertain to the adjacent land territory and are automatically subject to the soverignty of the state which holds that territory.

To these three theories one may add the principle of the 'operations of nature' as a fourth argument in establishing a good title to submarine areas. Which of these theories determine the legal nature of the submarine area of the Shelf is the subject of the following discussion.

1. The Theory of Res Communis:

It is apparent that the first contention of Young's summary is derived from the theory that the high seas are the common property of all peoples and capable of exclusive acquisition by none. The fact that the waters of the high seas are primarily a high way of commerce, and for this purpose are most useful when open freely to all, does not, according to Young, justify the subjection of the submarine areas to the same legal regime of the waters above.[2] In fact, since the high seas are the property of the international community, the development of submarine resources beneath them should also be entrusted to the international community.[3] In spite of the fact that the practice of

2. Ibid, p.229.
3. This view was suggested by Mr. Hsu to the ILC; for further details on this point see ~~xxxxxxxxx~~ The 66th and 67th meetings of the ILC.

of states rejected this view in the past, it has been raised recently in the light of deep-sea mining activities.[4] As we shall see later, the internationalization scheme of submarine areas is more likely to be limited to the deep-sea floor without affecting the national interests of coastal states in the adjacent submarine areas.[5]

2. The Theory of res nullius

Many writers are of the opinion that submarine areas are, like land territory, res nullius until claimed and occupied by some state, which acquires rights of sovereignty thereupon. Gidel, making a distinction between the subsoil and seabed, regards the former as being capable of occupation which does not disturb the latter.[6] Opinions of other writers are not all in favour of this distinction.[7] However, all writers, whichever view they took of the status of the

4. This is one of the proposals put forward by some writers for the establishment of a new regime to the ocean floor: see Young 'The Legal Regime of the Deep-Sea Floor,' 1968, 62 AJIL, pp.641-653.

5. Infra, p. 224.

6. Gidel, Le Droit International Public de la Mer, 1932, Vol.1, pp.507-517 and 498-501.

7. Supporting Gidel's view are Higgins and Colombos: International Law of the Sea, p.54; Contra: Fauchille, Traite de Droit International Public, 1925, Vol.1, Part II, p.19; Westlake, International Law, 1904, Vol.1, pp.187-8; Hurst, C. 'Whose is the Bed of the Sea' BYIL 1923-24, p.34; Smith, Great Britain and the Law of Nations, Vol.II, p.122.

seabed itself, regard the subsoil as capable of 'effective occupation,' subject to no unreasonable interference with the area of the high seas above. Those who considered the seabed to be incapable of occupation, went further and insisted that occupation of the subsoil is only permissible by operations which are begun on terra firma or in territorial waters and are carried beneath the high seas wholly underground.[8]

If the opinion of Gidel that the seabed has the same status as the sea is correct, the whole concept of the shelf-doctrine is in conflict with international law. The fact that the whole doctrine of the Continental Shelf is at variance with existing international law was rightly stated by the Foreign Minister of Peru in the Onassis whaling fleet incident: 'The world must accept the fact that America is elaborating its own code of rights based on social needs which are at variance with the freedom of the seas.'[9] This was also expressed earlier by Lord Asquith in Abu Dhabi Award, where he refused to accept the draft articles adopted by the ILC on the subject of the Continental Shelf as recording, or even purporting to record, established rules.[10] According to him, the articles were expressive of the development and not the codifying task of the commission.[11]

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8. Gidel, op.cit., p.510, and Higgins and Colombos, op.cit.p.55.
9. The Times, Dec.3, 1954.
10. Abu Dhabi Arbitration, ILQ, Vol.II, 1951, pp.247-261.
11. Ibid.

On the other hand, the state practice in regard to sedentary fisheries supports the view that the seabed is open to some degree of occupation by individual states.[12] Such occupation, though dictated by the economic interest of the coastal state, must not unreasonably interfere with the freedoms of the high seas. This was clearly expressed by Fauchille where he states 'the freedom of the superjacent waters must be regarded as the dominant principle.'[13]

Following the view of Fauchille and the evidence of state practice, we therefore reach the conclusion that the Continental Shelf under the high seas is capable of occupation but that the seas themselves are not. This assumption that the submarine areas under the high seas are res nullius capable of being appropriated by occupation, raises the question of what kind of occupation is required?

(i) Effective Occupation

The modern theory of appropriating land territory by occupation asserts that the occupation must be physical and effective.[14] Applying it to submarine areas, this rule

12. See Vattel's oft-quoted dictum about Ceylon's and Bahrein's pearling rights, Droit des Gens, Book 1, Chapter XXIII, 287.

13. Fauchille, Supra No.7; The same view was expressed by Miss Whiteman, the U.S. delegate to the Conference on the Law of the Sea, Fourth Committee, p.76. See also commentary on article 69 of the ILC's draft articles on the Continental Shelf: 2YBILC, 1956, p.298, mentioned infra, p.

14. Oppenheim's International Law, 1955, Vol.1, p.557.

would mean that only those areas under actual exploitation could be regarded as being under the exclusive authority of the claiming state. Several important objections emerge from this theory:-

1. The main objection to any rule based on occupation would appear to be its disregard of the interests of the adjacent coastal state. Rights would vest in the occupant, no matter whence he came or how tenuous his prior connection with the region. In his comments on this doctrine, Young states 'A principle which permitted such a situation would rightly seem intolerable to most coastal states, and especially so to one unable to proceed immediately with development on its own account. Considerations of security, of trade and navigation, of pollution, and of customs and revenue, would all militate against recognition of such a doctrine. It is not sufficient to say that a coastal state by forehanded action may place itself in the position of occupant; many coastal states do not have the technical or financial means at hand to win a race for occupation against some other state on the hunt for additional resources.'[15]

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15. Young, supra No.1, p.230.

2. Another objection is the difficulty of determining what constitutes effective occupation at the bottom of the sea? By looking at some of the early claims to the Continental Shelf, it appears that, instead of only appropriating limited areas in respect of particular resources after their exploitation has been in progress, certain states have already appropriated extended areas in respect of all resources before their exploitation.[16] Where there is no exploitation, the acts of appropriation have necessarily taken the form of legislative declaration of claim which, in several cases, have been reinforced by the issuing of regulations, and by the grant of concessions for exploration. The question which one may ask is whether such purported appropriations can satisfy the test of 'effective occupation' which they must do if they are to give a sound title under the law of occupation. The answer is certainly not an

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16. Strictly speaking, this is the case with all coastal states including, in 1945, the U.S.A. This is apparent from the wording of Truman's proclamation on the Shelf: The second recital of the preamble reads, '..... and that with modern technological progress their utilization is already practicable, or will become so at an early date.' The last phrase of the third recital also says '..... when and as development is undertaken,' which means that the U.S. Government was not yet in a position which enables her to exploit all the area claimed.

easy one but after the Island of Palmas,[17] the Eastern Greenland,[18] and the Clipperton Island[18a] cases, it seems impossible to maintain that actual settlement is a sine qua non of effective occupation. These three cases lay down clearly that what is required is effective display of state activity in such a manner as the circumstances of the territory demand. In his comments on these cases, Professor Waldock says 'no doubt an international tribunal will still seek to distinguish between a genuine, effective manifestation of state functions and a purely paper claim but in desolate, or, in the case of the seabed, submerged territory, it will only demand the minimum state activity which the nature of the territory calls for. On this basis, effective assumption of jurisdiction over fairly extensive areas of seabed can probably be established without necessarily showing much or even any physical activity on the seabed itself.'[19]

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17. The Island of Palmas Case, (U.S.A. and Netherlands) 1928 AJIL, Vol.22, p.867 (decided by Judge Huber).

18. The Eastern Greenland Case (Denmark and Norway), 1931 P.C.I.J. Series A-B, No.53.

18a. The Clipperton Island Case, (Mexico and France), 1932, AJIL, vol.26, p.390 (decided by the King of Italy).

19. Waldock, C. "Legal Claims to the Continental Shelf," Grotius Transactions, 1950, pp.115, 141.

3. Finally, and as Young remarks, it is still more objectionable since it might lead to 'snatch-and-squat' tactics reminiscent of the California gold rush and the Cherokee Strip.[20]

(ii) Fictitious or Notional Occupation

The concept of a 'notional' occupation permits a state to acquire by proclamation, in lieu of occupation, the submarine areas which it claims. As a result, coastal states would be in a better position to protect themselves by a timely action against unwelcome intrusions. Notional occupation, however, does not meet all the foregoing objections arising from the principle of effective occupation. Further, by making a state's unilateral declaration an essential element, it may appear to sanction unlimited power in the declaring state to decide the scope and nature of its claim. It also reintroduces into international law the idea of fictitious occupation as a valid basis of title.

This concept, being controversial, has been largely rejected, save perhaps for the Polar regions.[21] Young does not approve readmitting it with respect to submarine areas

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20. Young, Supra, p.230. In the Cherokee Strip, the rewards went to owners of the fastest horses, not the best farmers.

21. On the status of Polar Regions, see J. B. Scott, AJIL 3 (1909), p.928, and T. W. Bach, AJIL 4 (1910) p.265; see also Antarctica Treaty, 1959 (Cmd.913).

where he states: 'to insist that occupation is necessary under a general rule, and then to admit a spurious occupation as sufficient, is devious reasoning. The necessity of a fiction strongly suggests that the problem is in the wrong pigeon hole and that claims to submarine areas require different treatment from claims to land territory.'[22]

3. The Principle of Adjacency: Contiguity, or Continuity

The framework within which we have to set up the legal basis of claims to the shelf, is incomplete unless something is said about the place of contiguity and other related geographical doctrines in modern international law. During the 19th century, various geographical doctrines, embodying the ideas of contiguity, continuity or unity of territory, were advanced in support of territorial claims.[23] But these doctrines, in their most extravagant forms, were seen to be merely pretexts for attempts to pre-empt the sovereignty of large areas which the states concerned were not yet in a position to acquire by effective occupation. At any rate, ever since the Berlin Africa Conference of 1885, geographical doctrines have been rejected as distinct roots of title apart from effective occupation.[24] This conclusion was confirmed by Judge Huber in the Island of Palmas Award

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22. Young, supra, p.230.

23. For example, the doctrines of the hinterland, Watershed, middle distance, and contiguity of territory. To these the 20th century has added 'polar sectors.' See Waldock, supra, p.120.

24. Westlake, International Law, Peace (1910), Chapter V.

'The title of contiguity, understood as a basis of territorial sovereignty, has no foundation in international law.'[25]

To say that the principle of continuity - or contiguity - has no place in international law, is to state a proposition of doubtful accuracy. The principle of contiguity played a useful part in the period when some compromise between the fanciful assertions of pure discovery and effective occupation best fulfilled the needs of the time. This applies to the rule, which is no more than a variant of the principle of contiguity, that the occupation of the portion of the shore confers title to interior territory up to the limit of the watershed or that the occupation of the coast carries with it a right to the entire territory drained by the rivers emptying their waters within its line.[26]

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25. Supra, No.17.

26. This rule was described by Hall as unobjectionable (Hall, International Law, 3rd ed. 1890, p.109); but Lord Stowell doubted its accuracy except in relation to islands. This exception is based on the decision of Lord Palmerston in the Lobos Island case, where he gave to Peru, being the closest main land to the island, a prima facie title to it: Moore, International Arbitrations, vol.IV, p.3554, (The opinion of Lord Stowell is reproduced in Smith, Great Britain and the Law of Nations, Vol.II, 1935, p.3).

This rule of contiguity was utilized to establish a geographical unity between the main land and the adjacent submarine areas, so that the principle of sovereignty - or state control - exists over the annexed area.[27] Accordingly, the submarine areas contiguous to the coasts of a state are regarded as appertaining to that state by automatic attribution of law and without any requirement of occupation, either real or fictitious. It is at this point that the proximity-relation between the coastal state and the adjacent Continental Shelf - assumes importance, for it serves to add an element of effectiveness to what might otherwise be a paper occupation.[28] In fact, the coastal state has potentially much greater means of control than other states. Therefore, whereas a bare proclamation by 'The non-coastal state' would surely be a paper claim, a similar one by 'The coastal state' may well be an act of appropriation which is effective as the first step in an occupation.[29]

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27. This is the main argument of most Latin-American countries, see the Latin-American practice, infra, p. 91 : the second argument in the fourth recital of the Truman proclamation on the shelf reads 'The Continental Shelf may be regarded as an extension of the land mass of the coastal nation and thus appertenant to it,' see the U.S. practice, infra p. 80

28. The first argument in the fourth recital of the Truman proclamation on the shelf upholds this view where it says 'The effectiveness of measures to utilize or conserve these resources would be contingent upon co-operation and protection from the shore'; again this point is discussed under the U.S. practice.

29. 'The non-coastal state' here, means any state, whether coastal or non-coastal, which is not adjacent to the shelf claimed, while 'The coastal state' means the adjacent state.

There may be an element of artificiality in this argument which starts from the proposition that contiguity is a dangerous doctrine unless confined within the principle of effective occupation and ends by reducing the 'effective occupation' to a proclamation which can be only issued by the coastal, the contiguous, state. It may be essentially unhelpful to relay, as a check upon exorbitant claims of contiguity, on the doctrine of effective occupation and to proceed to argue that the effectiveness required is the effectiveness of 'a symbolic act of appropriation in the form of a proclamation' which can issue only from the coastal state.[30] In both the Eastern Greenland and the Clipperton Island cases it was decided that full effectiveness of occupation is not essential.[31] Further, these decisions show that there are situations in which occupation, in the normal meaning of the word, is not required at all and in which the conception of occupation is a more or less deceptive figure of speech.[32] If this is so with regard to inhabited or sparsely inhabited territory, it is particularly true in relation to uninhabitable areas such as the seabed and its subsoil. Following this view, Professor Waldock suggests that the area annexed under this principle must be limited

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30. Lauterpacht, H. 'Sovereignty over Submarine Areas,' BYIL, 1950, pp.376,420.

31. Supra, notes 18 and 18a.

32. This is the view of Lauterpacht, supra, p.421.

to the Continental Shelf proper.[33] Then, according to him, the physical edge of the shelf might constitute a natural legal boundary of the submarine territory.[34] Professor Waldock admits that this principle would not so readily operate where the coastal state had no well-marked shelf-edge off its shores.[35] It is apparent that Professor Waldock applies the principle of contiguity to the shelf area on the grounds that state activity is effectively present, at least in some parts of this area.[36] In other words, he is inclined to support a contiguity which goes side by side with 'effective occupation.' Such situation is presumed to exist in coastal states with regard to the Continental Shelf, the outer limits of which is 200 metres depth.[37]

The principle of contiguity is subject to further criticisms based on the geological nature of the Continental Shelf region. Contiguity implies that the area claimed is not only contiguous to the mainland, but that it is continuous to, an extension to, the state territory. Therefore, the

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33. In principle, Waldock rejects any claim which is based on contiguity, loc.cit., pp.120 and 147; but he accepts contiguity within the principle of effective occupation.

34. Ibid,,p.142.

35. Ibid,

36. Ibid,

37. This assumption is inferred from the definition adopted in Article 1 of the Convention on the Continental Shelf; see p.49 above, in particular note 129 on that page.

principle of contiguity cannot be reduced to a mere discovery of land, which may be occupied on the principle of res nullius. From this point of view, the similarity in topography between the two areas becomes relevant. If the Continental Shelf area corresponds in type of topography with the land inshore, as most geologists ascertain,[38] then the principle of contiguity may be validly invoked. If, as Pratt suggests, the region of the Continental Shelf (including the Continental Slope) is a mobile segment of the earth's crust, which, unlike the land inshore, is tectonic in its nature,[39] then the concept of continuity, or extension, does not apply. However, the uncertainty and defects in Pratt's theory have been dealt with in Part One, and there is no need to mention it again.[40] Finally, following the view of most geologists, one may say that as far as the Continental Shelf (excluding the slope) is concerned the principle of contiguity, although not a title in itself, has a certain importance within the principle of effective occupation.[41]

A different interpretation to the theory of contiguity was suggested by Mr. Feith before the ILA in Brussels in 1948. He assumes that submarine areas could be dyked and drained, and would then be acquired on the principle of accretion.[42]

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38. See pp.9-11 above.
39. See pp.12-14 above.
40. Ibid.
41. The Eastern Greenland case, supra No.18.
42. ILA, Rep. of the 43rd Conf. p.174.

This view is impracticable, and the method suggested by Mr. Feith is, with regard to most areas, inconceivable. It would have been nearer to the ideas of some geologists, if he had given as an example the natural accretion produced through operation of nature. However, to accomplish this study, it is necessary to discuss the principle of accretion and other natural causes as a proposed solution to the legality of the claims under customary international law.

4. The Operations of Nature as a Mode of Losing or Acquiring State Territory: Accretion, Erosion, and Avulsion.[43]

By accretion and erosion, the territory of states may be slowly gained and lost respectively. Accretion is the name for the increase of land through new formations. And it is a customary rule of the law of nations that enlargement of territory, if any, created through new formations, takes place ipso facto by the accretion, without the state concerned taking any special step for the purpose of extending its sovereignty.[44] The natural phenomenon of accretion is of two kinds:

(a) Alluvion, which is the name for an accession of land washing up on the seashore or on a river-bank by the waters. Such accession as a rule is produced by a slow and gradual process.[45]

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43. We leave out the process of avulsion as it relates to boundary disputes where the dividing line is a turbulent river.

44. Oppenheim's International Law, Supra No.14, p.563.

45. Ibid, p.392; Sir Scott relied in part on this principle in (contd.)

(b) Dereliction,[46] as when the sea falls below the usual water mark.

Erosion, on the other hand, is the gradual eating away of the land by currents, winds, or tides. Both accretion and erosion are of minor importance as modes of territorial gain and loss. However, it is important to note that, whatever territory may be gained by one process or lost through the other, such gains and losses are recognised as valid under the law of nations.[47]

With regard to the seabed of the Continental Shelf, the theory attributed to most geologists, as we have seen, is that the surface of the shelf is formed by erosion and accumulation.[48] It is presumed that the ultimate result of these two antagonistic forces, the one the demolishing action of the sea to the coast, the other the building up of the abraded material, is a plane of dry land. One phenomenon of this is the formation of deltas.[49] It is a scientific

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his decision concerning the mud islands off the mouth of Mississippi, in 1804: see comments below, No.71a.

46. Svarlien, An Introduction to the Law of Nationa, 1955, p. 182. Oppenheim uses the word 'dereliction' to indicate the loss of territory through the owner state completely abandoning it with the intention of withdrawing from it for ever; supra, p.579.

47. Svarlien, supra.

48. See pp.5-9 above.

49. 'Delta' is the name for a tract of land at the mouth of a river like the Greek letter Δ, and owing its existence to a gradual deposit by the river of sand, stones, and earth on one particular place at its mouth. As the deltas are continually increasing, the accession of land they produce may be very considerable and, according to the law of nations, (contd.)

fact that the waters of the oceans neither increase nor decrease. Therefore, an invasion by the sea of a previously continental or insular area is not explained by any increase in the waters of the globe. Apart from additional geological causes, the rising of the sea in some parts of the world can be explained by the process of abrasion. This happens when the erosive action of the sea is not in equilibrium with the transporting and accumulating action of the same medium. Such submersion, however, is temporary because, in the long run, neither the sea conquers the land, nor the land gains territory from the sea. Hence, the argument of Attorney-General of Texas, in U.S. versus Texas, is based on a misapprehension of this theory.[50] Seas do not shrink or rise as a result of a change in the volume of their waters, but because of the foregoing natural operations, and other geological causes which are beyond the scope of this study.

B. The Subsoil Beneath the High Seas and the Channel Tunnel Project

The subsoil beneath the bed of the open sea requires special consideration on account of coal or other mines, tunnels and the like. For the answer to the question whether mines and tunnels can be driven into that subsoil at all, and

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is to be considered an accretion to the territory of the state to which the mouth of the river belongs, although delta may be formed outside the territorial maritime belt: Oppenheim, loc.cit., p.565.

50. See p.2, No.3, above.

if so, whether they can be under the territorial supremacy of a particular state, depends entirely upon the character in law of such subsoil. If the subsoil of the open sea stands in the same relation to the open sea as the subsoil beneath the territory of a state stands to that territory, all rules concerning the open sea would necessarily have to be applied to the subsoil beneath its bed, and no part of this subsoil could ever come under the territorial supremacy of any state.

Oppenheim is of the opinion that it would not be rational to consider the subsoil beneath the bed of the open sea as an inseparable appurtenance of the open sea, just as the subsoil beneath the territorial land and water is an appurtenance of such territory.[51] The rational of the open sea being free and forever excluded from occupation on the part of any state is that it is an international highway, which connects distant lands, and thereby secures freedom of communication, and especially of commerce, between states separated by the sea. There is no reason whatever for extending this freedom of the open sea to the subsoil beneath its bed. On the contrary, there are practical reasons - taking into consideration the building of mines, tunnels, and the like - which compel recognition of the fact that this subsoil can be acquired through occupation. With regard to the status of the subsoil of the high seas, Oppenheim has

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51. Oppenheim, supra, p.629.

suggested the following rules:[52]

(1) The subsoil beneath the bed of the open sea is no man's land, and it can be acquired on the part of a littoral state through occupation, starting from the subsoil of the maritime belt into the subsoil of the open sea.

(2) This occupation takes place ipso facto by a tunnel or a mine being driven from the shore through the subsoil of the open sea.

(3) This occupation of the subsoil of the open sea can be extended up to the boundary line of the territorial maritime belt of another state, for no state has an exclusive claim to occupy such part of the subsoil of the open sea as is adjacent to the subsoil of its territorial maritime belt.

(4) An occupation beneath the bed of the open sea for a purpose which endangers the freedom of the open sea is inadmissible.

(5) It is likewise inadmissable to make such arrangements in a part of the subsoil beneath the open sea which has previously been occupied for a legitimate purpose as would indirectly endanger the freedom of the open sea.

According to these five rules, there is nothing to prevent coal and other mines which are exploited on the shore of a littoral state from being extended into the

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52. Ibid, p.630.

subsoil beneath the open sea up to the boundary line of the subsoil beneath the territorial maritime belt of another state. Consequently, a tunnel which might be built between two parts of the same state separated by the open sea would fall entirely under the territorial supremacy of the state concerned. On the other hand, for a tunnel between two different states separated by the open sea special arrangements would have to be made by a treaty concerning the territorial supremacy over that part of the tunnel which runs under the bed of the open sea. An example of this case is the Channel Tunnel Project.

The Channel Tunnel Project for linking the U.K. and France has been the subject of important discussion between the two countries since 1802.[53] These long negotiations seem to have reached its final stage by a mutual understanding of the benefit of the project to the two parties. This became apparent when in 1966 the two governments concerned took the decision that the Channel Tunnel should be built, subject to finding a solution for the construction work on mutually acceptable terms.[54] The international commission, which was appointed by the two Governments in 1876, made a report on the construction and working of the proposed tunnel.[55] The Report enclosed a memorandum, recommended by the commissioners as a basis for a treaty between the U.K.

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53. Colombos, 'Le tunnel sous la Manche et le droit international (historical introduction) pp.3-45).

54. The Times, July 9, 1966.

55. See Parl. papers, C.1576, Report of the Commissioners for (contd.)

and France. From the draft articles of this memorandum, it appears that the legal problems are not likely to present any serious difficulty.

Article 1, of the proposed treaty, suggested that the boundary between the U.K. and France in the Tunnel (and for the purposes of the tunnel and the railway alone) should be half way between low-water mark (above the tunnel) on the coast of England and low-water mark (above the tunnel) on the coast of France. This boundary applies, however, solely to the tunnel and to submarine railways, and has no effect with regard to any questions of nationality, navigation or fisheries or any other rights in the waters surrounding the tunnel. All these questions were to be regulated by municipal legislation within the respective territorial jurisdiction of the U.K. and France. Article 4 recommended that an international commission consisting of six members, three of whom should be nominated by the British Government and three by the French Government, should submit to the two Governments its proposals for supplementary conventions with respect to (a) the apprehension and trial of alleged criminals for offences committed in the tunnel or in trains which have passed through it, and the summoning of witnesses; (b) customs, police and postal arrangements, and other matters which it might be found convenient so to deal with. Finally,

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the Channel Tunnel and Railway, 1876; reprinted in Colombos, supra, p.143.

Article 15 advised that each Government should have the right to suspend the working of the submarine railway and the passage through the tunnel whenever such Government, in the interest of its own country, thought necessary to do so, and even to damage or destroy the works of the tunnel or submarine railway, or any part of them, in the territory of such Government, and flood the tunnel with water.[56]

When the question of the construction of the tunnel was again raised after the First Great War, the Report of the Special Committee, which was appointed by the two Governments for that purpose, was definitely of the view that the subsoil could be effectively occupied by the two countries, and that the rights of sovereignty and jurisdiction of the U.K. and France in the tunnel could be settled without difficulty by a treaty between them.[57] As the Anglo-French negotiations had preceded the establishment of the doctrine of the Continental Shelf, the draft treaty to which such negotiations had lead would only require that it should be brought up to date in conformity with present conditions. However, the present state of law does not affect this right of coastal states as long as the operations to exploit the subsoil beneath the high seas do not interfere with the waters above it.[58]

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56. This stipulation was proposed in the interest of defence in time of war.

57. Parl.papers 1930 (Cmd.3591), and State Papers, Vol.134, pp.1-5.

58. Article 7 of the Convention on the Continental Shelf.

Conclusion:

From this study of the various theories of acquisition of land territory, it appears that the principle of contiguity is the most advocated theory in justifying claims to the Continental Shelf. The effectiveness of state activity in the area of the shelf cannot be reduced to a mere proclamation, although it does not require from the state concerned to make an impact in every nook and cranny of the area claimed. What is required is a minimum of state activity displayed in that area, without which the principle of contiguity would be misused to justify expansionist claims to all submarine areas. Furthermore, if title to the Continental Shelf is to follow from mere contiguity the logical distinction between claims to contiguous seabed and contiguous high seas wears thin.

It is inferred from this conclusion that:-

(a) The mere fact that a littoral state is unable to proceed, upon its own technical ability, to exploit the natural resources of its Continental Shelf, does not deprive that state of the right to exercise jurisdiction and control over such resources, and

(b) The littoral state, while exercising its rights over the shelf area, must not unreasonably interfere with the freedoms of the high seas.

Finally, it is not suggested that this conclusion gives any certain and final result on the subject. In fact,

neither the practice of states nor the convention on the Continental Shelf, which remain to be discussed here, support, in toto, any of the theories which have already been examined.

2. The Practice of States

The practice of states with regard to the legal nature of claims to the Continental Shelf may be divided categorically into three main groups, namely (1) The Anglo-American practice, (2) The Latin-American practice, and (3) The Practice of Arab states in the Arabian-Persian Gulf.

This classification stems from the policy followed in each group, without attaching any importance to the chronological analysis of the claims. Therefore, I shall deal first with the Anglo-American policy starting with the Truman proclamation on the shelf for the historical importance which is given to this proclamation, though it is not the first governmental document on the subject.[59]

(1) The Anglo-American Practice

A. The U.S. Practice: Truman's Proclamations[60]

The fourth recital of Truman's proclamation on the Continental Shelf, from which the legal theory is mainly to be extracted, asserts that 'the exercise of jurisdiction

59. The Truman proclamations were preceded by the 1942 Treaty between the U.K. and Venezuela over the submarine areas of the Gulf of Paria, and also by the Argentina Decree No.1, 386, dated Jan.24, 1944, by which Argentine proclaimed sovereignty over the 'Argentina Continental Shelf' and the 'Argentina Epicontinental Sea.'

60. See note 65 in Part One.

over the natural resources of the seabed and subsoil of the Continental Shelf by the contiguous nation is reasonable and just.' This assertion is supported with four arguments:

(i) 'The effectiveness of measures to utilize or conserve these resources would be contingent upon co-operation and protection from the shore.' This means that the adjacent coastal state is in a better position than any other state to make an 'effective occupation' of the shelf and assume effective jurisdiction and control over its resources. It is a fact that the exploitation of the natural resources of the shelf, without some co-operation from shore, is scarcely feasible.[61]

(ii) 'The Continental Shelf may be regarded as an extension of the land mass of the coastal nation and thus naturally appertenant to it.' This is one of the geographical doctrines, referred to earlier,[62] which are based on the principle of contiguity.

(iii) 'These resources frequently form a seaward extension of a pool or deposit lying within the territory.' Waldock describes this provision of being 'partly a specialised geographical doctrine and partly a claim to protect the U.S. which might be tapped

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61. Waldock, supra, p.124.

62. See note 23 above.

from the high seas.'[63] Finally,

(iv) 'Self protection compels a coastal nation to keep close watch over drilling and mining operations off its shores.....' 'Self protection' has been successfully advocated recently to justify a variety of claims, which may be termed as 'specialized sovereign competence,'[64] made by coastal states to adjacent zones on or above the high seas, such as the contiguous zone, fisheries zone, and air defence zone (ADIZ and CADIZ).[65] It is also suggested that 'self protection' is one of the roots of territorial waters.[66]

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63. Supra, p.124.

64. Amador uses this term in substitution of the various terms and phrases which are used to describe the nature of the coastal state's right to exploit the natural resources of the Continental Shelf. By analogy one may say that any special right asserted by a coastal state in any area beyond the sphere of its territorial sovereignty is, in fact, a 'specialized sovereign competence': see Amador, note 55 in Part One, on p.129.

65. The U.S. air defence identification zone (ADIZ), and the Canadian air defence identification zone (CADIZ): for further details about these two zones, consult Murchison, J. T.: The Contiguous Air Space Defence Zones in International Law, 1956.

66. Waldock, supra, p.124; but on p.138, Waldock states that 'self protection' has no place in law as a title to territory.

In addition to this, the first and the second recitals of the proclamation find arguments based on 'social needs.' These are:

(a) A world-wide need exists for new sources of petroleum and other minerals, and

(b) These resources according to expert opinion lie under the shelf and technological progress has made their exploitation practicable either now or in the near future.

This shows that it was principally petroleum which the American Government had in mind when proclaiming this new policy.[67] It is also apparent that 'social needs,' according to the proclamation, justify this change in the old rules of international law. In his comments on this point of the proclamation, Sir Cecil Hurst says 'Now in the face of an increasing demand for a diminishing supply I feel that international lawyers must approach this subject of the Continental Shelf on a realistic basis ..... we must do so fully realising that some of our old ideas about inter-

66. Waldock, supra, p.124; but on p.138, Waldock states that 'self protection' has no place in law as a title to territory.

67. In fact, while the preamble refers only to 'petroleum and other minerals,' the operative sentence says comprehensively 'the natural resources of the subsoil and seabed of the Continental Shelf.'

national law may be found to be inadequate, or even unsatisfactory, in the light of modern requirements ..... If the world must have petroleum and petroleum is present in available quantities in the Continental Shelf, and the engineering experts say that from such sources it is a feasible proposition to obtain it, the necessary operations to obtain it will be undertaken. That is the situation which international lawyers must face.'[68]

The above examination of the proclamation shows that, apart from 'social needs' and 'self protection,' the U.S. used arguments drawn from the principles of contiguity and effective occupation. This new policy of the U.S. seems to be incompatible with the previous U.S. attitude in regard to effective occupation and contiguity. Firstly, the U.S. Government has strenuously contended, particularly with respect to Polar lands, that title by occupation requires actual settlement and use.[69] Secondly, the U.S. Government, more than any other, was responsible for establishing that contiguity of territory alone without effective occupation does not give title.[70] On this

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68. Hurst, note 49 in Part One, pp.185, 189.

69. Hackworth, G. H., Digest of International Law, Vol.1 (1940), pp.399-400.

70. Moore, International Arbitrations, vol.1 (1898), pp. 265, 266. However, it all depends on what is really meant by effective occupation at the seabed.

controversy in the U.S. policy, Professor Waldock remarked by saying 'It would scarcely be consistent for the U.S. to wrest the guano resources of barren islands from coastal states by denying the title of contiguity in the 19th century and to claim the natural resources of the seabed in the 20th century by reliance primarily on that title. Moreover, it was one of the parties to the Island of Palmas case where Judge Huber, in the course of, perhaps, the most distinguished judicial award in the whole of international law, so firmly rejected the claim to title by bare contiguity.'[71]

However, the principle of contiguity has by no means been unknown to the U.S. practice in the 19th century. Thus it seems not inapposite to recall the words of Sir William Scott in the Anna case.[71a] The Anna, an American ship, was seized by a British privateer at a place more than three miles from the main land of the U.S. but approximately two miles from the alluvion islands of the mouth of the Mississippi. Sir William regarded these uninhabitable mud-banks a 'kind of portico to the mainland' which ought

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71. Supra, p.138.

71a. The Anna, (1805), 5C Rob. 373, 385. Also reported by Green, L. C., 'International Law through the Cases,' p.397.

by common sense to be United States territory. To reach this conclusion, he relied on the principles of increment by alluvion and contiguity. With regard to the latter principle, he stated:

> 'Consider what the consequence would be if lands of this description were not considered as appendant to the mainland, and as comprised within the bounds of territory. If they do not belong to the U.S.A., any other power might occupy them, and they might be embanked and fortified. What a thorn this would be in the side of America ..... whether they are composed of earth or solid rock, will not vary the right of dominion, for the right of dominion does not depend on the texture of the soil.'

Accordingly, he released the ship to her American owners on the grounds that she was captured within the United States' territorial seas, which was to be reckoned from the islands.

Therefore, if such islands, in the 19th century, formed a portico to the mainland, adjacent submarine areas may well be regarded, in the 20th century, as a door step to which consideration should apply.

Finally, it has been suggested that the U.S. Government has taken a unilateral action the legality of which does not

depend on recognition.[72] This argument is inferred from the fact that, unlike the fishery proclamation, the shelf proclamation does not undertake reciprocally to recognise the right of other states to assert a similar right.[73] According to Professor Waldock, 'The absence of any similar undertaking in the shelf proclamation, issued on the same date, can hardly be accidental and does rather indicate that the U.S. did not consider recognition by other states as in any way necessary to give legal propriety to its claim to the resources of the shelf.'[74] This view is incompatible with the third recital, of the preamble, which declares: 'recognized jurisdiction over these resources is required in the interest of their conservation and prudent utilization when and as development is undertaken.' Further, the attitude of the U.S. governments towards the claims of other countries shows that reciprocity is granted to the extent to which such claims are in conformity with the Truman proclamation and the generally accepted principles of international law.[75]

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72. Waldock, supra, pp.138, 139.

73. The fishery proclamation provides that 'The right of any state to establish conservation zones off its shores in accordance with the above principles is conceded, provided that corresponding recognition is given to any fishing interests of nationals of the U.S. which may exist in such areas.' (See note 60 above).

74. Supra, loc.cit.

75. See protests made by the U.S. Government against the Chilean, Peruvian and Argentinian Decrees, A/CN/4/19, March, 1950, pp.113-116.

Lastly, the third recital of the preamble, and in particular the phrase '..... when and as development is undertaken,' may suggest that there should be a distinction between the legal situation before the development of the resources of the Continental Shelf began, and the situation after such development had begun. In other words, the intention of the proclamation was to draw a distinction in law between the claims to the Continental Shelf and its resources before any development of such resources and the claims to the shelf and its resources after development had begun.[76] In fact, the Executive Order issued by the President on the same day, and which affords some guide to the proclamation's interpretation, does not draw any distinction between the situation before and the situation after, the commencement of development work.[77] Sir Cecil Hurst summed up the situation on this point by saying 'taking the two documents together I think one must deduce from the text an intention on the part of the U.S. Government to claim as from the issue of the proclamation and without waiting for the commencement of any development work an exclusive

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76. Hurst, supra, p.160.

77. The Executive Order states, 'It is ordered that the natural resources of the subsoil and the seabed of the Continental Shelf beneath the high seas but contiguous to the coasts of the U.S. declared this day by proclamation to appertain to the U.S. and to be subject to its jurisdiction and control, be and they are hereby reserved .....' (See note 60 above).

right to control the Continental Shelf adjacent to the coasts of the U.S.A. .....'[78]

B. The U.K. Practice[79]

The U.K. has approached the problem of mineral resources under the high seas by the path of occupation.[80] This is clearly shown in the 1942 Treaty on the Gulf of Paria.[81] The Treaty, which is regarded as the earliest state document on the Continental Shelf, divides the submarine areas of the Gulf into two spheres of interest combined with mutual recognition of any rights of sovereignty or control lawfully acquired by each of the two parties in its own sphere. This means that the Treaty looked forward to the legal occupation

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78. Supra, p.161.

79. The first legislation concerning the Continental Shelf of the United Kingdom itself was given by the Continental Shelf Act, 1964, which came into force on April 15 of the same year. The Act, indirectly, incorporates the convention on the Continental Shelf which was ratified by the U.K. Government on May 11, 1964, and came into force on June 10, 1964. However, there are few, but important, differences between the provisions of the Act and those of the Convention, which shall be referred to where appropriate. For a study on the Act, see Alec Samuels, 'The Continental Shelf Act, 1964,' published in Developments in the Law of the Sea, 1958 - 1964, by the British Institute of International and Comparative Law, International Law Series No.3.

80. Waldock, supra, p.131.

81. See note 64 in Part One.

of parts of the seabed. In fact, the legal technique used by Venezuela and the U.K., both of which started soon after the conclusion of the Treaty to annex the submarine areas each on its side, was undoubtedly derived from the law of occupation.

In 1945, the Bahamas Petroleum Act was passed to regulate oil exploitation of the seabed off the Bahamas without asserting exclusive rights over the whole shelf. This Act was augmented in 1948, by Order in Council.[82] The first recital of the Order states that it is desirable to extend the boundaries of the colony of the Bahamas so as to include the Continental Shelf contiguous to the coasts of the colony. Article 2 of the operative part of the Order declares, 'The boundaries of the colony of the Bahamas are hereby extended to include the area of the Continental Shelf which lies beneath the sea contiguous to the coasts of the Bahamas.' This also indicates that the case was regarded as one of occupation of territory.

Finally, similar claims were made by Order in Council with regard to the Continental Shelf of British Honduras,[83] Jamaica,[84] and the Falkland Islands.[85]

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82. Statutory Instruments, 1948, Vol.III, p.27. As to the 1945 Petroleum Act, see note 67 in Part One, p.30.
83. Statutory Instruments, 1950, Vol.I, No.2100.
84. Statutory Instruments, 1948, Vol.XI, p.111.
85. The same citation in note 83 above.

(2) The Latin-American Practice

The Latin-American claims, which followed the Truman Proclamation, deviate to a large extent from the policy declared by Truman with regard to the shelf area. They seem to be directed to the appropriation of vast areas of the high seas rather than the assertion of certain rights over the shelf. With such claims the principle of 'effective occupation' wears thin. It is only by virtue of the principle of contiguity that a coastal state may attempt to embrace vast areas of the high seas. In fact, this principle was adopted by most Latin-American countries.[86]

The Argentina Declaration[87] starts with the recital 'The submarine platform, known also as the submarine plateau or Continental Shelf, is closely united to the mainland both in a morphological and in a geological sense.' Another recital grants conditional recognition to the right of other states to make claims both to their Continental Shelf and epicontinental sea. This recital, according to Waldock, shows a consciousness that the acquiescence of other states in Argentina's pretensions is at least desirable.[87a]

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86. Argentina, Brazil, Peru, Chile, and Costa Rica.

87. A.J.I.L., Vol.41 (1947), supp.11-12. This declaration was preceded by the Decree No.1,386 of Jan.24, 1944, concerning national sovereignty over the Argentine Continental Shelf and Epicontinental Sea.

87a. Waldock, supra, p.129.

Furthermore, the Declaration asserts that the U.S. and Mexico[88] have proclaimed their sovereignty both over the shelf and epicontinental sea. It is apparent that this assertion is not true in regard to the U.S. as to the epicontinental shelf. Finally, the Declaration refers to modern international law and contributions of national and foreign publications as another argument in support of the Argentina claim.

The most that one may say about these recitals is that the Argentine in effect claims to extend her territorial waters to the edge of the Continental Shelf, leaving the shelf area undefined.

The Brazilian Decree, of 1950, uses a different technique for integrating into national territory the adjoining part of the Continental Shelf.[89] In the preamble of that Decree we read: 'Whereas the Continental Shelf contiguous to continents and islands and extending beneath the high seas is in reality submerged territory .....'[90]

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88. The Presidential Declaration, 29 October, 1945, supra, note 67 in Part One. This declaration, which came a month after the Truman proclamations, refers only to the Continental Shelf which is limited by 200 metres depth. However, the Amendment to the Mexican Constitution, introduced in 1949 for the purpose of translating the declaration, and which was perhaps influenced by the Latin-American proclamations, declared national sovereignty over the epicontinental shelf to the extent laid down in international law.

89. Supra, note 67 in Part One, p.299.

90. Ibid.

The fact that in some governmental documents and in publications and discussions the Continental Shelf is referred to as 'submerged territory,' suggests that this term is used to strengthen the idea that it once belonged to the riparian state and that there is nothing strange in the fact that a state claims control and jurisdiction over the resources in the shelf, or even sovereignty over that area.[91] This is, in fact, the view of some geologists who believe that the shelf, or part of it, have been once dry land.[92] However, the same geologists agree that this happened during the last glacial period, between 10,000 and 12,000 years ago, a period which deprived the riparian state of 'continuous possession.'[93]

The Chilean Decree of June, 1947 declared an immediate protection zone extending 200 miles from all the coasts of the mainland and islands.[94] Chile sought to justify these large claims in recitals which asserted that the U.S., Mexico and the Argentine had already proclaimed (1) Their sovereignty over their adjacent shelf and adjacent seas within the limits

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91. The press release accompanying the Truman Proclamations uses similar words where it says, 'Valuable deposits of minerals other than oil may also be expected to be found in these submerged areas.' Article III of the Petroleum Act of the Philippines states, 'All natural deposits..... whether found in or under the surface of ..... lakes, or other submerged lands.'

92. See p.5 above.

93. An attempt to apply the principle of 'prescription' would fail for the same reason.

94. ILQ, 2 (1948), p.135.

necessary to preserve for the said States the natural riches belonging to them, whether already known or to be discovered, and (2) Their right to protect and control fisheries with the object of preventing damage to the natural riches in the seas adjacent to their coasts. A further recital asserted that international consensus of opinion recognises the right of every country to consider as its national territory any adjacent extension of the epicontinental sea and the Continental Shelf.

In his comments on these recitals, Professor Waldock says 'Plainly, these recitals exaggerate the extent of international agreement concerning the Continental Shelf, distort the United States' views and show little consciousness of the limits inherent in the geological concept of the Continental Shelf.'[95]

Finally, the Declaration argues that Chile's life, owing to the narrowness of her land boundaries is peculiarly linked to the sea. One may add to this reason another one relating to the narrowness of her Continental Shelf which scarcely extends beyond the three miles limit. Chile, therefore, has nothing to gain from any doctrine associated with the geological concept of a distinct submarine shelf. Hence, it has been suggested that the term 'Continental Shelf' in the Chilean Decree is employed as a mere catch-phrase to

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95. Supra, p.131.

cover the expansion of territorial waters and fishing monopolies in the high seas.[96]

(3) The Practice of Arab States in the Arabian-Persian Gulf

We come, at last, to the series of proclamations which were issued by Saudi Arabia and nine Sheikhdoms over the submarine areas of the Arabian-Persian Gulf.[97] The Saudi Arabian pronouncement follows the main lines of the Truman Proclamation.[98] According to this Royal Pronouncement, the exercise of jurisdiction over the resources (of the contiguous seabed and subsoil under the high seas in the Gulf) is claimed to be reasonable and just since the effectiveness of measures would depend on co-operation from shore and a coastal state in self-protection needs to keep a close watch on off-shore activities. In other words, both the principles of 'effective occupation' and 'self protection' are invoked, with the omission of the geological arguments in the Truman proclamation.

The Rulers Proclamations, on the other hand, were inspired by Britain.[99] The main recital of these British inspired

96. Ibid; The Peruvian Decree of 1 August, 1947, ILQ, 2 (1948), p.137, and the Decree-Law of Costa Rica of 2 November, 1949, note 67 in Part One, p.9, both follow the form of the Chilean proclamation with variations in detail.

97. For the Royal Pronouncement of Saudi Arabia, see AJIL, 34 (1949), supp. p.156. The proclamations of the Sheikhdoms are published in the same supplement, pp.185-6; (For Bahrein see note 67 in Part One, p.24).

98. This is probably because the oil concessions in Saudi Arabia are held by U.S. companies.

99. Apart from Kuwait which became independent in 1961, all other Sheikhdoms and emirates are still British protectorates.

proclamations reads: 'Whereas it is just that the seabed and subsoil extending to a reasonable distance from the coast should appertain to and be controlled by the littoral state to which it is adjacent .....' According to this recital, the seabed and subsoil belong to the adjacent coastal state on grounds of justice, and not by the law of nations. Further, the area claimed is restricted to a 'reasonable distance.'

The practice of other states is invoked by all the proclamations. Saudi Arabia declares that 'various other nations now exercise jurisdiction over the subsoil and seabed of areas contiguous to their coasts.' The rulers go further by saying that 'the right of a littoral state to exercise its control over the natural resources of the seabed and subsoil adjacent to its coasts has been established in international law practice by the action of other states.' Professor Waldock suggests that this phrase in the British inspired proclamations should not be taken as meaning that the U.K. now regards every coastal state as ipso jure exercising jurisdiction over the adjacent seabed.[100] He refers to the Qatar Arbitration which was decided after the proclamations were made.[101] In that case, the U.K. considered the issue of the proclamations as an essential step in the acquisition by the several sheikhs of oil rights in the seabed outside

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100. Supra, p.135.

101. See note 84 in Part One.

territorial waters.[102] In other words the U.K. in these proclamations still looked on a coastal state's rights in submarine areas as being dependant on an act of appropriation.[103]

Finally, the absence of any reference to the Continental Shelf in these proclamations is explained by the fact that the depth of the waters in the Gulf nowhere exceeds 100 fathoms.

Conclusion

It is apparent that the above examination of state practice does not give any certain result on the principle or principles which may justify claims to the Continental Shelf. It only suggests that, while Latin-American practice leans towards a natural right founded on contiguity, Anglo-American practice seems to lean towards the law of occupation. Of these two principles contiguity has been expressly rejected as a principle of international law while occupation is an established and, indeed, fundamental rule.

The fact that the main weight in the Latin-American claims is put on contiguity has been met forcefully and with much indignation by the British Government.[104] Apart from the fear that contiguity once adopted as a legal principle would lead to the appropriation of huge areas of

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102. Waldock, op.cit.

103. Ibid.

104. See protests made by the U.K., the U.S., and the French Governments against the Latin-American claims; reported by Mouton. 'The Continental Shelf,(1952, pp.89-95.

the high seas, it may be also used to attack established titles to islands occupied by other states, particularly to islands of the Latin-American coasts.[105] It is perhaps because of this that the U.K. provides in the 1942 Treaty on the Gulf of Paria, and in other British inspired proclamations for the safeguarding of existing sovereignty of islands on the Continental Shelf.

Finally socio-economic considerations based on 'self protection' and 'social needs' were invoked by most countries, especially by the Latin-American states. These protective factors, which are indispensable to the welfare and progress of the coastal state have become part of modern international law.

3. Under the Convention of the Continental Shelf

The legal theory upon which the doctrine of the shelf is based has been discussed throughout the International Law Commission's debates on the subject. The Commission did not show any signs of adopting rules, as a lex ferenda, on this question. Hence, the principle or principles which, according to the Commission, justified the establishment of this new doctrine were always referred to in the commentary on the

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105. See the Antarctica Cases: U.K. V. Argentina, and U.K. V. Chile; ICJ Pleadings, March 16, 1956; (Removal from the list). The two cases relate to disputes over certain Antarctica and sub-Antarctica islands which belong to the U.K., as part of the colony of the Falkland Islands.

draft articles of the Commission's Reports to the General Assembly.

In its report to the General Assembly concerning its second session, 1950, the Commission took the view that a coastal state could exercise control and jurisdiction over the seabed and subsoil of the submarine areas off its coast in order to explore and exploit the natural resources existing there.[106] In the opinion of the Commission, the seabed and subsoil of the submarine areas referred to above were not to be considered as either res nullius or res communis, and that the exercise of such control and jurisdiction was independent of the concept of occupation.[107]

The fundamental principle contained in the commentary on Article 2 of the 1951 draft articles on the shelf did not differ in nature from what had been discussed in 1950.[108] These commentaries, which were based on Hudson's proposals,[109] excluded the treatment of the shelf areas as res nullius,[110] defining the right of the coastal state over the Continental Shelf without reference to the notion of occupation, whether

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106. 2 YBILC, 1950, p.384, para.198; This conclusion is based on Hudson's first proposal which is extracted from the report of the ILA to the Copenhagen Conference, see 1YBILC, 1950, p.218.

107. 2YBILC, 1950, pp.384-385.

108. 2YBILC, 1951, p.142.

109. Hudson's text, 1YBILC, 1951, p.407.

110. Paragraph 4 of the commentary on Article 2, supra, loc.cit.

effective or notional, or any formal assertion by the sovereign state.[111] The Commission tried to justify this attitude by stating:-

> 'It would serve no purpose to refer to the seabed and subsoil of the submarine areas in question as res nullius capable of being occupied by the first occupier. That conception might lead to chaos, and it would disregard the fact that in most cases the effective exploitation of the natural resources will depend on the existence of installations on the territory of the coastal state to which the submarine areas are contiguous.'[112]

In the final analysis of this paragraph, it appears that the principle of occupation assumes importance only in relation to the principle of contiguity. In other words, it is the littoral state which exercises the rights asserted in Article 2. This means that the principle of occupation, though rejected vis-a-vis coastal states other than the littoral state, is, in fact, one of the principles upon which the new doctrine rests. The Commission, however, seems to contradict itself when it comes to say that the exercise of the right of control and jurisdiction is independent of occupation because, in its opinion, effective

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111. Para.5, Ibid.

112. Para.4, Ibid.

occupation of the submarine areas in question would be practically impossible.[113] On the one hand, the Commission presupposes the existence of effectiveness in the littoral state for the exploitation of the natural resources of the shelf area, but on the other hand, it considers the right of jurisdiction and control to be subject ipso jure to the coastal state without regard to occupation effective or notional. This uncertainty and confusion in the Commission's views stems from the fact that instead of forming new norms of law for the regime of the shelf, the Commission is mixing these with the old rules of international law.

Furthermore, the Commission rejected attempts to base on customary law the rights mentioned in Article 2.[114] The Commission was of the opinion that the numerous proclamations which have been issued over the past decade were far from being part of customary international law.[115] The Commission was satisfied to state that 'The principle of the Continental Shelf is based upon general principles of law which serve the present-day needs of the international community.'[116] What are these 'general principles of law which serve the present-day needs of the international community' if they are not the same principles set up by the various proclamations which were issued mainly because of the present-day

113. Para.5, Ibid.
114. Para.6, Ibid.
115. Ibid.
116. Ibid.

needs of the international community? In fact, Hudson's proposal, upon which this phrase is based, states '..... the proclamations are based upon concepts of international law which serve the present-day needs of the international community.'[117] Finally, Hudson proposed replacing the words 'concepts of international law,' in his text, by the words 'general principles of law," the term employed in Article 38 of the Statute of the I.C.J.,[118] thus, the only thread which is left for linking these two phrases is that both the proclamations and the Continental Shelf are based on something (concepts? or general principles?) which serve the same purpose, namely, 'The present-day needs of the international community.'[119]

The 1953 and 1956 Commentaries do not differ from each other in substance.[120] They also follow the same basic idea of the 1951 views which are discussed above. It is, however, worthwhile quoting the final views expressed by the ILC, in 1956, in order to understand the fundamental principles upon which the new doctrine rests:

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117. Hudson, note 109 above, p.408.

118. Ibid.

119. In fact, the effect of the proclamations on establishing a customary law, and the value of such proclamations as a rule of customary law in process of formation cannot be ruled out entirely. See Yepes and Scelle in 1YBILC, 1951, p.408.

120. 2YBILC, 1953, p.214, paras.72 and 73; and 2YBILC, 1956, p.298, paras.7 and 8.

'7. The rights of the coastal state over the Continental Shelf do not depend on occupation, effective or notional, or on any express proclamation.

8. The Commission does not deem it necessary to expatiate on the question of the nature and legal basis of the sovereign rights attributed to the coastal state. The considerations relevant to this matter cannot be reduced to a single factor. In particular, it is not possible to base the sovereign rights of the coastal state exclusively on recent practice, for there is no question in the present case of giving the authority of a legal rule to a unilateral practice resting solely upon the will of the states concerned. However, that practice itself is considered by the Commission to be supported by considerations of law and of fact. In particular, once the seabed and the subsoil have become an object of active interest to coastal states with a view to exploration and exploitation of their resources, they cannot be considered as res nullius, i.e. capable of being appropriated by the first occupier. It is natural that the coastal states should resist any such solution. Moreover, in most cases the effective exploitation of natural resources must presuppose the existence of installations on the

'territory of the coastal state. Neither is it possible to disregard the geographical phenomenon whatever the term - propinquity, contiguity, geographical continuity, appurtenance or identity - used to define the relationship between the submarine areas in question and the adjacent non-submerged land. All these considerations of general utility provide a sufficient basis for the principle of the sovereign rights of the coastal state as now formulated by the Commission.'[121]

At the Fourth Committee of the Geneva Conference, 1958, four proposals based on the foregoing views of the ILC were suggested as new articles and amendments to the 1956 text. First, Mexico proposed an amendment to Article 68 (Article 2 of the Convention) to read: 'The coastal state exercises sovereignty over the seabed and subsoil of the Continental Shelf and over the natural resources thereof, to the exclusion of other states, physical or virtual occupation not being a necessary condition.'[122] The phrase 'physical or virtual occupation not being a necessary condition,' which is our only concern here, would not have been rejected if it were not for the first part of the proposal which introduces the concept of full sovereignty instead of 'sovereign rights' for the limited purpose of exploring and exploiting the natural

121. Ibid.
122. Doc.A/CONF.13/C.4/L.2

resources of the shelf. As a result, the Mexican amendment was rejected by the Committee.[123]

Secondly, both Argentina and Yugoslavia had submitted each a proposal, which were substantially the same.[124] These two proposals were suggested as a second paragraph to Article 68. The Argentine amendment, which was adopted without much opposition, read: 'The rights of the coastal state are exclusive in the sense that if that state does not explore or exploit the Continental Shelf no other may undertake these activities.'[125]

Finally, Mr. Garcia Amador, the Cuban delegate, proposed a new article which, according to him, should be placed between Articles 68 and 69.[126] This proposed article simply repeated the last paragraph of the Mexican proposal and the text of paragraph 7 of the Commission's commentary on Article 68.[127] It stated: 'The rights of the coastal state over the Continental Shelf do not depend on occupation, effective or notional, or on any express proclamation.'[128]

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123. U.N. Conf. on the Law of the Sea, Fourth Committee, p.69; The Mexican amendment was based on a statement made by the representative of the Government of Mexico, at the third meeting of the Inter-American Council of Jurists, Mexico, 1956; see Acts and Doc. of the Third Meeting, Pan-American Union, Washington, D.C. 1956, p.56; see also the comments of the Mexican delegation in the General Debate of the 9th Meeting, Fourth Committee, supra, pp.14-15.

124. The Yugoslav amendment was not voted on; for this amendment, see Doc.A/CONF.13/C.4/L.13.

125. Doc.A/CONF.13/C.4/L.6/Rev.2.

126. Doc.A/CONF.13/C.4/L.45.

127. See notes 120 and 122 above.

128. Supra, note 126.

According to some representatives, the Cuban proposal hinged on the concept of occupation, which in turn was linked with that of sovereignty, and since the Committee had decided to substitute the word 'exclusive' for 'sovereign,' consideration of the Cuban proposal would, in effect, mean re-opening discussion of a matter already decided by a vote.[129] Further, as the Cuban proposal was virtually identical with the last phrase of the Mexican amendment, which was rejected at an earlier meeting, it was therefore superfluous and out of order.[130]

Mr. Amador, replying to the objections raised by the Netherlands representative, said: 'In adopting the term 'exclusive rights'[131] the Commission had decided that the coastal state did not have complete sovereignty over the seabed and subsoil of the Continental Shelf, but it had recognised the sovereign nature of the rights of the coastal state for the purpose of the exploration and exploitation of the natural resources of the shelf. It might happen that another state might be unaware of such rights, because there was no occupation, either effective or notional, because the coastal state lacked the technical means for the exploitation

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129. Mouton (The Netherlands), 25th Meeting, para.22; and Munch (Germany), 26th Meeting, para.4.

130. Mouton, 26th Meeting, para.5.

131. Amador must have been referring to the Fourth Committee, because the Commission had adopted the term 'sovereign rights.'

of the resources beyond the depth of 200 metres provided in Article 67. The Cuban amendment made provision for such a case.'[132]

After considerable discussion on the Cuban proposal, it was adopted as paragraph 3 for Article 2. This leads us to the conclusion that paragraphs 2 and 3 of Article 2, enunciating the legal basis of the new doctrine for the first time as a positive law, grant each coastal state exclusive rights of exploitation of the Continental Shelf off its coast. The basic concept of this new regime provides:

Article 2 - 1. The coastal state exercises over the Continental Shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.

2. The rights referred to in paragraph 1 of this article are exclusive in the sense that if the coastal state does not explore the Continental Shelf or exploit its natural resources, no-one may undertake these activities, or make a claim to the Continental Shelf, without the express consent of the coastal state.

3. The rights of the coastal state over the Continental Shelf do not depend on occupation, effective or notional, or on any express proclamation.

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132. Fourth Committee, 26th Meeting, para.11; Moreover, and as the representative of Guatemala remarked, the Mexican proposal which was partly reintroduced by the Cuban proposal, had been rejected because a number of delegations had objected to the nature of the rights it sought to confer upon the coastal state, rather than to that part of it which corresponded to the Cuban proposal; see, supra, para.7.

Conclusion

From the foregoing provisions of the Convention on the Continental Shelf and the various views expressed in the ILC and in Fourth Committee, it is apparent that the considerations relevant to the legal basis of the sovereign rights attributed to the coastal states cannot be reduced to any one principle. The position under the convention may be summed up as follows:-

(1) According to Article 2(2), the Continental Shelf was meant to belong ipso jure to the littoral state. Consequently, the right derived from this theory might arise in various forms: the littoral state might declare that it had no intention of exploring or exploiting the seabed and subsoil of its Continental Shelf. It might leave it to others to do so, even without granting them a formal concession as long as the express consent of the coastal state is proven. On the other hand, it might equally exercise its right over the Continental Shelf by granting a concession. In all these circumstances, the right to exercise jurisdiction and control would still be vested in the littoral state. In other words, the situation is somewhat analogous to that of the territorial sea.

(2) The first part of Article 1(a) together with the Commission's commentary on Article 68 suggest that the principle of contiguity was given much consideration as

a basis for the rights granted. This means that the principle of contiguity, which has been rejected as a distinct root of title apart from effective occupation, assumes importance from the fact that effective exploitation of the natural resources of the shelf presupposes the existence of installations on the adjacent land territory.

(3) Under Article 2(3), although the rights of the coastal state do not depend on occupation, various views suggest that 'effective occupation' was thought to exist in the adjacent coastal state.

(4) Finally, in spite of the fact that the Convention does not refer to the practice of states as one of the principles underlying the new doctrine, one may easily deduce from the various views which led to the Convention that the unilateral actions of some coastal states had influenced to a great deal such views.

Section II - Rights of Coastal States over the Continental Shelf

1. The Nature of the Rights Asserted and the Freedoms of High Seas

(A) Under the Unilateral Action of Coastal States

The various proclamations and enactments relating to submarine areas do not supply a clear answer to the question whether the rights asserted are rights of sovereignty, or merely rights of jurisdiction and control, and whether they are rights over the submarine areas or over their resources. Their cumulative result is that in relation to the subject matter of these instruments the rights asserted amount to a kind of appropriation.

The absence of intention to distinguish between exclusive 'jurisdiction and control,' on the one hand and sovereignty on the other hand, is shown in the Brazilian Decree which speaks of the 'interest in the declaration of sovereignty or of the dominion and jurisdiction of states over the region thus accruing to the national territory.'[133] Article 1 of this Decree states, "It is expressly recognised that the part

133. Decree No.28, 840, 8 November, 1950, Supra Note 89.

of the seabed which corresponds to the continental and insular territory of Brazil is incorporated in the said territory, under the exclusive jurisdiction and dominion of the Federal Union." The Mexican Proclamation of 1945, while declaring that 'it is not reasonable, wise or possible that Mexico should ignore jurisdiction, exploitation and control,' over the Continental Shelf, proceeds to state that 'the Government of Mexico claim the whole of the continental platform or base adjacent to its coasts.'[134].

Full sovereignty over the Continental Shelf is claimed explicitly in some proclamations such as those of Argentina, Chile, Peru, Costa Rica, Nicaragua, Honduras, and El Salvador.[135] The purely British proclamations such as those relating to the Gulf of Paria, the Bahamas, Jamaica, and Falkland Island amount, by clear implication, to an assumption of rights of full sovereignty.[136] The 1964 Continental Shelf Act of the U.K. incorporates the provisions of the Convention on the Continental Shelf by virtue of Section 1(1) which says that, "Any rights exercisable by the United Kingdom outside territorial waters with respect to the seabed and subsoil and their natural resources ..... are hereby vested in Her Majesty."[137] The words 'any rights' mean

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134. Declaration, 29 October, 1945, Supra Note 88.

135. For these proclamations see supra pp.91-92.

136. All cited above, Notes 82, 83, 84 and 85.

137. The Continental Shelf Act, 1964, AJIL, 1964, p.1085.

sovereign rights for the purpose of exploring and exploiting the Continental Shelf, which the Convention confers upon the coastal state.[138]

It is only with regard to 'safety zones' that the Act deviates from the Convention and other rules of international law. Under Section 2(1 & 2) of the Act, the assumed power of the Parliament to impose criminal penalties upon alien masters navigating ships sailing under an alien flag is plainly contrary to the general rule of international law, because penal or disciplinary proceedings may only be instituted before the juridical or administrative authorities either of the flag state or of the state of which such person is a national.[139] Section 3(1) of the Act states: 'Any act or omission which -

(a) takes place on, under or above an installation in a designated area or any waters within 500 metres of such an installation, and

(b) would, if taking place in any part of the United Kingdom, constitute an offence under the law in force in that part, shall be treated for the purposes of that law as taking place in that part.'

It is apparent that the U.K. Government treats the area of the safety zone as part of the main land. The English criminal law, which is territorial in its nature, has been

138. Article 2(1) of the Convention.

139. See Article 11 of the Convention on the High Seas.

extended by virtue of this section. This is, perhaps, the first straight forward provision in an English Act which proclaims full sovereignty over certain areas of the high seas.[140]

These claims to full sovereignty are in contrast to the Truman proclamation on the Continental Shelf. This proclamation declared that 'The Government of the United States regards the natural resources of the subsoil and seabed of the Continental Shelf beneath the high seas but contiguous to the coast of the United States as appertaining to the U.S., subject to its jurisdiction and control.'[141] According to this passage of the proclamation, it is not only that the assumption of 'control and jurisdiction' was preferred to assumption of 'sovereignty,' but also that the 'control and jurisdiction' thus claimed had reference not to the seabed and subsoil of the Continental Shelf as such but merely to the resources of the shelf area.

Lauterpacht has suggested more than one cause for this intentional wording of the proclamation:[142]

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140. See R. V. Martin, 1956, 2QB, p.272; R. V. Naylor, 1962, 2QB, p.527; and Cox, V. Army Council, 1963, A.C., p.48. The three cases are decided in connection with Articles 60 and 62 of the 1949 Civil Aviation Act. See also Section 10 of the Tokyo Convention Act, 1968, which deals with crimes on board aircraft.

141. Truman Proclamation, supra, Note 60 on p.79.

142. Lauterpacht, 'Sovereignty over Submarine Areas,' BYIL, 1950, p.388.

1. It may have been due, in the first instance, to the fact that according to the constitution of the U.S. formal annexation or acquisition of territory requires legislative approval and cannot be accomplished by presidential proclamation.
2. Secondly, in view of the persistent attitude of the U.S. in the matter of acquisition of sovereignty over arctic and antarctic regions - an attitude based on a rigid insistence on effective occupation as a condition of acquisition of a valid title - it was deemed preferable to give a somewhat different and less emphatic formulation to a claim based on the fact of contiguity.
3. Finally, it is possible that some importance was attached to the theory that 'sovereignty and ownership go together' and that in view of domestic controversy in the U.S. concerning the ownership of the subsoil of the Continental Shelf the express assumption of sovereignty was deemed to be prejudicial to an as yet unresolved issue.

This cautious formulation by the U.S. of its title over the Continental Shelf has not been followed by other states. In spite of much similarity between the Saudi Arabian pronouncement and the Truman proclamation in many respects, Saudi Arabia, in this case, followed the attitude of those states which regarded the seabed and subsoil of the Continental Shelf to be subject to the exclusive jurisdiction and control

of the state concerned.[143]

The only feature common to the various proclamations is that all of them explicitly provide, either in general terms or specifically, for the preservation of all or some of the freedoms of the high seas. With regard to the Latin-American proclamations which assert national sovereignty over the Continental Shelf and epicontinental sea, the right of free navigation has been expressly preserved. Other freedoms of the high seas, including the right of fishing and flying over the area claimed, are, undoubtedly, prohibited, since the claims amount in their nature to an extension of the territorial sea. Hence, the Argentine Decree states, 'For purposes of free navigation, the character of the waters situated in the Argentine epicontinental sea and above the Argentine Continental Shelf, remains unaffected by the present declaration.'[144] In the Chilean Decree, we read, 'This declaration ..... does not affect the rights of free navigation on the high seas.'[145] This reference, in the Chilean Decree, to the area claimed as 'high seas' is incompatible with the national sovereignty proclaimed over the same area.

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143. Royal pronouncement, supra note 97; the proclamation of the Sheikhdoms on the Arabian-Persian Gulf adopted the same wording.

144. Art.2.

145. Art.4. Art.5 of Costa Rica Decree uses the same wording. While Honduras, in Art.5, and Peru, in Art.4, both add the words: '..... in conformity with international law.'

Other Latin-American countries which did not make direct claim to the waters above the shelf, such as Mexico and Brazil, also refer only to the right of free navigation, with the exception that the Mexican declaration describes the waters above the shelf as 'high seas,' while in the Brazilian Decree dubious terms are used. Thus the Mexican proclamation disclaims any intention to interfere with the freedom of navigation on the high seas. There is also a statement in the declaration in regard to 'closed fishing zones,' concerning the supervision of fishing activities.[146] However, the amendment to Articles 27, 42 and 48 of the Constitution declared, in addition to the Continental Shelf and submarine bed, the waters covering these areas to the extent fixed by international law, to be included in the national property.[147] It seems that the sovereignty claimed over the waters above the shelf is directly related to the supervision of the closed fishing zones. The important point is the establishment of sovereignty over the shelf and its waters. This entity of shelf and sea, in the practice of Mexico, is identical with that of the first group of the Latin-American countries. As to the Brazilian Decree, Article 3 states, "Rules governing navigation in the waters covering the

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146. U.N. Doc.A/CN 4/61, p.15.

147. These articles are cited in Auguste B., 'The Continental Shelf, 1960', pp.130-131.

aforesaid Continental Shelf shall continue in force without prejudice to any further rules ..... especially as regards fishing in that area." Whether the Brazilian claim was intended to apply to living resources, e.g. fish, is not stated in the Decree. However, at the time of this legislation there were fishery limits in existence under the Brazilian laws.[148]

In the Anglo-American and associated proclamations, freedoms of the high seas are preserved always in general terms, but in some of them the right of free navigation is mentioned along with the general terms. Proclamations coming under the first heading are those of the Bahamas, British Honduras, Jamaica and the Falkland Island. The Order-in-Council concerning each of them states, 'Nothing in this Order shall be deemed to affect the character as high seas of any waters above the Continental Shelf and outside the limits of territorial waters.'[149] On the other hand, both the Treaty of 1942 on the Gulf of Paria and the Order-in-Council made under the Treaty were declared not to affect in any way the status of the waters nor freedom of navigation or passage in the Gulf.[150] The Arab states in the Persian Gulf go even further in mentioning specifically various freedoms of the high seas. Each Ruler declares that

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148. 12 miles, 1930, cited in Amador, supra note 64, p.31.

149. Art.3 of each Order.

150. Arts. 5 and 6 of the Treaty.

his proclamation is not to affect the character as high seas of the superjacent waters, nor the air space above those waters, nor the fishing and traditional pearling rights in them.[151]. It will be noted that the free air space is now mentioned, as well as the high seas, and that fishing rights are expressly preserved. Finally, the Truman proclamation declares **that** "the character as high seas of the waters above the Continental Shelf and the right to their free and unimpeded navigation are in no way thus affected."[152] The proclamation also refers to the Continental Shelf as 'beneath the high seas.' This reservation has a direct bearing on the question of fishery which is the subject matter of the second proclamation.

In the Coastal Fisheries Proclamation[153] President Truman proclaims as proper the establishment of conservation zones in those areas of the high seas contiguous to the coasts of the U.S. in which fisheries either have been or in future may be developed on a substantial scale. Such zones, unless the U.S. nationals are the only participants in fishery, shall be regulated and controlled by the U.S. and other state or states whose nationals are engaged in the fishery. The proclamation also asserts the right of the U.S. foreign fishing vessels in particular areas of the high seas where the U.S. interests are conceived to be threatened.

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151. Supra, note 97.
152. The last para. of the operative part.
153. AJIL, Vol.40, 1946, Off. Doc., p.45-48.

Finally, there is a reservation of freedom of navigation in the same terms as in the shelf.[154]

Taking the two documents together, it is apparent that the U.S. claims, unlike those of most Latin-American countries, do not amount to an extension of territorial waters.[155] In spite of this, it was perhaps unfortunate that the U.S. on the day on which it issued the proclamation as to the Continental Shelf also issued the proclamation relating to fisheries. Whatever may have been the propriety of the latter, it was independent of the claim to the Continental Shelf. Yet, and as Lauterpacht says, some Latin-American countries have combined in the same instrument the claim to the adjacent submarine areas with sweeping assertions of sovereignty over the high seas; while Mexico did no more than join in one proclamation the substance of the two separate proclamations of the United States.[156]

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154. The proclamation concedes the same right to establish conservation zones to other states off their coasts on condition that similar recognition is given to any existing interests of U.S. nationals in the fisheries concerned.

155. This conclusion is confirmed in the Montebello case, where the Court of Claims decided that the vessel Montebello, which was sunk off the coast of California outside the three mile limit but over the Continental Shelf, was not, according to the language of the Truman proclamation, within the U.S. or within a place 'as may be determined by the President to be under the dominion and control of the U.S.;' see full details in Matson Navigation Co., and Union Oil Co. of California V. U.S., 141F. supp.929, 934 (Ct.Cl., 1956). This decision rejects the suggestion of Professor Bingham and other writers that by virtue of the proclamation the territorial waters of the U.S. should be extended: Rep. of the 'International Law of Pacific Coastal Fisheries.' Bonchard 1946, AJIL, 61.

156. Lauterpacht, supra note 142, p.412.

(B) Under the Convention of the Continental Shelf

(1) The Historical Development of Article 2(1)

The difference in terminology used to ascertain coastal states' rights over the submarine areas of the Continental Shelf was also dealt with by the ILC. In 1950 the Commission debated the subject generally. Those members who voiced a reasoned opinion on this matter expressed themselves in favour of the view that the powers of the state in the adjacent submarine areas are those of sovereignty.[157] However, the provisional report of the Commission to the General Assembly used a different language. It stated that 'the seabed and subsoil were subject to the exercise, by the littoral state, of control and jurisdiction for the purposes of their exploration and exploitation.'[158] From this report, it appears that the Commission was at variance, apart from the single exception of the proclamation of the U.S., with the relevant proclamations and enactments of all other states which have claimed sovereignty either expressly or impliedly in as much as they included these areas within their boundaries or declared them to belong to their states.

This preliminary report of the Commission passed without much opposition. It was not until the Commission had reported its first draft articles to the General Assembly, in 1951, that the split between Governments over this issue became wide.

157. This was the view of Professor Brierly and the Rapporteur, Professor Francois, (A/CN.4/SR.68, pp.6-8).

158. Special supp. No.12 (A/1316, p.22).

The text of Article 2 (Article 2(1) of the Convention) of the 1951 draft read:

> 'The Continental Shelf is subject to the exercise by the coastal state of control and jurisdiction for the purpose of exploring it and exploiting its natural resources.'[159]

This text was criticised by the Governments of Chile, France, Iceland, the Union of South Africa and the U.K., all of which considered that coastal states should exercise sovereignty over the Continental Shelf, though, with the exception of Chile, they did not claim sovereignty over the superjacent waters and the air space above.[160] The Swedish Government and certain others had endorsed the Commission's views.[161] The Brazilian and Danish Governments believed that coastal states should exercise 'exclusive' jurisdiction, whereas the U.S. Government would be satisfied if that were brought out clearly in the commentary.[162]

While objections to this article from those countries which assumed full sovereignty over the Continental Shelf was likely to follow, the U.S. disapproval is hard to appreciate. In spite of similarity between the Truman proclamation and Article 2, the U.S. Government in its comments on this Article stated, '..... this Government

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159. U.N.G.A. Off.Rec., supp. No.9 (A/1858, p.18): also 2YBILC 1951, p.141.
160. 1YBILC, 1953, p.83, para.56.
161. Ibid.
162. Ibid.

wonders, accordingly, whether it would not be advisable to make it clear, at least in the commentaries, that control and jurisdiction for the purpose indicated in the draft articles mean in fact an exclusive, but functional, right to explore and exploit.'[163]

The only justification to the U.S. attitude seems to be that in the Truman Proclamation the word 'appertain' - belong to - is mentioned along with jurisdiction and control. In other words, the U.S. Government was anxious to make clear that the Continental Shelf belonged to the coastal state, and that the rights are exclusive so that no other state would be entitled to exploit the resources of the shelf without the express consent of the coastal state concerned.

Along these lines of the various Governments' policies, the Commission had decided to adopt the term 'sovereign rights' instead of 'jurisdiction and control' at its seventh and eighth sessions in 1953 and 1956 respectively. The 1956 text for Article 68 (Article 2(1) of the Convention) which was identical with its 1953 draft of this article read:

> 'The coastal state exercises over the Continental Shelf sovereign rights for the purpose of exploring and exploiting its natural resources.'[164]

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163. U.N. Off.Rec., Supp.No.9 (A/2456), Annex II, p.70.

164. 2YBILC, 1956, p.297 'Sovereign rights' was replaced by 'exclusive rights' in Committee IV, finally, the Plenary Session adopted the Commission's terminology of the 1956 draft. See comments and criticisms on this term in the 234 and 238 Meetings of the Commission.

From the Commission's commentary on this draft it is understood that the Commission desired to avoid any language lending itself to interpretations alien to an object which is considered to be of decisive importance, namely, the safeguarding of the principle of the full freedom of the superjacent sea and the air space above it.[165] Hence it was unwilling to accept the sovereignty of the Continental Shelf. On the other hand the text as now adopted leaves no doubt that the rights conferred upon the coastal state cover all rights necessary for and connected with the exploration and exploitation of the natural resources of the Continental Shelf. Such rights include jurisdiction in connection with the prevention and punishment of violations of the law of the Continental Shelf.

Many observers did not see any difference between 'jurisdiction and control' in the 1951 draft, and 'sovereign rights' in the 1953 and 1956 drafts. Professor Brierly, for instance, believes that 'if the littoral state had exclusive rights of control and jurisdiction over the subsoil, it could be regarded as enjoying sovereignty.'[166] Sir Cecil Hurst, when dealing with the Truman Proclamation, also states that, 'The distinction between the jurisdiction and the exclusive control which are claimed and sovereignty is so small as to be little more than a question of name.'[167]

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165. Ibid, para.2.
166. U.N. Doc.A/CN.4/SR.68, p.8.
167. Grotius Transactions, 1948, 'The Continental Shelf,' p.161.

He goes even further to say, 'If the rights claimed over the Continental Shelf and its resources were called sovereignty, they would be no more extensive than what are claimed in the Proclamation.'[168] Finally, the Governments which believed that coastal states should exercise sovereignty over the Continental Shelf had argued that control and jurisdiction amounted to the same thing, the more so if the latter term were reinforced by the qualification 'exclusive'; and it was upon this view that Professor Francois had suggested the substitution of 'sovereign rights' for 'jurisdiction and control.'[169]

This point, however, is highly controversial. If the text of the 1956 draft for Article 2(1) were intended to confer on the coastal state jurisdiction and control over the Continental Shelf, then the change made in terminology, if it was an improvement at all, does not merit the time spent on it. If, on the other hand, the text was adopted to grant the coastal state rights more than those accorded to it in the 1951 draft, then it would be detrimental to the Commission's prestige to reverse the views which it had officially and publicly expressed in the report on its third session. In fact, nothing had occurred to justify such a change of position. Any Government which, in its comments on the 1951 draft, had expressed the view that sovereignty

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168. Ibid, p.162.
169. Supra, note 160, para.57.

ought to be conferred upon the coastal state, had probably already expressed that view before, and in more solemn form, for example by making a proclamation on the subject. Therefore, if the change made had been necessary as a result of political pressure, then it would have been more appropriate for the Commission to leave this to a political body, such as the Geneva Conference on the Law of the Sea, where every coastal state would play its role as a maritime power.

Be that as it may, 'sovereign rights' or 'rights of jurisdiction and control,' what actually matters is the impact of the rights granted on the status of the superjacent waters as high seas.

(ii) The 'Sovereign Rights' of the Coastal State and the Freedom of the High Seas

In view of the manifold uses of the high seas, the right of a coastal state to exploit the natural resources of its Continental Shelf adds prima facie merely another form of user to the list of those already existing. The exclusiveness of this right, under Article 2(2) of the Convention, does not create any presumption in favour of the coastal state to the prejudice of other forms of uses of the high seas. On the contrary, by the terms of Article 3 of the Convention, 'The rights of the coastal state over the Continental Shelf do not affect the legal status of the superjacent waters as high seas, or that of the air space

above those waters.' This Article, which is couched in categorical terms, is self-explanatory. For the articles on the Continental Shelf are intended as laying down the regime of the Continental Shelf only as subject to and within the orbit of the paramount principle of the freedom of the seas.

While Article 3 lays down in general terms the basic rule of the unaltered legal status of the superjacent sea and the air above it, Articles 4 and 5(1) apply that basic rule to the main manifestations of the freedom of the seas, namely, the freedom of laying and maintaining submarine cables and pipelines on the Continental Shelf and the freedom of navigation and fishing in the superjacent waters. Thus Article 4 states: 'Subject to its right to take reasonable measures for the exploration of the Continental Shelf and the exploitation of its natural resources, the coastal state may not impede the laying or maintenance of submarine cables or pipelines on the Continental Shlef.' The term 'reasonable measures' was critized by some lawyers.[170] Apart from the vagueness of this term, it is not clear which of

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170. Hudson, in 1YBILC, 1951, p.278, para.93, suggested the substitution of 'necessary measures' for 'reasonable measures.' He thought that one could prove almost anything by reasoning. Professor Schwarzenberger also wrote in his International Law, 1957, pp.350-351, 'If reasonableness is the test of the compatibility of any particular type of user with the freedom of the seas, a user cannot be excluded on the grounds of novelty and hypothetical impairment of established forms of user alone.'

the two interests, namely, the exploitation of the natural resources and the establishment or maintenance of submarine cables and pipelines, would prevail.[171]

Article 5(1) lays down that 'the exploitation of the Continental Shelf and the exploitation of its natural resources must not result in any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea, nor result in any interference with fundamental oceanographic or other scientific research carried out with the intention of open publication.' It will be noted that what the Article prohibits is not any kind of interference, but only unjustifiable interference. The manner and the significance of that qualification were the subject of prolonged discussion in the Commission.[172] The Commission, by formulating the test of unjustifiable interference, thought it advisable to eliminate any semblance of rigidity in adapting the existing principle of the freedom of the sea to what is an essentially novel situation. To lay down, therefore, that the exploration and exploitation of the Continental Shelf must never result in any interference whatsoever with navigation and fishing might result in many cases in rendering somewhat nominal both the sovereign rights

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171. This is so because the Article says, 'subject to its right ..... the coastal state may not impede .....'

172. See the 201 and 202 meetings, 1 UBILC, 1953.

of exploration and exploitation and the very purpose of the articles as adopted. In fact, the progressive development of international law, which takes place against the background of established rules, must often result in the modification of those rules by reference to new interests or needs. The extent of that modification must be determined by the relative importance of the needs and interests involved. The case is clearly one of the assessment of the relative importance of the interests involved. According to the Commission, interference, even if substantial, with navigation and fishing might, in some cases, be justified; on the other hand, interference, even on an insignificant scale would be unjustified if unrelated to reasonably conceived requirement of exploration and exploitation of the Continental Shelf.[173] However, unlike article 4, according to the imperative manner of this Article, where there is unjustifiable interference, the choice, as to which of the two interests must prevail, is not with the coastal state.

Finally, the Commission thought it desirable to rule out expressly any right of interference with navigation in certain areas of the sea. These areas are defined in Article 5(6) of the Convention as 'recognised sea lanes essential to international navigation.' The importance of these areas

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173. Ibid, page 215, para.77.

for the purpose of international navigation is such as to preclude the construction therein of installations or the maintenance of safety zones even if such installations or zones are necessary for the exploration or exploitation of the Continental Shelf.[174]

Summary and Conclusions

From the previous discussion, it is apparent that this radical change in the Commission's attitude towards Article 2(1) has not been logically justified. In spite of the fact that the Commission had in many cases made changes in its drafts on the law of the sea, it would seem that, in the generality of cases, the Commission made changes to please certain governments, rather than because they were any real improvement. In fact, the term 'sovereign rights' was unnecessary in the present instance of Article 2. It was not the practice to speak of sovereigh rights over the high seas for the purpose of naval engagement, visit, search and capture, or for the purpose of exercising control over fishing or suppressing piracy and the slave trade. Nor was it the practice to speak of sovereigh rights over the seabed of the high seas for the purpose of maintaining sedentary fisheries or cable-laying. Nor was it the practice to speak

174. According to the Commission, loc.cit., para.80, such lanes include straits in the ordinary sense. However, the position of straits is uncertain because it was deleted from the text of this paragraph at the request of El-Khoury, and it seems that those who voted in favour of its deletion were divided on the intentions of the voting, see 1YBILC, 1953, pp.105-106.

of sovereign rights over the contiguous zone beyond the territorial sea for the purpose of enforcing customs, fiscal and immigration regulations. Why then should the Commission speak of sovereign rights over the Continental Shelf for the purpose of exploiting its natural resources?

To argue that the use of this term is necessary from the point of view of national defence sounds somewhat dated in the light of modern weapons of long range rockets where the main threat to national security lies in the third dimension. Hence the use of the term 'sovereigh rights' was not only unnecessary but also unjustifiable for five main reasons:

In the first place, freedom of the high seas could be subject to restrictions without changing its character, just as could sovereignty over territory in a similar situation. If innocent passage through the territorial sea did not assimilate the territorial sea to the high seas, there was no reason why exploitation of natural resources should necessitate the assimilation of the Continental Shelf to territory. Indeed, the enforcement of customs, fiscal and immigration regulations in the contiguous zones had not converted those zones into territorial sea. What was needed concerning the Continental Shelf was exclusive right of exploitation, not sovereignty.

Secondly, it was not the case that the coastal state's rights over the Continental Shelf were an existing rule of

law. Claims had been made to exercise certain rights over it but that was all. Not enough time had elapsed since those claims had been made for it to say that they were generally accepted. The point was pertinent, particularly because what was affected was collective or community interests, not interests of individual states; it usually took more time for opposition to encroachments on collective interests to become articulate. Therefore, it could not be argued that a claim which was not immediately contested was accepted. Final proof of the absence of any new rule of international law on the matter was furnished by the very fact that the Commission has been seized of it; if there had been general agreement, that would have been unnecessary. It is worth bearing in mind, moreover, that when the Commission had, in 1951, provisionally approved a text which made it clear that it did not recognise sovereignty over the Continental Shelf, not a single government had protested that it was deprived of something which it already possessed; the most that any government had been moved to do was to say that, in its view, sovereignty over the Continental Shelf should be recognised.

Thirdly, it was unrealistic to suppose that sovereignty over the Continental Shelf could be restricted to the seabed and subsoil, or merely to the natural resources of such areas. In practice, the coastal state cannot enforce compliance with its interest in the shelf without being prepared to take preventive or repressive action against others who may also

desire to exercise their rights in such area. Action of this kind can be taken only on the surface of the high seas. This, prima facie, constitutes a challenge to one of the basic rules underlying the principle of the freedom of the seas. Therefore, those states which, in claiming sovereignty over the Continental Shelf, had claimed sovereignty over the superjacent waters as well, had been perfectly logical.

Fourthly, acceptance by the Commission of the principle of limited sovereignty over the Continental Shelf had only encouraged a mischievous trend which had begun with the Latin-American claims. It is not to be doubted that the Commission, in adopting the concept of sovereign rights had sanctioned those sweeping claims which had been made in the past.

Fifthly, the Commission should have realised that, although states were at liberty to parcel out the high seas among themselves, the initiative in acts of that kind should be left to political bodies such as the General Assembly, or any other body set up by it. The Commission, as a legal body, should have resisted attempts to encroach upon established principles of international law, particularly those favouring the development of the community idea, such as the freedom of the high seas.

Finally, it is worthwhile to conclude by referring to the five rules governing the high seas, as defined by Professor Schwarzenberger.[175] Those relating to the subject

175. Schwarzenberger, loc. cit., p.338, 349.

of the Continental Shelf were formulated as follows:

Rule 4: Under international customary law, the right of (reasonable?) user of the high seas, the air space above them and the bed of the sea may be exercised for any purposes not expressly prohibited by international law.

Rule 5: The assumption of exclusive jurisdiction over any portion of the high seas is prohibited.

2. The Meaning of the Term 'Natural Resources.'

(A) From the ILC to the Plenary Meeting

The scope of the rules of international law concerning the Continental Shelf depends on the definition given to the term 'natural resources.' As the sovereign rights of the coastal state may be exercised only for the purpose of exploring and exploiting these resources, the objects with respect to which this 'functional sovereignty' may be exercised must be clearly defined. Therefore, Article 2(4) of the Convention setting forth the definition of the 'natural resources,' provided the occasion for considerable discussion. The study of this definition started with a general commentary from the Commission. Then it turned into a hot debate in the fourth Committee which reproduced the definition in the text of the Convention. Finally, the definition was subjected to certain modifications in the 8th Session of the Conference,

before it became paragraph 4 of Article 2.[176]

The question of adequately defining the term 'natural resources' has caused the Commission some difficulty. At its Third Session, in 1951, the Commission had only dealt with 'mineral resources,' and some members proposed adhering to that course.[177] Those members pointed out that the Truman Proclamation had referred to natural resources, but that the preamble referred only to 'mineral resources.' Hence, they suggested, the exploitation of natural resources might perhaps be restricted to mineral resources. The Commission, finally, decided to postpone consideration of the question whether the word 'mineral' should be substituted for 'natural' in Article 2.[178]

At its Fifth Session, in 1953, the Commission decided after long discussion to retain the term 'natural resources,' as distinct from the more limited term 'mineral resources.'[179]

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176. Article 2(4) lays down:

> 'The natural resources referred to in these articles consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.'

177. See Sandstrom and Francois in 1YBILC, 1951, pp.276, 277, paras.46 and 53 respectively.

178. Ibid, p.276.

179. 2YBILC, 1953, p.214, para.70 (Rep. to the General Assembly).

The Commission, however, came to the conclusion that the products of sedentary fisheries, in particular, to the extent that they were natural resources permanently attached to the bed of the sea, should not be outside the scope of the regime adopted and that this aim could be achieved by using the term 'natural resources.'[180] It is clearly understood, however, that the rights in question do not cover so-called bottom-fish and other fish which, although living in the sea, occasionally have their habitat at the bottom of the sea or are bred there.[181]

At the Eighth Session, in 1956, it was proposed that the condition of permanent attachment to the seabed should be mentioned in the Article itself (Article 68). At the same time the opinion was expressed that the condition should be made less strict; it would be sufficient that the marine fauna and flora in question should live in constant physical and biological relationship with the seabed and the Continental Shelf; examination of the scientific aspects of that question should be left to experts. The Commission, however, decided to leave the text of the article and of the commentary as it stood.[182]

When the text of the 1956 draft of the ILC was brought before the Fourth Committee, a joint proposal was introduced by several delegations with the view to finding a compromise

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180. Ibid, mentioned in the Report.

181. Ibid.

182. Report to the General Assembly, 2YBILC, 1956, pp.297-298.

formula with regard to the meaning attributed to the expression 'natural resources.' This was the one that eventually became the definition contained in paragraph 4 of Article 2 of the Convention.[183] That text as adopted in the Fourth Committee contained the additional phrase, '; but crustacea and swimming species are not included in this definition.'[184] A Mexican oral proposal to delete the words 'crustacea and,' only, failed by a vote of 27.27.13.[185]

At the 8th Plenary Session of the Conference, the final phrase, '; but crustacea and swimming species are not included in this definition' was rejected with the approval of Australia.[186] Australia had, meanwhile, come to regard the phrase as superfluous. The phrase had been voted upon in two parts: the words 'crustacea and' were rejected on roll-call by a vote of 22 in favour, 42 against and 6 abstensions.[187] The voting was confused, for the reason that it apparently was not clear whether an affirmative vote was a vote in favour of retention or in favour of deletion of these words. The remaining words '; but swimming species are not included in this definition' were rejected by 14 in favour (of retention), 43 against and 9 abstensions.[188]

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183. This proposal was submitted by Australia, Ceylon, Federation of Malaya, India, Norway and the U.K., A/CONF.13/C.4/L.36.

184. A/CONF.13/C.4/SR.24, p.7.

185. Ibid.

186. A/CONF.13/SR.8, pp.11, 12.

187. Ibid.

188. Ibid.

(B) The Construction of Article 2(4) in the Light of the Various Views

Treaty stipulations are often regarded as mirroring the common practice of states, but state practice regarding rights over the Continental Shelf is frequently vague and subject to disputes. The Geneva drafters were hampered by a lack of detailed and practical principles, particularly in regard to the Continental Shelf, from which they could draw. Therefore, the interpretation of Article 2(4), like most other provisions of the Convention, has given rise to controversies in recent state practice.[189]

The resources covered by the definition are 'mineral and other non-living resources,' and also 'living organisms belonging to sedentary species' i.e. organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil. Accordingly, the natural resources may be divided categorically into:-

(A) i - mineral resources, and

ii - other non-living resources, together with

(B) i - immobile living organisms

ii - living organisms which move only few feet or less, and

iii - living organisms which move considerable distance.

189. See the dispute between France and Brazil over lobster fishing in the Atlantic, the so-called 'Lobster War,' by Issam Azzam, ICLQ, 1964, p.1453-1459.

Apparently, Article 2(4) includes only the first four items. Item (B)(iii) is clearly not covered by the Article. As to (A)(i), it has never been disputed that the definition of natural resources should at any rate include the mineral resources of the seabed and subsoil, in particular oil deposits. State practice is uniform in accepting this minimum. The controversial issue was whether, and if so to what extent, it would be reasonable to go beyond that minimum. With regard to (A)(ii), it has been suggested that although most of the non-living resources of the seabed and the subsoil were, of course, mineral resources, the words 'and other non-living resources' had been added ex abundanti cantila to ensure that the Article would definitely apply to resources such as the shells of dead organisms.[190]

However, it must be noted that 'non-living resources' do not include abandoned property lying on the seabed or covered by sand. This was made clear in the Commission's commentary where it was stated: '..... nor do these rights cover objects such as wrecked ships and their cargoes (including bullion) lying on the seabed or covered by the sand of the subsoil.'[191] In the case Gasparroni ed altri, decided in 1952 by the Tribunal of Trani, Italy, defendants, accused of theft, had dragged certain munitions of war

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190. See Professor Bailey's comments in the Fourth Committee; A/CONF.13/C.4/SR.21, pp.7-8.

191. 2YBILC, 1956, p.298, para.5, (Rep. to the General Assembly).

abandoned by the Allies from the bottom of the sea at a place 22 miles off the Italian coast. The Tribunal held that neither by international law nor by Italian law was the Italian State entitled to this property or authorised to grant an alleged exclusive concession for its recovery from the high seas. Rather, the only way to acquire title to the property, the Tribunal ruled, was through occupation, i.e. the taking of possession of the munitions coupled with animus occupandi.[192]

It is only in respect of Group B that controversies arise. In fact item (B)(i) is unlikely to raise any problem even with those states which preferred adherence to 'mineral resources' in the strict sense. Indeed, it would be unreasonable to give coastal states exclusive rights over mineral resources such as the sands of the seabed but not over the coral, sponges and other immobile living organisms. The major point of dispute between states relate to the inseparable relation between categories (B)(ii) and (B)(iii). It is hard to tell where the line should be drawn between these two categories.

As we have seen earlier, the Plenary Session of the Conference rejected the additional proviso, '; but crustacea and swimming species are not included in this definition,' and marine crustacea were thus left in an uncertain position.[193]

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192. Case of Gasparroni ed altri, XXXVIII Rivista Di Diritto Internazionale, 1955, 90-94.

193. Supra, note 186.

This uncertainty resulted from the fact that the words 'crustacea and,' as distinct from the other part of the phrase, were voted on separately. First, the Mexican proposal to delete the words 'crustacea and' failed on the basis of 27.27.13; had it been approved it would have meant that crustacea, unlike swimming fish, is included in the definition. Secondly, when the whole phrase was voted out, the words 'crustacea and' were, again, voted on separately.[194] But, as mentioned earlier, it was not clear whether an affirmative vote was a vote in favour of retention or in favour of deletion of these words. It was this special treatment of the subject of crustacea which created the unhappy situation with regard to its status, being left hovering at the border line between categories (B)(ii) and (B)(iii).

What are crustacea?

In his article on the Franco-Brazilian dispute over lobster, Mr. Azzam wrote:

> 'Crustacea, ranging in size from the most minute of creatures to the great Japanese crab of the Western Pacific with legs of sixteen feet, owe their name to the carapace or crusted external skeleton which protects their soft bodies. The term "lobster" has been loosely applied to a large number of crustacea. The commercial lobster, however, is of three varieties: the Homaridae, Palinuridae and Norweigian - all

194. The first vote on these words was taken in the Fourth Committee.

characterised by numerous limbs used for specialised functions of feeling, fighting, swimming and walking. The Palinuridae (Spiny or Rock lobster which also is known as 'African lobster,' 'Crawfish' or 'Langouste') are distinguished from the Homaridae in that their first two legs do not terminate in chelae (pincers). Their usual habitat are tropical, subtropical and some temperate waters. The problem of culturists in recent years has been the prevention of their steady depletion, for lobster fishing is an interesting and important industry both in Europe and the U.S. We know very little of the variation, inter-relation and locomotion of spiny lobsters. Averaging in length from approximately eighteen inches to several feet, they are stalk-eyed with five pairs of legs. Their jerky swimming is achieved by hooking their body backward with the curved tail in retrograde notion. After hatching, the larvae spend from three to five weeks irresponsibly floating around near the surface, "somewhat lacking in the powers of co-ordination and orientation." At the fourth or fifth stage, they leave the surface to dwell among coral reefs from which they do not leave of their own accord. Tagging experiments have cast doubt on their migratory propensity on the ocean floor, which has led some to say that "lobsters biologically are closer relatives

to spiders rather than to fish."'[195]

This explains why lobsters, in their habitat, must be dissociated from fish. Similarly, the same should apply to other kinds of crustacea such as shrimp and crab.[196]

In spite of these scientific findings about the biology of crustacea, lawyers seem to have adopted a different theory.[197] Thus Dr. Amador considered curstacea, unquestionably, excluded from the regime of the shelf.[198] Professor Bailey of Australia, an original sponsor of the six-power compromise proviso, suggested that 'no crustacea or swimming species should be covered by the definition.'[199] Miss Gutteridge is also of the opinion that 'the definition entirely excludes all swimming fish; it also excludes all swimming crustacea.'[200] Dean, the Chairman of the U.S. Delegation to the Conference, summed up the situation not very plainly: 'The Convention now explicitly excludes from the domain of the coastal state organisms which are able to move other than in constant

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195. Supra, note 189, pp.1457-8.

196. But see the U.S. policy, below note 197.

197. The U.S. Government also treated lobsters and shrimps as not included in the natural resources of the shelf (letter, Oct.11, 1963, MS. Dep. of State, file pol.33-4, UK-US); on the other hand, it considered king crab as part of the natural resources (Dept. of State press release, Nov.14, 1964, U.S. TIAS5688).

198. Amador, 'The Exploitation and Conservation of the Resources of the Sea,' 1959, p.128.

199. Supra, note 186.

200. Gutteridge, 'The 1958 Geneva Convention on the Continental Shelf,' 35 BYIL, 1959, pp.117-119.

physical contact with the seabed or the subsoil.'[201] Earlier, in 1954, the ILA made a similar vague statement: 'The natural resources of the Continental Shelf include marine resources permanently adhered to the seabed sedentary fisheries but not any other fisheries.'[202]

On the other hand, the Inter-American Council of Jurists, at its third meeting in Mexico, 1956, adopted a broad interpretation to the meaning of natural resources. Article XII of Resolution XIII, which was passed by the Council at that meeting, states:

> 'The right of the coastal state with respect to the seabed and subsoil of the Continental Shelf extends to the natural resources found there, such as, petroleum, hydrocarbons, mineral substances, and all marine, animal, and vegetable species that live in a constant physical and biological relationship with the shelf, not excluding the benthonic species ..... coastal states have, in addition, the right of exclusive exploitation of species closely related to the coast....'[203]

Apparently, the resolution claims for the coastal states all the living species which are normally associated with the bottom of the waters, including benthonic species. Such a

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201. Dean, A. 'The Geneva Conference on the Law of the Sea,' 1958, 52 AJIL, p.621.

202. ILA, 46th Conference, Report (7) - (2) - (a), p.viii, 1954.

203. Pan American Union, Dep. of State Bulletin, 34 (1956), p.298.

wide interpretation of natural resources would have brought within the definition not only crustacea, but any other swimming species which, according to their habitat, are normally associated with the sea floor.

However, at the Inter-American Specialised Conference in Ciudad Trujillo in 1956, efforts for a similar broad interpretation of the coastal state's rights were not successful. The Conference refused to act on resolution XIII of the Inter-American Council of Jurists, and adopted a much more moderate position. The Conference stated that 'Agreement does not exist among the states here represented with respect to the juridical regime of the waters which cover the said submarine areas nor with respect to the problem of whether certain living resources belong to the seabed or to the superjacent waters.'[204]

All in all, it is a matter of adjustment between the interests of the coastal state and the international community at large. After all, most of the rules underlying the new doctrine are novel. Therefore, it would not be incompatible with the general interest to consider crustacea as part of the natural resources of the Continental Shelf. This trend of thought may be justified by the social needs of the coastal state, the welfare of whose population depends

204. Final Act, Conferences and Organisations Series, Vol.50, Pan American Union, 1956.

largely on the resources of the sea.[205] In the Franco-Brazilian dispute, Brazil had relied on this principle. In spite of the fact that neither of the two countries was a party to the convention at the time of the dispute, both had relied on its provisions to support their claims.[206] France maintains that the Conference's rejection of the proviso, 'but crustacea and swimming species are not included in this definition,' supports its position of a self-evident principle which requires no further clarification.[207] On the other hand, Brazil contends that inclusion of crustacea within the Continental Shelf is self-evident and requires no mention, a position which is concurred in by other Latin-American countries desiring to curtail foreign development of their fisheries, and who have adopted broad interpretations of their rights over the Continental Shelf.[208]

Finally, the meaning of 'harvestable stage' has a direct bearing on the whole question of which living organisms are included in the definition. Does 'harvestable stage' mean the stage of life during which the resources are harvestable

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205. This was expressly referred to in Article XII of resolution XIII, supra note 203.

206. France acceded to the Convention in 1965, while Brazil has not accepted it yet.

207. M. Trimcaud, 'La Convention de Geneva at le plateau continental,' Le Monde, Feb.27, 1963.

208. Lissitzyn, O. J., 'International Law in a Divided World,' International Conciliation, March, 1963.

or the particular moment at which they are captured? According to Professor Bailey the intended meaning of 'harvestable stage' was 'that stage of life during which the resources are harvestable.'[209]

Summary

The Commission's Report of 1951 limited state rights over the Continental Shelf only to mineral resources. Two years later the Commission extended state rights to sedentary fisheries also. This position was maintained in its final comprehensive draft articles which were the basis of discussion at the Geneva Conference. When the matter was discussed by the Conference's Fourth Committee, the interpretation of the phrase 'natural resources' led to the submission of numerous proposals and amendments. The various views of the participating countries may be summed up as follows:-

1. Those tending toward strict and limited interpretation of the term 'natural resources' maintained that it included only mineral (non-living) resources, a view which the Fourth Committee rejected.
2. Those which held that the regime of the Continental Shelf incorporated all resources (living and otherwise). This position was unacceptable to the majority.

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209. Cited by Whiteman, M. 'Conference on the Law of the Sea: Convention on the Continental Shelf,' 52AJIL, 1958, pp.636-640.

3. Finally, six states submitted a compromise proposal in which mineral resources and sedentary fisheries were included, with an additional proviso stating: '; but crustacea and swimming species are not included in this definition.' The 8th Plenary Session did not adopt the additional proviso, and marine crustacea were thus left in an uncertain position; while the debate continues as to their position.

Section III - Delimitation of the Continental Shelf Between Opposite or Adjacent States

1. The Problem of the Delimitation of Sea Boundaries in International Law

One of the most unsatisfactory portions of the Geneva Conventions on the Territorial Sea and Contiguous Zone, and the Continental Shelf is that concerned with the specific limits of seaward areas under national jurisdiction. Problems relating to the limits of the shelf fall within two categories:

(a) Lack of a precise outer limit of the Continental Shelf off the coasts of states bordering the vast seas where the nearest opposite state may be many hundreds or thousands of miles away. This is the problem associated with Article 1 of the Continental Shelf Convention.[210]

(b) Lack of well developed acceptable techniques and principles for the delimitation of the Continental Shelf between opposite or adjacent states. This is the problem which may depend on an authoritative interpretation of Article 6 of the Convention.

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210. This problem is discussed in Part Three in connection with the regime of the deep sea floor.

Relatively little has been written on the techniques and principles applicable to the delimitation of boundaries of seaward areas under national jurisdiction, whether such areas belong to the territorial sea, contiguous zone, or the Continental Shelf.[211] It is with this side of the problem, and only in connection with the Continental Shelf, that the present section is concerned.

2. Delimitation Principles and Techniques Under Article 6 of the Continental Shelf Convention

Article 6 lays down the provisions relating to the delimitation of the Continental Shelf between two opposite or adjacent states as follows:[212]

1. Where the same Continental Shelf is adjacent to the territories of two or more states whose coasts are opposite each other, the boundary of the Continental Shelf appertaining to such States shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary is the median line, every point of which is equidistant from the nearest points of the baselines from which the breadth of the territorial sea of each state is measured.

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211. According to Boggs, S. W., International Boundaries, 1940, p.32, authors who have written on water boundaries include Fauchille, de Lapradelle, and Gidel.

212. As to the delimitation of the territorial and contiguous zone between opposite or adjacent states see Articles 12(1) and 24(3) of that Convention.

2. Where the same Continental Shelf is adjacent to the territories of two adjacent states, the boundary of the Continental Shelf shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary shall be determined by application of the principle of equidistance from the nearest points of the baselines from which the breadth of the territorial sea of each state is measured.[213]

In the absence of agreement between the parties, the principles and techniques provided for in this article will be considered in the following order:

A. "Special circumstances" lines

B. Baselines for delimiting the territorial sea, and

C. Equidistance lines which may be divided into:

(i) Median lines between opposite states, and

(ii) Lateral lines between adjacent states,

from land to the high seas.

A. "Special Circumstances" lines

The term 'special circumstances,' which justifies departures from the equidistance principle, has not been

213. The Commission, when adopting this Article, stated that it was in the position to derive some guidance from the proposals made by the Committee of Experts on the delimitation of territorial sea and contiguous zone, see A/CN.4/61, Add.1. It should be noted that 'special circumstances' are mentioned in relation to the delimitation of the territorial sea and the Continental Shelf, but not in relation to the contiguous zone.

defined by a text of positive law. Such circumstances, however, cannot be listed exhaustively, in view of the extreme variety of legal and material factors which may be of account.

In short, a special circumstance affecting the equidistance method may be the effect of a particular legal situation: historic waters.[214] It may also be the consequence of geographical considerations, such as those mentioned by the Commission.[215] Other explanations to what may constitute a special circumstance under Article 6 was given by various governments when signing, ratifying, or acceding to the Convention.

In acceding to the Convention, the French Government declared that there are special circumstances within the meaning of Article 6 in the Bay of Biscay, the Bay of Granville, and the sea areas of the Straits of Dover and of the North Sea off the French coast.[216] In signing the Convention, the Republic of Venezuela also declared that there are special circumstances to be taken into consideration in

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214. Article 12 on the territorial sea mentions 'historical title' as a special circumstance.

215. In its Report to the General Assembly, the Commission states, 'special circumstances would include exceptional configuration of the coast as well as the presence of islands or of navigable channels:' 2YBILC, 1953, p.216, and 2YBILC, 1956, p.300.

216. Instrument of accession deposited in June 14, 1965. The Governments of the U.K., the U.S. and of Yugoslavia refused to accept the reservations made by the French Government to Article 6.

the following areas: the Gulf of Paria, in so far as the boundary is not determined by existing agreements, and in zones adjacent thereto; the area between the coast of Venezuela and the island of Aruba; and the Gulf of Venezuela.[217] Finally, the Iranian Government declared, on signing the Convention, its acceptance to Article 6 on the understanding that one method of determining the boundary line in special circumstances would be that of measurement from the high water mark.[218]

These various reservations in connection with 'special circumstances' show that this clause was understood not as much as a limited exception to a generally applicable rule, but more in the sense of an alternative of equal rank to the equidistance method. This view is supported by the fact that in the contentions submitted on behalf of all the parties to the North Sea Continental Shelf cases, special circumstances was treated as an alternative to the equi-distance principle.[219] Unfortunately, the I.C.J., when dealing with these cases, refused to explore the meaning of 'special circumstance' on the grounds that this matter was

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217. Signed and ratified on 30 October, 1958, and 15 August, 1961 respectively. The Government of the Netherlands, when ratifying the Convention in Feb. 18, 1966, reserved all rights regarding the reservations in Article 6 made by Venezuela.

218. Signed 28th May, 1958.

219. Infra, note 257.

irrelevant to the point of dispute, as it will be explained later.[220]

B. Baselines for Delimiting the Territorial Sea

Baseline problems are chiefly of three types:

(i) the shore line; also called the low-tide line, or the low-water mark.

(ii) the line between inland waters and the territorial sea - in bays, gulfs, river mouth, and estuaries, where it serves as an artificial coastline in delimiting the territorial sea, and

(iii) the definition of 'island' to determine which islands are to be used and which are to be ignored, in delimiting the territorial sea.

The three types are here considered:

(i) The Shoreline Baseline

The generally accepted rule is that the baseline from which the territorial sea is measured is always the line of low-water mark following the sinuousities of the coast and not a straight line, or lines, drawn from point to point.[221] The problems, however, becomes more difficult when the shore is surrounded or fringed by islands, shoals or rocks. Reference has already been made to the Anna case where Lord Stowell described the alluvion islands off the mouth of the

220. According to the method suggested by Judge Ammoun, infra, note 293, special circumstances was considered merely as a modification to the equidistance principle.

221. This last method is also referred to as the trace parallele as opposed to the first one, courbe tangante or 'envelopes (contd.)

Mississippi as forming 'a kind of portico to the mainland,' and, consequently, the baseline of the territorial sea was drawn along such islands.[222]

The question was further considered by the I.C.J. in the Anglo-Norwegian Fisheries Case.[223] The Court was asked by the two Governments to decide whether the "method employed for the delimitation of the Norwegian fisheries zone by the Royal Norwegian Decree of July 12, 1935, and the baselines fixed by the said Decree in application of that method was contrary or not to international law."[224] In its judgment, the Court held that 'it had no difficulty in finding that for the purpose of measuring the breadth of the territorial

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of arcs of circles' following the line of the coast: see Colombos, International Law of the Sea, 6th ed., 1967, p.113.

222. The Anna, supra note 71a.

223. I.C.J. Reports, 1951, p.116.

224. The Decree defined the limits of Norwegian territorial waters by reference to straight baselines drawn between 48 fixed points some of which were over ten miles apart, the longest being 44 miles. The outer limit of Norwegian territorial sea was drawn four miles from these baselines by parallel lines. It should be observed that the U.K. Government did not contend in the right of Norway to have four miles territorial sea. It also abandoned its protest against the trace parallel method; see British reply at p.129 of the Judgment.

sea, it is the low-water mark, as opposed to the high-water mark, or the mean between the two tides, which has generally been adopted in the practice of states.'[225] The Court, however, found itself obliged to decide whether the relevant low-water mark was that of the mainland or of the 'Skjaergaard.'[226] It was decided that the Skjaergaard constituted a whole with the mainland. Accordingly, it was the outer line of the Skjaegaard which should be taken into account in delimiting the belt of Norwegian territorial sea. This solution was decided, in the Court's opinion, by 'geographic realities' and was also influenced by 'economic interests peculiar to a region, the reality and importance of which are clearly evidenced by long usage.'[227] The Court thus arrived at the conclusion, by ten votes to two, 'that the method employed for the delimitation of the fisheries zone by the Decree of July 12, 1935, was not contrary to international law,' and by eight votes to four, 'that the baselines fixed by the said Decree in application of this method was not contrary to international law.'

It is suggested, however, that no exaggerated importance should be given to the Court's findings: It cannot be held that it created a precedent since it dealt with a unique geographical configuration of a coast which - as the Court repeatedly said - was 'exceptional.' Nor must the Court's

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225. At p.128 of the Judgment.

226. A Norwegian term meaning literally rock rampart and embracing the various islands, islets, rocks and reefs.

227. At p.133 of the Judgment.

judgment be construed as having brought a change in the general principles governing the delimitation of the territorial sea.[228] In fact, the Court itself laid stress on the proposition that 'the delimitation of sea areas has always an international aspect; it cannot be dependent merely upon the will of the coastal state as expressed in its municipal law. Its validity with regard to other states depends upon international law.'[229]

Finally, in accordance with the Court's decision, the Geneva Convention on the 'Territorial Sea and Contiguous Zone' allows a state to deviate from the general principle provided for in Article 3 of that Convention, and claim in certain circumstances, the right to delimit its territorial sea according to the straight baseline rule.[230]

(ii) Artificial Coastlines

Another exception to the shoreline baseline is the use of artificial baseline for bays. It is suggested that, except where such arbitrary straight lines are regarded as having been established by prescription, they be understood to be effective only when interested states, or the international community, specifically accepts the claims of the coastal state.[231]

There is no doubt that bays not exceeding six miles

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228. Colombos, supra, p.117.

229. At p.132 of the judgment.

230. See Article 4 of that Convention.

231. Boggs, 'Delimitation of seaward boundaries,' AJIL, 1951, p.253.

across at the entrance are internal waters when both sides belong to the same state. By custom, however, and by treaty and in special conventions, the six mile rule has frequently been extended to more than six miles.

A ten-mile rule was adopted in the Anglo-French Convention of August 2nd, 1839.[232] The same limit was also adopted by the North Sea Fisheries Convention of May 6th, 1882.[233] However, in the Anglo-Norwegian fisheries case, the I.C.J. deemed it necessary to point out that 'although the ten-mile rule had been adopted by certain states both in their national law and in their treaties and conventions, and although certain arbitral decisions had applied it as between these states, other states had adopted a different limit.' Consequently, the ten-mile rule 'had not yet acquired the authority of a general rule of international law.'[234]

12-mile rule for bays was favoured by the Institute of International Law in 1894, unless a continuous usage of a long standing has sanctioned a greater width.[235] At its Vienna Conference, in 1926, the ILA accepted the principle that in

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232. Herstlet, Treaties, vol.5, p.89.

233. Both the 1839 and the 1882 Conventions were denounced by the parties concerned by the adoption of the European Fisheries Convention of 1964.

234. At pp.116 and 131 of the judgment.

235. Annuaire, vol.13, p.329.

the case of bays 'territorial waters shall follow the sinuosities of the coast unless an occupation or established usage generally recognised by nations has sanctioned a greater limit.'[236]

Finally, this question has been slightly obscured in the Commission's debate concerning an arbitrary length of this line between low water marks: 10, 25, 15 or 24 miles.[237] At the 1958 Geneva Conference a 24-mile rule was adopted for bays.[238]

(iii) The Definition of Islands

Islands constitute, in relation to baseline problems, a third exception to the normal rule of shoreline baseline. An island has been defined as 'a naturally formed area of land, surrounded by water, which is above water at high-tide.'[239] All ordinary islands, as defined here, have the normal belt

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236. Article 7 of the Draft Convention on the 'Law of Maritime Jurisdiction in time of peac,' 34th Rep., p.102.

237. U.N. Doc.A/C.6/1. 378.

238. The definition of a bay is contained in Article 7 of the Convention on the Territorial Sea and Contiguous Zone. It is not the purpose of this section to comment upon the process through which this definition was formulated or to express any views on the several methods which might be used to determine whether a given body of a water is a bay within the meaning of the Article. For a good study on bays, see Commend M. P. Strohls's International Law of Bays, the Hague, 1963; especially Chapter Two, where he deals with Article 7.

239. Article 10(1) of the Convention on the Territorial Sea and Contiguous Zone.

of territorial sea.[240] If an island is situated within six miles from the coast then the whole extent of waters would be territorial. In all other cases, an island is to be treated as possessing its own belt of territorial waters in accordance with the principles already outlined.

It is also agreed that a low-lying island, or a low-tide elevation, which is covered at high tide and dries only at low tide, has no territorial sea of its own, if wholly situated at a distance exceeding the breadth of the territorial sea from the mainland or island.[241]

Finally, Figure 5 illustrates how the baseline, from which the breadth of the territorial sea is measured, is drawn in all the foregoing cases.

C. The Equidistance Line

As already mentioned, the equidistance line, whether medium or lateral, is defined as the line every point of which is equidistant from the nearest points of the baselines from which the breadth of the territorial sea of each state, is measured.[242] Normally, the equidistance line constitutes a series of straight lines, since it is unreasonable to

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240. Ibid, Article 10(2).

241. Ibid, Article 11(2). According to paragraph 1 of this Article, "Where a low-tide elevation is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the mainland or an island, the low-water line on that elevation may be used as the baseline for measuring the breadth of the territorial sea." Compare this part of Article 11 with Article 4(3) of the same Convention.

242. Article 6 of the Continental Shelf Convention.

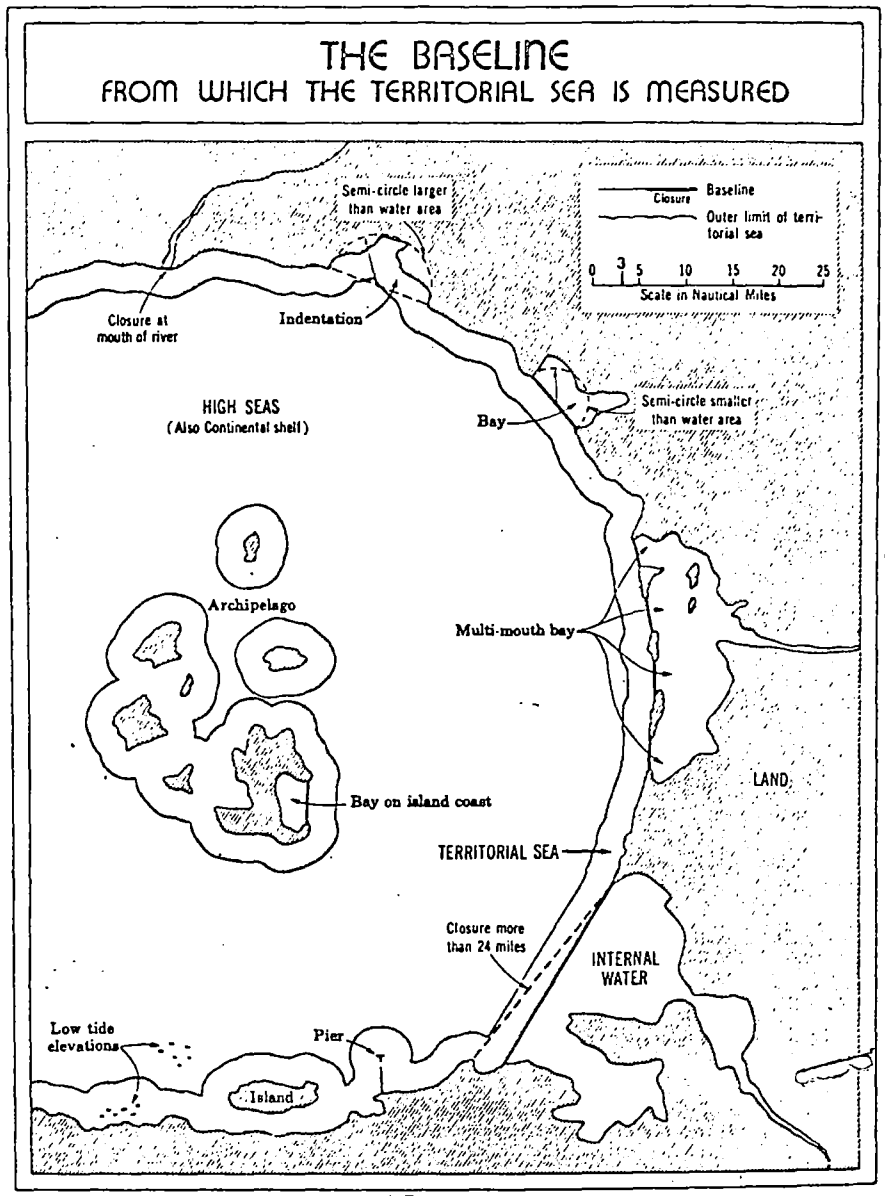

Fig. 5 -- From the U.S. Dept. of State, "Sovereignty of the Sea", Geog. Bull. No. 3, April, 1965, Pub. no. 7840.

expect the line to be so accurately drawn to make every point of which is equidistant from the nearest points on the opposite or adjacent baselines.

When a median line passes very near islands in the middle of a gulf or sea, if any island be found to be on the wrong side, i.e. if an island belonging to state A is situated closer to state B, it is not clear whether the median line should be shifted to accommodate the island in question on the grounds that the baseline taken into consideration is that of the island rather than the mainland. This is apparent from the fact that Article 6 speaks only of baselines, not 'mainland' or 'island' baselines. The case becomes more complicated when the island in question belongs to a third party, which might turn out to be a land-locked state. In spite of the fact Articles 2 to 7, inclusive, refer only to the coastal state as having the rights conferred by the Convention over the Continental Shelf, Articles 9, 10 and 11, refer only to States which, according to Article 8, are members of the U.N. or of any of the specialised agencies.[243] Moreover, Article 1 defines the Continental Shelf as the seabed and subsoil adjacent to the coast, which may be the coast of a mainland or an island; and there is nothing in the Convention to suggest that the islands referred to in Article 1(b) are those of established sovereignty. Accordingly, and

243. Articles 9, 10 and 11 deal with ratification of and accession to the Convention. The same applies to Articles 12 and 13, concerning reservations to and revision of the Convention, where states as such are mentioned.

as explained later,[244] if such tiny islands, as those in the Pacific and in the Atlantic, are given full rights under the Convention, the results would be very harmful to the interests of many coastal states which might consider such interpretation to the terms of the Convention as contrary to the principles of equity.

With regard to the drawing of a lateral boundary line from land to the outer limit of the Continental Shelf, it is necessary, as a first stage, to determine the segment of this line which relates to the boundary of the territorial sea. If the coast line is not irregular, the most reasonable boundary is a single straight line from the baseline of the land boundary terminus to the point of intersection of the envelopes of T. mile arcs drawn from the nearest points of the baselines of the two countries.[245] Such line will usually be perpendicular to the shoreline. If the coast line is exceptionally irregular, so that the two adjacent states are, in fact, opposite to each other, the most reasonable boundary is a line beginning at the land terminus, and continued by median line techniques between the lands of the

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244. Infra, Alternative Regimes for Deep-Sea Floor - see the first alternative.

245. T = Width of the territorial sea (3 nautical miles, 4, 6, 9, 12 etc.). For the delimitation of the seaward limit of the territorial sea by the 'envelopes of arcs of circles' method, see Boggs, supra No.231, p.253.

two countries.[246]

Article 6(2) of the Continental Shelf Convention applies to the boundary line beyond this first segment. It is, now, worth discussing the judicial interpretation of this article, which the ICJ has given in the North Sea Continental Shelf disputes.

3. Article 6(2) and the North Sea Continental Shelf Cases

A. The Application of the Continental Shelf Convention to the North Sea

The waters of the North Sea are shallow, and the whole seabed consists of Continental Shelf at a depth of less than 200 metres, except for the formation known as the Norwegian trough, a belt of water 200-650 metres deep fringing the southern and south-western coasts of Norway to a width averaging about 80-100 kms.

The North Sea has seven coastal states: the U.K., France, Belgium, the Netherlands, the Federal Republic of Germany, Denmark, and Norway. All of them, except for Norway, Germany and Belgium, have ratified or acceded to the Convention on the Continental Shelf.[247]

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246. Such is the case in the boundary between Denmark and Norway in their North Sea Continental Shelf. Denmark and the Netherlands tried to apply the same technique as between themselves, but the boundary drawn by them, as explained later, was regarded by the ICJ, in the North Sea Continental Shelf cases, as incompatible with the provisions of Article 6(2).

247. It is the official view that Norway should not accede to the Convention because of the feat that accession might prejudice her claim to what she considers now to be the effective median line. It has also been suggested that the German ratification of the Convention has been delayed

(Contd.)

Much of the greater part of the Continental Shelf has already been the subject of delimitation by a series of agreements: the U.K., which lies along the whole western side of it, concluded agreements with some of the eastern side countries, namely Norway, Denmark, and the Netherlands.[248] These three delimitations were carried out by the drawing of median lines which divided the intervening space equally between them. The line XY shown on Map 1, represents these delimitations. A similar lateral-median line, line OP on Map 1, was established between Norway and Denmark by agreement.[249] Two more agreements concluded between the Federal Republic on the one hand, and the kingdoms of Denmark and the Netherlands divided those areas of the shelf situated in the immediate vicinity of their coasts, by the lines AB and CD

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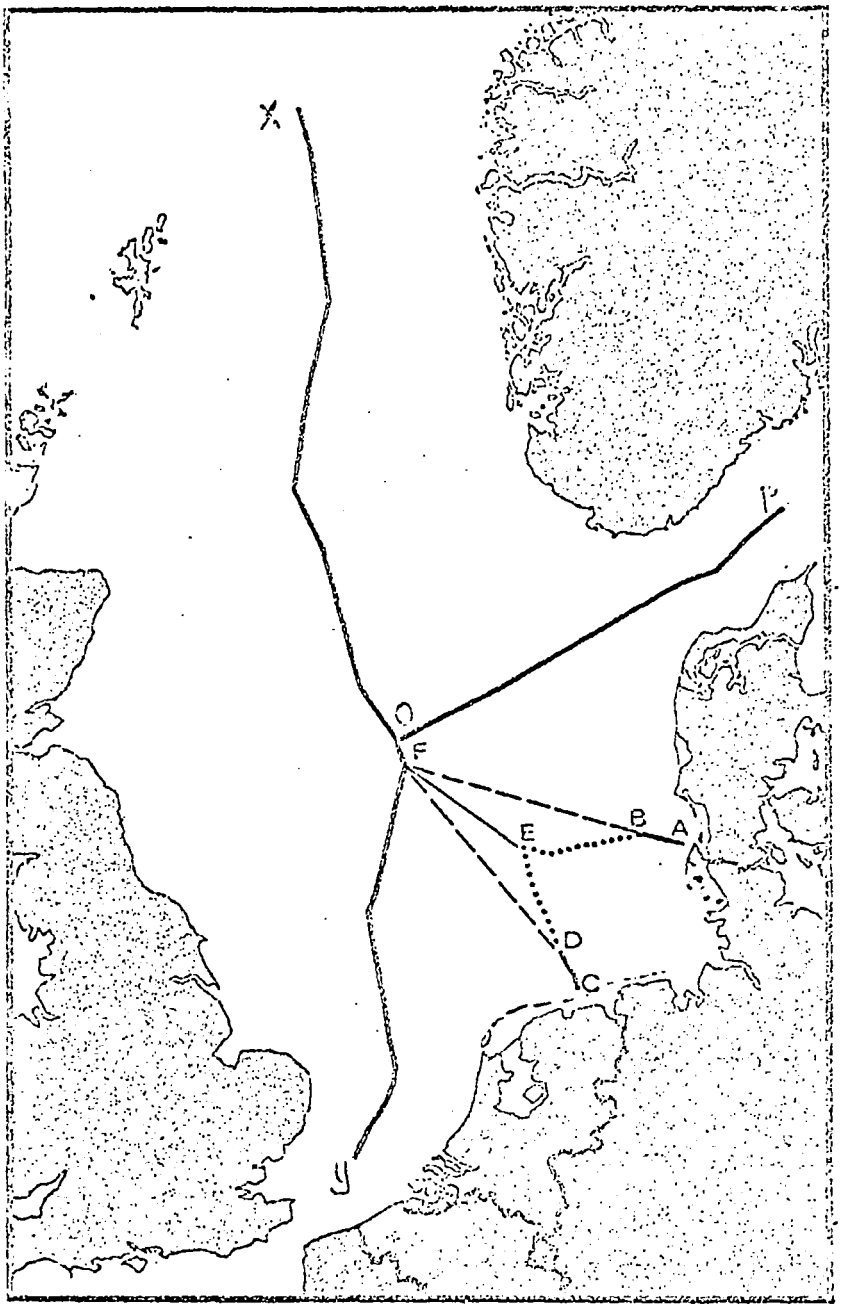
by a desire to secure first for Germany through negotiated settlement with Denmark and the Netherlands, a larger off shore area than it would receive through application of the boundary line provisions in Article 6. However, on January 20, 1964, the Federal Government published a proclamation which, after referring to the Continental Shelf Convention and to Germany's intent to ratify it, asserted the rights of the Federal Government over its Continental Shelf as defined in the Convention. For further details, see Young, 'Offshore Claims and Problems in the North Sea,' AJIL, 1965, p.505.

248. U.K.-Norway, Agreement signed March 10, 1965, and ratified June 29, 1965, Cmnd. 2626. U.K.-Denmark, Agreement signed March 3, 1966, and ratified Feb.6, 1967, Cmnd.2973. U.K.-Netherlands, two Agreements signed October 6, 1965, and ratified December 23, 1966, Cmnd.2830 and 2831.

249. Agreement between Norway and Denmark, Dec.8, 1965, Norwegian St. pr.p., nr.68.



Map 1 – From the Judgment

respectively, as shown on Map 1.[250] Finally, in addition to the partial boundary lines, Germany/Denmark and Germany/Netherlands, another line,. line EF, has been drawn in the area under an agreement between Denmark and the Netherlands.[251]

All the lines drawn in the area are established according to the principle of equidistance provided for in Article 6 of the Continental Shelf Convention. The areas attributable to the continental states all extend to the 'main stem' line, YZ, between Britain and the Continent with the exception of the West German area, which is pinched off by the meeting of the Danish and Dutch areas some 50 nautical miles north-north-west of Heligoland.

Under this Geneva-type delimitation, rough calculations indicate that approximately 46% of the shelf area of the North Sea would appertain to the U.K., about 24% to Norway (including the area of the Norwegian trough), 11% to the

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250. Germany-Denmark, June 9, 1965, ICLQ, 1966, p.904. And Germany-Holland, Dec.1, 1964, Netherlands Treaty Series, 1964, nr.184.

251. Denmark-Netherlands, March 31, 1966, Netherlands Treaty Series, 1966, nr.130. The Government of the Federal Republic, taking the view that this delimitation was res inter alios acta, notified the Governments of Denmark and the Netherlands that the agreement thus concluded could not 'have any effect on the question of the delimitation of the German-Netherlands or the German-Danish parts of the Continental Shelf in the North Sea:' see paragraph 9 of the judgment of the ICJ in the matter.

Netherlands, 10% to Denmark, 5% to West Germany, and about ½% to each of Belgium and France.[252]

B. The Point of Dispute Between Germany/Denmark and Germany/Netherlands

The further negotiations between Germany and her neighbours, namely, Denmark and the Netherlands, for the prolongation of the partial boundaries represented in lines AB and CD broke down mainly because Denmark and the Netherlands wished their prolongation also to be effected on the basis of the equidistance principle. This would have resulted in the dotted lines B-E and D-E, shown on Map 1. On the other hand, the Federal Republic considered that such an outcome would be inequitable because it would unduly curtail what the Republic believed should be its proper share of Continental Shelf area, on the basis of proportionality to the length of its North Sea coastline. Thus the Federal Republic would have wished to obtain in the course of the negotiations, in addition to the area already defined by the partial boundary lines of AB and CD, the area enclosed by the two pecked lines B-F and D-F, also shown on Map 1.

It will be observed that neither of the lines B-E and D-E, taken by itself, would produce this effect on the proper share of Germany, but only both of them together - an element regarded by Denmark and the Netherlands as irrelevant to what they viewed as being two separate and self-contained delimita-

252. Young, 'Off Shore .....' p.517.

tions, each of which should be carried out without reference to the other.

The reason for the result that would be produced by the two lines B-E and D-E, taken conjointly was explained by the ICJ as follows:

> "In the case of a concave or recessing coast such as that of the Federal Republic, the effect of the use of the equidistance method is to pull the line of the boundary inwards, in the direction of the concavity. Consequently, where two such lines are drawn at different points on a concave coast, they will, if the curvature is pronounced, inevitably meet at a relatively short distance from the coast, thus causing the related Continental Shelf area to take the form approximately of a triangle with its apex to seaward and, as it was put on behalf of the Federal Republic, "cut off" the coastal state from the further areas of the Continental Shelf outside of and beyond this triangle. The effect of concavity could of course equally be produced for a country with a straight coastline if the coasts of adjacent countries protruded immediately on either side of it ..... these effects are directly attributable to the use of the equidistance method of delimiting Continental Shelf boundaries off recessing ..... coasts. It goes without saying that on these types of coasts the equidistance method produces exactly similar effects in

the delimitation of the lateral boundaries of the territorial sea of the states concerned. However, owing to the very close proximity of such waters to the coasts concerned, these effects are much less marked and may be very slight."[253]

After the negotiations between the parties had failed to result in any agreement about the delimitation of the boundary extending beyond the partial one already agreed on, it was decided by special agreements between them to submit the matter to the ICJ.[254]

C. Pleadings Before the ICJ

According to the two Special Agreements, the Court is requested to decide the 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 Conventions of 1964 and 1965 between the Federal Republic and each of the Netherlands and Denmark respectively?"[255]

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253. Paragraph 8 of the judgment.

254. For the two Special Agreements together with a tripartite protocol, which were signed at Bonn on Feb.2, 1967, see the ICJ judgment, pp.7-10.

255. Article 1 of the Special Agreements. In the protocol, it was agreed that, for the purpose of appointing a judge ad hoc, the Governments of Denmark and of the Netherlands shall be considered parties in the same interest within the meaning of Article 31, paragraph 5, of the Statute of the Court.

In the course of the oral and written proceedings it was submitted on behalf of the Federal Republic of Germany that:

(1) The delimitation of the Continental Shelf between the parties in the North Sea is governed by the principle that each coastal state is entitled to a just and equitable share on the basis of proportionality to the coastline.

(2) The equidistance method mentioned in Article 6(2) of the Convention is not a rule, or has not become a rule, of customary international law.

(3) Even if Article 6(2) would be applicable between the parties, special circumstances within the meaning of the same article would exclude the application of the equidistance method in the present case, and, finally

(4) The equidistance method cannot be used for the delimitation of the Continental Shelf, unless it is established by agreement, arbitration, or otherwise, that it will achieve a just and equitable apportionment of the Continental Shelf among the coastal states.

The submissions presented by the Government of Denmark were identical mutatis mutandis with those of the Netherlands. It was stated on behalf of these two Governments that:

(1) The delimitation as between the parties of the said areas of the Continental Shelf in the North Sea is governed by the principles and rules of international law which are

expressed in Article 6(2) of the Convention, namely, the equidistance - special circumstances rule.

Accordingly,

(2) Since the parties are in disagreement, and since special circumstances which justify another line has not been established by the Federal Republic, the boundary between the parties is to be determined by application of the principle of equidistance indicated in the preceding submission.

However, although the proceedings concerning the two kingdomes have thus been joined, the cases themselves remain separate, at least in the sense that they relate to different areas of the North Sea Continental Shelf. In fact there is no a priori reason why the Court must reach identical conclusions in regard to them, - if for instance geographical features present in the one case are not present in the other. At the same time, the Court felt that the two cases may be treated as one, to the extent that the legal arguments presented on behalf of Denmark and the Netherlands, both before and since the joinder have been substantially identical, and have been presented either in common or in close co-operation.[256]

Finally, such are the geographical facts, events, and contentions in the light of which the Court has to determine what principles and rules of international law are applicable to the delimitation of the areas involved.

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256. See paragraph 11 of the judgment.

D. Findings and Reasoning: Judicium finium regundorum.[257]

It will not be possible, in the light of the limited scope of this work, to analyse and discuss all the principles and arguments contained in the judgment and in the various separate and dissenting opinions.[258] For this reason, only the main points of the judgment will be dealt with here.

In considering the contentions put forward on behalf of the Federal Republic, the Court declared that it was unable to accept them, because its task in this case related essentially to delimitation and not to the apportionment of the areas concerned.[259] Delimitation, the Court explained, is a process which involves establishing the boundaries of an area already appertaining to the coastal state and not the determination de novo of such an area.[260] Delimitation in an

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257. The Court, by eleven votes to six, passed its judgment in February 20, 1969. Those in favour are: President Bustamente, Judges Amoun, Gros, Fitzmaurice, Foster, Jessup, Khan, Padilla Nirvo, Perern, Onyeama, and Judge ad hoc Mosler. Against: Vice President Koretsky, Judges Bengzon, Lachs, Morelli, Tanaka, and Judge ad hoc Sorensen.

258. President Bustamente, Judges Jessup, Padilla Nervo, and Ammoun appended separate opinions to the judgment. On the other hand, Vice President Koretsky, Judges Tanaka, Morelli, Lachs and Judge ad hoc Sorensen appended dissenting opinions to the judgment. Judges Khan and Bengzon, each made a special declaration, in favour and against respectively.

259. Paragraph 18 of the judgment.

260. Ibid.

equitable manner is one thing, but not the same thing as awarding a just and equitable of a previously undelimited area.[261] More important is the fact that the doctrine of the just and equitable share appears, to the Court, to be wholly at variance with the fundamental rule that the right of the coastal state to the totality of the Continental Shelf which constitutes a natural prolongation of its territory is an inherent right.[262] It follows that even in such situations as that of the North Sea, the notion of apportioning the as yet undelimited area considered as a whole is quite foreign to, and inconsistent with, the basic concept of Continental Shelf entitlement, according to which the process of delimitation is essentially one of drawing a boundary line between areas which appertain to one or other of the states affected.[263] The Court went on to say, 'the delimitation itself must indeed be equitably effected, but it can not have as its object the awarding of an equitable share, or indeed of a share, as such, at all - for the fundamental concept involved does not admit of there being any thing undivided to share out.'[264]

The Court, then, turned to examine the contentions advanced on behalf of Denmark and the Netherlands. The

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261. Ibid.
262. Paragraph 19.
263. Paragraph 20.
264. Ibid.

question which the Court had to answer in this respect was whether the equidistance - special circumstances principle constitute a mandatory rule, either on a conventional or on a customary international law basis, in such a way as to govern any delimitation of the North Sea Continental Shelf areas between the parties concerned.

As to the first part of this question, the Court decided that the conventional rule of equidistance - special circumstances, contained in Article 6 of the Convention, can not be binding on the Federal Republic, since the Republic, though one of the signatories of the Convention, has never ratified it, and is consequently not a party.[265] But it was also contended that the Convention, and in particular Article 6, has become binding on the Federal Republic in another way, namely because, by conduct, by public statements and proclamations, the Republic has unilaterally assumed the obligations of the Convention.[266] To these contentions, the Court had only to say, 'it is clear only a very definite, very consistent course of conduct on the part of a state in the situation of the Federal Republic could justify the Court in upholding them; and if this had existed, i.e. if there had been a real intention to manifest acceptance or recognition of the applicability of the Convention, then it must be asked

265. Paragraph 26.
266. Paragraph 27.

why it was that the Federal Republic did not take the obvious step of giving expression to this readiness by simply ratifying the Convention.'[267] A further point, which adds to the difficulties involved by the Danish-Netherlands contention, is that if the Federal Republic had ratified the Convention, it could have entered a reservation to Article 6, by reason of the faculty to do so conferred by Article 12 of the Convention.[268] This faculty would remain, whatever the previous conduct of the Federal Republic might have been.[269]

According to the foregoing considerations, the Court held that Article 6 of the Convention is not, as such, applicable to the delimitations involved in the present proceedings. Consequently the delimitation of the line E-F, as shown on Map 1, which was effected by Denmark and the Netherlands under the 1966 agreement to which the Federal Republic was not a party, could not in any case find its validity in Article 6.[270] Furthermore, Article 6 of the Convention provides only for delimitation between 'adjacent' states, which Denmark and the Netherlands clearly are not,

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267. Paragraph 27.

268. Article 12(1) states, "At the time of signature, rafification, or accession, any state may make reservations to articles of the Convention other than to Articles 1 to 3 inclusive."

269. Paragraph 30.

270. Paragraphs 34 and 36. As to the Danish-Netherlands Agreement of March 31, 1966, see note 251 above.

or between 'opposite' states which, despite suggestions to the contrary, the Court thinks they equally are not.[271] The validity erga omnes, including the Federal Republic, of the delimitation of the line E-F must therefore be sought in some other source of law.

It is a main contention of Denmark and the Netherlands that there does in fact exist such a resource. These two Governments maintain that the Federal Republic, whatever its position may be in relation to the Convention, is in any event bound to accept delimitation on an equidistance - special circumstances basis, because the use of this method is not in the nature of ammerely conventional obligation, but is, or must now be regarded as involving, a rule that is of the corpus of general international law.[272]

According to this contention, the equidistance principle is seen as: (a) a necessary expression in the field of delimitation, and therefore as having an a priori character of, so to speak, juristic inevitability, or (b) if equidistance should not possess any a priori character of necessity or inherency, it should have become a rule of positive law through influences such as those of the Convention and state practice.

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271. Paragraph 36; see emphasis on this point made by Judge Khan in his declaration on p.61 of the judgment.

272. Mentioned in paragraphs 37 and 38 of the judgment.

The Court rejected the first contention on the grounds that there was no indication in the work done in this field by international legal bodies, in particular the Commission and the Committee of Experts, to suppose that it was incumbent on the drafters of the Convention to adopt a rule of equidistance, because such a rule must be mandatory as a matter of customary international law.[273] This conclusion is also supported by the fact that the Commission gave priority to delimitation by agreement, and by special circumstances before recourse can be had to the equidistance principle. Yet the record shows that even with these mitigations, doubts persisted, as to whether the equidistance principle would prove satisfactory in all circumstances.[274]

With regard to whether on some basis other than that of an a priori logical necessity, the equidistance principle has come to be regarded as a rule of customary international law, the Court examined the status of the principle as it was incorporated in the Convention, and in the light of state practice subsequent to the Convention.

The first point can conveniently be considered under the reservations article of the Convention.[275] The Court, therefore, decided that any articles that do not figure among those excluded from the faculty of reservation under

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273. Paragraphs 48-52 of the judgment.
274. Paragraph 55.
275. Article 12.

the said article, were not regarded declaratory of previously existing or emergent rules of law; and this is the inference the Court had in fact drawn in respect of Article 6.[276] The Court was critised for such inference on the grounds that there are certain other provisions, also not excluded from the faculty of reservations, but which do undoubtedly relate to matters that lie within the principle of customary international law.[277] The Court's answer was that these rules ante-date the Convention, and not directly connected with it. They were mentioned in the Convention not in order to declare their existence, but simply to ensure that they were not prejudiced by the exercise of Continental Shelf rights.[278] Furthermore, the Court was not convinced that such a conventional rule has become a general rule of international law within such a short period of time, since the Convention came into force, which is less than five years.[279] However, the Court did not stress the time factor more than what it regarded as an indispensable requirement relating to state practice, including that of states whose interests are involved, which should have been both extensive and virtually uniform in the sense of the provisions invoked.[280]

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276. Paragraph 64.

277. Reference was made to Articles 4 and 5(1), relating to the freedoms of laying cables and pipe lines, and of fishing.

278. Paragraph 65.

279. The Convention came into force in June 10, 1964.

280. Paragraphs 73 and 74.

Secondly, with respect to whether state practice in the matter of Continental Shelf delimitation has, subsequent to the Convention, been of such a kind as to satisfy this requirement, the Court cited some fifteen cases, in which Continental Shelf boundaries have been delimited according to the equidistance principle. It was found that over half the states concerned were or shortly became parties to the Convention, and were therefore acting in the application of the Convention. Accordingly, from their action no inference could legitimately be drawn as to the existence of customary international law in favour of the equidistance principle. As regards those states which were not, and have not become, parties to the Convention, the Court declared that it did not receive any material evidence that such states believed themselves to be applying a mandatory rule of customary international law. Furthermore, in almost all the cases cited, the delimitations concerned were median-line ones between opposite states, and not lateral delimitations between adjacent states; two cases which, according to the Court differ in various respects.[281]

In the light of these various considerations, the Court came to the conclusion that the Convention did not embody or crystallise any pre-existing or emergent rule of customary law, according to which the delimitation of Continental Shelf areas between adjacent states must, unless the parties

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281. Paragraphs 75, 76 and 79; and also para.57.

otherwise agree, be carried out on an equidistance - special circumstances basis; nor has its subsequent effect been constitutive of such a rule; and that state practice up-to-date has equally been insufficient for that purpose.[282] As a result of this conclusion, the Court decided that it was unnecessary to determine whether or not the configuration of the German North Sea coast constitutes a 'special circumstance' for the purposes of Article 6, since once the equidistance method of delimitation is determined not to be obligatory in any event, it ceases to be legally necessary to prove the existence of special circumstances in order to justify not using that method.[283]

After having arrived at this conclusion, the Court declared that its task was not to delimit the areas of Continental Shelf appertaining to each party; but merely to indicate to the parties the principles and rules of law in the light of which the methods for eventually effecting the delimitation will have to be chosen.[284] To that end the Court decided that 'the delimitation of the areas in question is to be effected by agreement in accordance with equitable principles, in such a way as to leave to each party all those parts of the Continental Shelf that constitute a natural prolongation of its land territory under the sea, without encroachment on the natural prolongation of the land territory

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282. Paragraphs 69 and 81.

283. Paragraph 82.

284. Paragraph 84.

of the other.'[285] In the words of the judgment, 'The parties are under an obligation to enter into negotiations with a view to arriving at an agreement and not merely to go through a formal process of negotiation as a sort of prior condition for the automatic application of a certain method of delimitation in the absence of agreement; they are under an obligation so to conduct themselves that the negotiations are meaningful .....'[286] The judgment justifies such an obligation by stating that 'not only ..... the obligation to negotiate, which the parties assumed by Article 1(2) of the Special Agreements, arises out of the Truman Proclamation, which, for the reasons given in paragraph 47, must be considered as having propounded the rules of law in this field, but also ..... this obligation constitutes a special application of a principle which underlies all international relations; and which is moreover recognised in Article 33(5) of the Charter of the U.N.'[287] The judgment goes on to say, 'so far therefore the negotiations have not satisfied the conditions indicated in paragraph 85(a).'[288]

In his separate opinion, Judge Ammoun did not agree with the Court that there exists Pactum de contrahendo in this case by saying, 'It (the obligation) can not be inferred from

285. Paragraph 101 (operative part).
286. Paragraph 85(a).
287. Paragraph 86.
288. Paragraph 87.

the Truman Proclamation, nor yet from Article 33 of the Charter, which concerns disputes the continuance of which is likely to endanger the maintenance of international peace and security ..... a submission that there was an obligation to negotiate, and that the negotiations carried out 'were not meaningful,' would amount to a prejudicial objection to the hearing of the case.'[289]

As to what is meant, here, by 'equitable principles', the Court declared that 'equity does not necessarily imply equality ..... but in the present case there are three states whose North Sea coastlines are in fact comparable in length and which therefore have been given broadly equal treatment by nature except that the configuration of one of the coastlines would, if the equidistance method is used, deny to one of these states treatment equal or comparable to that given the other two.' Therefore, the rule which has to be deduced from the principle of equity in the present case is that of 'a reasonable degree of proportionality between the extent of the Continental Shelf appertaining to the states concerned and the length of their respective coast-lines.'[290]

Although this solution does not refer to any sort of practice as how to apply it practically, it starts from the idea of natural prolongation of the land territory, and

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289. Ammoun, Separate Opinion, paragraph 47.
290. Paragraphs 91 and 98.

implies the realignment, in the form of a single straight baseline, of the concave coast of the Federal Republic.[291] This method could be criticised in its practical application, for failing to avoid overlappings of one sector over the Continental Shelf over another at some distance from the coast. For this common sector, the Court recommends division into equal shares unless the parties agree on a regime of joint exploitation to preserve the unity of a deposit.[292] Furthermore, it amounts to a return from back door to Germany's proposal of apportionment into just and equitable shares, which the Court has rejected.

Finally, Judge Ammoun suggested a method based on equidistance - special circumstances.[293] This method, which was rejected as not being a rule of treaty law or customary international law, may, in his opinion, be re-adopted by a general principle of law, namely equity.[294] He explains that 'special circumstances' exists in the present case by the configuration of the coast of the Federal Republic, which should be taken into account to avoid the inequitable application of the equidistance line pure and simple.[295] The front must thus not be understood as meaning

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291. Paragraph 98.

292. Paragraph 99. There already exists a number of agreements on the joint exploitation, or the regulation by another manner, of a deposit extending across a boundary line. Most of these agreements are in the North Sea and in the Arabian-Persian Gulf; for further details, see the separate opinion of Jessup, pp.23-25.

293. Paragraph 52 of his separate opinion.

294. Ibid.

295. Supra, para.53.

the coast with its more or less pronounced bends on the water line.[296] Accordingly, Judge Ammoun suggests, as in the Fisheries Case and in the case of bays, a single straight baseline extending along the coast of the Federal Republic from one of its extremities to the other which would completely obliterate its concavity.[297] The bases for the delimitation of the Continental Shelf as between the parties having been determined, the equidistance lines would then be drawn taking as the starting point the intersections of the said baselines of the Federal Republic and those of the Netherlands and Denmark respectively. The area appertaining to the Federal Republic would be contained between the two equidistance lines and would extent out to sea as far as their point of intersection, as shown in Map 2.[298]

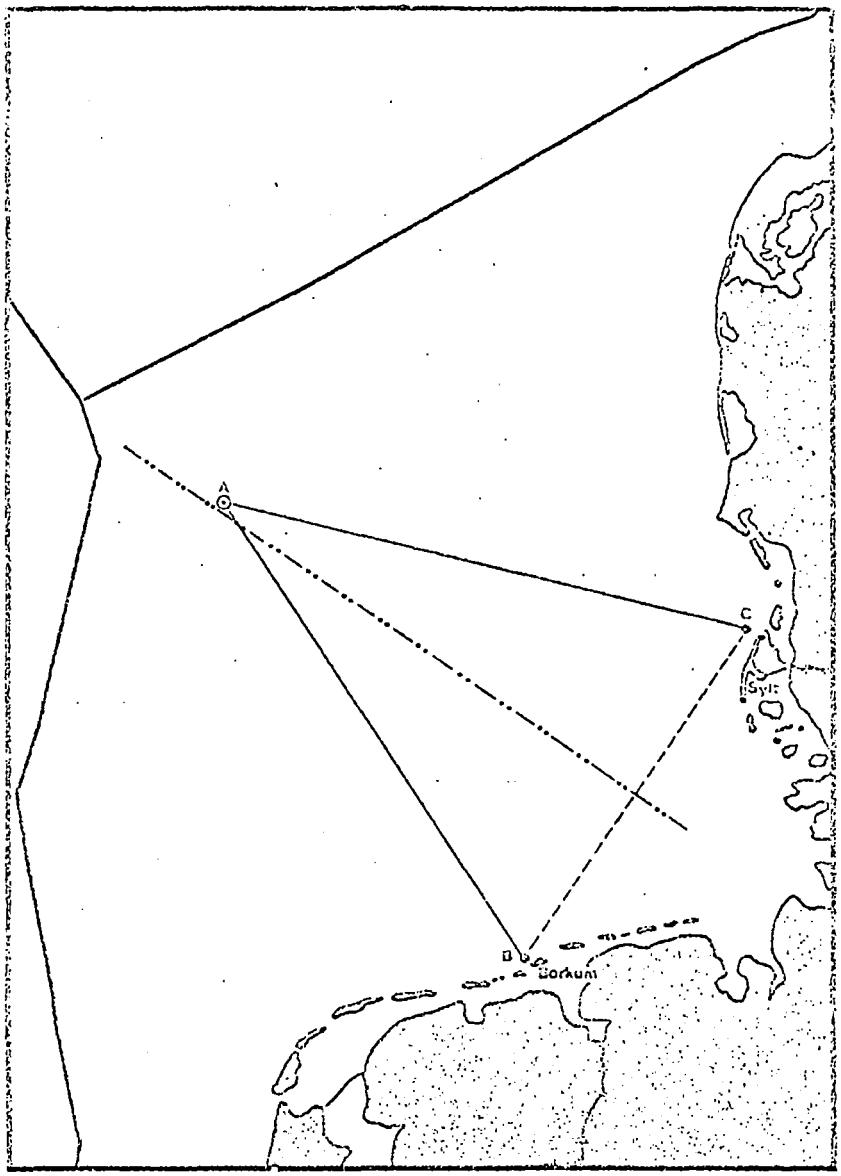
Conclusion

The problem of delimitation is one of general application to all seaward areas under national jurisdiction. Positive international law is silent on this matter, and the few agreements dealing with sea boundary questions were arrived

296. Supra, para.54.

297. Supra, para.55.

298. This method is in fact identical in many ways with that recommended by the Court to the parties in paragraph 98 of the judgment. In both cases, the coastal front is adopted as the baseline for delimiting the areas in question. Moreover, the Court emphasises the importance of establishing one or more straight baselines, where the parties wish to employ in particular the equidistance method of delimitation. The only difference seems to be technical: while the Court considers the method of delimitation is a matter for the parties to decide, Judge Ammoun prescribes to them the equidistance principle as explained above.



Map 2 – From the Separate Opinion of Judge Ammoun.

at through negotiations rather than the application of any general rule. The inherited problem with regard to the delimitation of these areas is that they have never been defined precisely under any international convention. The outer limits as well as the inward limits of the territorial sea, any contiguous zone, and the Continental Shelf are mostly regulated by national laws which differ from one country to another.

The principle of equidistance as a fair method of determining a boundary was adopted in Article 6 of the Convention on the Continental Shelf. The trouble comes in its application to specific situations where the general language of the Convention fails to provide a clear or adequate answer. This is the more regrettable because Article 6 gives the appearance of furnishing an automatic solution on which one could rely when the states concerned could not agree. There are, at least, three types of difficulties in applying the principle of equidistance as a general rule:

One type of difficulty relates to the baselines from which the boundary is to be measured. Suppose states A and B are opposite each other and both are parties to the Shelf Convention, but that only B is a party to the Territorial Sea Convention. A measures its territorial sea from base-lines further seaward than those specified in the Territorial Sea Convention. Under a literal interpretation of Article 6,

the shelf boundary between A and B is the line equidistant between the baselines, even though A thereby acquires substantially more shelf area than B, whose baselines have been restrained by the Convention rules. A similar displacement of the line will occur in cases where the states concerned are adjacent to one another rather than opposite.

A second class of difficulties arises from the problem of islands. What role is to be assigned to islands in determining the equidistance boundary line? The Shelf Convention is silent on this point, except to affirm in Article 1 that islands also possess shelf areas. Article 6 speaks only of baselines, not "mainland" or "island" baselines. If state A possesses an island three-quarters of the way across the sea toward state B, does this mean that state A gets seven-eighths of the shelf between itself and B? If B possesses other islands close to A, does the shelf boundary zig-zag accordingly? Such islands, situated off the coasts of other countries, might cause vexing problems if they were given full rights under the regime of the Convention.

A third group of difficulties is the case of adjacent states with the coast of one of them either concave or convex. This is best exemplified in the North Sea Continental Shelf cases. As already explained, the ICJ refused to apply Article 6(2) as a matter of law. This type of difficulty is perhaps less problematic since 'special circumstances,' which justify departures from the equidistance principle, might be

invoked successfully. But the Convention fails to define the 'special circumstances' in which it recognises that a boundary other than the line of equidistance may be justified. This gap leaves the way open for raising all kinds of allegations regarding 'special circumstances' in order to prevent the application of the equidistance rule.

There is no doubt that all these obstacles can be readily removed, as the Convention provides, by agreement among the states concerned. This was also decided by the ICJ in the North Sea Cases. Those who may become involved in these boundary problems should be aware that the Convention rules do not furnish guaranteed and automatic applicable solutions, even in cases where the parties are bound by them in principle. The Convention is only a point of departure for negotiations. The 'key' word for any meaningful negotiation is 'equity' rather than the application of one method of delimitation or another. 'Equity' is the path to any just and lasting boundary settlement. It has been provided for in the Truman Proclamation as well as in those of the Arab States on the Arabian-Persian Gulf. It was also the cardinal principle of the ICJ decision in the North Sea Continental Shelf Cases.

PART THREE

The Legal Regime of the Deep-Sea Floor

Section I - The International Law of "Ocean Space."[1]

1. The Impact of Science and Technology on Law

It is now more than ten years since the Convention on the Continental Shelf was concluded at Geneva. During this period, the exploitation of mineral deposits, particularly oil and gas, in the shelf area has become an important part of the world's normal supply.[2] Meanwhile, the technical

1. Griffin in his article entitled 'The Emerging Law of Ocean Space,' 1 International Lawyer, 1967, p.545, defines 'ocean space' as comprehending, 'water surface, water column, seabed and subsoil.' "Inner space" was first used by President Kennedy, presumably, in reference to the seabed and subsoil of the high seas beyond present national jurisdiction.

2. Some 18 nations have been reported to possess commercial production offshore of oil and gas, while at least 60 countries are engaged in exploitation or development. Some 11% of world oil and 6% of world gas production comes from offshore areas; for further details, see Coene, 'Profile of Marine Resources,' paper presented at the Conference on Law, Organization and Security in the Use of the Ocean, Columbus, Ohio, March, 1967, pp. 3-6.

ability of coastal states is now advancing into the deep sea beyond the outer limit of the geographical shelf.

For the present only the U.S., the U.S.S.R., Japan, Britain, France, Australia, and Canada have developed sufficient technology of oceanography and non-land-mining to be able to think of embarking upon exploiting the natural resources of the deep ocean floor. The first two countries are, moreover, well ahead of the rest. In the U.S. it is now precisely those firms which have been prominent in the space race who are now largely beginning to look seriously at the economic possibilities of the deep.[3]

This technological development led to the discovery of considerable mineral deposits on the floor of the ocean. The minerals that are likely to be exploited economically are chiefly nodules of manganese, copper, nickle and cobalt, and phosphates, gas and petroleum. Their general location is known in areas of the Pacific, Atlantic and Indian Ocean floors but outside existing national jurisdiction. Until recently, such resources were viewed as scientific oddities rather than as potential natural resources. Now, there are glowing accounts of the vastness of the deposits of these materials which are thought to be several times more valuable

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3. 'Russia's call to avert ocean-floor arams race,' The Times, Friday, July 12, 1968.

than those on land.[4]

What is more important than the discovery of the minerals themselves, is the development within the last few years of a submersible craft which can stay submerged at great depths for a considerable time.[5] Semi-submersible drilling rigs already in operation are capable of drilling to depths of 350 metres.[6] These and all the patterns that eventually emerge could clearly bring huge international problems. They are a menace to navigation and their crew. Pollution caused by radio active waste and normal activities in drilling oil and gas is also harmful to fishing and fish product. There are the disputes over sovereign rights in the deep sea and national competition to exploit the same deposits.

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4. It has been estimated that some 1,500,000 million tons of nodules lie on the floor of the Pacific alone, to which a further 10,000 million tons are added every year, most of which consist of iron and manganese: see Brown, E. D., "Deep Sea Mining: The Legal Regime of Inner Space." Y.B.W.A., 1968, p.174.

5. Engineers in the U.S. have produced the RUM (Remote Underwater Manipulator), which is a tracked vehicle carrying a variety of instruments and controlled by console from the surface. The Aluminant, another submersible craft, was launched by the U.S. in 1964. It can travel about 100 miles at depths down to 15,000 feet. It is also fitted with 9 ft. arms which can move in six ways and lift 200 pound weights. Both the Aluminant and RUM-type vehicles proved their worth during the search for and recovery of the U.S. H-bomb lost off the Spanish coast in 1966: see Brown, loc.cit., p.175.

6. Luard, E., 'Legal tangles over seabed wealth,' The Times, June 7, 1968.

There is also the effect on world prices, and therefore on the main revenues of some countries. Brooks has estimated that the amount of manganese thrown on the market by a single producer might be so great that the price would drop from 90¢ per unit to 50¢. The cobalt price might drop from $1.50 per pound to $1.00; and nickle from 70¢ to 65¢ a pound.[7] Two or three producers would have even greater effect. Therefore, if no adjustment could be reached both by the users of the minerals and by the producers of the alternative sources of supply, such production might be economically self-defeating.[8]

There have been equally sensational developments in the military field. Some of the military benefits that could be derived from the use, or the permanent occupation, of the seabed are obvious. Anti-submarine warfare could be assisted by the establishment of detection and tracking under sea stations. With regard to surface ships, offensive action against them might be also undertaken from permanent under-sea stations, through the occupation of the strategic mountain ridges that cross the ocean bed. What is perhaps less obvious is the possible value of the deep sea for missile warfare. It has been suggested that, for offensive purposes, missiles fired from the seabed would not only be

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7. Brooks, B., 'Deep-Sea Manganese Nodules,' Paper presented at the 1967 Law of the Sea Institute Conference, University of Rhode Island, Kingston.

8. Ibid.

far closer to their targets than those fired from the mainland, and therefore more difficult to intercept, but the launchers would be more difficult to put out of action.[9] Still more important, now that anti-ballistic systems are being deployed, would be the defensive value of missiles on the seabed. Because they could be launched far earlier in the light of the incoming missile, seabed anti-missiles would have a far greater chance of hitting them before their multiple war heads had separated.[10]

These various developments in relation to the use of the oceanic floors would not be so alarming if international law, and in particular the Geneva Convention on the Continental Shelf, was clearer about national rights on the seabed. There could, therefore, shortly arise innumerable disputes and untold dangers - the development of a new dimension in the arms race, bitter conflicts on rights of sovereignty, the under-mining of present markets in minerals, even perhaps a new form of competitive colonialism beneath the sea - unless some international action is taken. The law of the sea, as has been so far developed, remains essentially the law of the surface waters and the Continental Shelf. The ocean depths have been as far beyond the reach and concern of the law as they have been beyond the knowledge and range of action of oceanography. The law must now follow the oceanographers into the depths, formulate whatever code for their exploration and

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9. Luard, supra No.6.

10. Ibid.

exploitation may prove to be required, and determine right of user of and title to whatever resources may be found there. "We must add on Ocean Depths Treaty to the U.N. Conventions on the Law of the Sea ..... the prototypes for such a treaty already exist in the U.N. Conventions on the Law of the Sea, the Antarctic Treaty, the Nuclear Test Ban Treaty, the Nuclear Liability Conventions, and the Outer Space Treaty."[11]

2. The U.N. Takes the Initiative:

(a) The Problem Before the General Assembly

This new problem received much attention on both international and national levels, by public and private bodies. In the U.N., significant resolutions were adopted at the 1966 and 1967 sessions of the General Assembly. The 1966 resolution requested the Secretary General to survey the existing state of knowledge with respect to marine resources beyond the Continental Shelf, excluding fish, to review with the aid of a group of experts, current activities of marine science and technology and formulate proposals for expanded international co-operation in understanding the marine environment; and to report thereon to the Assembly at its 1968 session.[12]

The 1967 action originated in a proposal put forward by Malta for a 'Declaration and treaty concerning the reservation,

11. Jenks, C. W., 'The New Science and the Law of Nationa,' ICLQ, 1968, p.327, at 329.

12. G.A. Resolution 2172 (XXI), December 8, 1966.

exclusively for peaceful purposes of the seabed and of the ocean floor, underlying the sea beyond the limits of present jurisdiction, and the use of their resources in the interests of mankind.'[13] In an accompanying memorandum the Maltese Government expressed the fear that technological progress would soon expose the ocean floor to competitive national appropriation and use, with risks of militarisation and exploitation for the national advantage of technologically developed countries. It therefore urged immediate steps to establish by treaty the propositions that the deep-sea floor is not subject to national appropriation in any manner and shall be reserved exclusively for peaceful purposes; that its exploration be undertaken in a manner consistent with the Charter; and that exploitation be carried on in the interests of mankind, with the financial benefits therefrom being 'used primarily to promote the development of poor countries.'[14] An international agency was envisaged to assume jurisdiction over the seabed and ocean floor as "trustee" for all states and to exercise supervisory and

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13. U.N. Doc.A/6695, August 18, 1967.

14. Ibid.

regulatory functions.[15]

The Maltese proposals, revised to call only for an examination of the question, was the subject of extensive debate in the Assembly's First Committee. In due course a resolution was framed and subsequently adopted unanimously by the Assembly on December 18, 1967.[16] This provides for the creation of an ad hoc Committee of 35 members to study

15. Ibid, p.3, para.4. Many Congressmen in the U.S. opposed vigorously the Maltese proposal. Their comments reveal a strong anti-United Nations flavour and a national economic interest. Some two dozen resolutions were introduced in the Halls of Congress opposing any move to vest title to the ocean floor in the U.N. Opposition was based on the view that such action was premature and ill-advised; that the organisation, being a "mediator" not a "sovereign," was hardly capable of undertaking the task. The U.N. was described by some representatives as a "wind tunnel" and an "unstable" organisation. Certain representatives impunged the very motives of Malta, the so-called "chunk of rock out in the Mediterranean." Some regarded the Maltese as acting for the U.K., others for the U.S.S.R., and still others for the purpose of preventing a wide interpretation of the exploitability provision of the Continental Shelf Convention. Malta, they declared, was "not a sounding board for any State," and "nobody put the Maltese Government up to it." The policy of this group was expressed by Congressman Hanna where he says, "our attitude towards the law of the sea should continue to be that of offering prescriptive rights,"to those who can obtain and develop the resources, "and then take to a mediation point how you are going to resolve the possible frictions between states." Finally, a number of legislators described U.S. acceptance of the Maltese plan a giveaway, the "biggest giveaway in the history of America" of "American property" and "sovereignty." For further details, see Weissberg, G., "International Law meets the Short-term National Interest; The Maltese proposal on the seabed and ocean floor - Its fate in Two Cities", ICLQ, January, 1969, pp.41-102.

16. Resolution 2340 (XXII) was adopted by a vote of 99.0.0. This resolution was based on a draft resolution introduced by Belgium in the First Committee: U.N. Doc.A/6964, Dec.12, 1967.

and report on the topic at the Assembly's next regular session. The study would include:

(1) A survey of past and present activities of the U.N., the Specialised Agencies, the International Atomic Energy Agency and other Inter-Governmental bodies with regard to the seabed and the ocean floor, and of existing international agreements concerning these areas.

(2) An account of the scientific, technical, economic, and legal aspects of this question; and

(3) An indication of the practical means to promote international co-operation in the exploration, conservation and use of the seabed and the ocean floor, and the subsoil thereof, and of their resources. The Assembly stated that the exploration and the use of the environment concerned should be conducted in accordance with the principles and purposes of the Charter, in the interest of maintaining international peace and security and for the benefit of all mankind.

(b) The Interim Report of the Ad Hoc Committee[17]

As in the First Committee of the General Assembly, the speeches made at the first two sessions of the elected Ad Hoc Committee had witnessed another clash between the national

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17. States elected to serve on the Committee were: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Ceylon, Chile, Czechoslovakia, Equador, El Salvador, France, Iceland, India, Italy, Japan, Kenya, Liberia, Libya, Malta, Norway, Pakistan, Peru, Poland, Rumania, Senegal, Somalia, Tanzania, Thailand, U.A.R., U.K., U.S.A., U.S.S.R., and Yugoslavia.

and international interests.[18] At the first session, the U.S., for example, while favouring international co-operation, stressed the study aspects of the Committee's work and adopted a most cautious approach on the establishment of an international regime. The Deputy U.S. Representative to the Ad Hoc Committee emphasised that before the implications of the Maltese proposal could be assessed in any definite manner the ground had to be prepared through legal studies and scientific technical evaluations. He considered it "quite clear" that, before treaties could be concluded, States would need "a great deal" more knowledge than they currently had at their disposal.[19]

At the second session, the Committee discussed the proposals of various countries, in particular those of the U.S.S.R. and the U.S. Regarding scientific, technological and economic questions both the representatives of the Soviet Union and of the U.S. had welcomed the proposal for an International Decade of Ocean Exploration which would include more than simply an expansion of existing international co-operative

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18. The first two sessions were held at the U.N. Headquarters from March 18 to 27, 1968, and June 17 to July 9, 1968. During the first session, a Legal Working Group, and a Technical and Economic Working Group were set up by the Committee. The Chairman distributed the work between the Committee and the two working groups. The Committee would deal with the political and international aspects of the subject, while each group should report to the Committee on the matters relating to its task.

19. U.N. Doc. A/AC.135/1, pp.12-17.

efforts.[20] The legal questions were extremely complex. A more precise definition of the notional jurisdiction of coastal states was necessary; this was also true for the outer boundaries of the Continental Shelf.[21] However, the Representative of the Soviet Union proposed the text of a draft resolution which would: (a) call on all States to utilise the seabed and the ocean floor "beyond the limits of territorial waters" exclusively for peaceful purposes, and (b) request the Eighteen-National Disarmament Committee (ENDC) to consider, "as an urgent matter," the issue of prohibiting the use of the said area for military purposes.[22]

As in the first session, the U.S. representative again avoided the legal issue by saying that a general agreement on every important point was necessary. According to him, if legal agreements were to be created for the seabed environment, they must rest on an accurate appreciation of both the physical features of the seabed and the technical and scientific capabilities for exploration and exploitation. However, he agreed with the Soviet Representative that the issue of prohibiting the use of the area for military purposes should

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20. The proposal was declared both by the Bureau and Advisory Board of the Inter-Governmental Oceanographic Commission and by President Johnson for the years 1970-1980; see U.N. Monthly Chronicle, July 1968, pp.47-48.

21. Such views were advanced, inter alia, by Belgium, Canada, Denmark, France and Italy: U.N. Doc.A/AC.135/1, pp.26 and 33.

22. U.N. Doc.A/AC.135/20, June 20, 1968.

be studied by the ENDC.[23]

A number of other draft resolutions were submitted for consideration by the Committee but it was decided to defer action to the third and final session.[24]

(c) The Ad Hoc Committee's Final Report

The Committee held its third and final session in Rio de Janeiro from August 19 to 30. The Chairman in his final statement declared that in its three sessions the Committee had reached a wide measure of agreement which was "a solid foundation of achievement on which the General Assembly can build." The concluding part of the Report states that the Committee had studied the various aspects of the issue and had identified the main problems. It had recognised the need for further study and offered suggestions for this purpose. Certain considerations which related to the seabed and ocean floor "appeared to commend themselves with varying

23. U.N. Doc.A/AC.135/24, June 28, 1968. At the ENDC meeting held in Geneva between July 15 and August 28, 1968, several suggestions were made with regard to the problem of the prevention of an arms race on the seabed. The Committee concluded that this subject would be a "fruitful area" for its future work: U.N. Doc.A/7189/DC.231, p.6, para.29, September 4, 1968.

24. Most of these proposals advocated the establishment of some form of internationalism, or urged that the present situation be frozen, or suggested that the Ad Hoc Committee recommended to the Assembly adoption of a declaration analogous to the Declaration regarding Outer Space. See in particular the Indian Declaration: U.N. Doc.A/AC.135/21, June 20, 1968.

degrees of acceptance." In spite of efforts to the very end, however, "final agreement" on a set of principles could not be reached.[25]

The Report then lists two sets of draft principles - one proposed by 15 developing countries, and another introduced informally by the U.K. The proposal submitted by developing countries from Asia, Africa, and Latin-America enunciates the following principles:-

1. The seabed and the ocean floor as defined in the title of the item are the common heritage of mankind and no state may claim sovereignty or exercise it over any part of the area.[26]
2. The exploration, use and exploitation of the seabed shall be carried on exclusively for peaceful purposes.
3. The exploration, use and exploitation of the area shall be carried out for the benefit and interest of mankind.
4. It shall be carried out in accordance with the principles and purposes of the U.N. Charter "and an international regime to be established" with the purpose of contributing to the maintenance of peace, respect for territorial integrity, the interests of the coastal states, and the promotion of economic development, particularly of the developing countries whether coastal or land-locked.

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25. U.N. Doc.A/7230, p.17, paras, 87 and 88, September, 1968.
26. This area was defined as the part of the seabed which lies beyond the limits of present national jurisdiction. However, as stated earlier, this requires a more precise definition for the outer limits of present national jurisdiction; supra note 21.

5. The international regime shall also consider the most appropriate application of benefits derived from activities in the seabed, through international machinery, for the economic, social, scientific and technological progress of the developing countries.
6. All activities in the seabed shall conform to a set of guidelines aimed at protecting the rightful interest of other states.
7. The seabed shall be open to scientific investigation without discrimination, and states shall foster international co-operation in this investigation; and
8. The U.N. with the Specialised Agencies shall ensure the observance of these principles and guidelines.[27]

During the discussion on these principles there was unanimity that the seabed beyond the limits of national jurisdiction should be used exclusively for peaceful purposes. The problem here is to determine the precise meaning of the word "peaceful." It may be interpreted as meaning either non-military or non-aggressive. In the Antarctica Treaty and the treaty establishing the International Atomic Energy Agency, "peaceful" means non-military.[28] However, its usual meaning in international law and in the context of the Charter

27. The U.K. draft principles do not differ in substance from those already mentioned, except in minor details which do not call for comments.

28. Article 1 of the Antarctica Treaty signed in Washington on December 1, 1959; and Article 2 of the Atomic Energy Agency established on 26 October, 1956: see also the Report of the ILA, 52nd Conference, 1966, p.17.

of the U.N. is non-aggressive.[29] Therefore, in the absence of any specific agreement to the contrary, "peaceful" in the context of deep-sea floor must be taken in its ordinary meaning in international law, and be understood as non-aggressive.

It was also widely recognised that an internationally acceptable definition of the precise limits of the area under consideration was central to the whole question. This requires a more precise definition of the outer limit of the shelf. Connected with this question is the problem that limits of territorial waters are not fixed and vary from state to state.

Finally, the proposed principles envisage free access by all nations to all areas of ocean space, the rejection of national claims to ocean space, and the creation of a U.N. authority to grant exploration and exploitation licences to states and international organisations.[30]

A list of draft resolutions and other proposals submitted during the three sessions of the Committee is annexed to the Report, together with the reports of the two Working Groups

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29. See McMahon, J. F., 'Legal Aspects of Outer Space,' BYIL, 1962, p.339, at 360; see also Article IV of the Outer Space Treaty in AJIL, 1967, p.644.

30. This part of the Report is similar to a resolution introduced in the U.S. Senate by Senator Pell of Rhode Island, calling for efforts to secure General Assembly action on a proposed "Declaration of Legal Principles Governing Activities of States in the Exploration and Exploitation of Ocean Space." Later Senator Pell introduced a revised resolution setting forth a draft treaty instead of a declaration; see S. Res.186, 90th Cong. Sess. Nov.17, 1967, and S. Res. March 5, 1968.

and a list of documentation prepared by the Secretariat for the consideration of the Committee. The resolutions refer to such matters as the prohibition of military uses of the seabed, principles governing the activities of states in the environment, a U.S. proposal for an International Decade of Ocean Exploration, and a proposal by Iceland aimed at preventing ocean pollution as a result of seabed exploration. This Report and the annex to it were submitted to the General Assembly for consideration at its 23rd regular session.

(d) The General Assembly's Four Resolutions

The Final Report of the Ad Hoc Committee was considered by the First Committee of the General Assembly, at 18 meetings held between 28 October, 1968, and 11 November, 1968, during which the Committee studied various draft resolutions.[31] The Committee deferred voting on these resolutions until December 1968.

In its Final Report to the General Assembly, the First Committee recommended four draft resolutions on the subject which was considered by the Ad Hoc Committee.[32] In draft resolution A, the First Committee recommends the establishment of a permanent Committee on the peaceful uses of the seabed and the ocean floor beyond the limits of national jurisdiction. The duty of this Committee would be to study

31. See U.N. Monthly Chronicle, December 1968, pp.53-61.

32. See Resolutions A, B, C, and D in paragraph 27 of the First Committee's Final Report to the General Assembly, No.A/7477, December 20, 1968.

the elaboration of the legal principles and norms which would promote international co-operation in the exploration and use of submarine areas beyond national jurisdiction for the benefit of mankind as a whole. Such co-operation would include the prevention of marine pollution and the use of such areas exclusively for peaceful purposes. To that end the Committee should work in close co-operation with the specialised agencies, the International Atomic Energy Agency and the inter-governmental bodies dealing with the problems referred to in this proposed resolution.[33]

Draft resolution B calls upon states to adopt appropriate safeguards against the dangers of pollution and other hazardous and harmful effects that might arise from the exploration and exploitation of the areas concerned.[34]

Draft resolution C requests the Secretary-General of the U.N. to undertake a study on the question of establishing in due time appropriate international machinery for the promotion of the exploration and exploitation of the resources of this area and the use of these resources in the interests of mankind.[35]

Finally, according to draft resoltuion D the concept of an Internal Decade of Ocean Exploration should be undertaken

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33. This draft resolution was adopted in the First Committee by 96.0.6.

34. The First Committee adopted this resolution by 101.0.1.

35. Unlike the three other resolutions, this was subject to much criticism from the socialist block. It was adopted by 77.9.18.; for further details see below.

within the framework of a long-term programme of research and exploration and the aegis of the U.N. Member states are invited to formulate proposals for national and international programmes to be undertaken during the Decade with due interest to the developing countries. Such proposals should be submitted to the U.N.E.S.C.O. for the Intergovernmental Oceanographic Commission in time to begin the Decade in 1970.[36]

These four resolutions were approved by the General Assembly.[37] It was also agreed that the new permanent Committee, which replaces the Ad Hoc Committee, shall be 42 members.[38] The extra seven seats went mainly to South America and to the Afro-Asian developing countries.

The main objection of the U.S.S.R. on resolution A was that the draft did not explicitly include the Continental Shelf within the limits of the area to be used exclusively for peaceful purposes. The Soviet Union was resolutely in favour of prohibiting military use of the seabed and the ocean floor, including the entire Continental Shelf. It also felt that the membership of the Standing Committee, as now

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36. This draft was adopted by 101.0.2.

37. See Resolutions 2467 A-D (XXIII), A/PV.1752, December 22, 1968. Resolution A was adopted by 112.0.7, with the abstention of the U.S.S.R. Resolution B was adopted unanimously. Resolution C was adopted by 85.9.25, with the abstention of both the U.K. and the U.S.A., while U.S.S.R. voted against. Resolution D was adopted without a vote.

38. The Ad Hoc Committee comprised 35 members.

defined, meant that the socialist countries were inadequately represented; at least one additional seat should be granted to them if the Committee was to have a wider membership than that of the Ad Hoc Committee.[39] According to the Soviet representative, the membership of the Committee, which would be dealing with questions of war and peace, should be determined through a political, not an arithmetical, approach.[40] Accordingly the U.S.S.R. abstained in the vote on that resolution expressing its support to the idea of setting up the Committee.

As in the First Committee, the U.S.S.R. voted against draft resolution C because it objected to establishing machinery that would serve only the interests of capitalist and imperialist monopolies. The Soviet representative said that the vote on the resolutions had shown that there was a broad consensus on most of the issues under consideration; only on the establishment of international machinery was there no consensus.[41] Concluding the U.S.S.R. representative said that the work of the Standing Committee, if it acted in accordance with the interests of all states and if its decisions and recommendations reflected a universally held viewpoint, would be useful.[42]

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39. The socialist countries received six seats in each of the Ad Hoc Committee and in the permanent Committee. In other words, the socialist block gained nothing of the extra seven seats in the new Committee.

40. See U.N. Doc.A/PV.1752, pp.27, 28, December 21, 1968.

41. Ibid, at p.31.

42. Ibid, at p.32.

Finally, the established Committee held its first session on 6 and 7 February. At the three meetings comprising the session, the Committee elected its officers, discussed its working methods and agreed to hold two sessions in New York from 10 to 28 March, 1969, and 11 to 28 August, 1969.[43]

It is hoped that the progress made by the General Assembly in adopting these four resolutions would be implemented by the Special Committee which was set up for this purpose.

3. The Problem before the ILA

The ILA gave special consideration to the legal regime of deep-sea mining at its 52nd Conference held in Helsinki, 1966. The Conference examined two preliminary questions, namely:

(1) Are mineral resources present in the ocean bed in commercial quantities?

(2) If the question under (1) can be answered affirmatively, is it technically possible to exploit these mineral resources?

After the Conference had answered both questions affirmatively, it turned to discuss and devise a distinct legal regime for deep-sea mining.[44] To that end the Conference rejected the application of the criterion of exploitability in Article 1 of the Shelf Convention, since that would lead to the partitioning of the submarine areas of the oceans between coastal

43. U.N. Monthly Chronicle, March, 1969.

44. ILA, 52nd Conference, 1966, p.787.

states, which, according to the Conference, exceeds the intention of the Convention to an unacceptable degree.[45] Accordingly, the Conference had before it three different approaches to the problem:

(1) That deep-sea mining should be governed by the principle of the freedom of the seas. This was rejected because the Conference realised that nobody would make large investments for exploration purposes in any area of the ocean floor where everyone else could freely drill in the same area and make a profit from this discovery.

(2) The partitioning of the ocean floor. This was also ruled out because it gives the coastal state a privileged position since there is no natural link between the coastal state and the ocean bed. In addition the choice of the basis on which the partition will have to take place may lead to great difficulties, some of which are the present day problems of delimitation of the Continental Shelf in the Arabian-Persian Gulf and the North Sea.

(3) The institution of an international legal regime. This can be developed along the following lines:

   (a) a special convention on deep-sea mining

   (b) the supervision of the exploration and exploitation of the natural resources could be submitted to a deep-sea mining authority,

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45. Ibid, at p.788.

as an international organisation under the auspices of the U.N., and

(c) The exploration and exploitation of the mineral resources would not take place by the U.N. itself because of the enormous financial risks involved.[46]

One of the main advantages of this proposal is that exploration and exploitation levies would benefit the U.N. and, accordingly, the whole community of states.

Finally, the Conference recommended the establishment of an International Committee for the study of the legal regime of deep-sea mining. This Committee which was set up in 1967, submitted a preliminary report with two main proposals:[47]

(1) That the outer limit of the Continental Shelf should be drawn at a depth of 500 metres,[48] and

(2) A treaty-based regime for the ocean bed and its subsoil should give control of these areas to a specialised

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46. This proposal is based on the Report of the Netherlands Branch Committee to the Conference, supra, p.797.

47. ILA, International Committee on Deep-Sea Mining; L. J. Bouchez, Rapporteur; Report on the Exploration and Exploitation of Minerals on the Ocean Bed and in its Subsoil, January 24, 1967.

48. In a subsequent Draft Report, November 22, 1967, the 500 metre isobath was linked with a distance criterion from the coast. In the Final Report of the Committee, dated 21 February, 1968, the same limit, with variations thereon, is recommended to the 53rd Conference of the Association.

agency of the U.N. which would be empowered to give concessions and collect levies but would neither involve itself in the financial risks nor undertake exploration and exploitation.[49]

4. The Problem on the National Level

Official U.S. interest in deep-sea resources has also increased dramatically in the past three years. By the Marine Resources and Engineering Development Act of June 17, 1966, Congress created both a National Council on Marine Resources and Engineering Development, and a Commission on Marine Science, Engineering and Resources.[50] Both bodies are currently engaged in wide-ranging studies of national needs and goals in this field, including points of international law and relations. Their reports and recommendations

49. The ILA held its 53rd Conference in Buenos Aires, in August, 1968. It is understood that this subject has received a special consideration by the various Branches of the Association, in particular the British and the Netherlands Committees on Deep-Sea Mining. As the Conference's Report was received too late to allow any further discussions on the subject, it would be sufficient to mention, here, that the Conference has adopted a resolution by which it requests the International Committee to continue its work. The Conference declared that various regimes - freedom of exploration and exploitation; the right of the first occupier; the granting of concessions by a super national authority - may be considered for adoption in respect of the areas beyond the depth of 200 metres. The Conference also realised that the importance of the investments necessary for submarine exploration and exploitation requires a regime offering a satisfactory degree of security. Accordingly, the Conference directed the Committee to examine this question in all its aspects: See Bulletin of the 53rd Conference, Buenos Aires, 25th-31st August, 1968, pp.20-21.

50. 80 Stat. 203, 33 U.S.C. Sess.1101-1108.

may be expected to have substantial influence on the course of American policy.[51] In the Congress itself the subject has also received increasing attention.[52] In addition to this official activity, many private American Groups, both legal and technical, are involved in conferences and study projects on various aspects of deep-sea development.[53] In the following section, some of the views expressed there will be displayed and looked at more closely.

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51. See Marine Science Affairs, 1967, 'A year of Transition: First report of the President to the Congress on Marine Resources and Engineering Development;' see also 'A Year of Plans and Progress: Second Report of the President,' in the 1968 Marine Science Affairs.

52. Supra, notes 15 and 30.

53. Among the Conferences which were held during the year 1967 are the following: A Conference by the American Bar Association, Institute on Marine Resources, held in June, 1967, Long Beach, California; the Conference on Law, Organisation, and Security in the Use of the Ocean, Columbus, Ohio, March, 1967; The Conference on Marine Frontiers, University of Rhode Island, July, 1967; and the Conference of the Law of the Sea Institute, University of Rhode Island, June, 1967.

Section II - Optional Criteria for Deep-Sea Mineral

1. The Present Status of Deep-Sea Floor

The present international law of the sea provides for freedom of the high seas for various purposes with recognition of the need for regulation of fisheries for purposes of conservation; for sovereignty of the maritime belt by the adjacent state subject to the right of innocent passage by vessels of all states; and for the exclusive right to exploit the resources of the shelf by the adjacent state.

According to some writers, this latter right, i.e. the right to exploit the resources of the shelf, extends to all submarine areas including the bottom of the oceans.[54] As we have seen earlier, the principal legal argument in support of this view is based on the language of Article 1 of the Continental Shelf Convention.[55] If technology makes exploitation activity possible anywhere in the deep-sea, the argument goes, then the limits of coastal state jurisdiction are automatically extended under this language up to the point where Article 6 of the Convention comes into play

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54. See note 130 in Part One.

55. Ibid.

to establish boundaries with other coastal states whose sovereign rights have been similarly extended.[56]

It has been suggested that this litteral interpretation of Article 1 of the Convention produces several desirable effects: it attributes authority and responsibility to a particular state, establishes a uniform seabed regime from the coast outward, reduces chances of conflict, and promotes the certainty and stability necessary to encourage entrepreneurs.[57]

On the other hand, it is asserted that such construction of Article 1 rests on unsound grounds.[58] The Continental Shelf Convention was designed to apply to limited off-shore areas related to the neighbouring coast. Although the legal shelf concept is broader than its physical counterpart, the use of the term "Continental Shelf" itself implies a distinction between the areas so defined and the floor of the great oceans. The key phrase in this connection is the reference in Article 1 to "submarine areas adjacent to the coast." While "adjacency" is not specifically defined, it undoubtedly conveys a notion of limitation which cannot be reconciled with indefinite extension into the vast oceans.[59] In

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56. Notes 128 and 129 in Part One.

57. Mero, The Mineral Resources of the Sea, 1965, pp.289-290; and also Craven, 'Technology and the Law of the Sea,' paper presented at Columbus Conference, Ohio, note 40 above.

58. Young, 'The Legal Regime of the Deep-Sea Floor,' AJIL, 1968, p.641, at 644.

59. Ibid.

addition, the work of the ILC and the 1958 Conference suggests that these groups did not think in terms of the bed of the deep sea at all, simply because it did not then appear to be within reach.[60]

If the Continental Shelf doctrine does not apply beyond a certain limit, though one not yet defined, the present status of the deep-sea floor must be determined by recourse to other principles of customary law. From this point of view, the concept of "freedom of the seas" covers the bed of the sea as well as the waters above it.[61] If the principle of acquisition by discovery and occupation were applied to this vast area, as it was to the American continents after their discovery by Europeans, the world would be faced by rivalries and wars even worse than those of the last few centuries among the maritime nations.

Therefore, in the interests of world peace, of efficient exploitation of vast resources, and of equitable opportunity

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60. See remarks made by Scelle, Fitzmaurice, and Amador in 1YBILC, 1956, pp.135, 137; and also Mouton's statement in the Fourth Committee, supra note 130 in Part One.

61. However, as stated in Part Two, Section I(1), writers are divided on the status of submarine areas. Those who suggested that submarine areas are res nullius were faced with the problem of "effective occupation" on the seabed, a problem which presents itself more seriously on the bottom of the oceans. Young, infra note 64, is of the opinion that the existing customary law allows a state to acquire rights of a territorial character over a portion of ocean bottom through occupation. This view is supported in some measure by a limited amount of practice with respect to such resources as sedentary fisheries.

to develop and utilise these resources by all nations and peoples, the agreements concerning Antarctica and the Outer Space point the way to a general agreement on the bed of the high seas. To that end several alternative regimes for governing mineral exploitation of the deep-sea have been suggested. Before dealing with those alternatives, it is even more important that the outer limits of the shelf be fixed to avoid any serious international controversy.

2. The Outer Limit of the Continental Shelf

With regard to the outer limit of the shelf, various suggestions have been made in the past. These are:-

(1) Definition based on depth only.[62]

(2) Definition based on a distance from the coast,[63] and

(3) Definition in terms of a minimum and a maximum distance. The minimum distance to be stated in miles irrespective of depth, or whether the seabed could or could not be worked. All the shallows included within such limits would belong to the Continental Shelf. The maximum distance, on the other hand, would depend on depth.[64]

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62. A depth of 550 metres was advocated in Geneva by the Indian, Netherlands and U.K. delegations. Another depth of 500 metres was recommended by the International Committee on Deep-Sea Mining in its Report to the ILA, supra note 48; for further details, see Brown, infra notes 65 and 66.

63. See Brown, infra notes 65 and 66.

64. This proposal was suggested by Mr. El Khoury to the ILC, 1YBILC, 1951, p.271, paras,74 and 75. Along these lines, Mr. Young has recently suggested a limit of 300 metres depth or 100 miles line from the coast whichever is greater. See Young, "The Limits of the Continental (Contd.)

Declining to agree on any criterion based on depth, Mr. Brown favoured a definition in terms of a distance from the coast which, according to him, would seem open to fewer objections than any other.[65] In his opinion, the outer limit of Continental Shelf should be one which satisfies these tests:-

"(a) The line should be so drawn as to honour existing vested rights based upon the formulation of Article 1. What constitutes a vested right - for example, does the state have a vested right in an area merely because it has been subject to Continental Shelf legislation even though no concessions,have been granted? - and whether an extensive or restricted interpretation of Article 1 is to be relied on, are questions which would probably not cause much difficulty in practise if the proposals made below were accepted.

(b) The line should be independent of any particular depth criterion so far suggested since any such criterion, either by design or in effect, might limit the exclusive zone to states possessing a geological Continental Shelf. This would be quite unacceptable to less fortunate states. A horizontal distance criterion might be a more useful test. It is open to the objection that equality of breadth of

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Shelf - and Beyond," American Society of International Law, April, 1968, p.229, at p.233.

65. Brown, E. D., 'The Outer Limit of the Continental Shelf,' The Juridical Review, August 1968, p.141.

exclusive zone is no guarantee of equality in resources and there would still remain problems relating to deposits extending beyond the outer limit of the zone. These drawbacks seem to be common, however, to any fixed outer limit.

(c) The outer limit should be such as will satisfy the security requirements of the coastal state. A coastal state cannot be expected to accept any regime which would require it to tolerate exploration and exploitation of the seabed off its coast by a foreign power. However, the distance out at which this immunity can be expected to be recognised would perhaps be covered by criterion (a) above, i.e. a line honouring existing vested rights.

(d) The line should be drawn at such a distance as will satisfy the requirement that resources beyond the outer limit are exploitable without the co-operation of the nearest coastal state. States would not accept a regime if it allowed foreign states to exploit areas which could only be exploited if the coastal state granted landing, storage, transport and supply facilities.

(e) It seems desirable that any new regime should be capable of facilitating a settlement with the Latin-American States over the question of delimitation of maritime areas. Agreement on a 200-mile limit would go some way in this direction though, in itself, it would not deal with the more extreme claims over the high seas.

(f) The outer line should be so drawn as to cater for the interests of the developing states by preserving for them exclusive exploitation rights in considerable submarine areas."[66]

Mr. Brown concludes by saying, "The exact distance would, of course, be negotiable but it is suggested that a line drawn at a distance of 200 miles from the low-water line of the coast would meet the above requirements to a considerable degree. The fact that previous attempts to introduce the idea of a horizontal limit were unsuccessful is not necessarily a good reason for rejecting such a proposal in the context of an altered appreciation of the exploitability of the deep seas and the ambiguity of the present position."[67]

Certain points in this analysis call for comment. First, with regard to "vested rights" mentioned in paragraph (a) above, it is apparent that the extent of these rights depends on the extent of the Continental Shelf, which is the matter of dispute. In other words, if the extent of such rights were known there would not have been any need to call for fixing the outer limit of the shelf. As to what might constitute a 'vested right' under Article 1, the passing of

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66. Brown, "Deep-Sea Mining: the Legal Regime of Inner Space," YBWA, 1968, pp.179-180.

67. Ibid. The two articles, referred to in notes 65 and 66 above, comprise the main part of a report submitted by Mr. Brown, Rapporteur of the British Branch Committee on Deep-Sea Mining, to the 53rd Conference of the ILA.

legislation or the granting of concessions, in so far as the existence of the right, and not the determination of its extent, is concerned, is completely irrelevant by virtue of Article 2(3) of the Convention.[68] Secondly, as to paragraph (c) above, Professor Schwarzenberger attaches to this aspect of the matter as little weight as he does to the sufficiency from the point of view of national defence of the breadth of the territorial sea under existing international law.[69] In fact the security argument sounds weak and out of date in the light of modern warfare. Thirdly, paragraph (d) does not suggest any precise and uniform boundary. The ability of foreign states to exploit certain submarine areas without the co-operation of the nearest coastal state is something which relates to the efficiency of each particular state, a matter which has to be determined by every-day state of technology. Fourthly, the fact that the adoption of a 200-mile limit would go some way in the direction of a settlement with the Latin-American countries, as suggested in (e), does not justify its adoption. The practice of the Latin-American countries, which is incompatible with the rules of the Convention, has been regarded by many countries as an encroachment on the freedom of the high seas. It goes without

68. Article 2(3) states, 'The rights of the coastal state over the Continental Shelf do not depend on occupation, effective or notional, or on any express proclamation;' supra, p.104.

69. Schwarzenberger, supra note 170 in Part Two, at pp.351-352.

saying that this practice, which lacks uniformity and generality, is far from becoming part of customary international law. Finally, Mr. Brown himself admits somewhere else that the proposed 200 miles, while it goes far beyond the outer limit of many shelves, would fall far short of including the whole of the geological shelves in some parts of the world.[70]

It would seem that the third suggestion, i.e. definition in terms of a minimum and a maximum distance, could adequately meet the interests of the coastal states in the area of their Continental Shelf. The advantage of having such a definition is that the minimum distance would secure a precise and uniform limit for all coastal states; while the maximum criterion of depth covers the interests of coastal states enjoying an extensive shelf of shallow seas. Such definition cannot be but just and equitable, because, as stated by the ICJ, "Equity does not necessarily imply equality ....."[71] between states; otherwise there is no reason why non-coastal states should be excluded from this right. Moreover, it is a fact that equality in shares does not produce equality in natural resources and benefits. The extent and the value of any Continental Shelf depend on geological and geographical realities of every coastal area. In this context the words of Professor Green immediately come

70. Brown, 'The Outer Limit .....', supra note 65, in note 4, pp.141-142.

71. The ICJ Judgment in the North Sea Continental Shelf Cases, supra note 257 in Part Tow.

to mind, "When Adam made his will he was so unconcerned with the equal rights of his children, that there are some states where the land mass does in fact end abruptly and there is no Continental Shelf."[72]

Therefore, the definition of the Continental Shelf may be worded as follows:

> "Legally the Continental Shelf is constituted by the seabed and the subsoil of the submarine regions situated off the territorial waters, to a minimum distance of x miles from the baselines from which the breadth of the territorial sea is measured, irrespective of the depth of the water, or to a maximum depth of Y metres (or fathoms) irrespective of distance."

Whether this minimum distance is 20, or 100, or more miles, and this maximum depth is 200, or 550, or more metres, is a matter for negotiation.

3. Alternative Regimes for Deep-Sea Floor

As a result of the defects seen in the occupation theory, four alternative regimes have been suggested for meeting the problems raised by the potential development of minerals of the sea floor:[73]

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72. Green, L. C., 'Freedom of the Seas - The Continental Shelf,' CLP, 1959, p.228.

73. These alternatives are attributed mainly to the following writers: Christy, F.T., 'Alternative Regimes for Marine Resources Underlying the High Seas,' paper presented at the Long Beach Conference, supra note 40; also by the same writer, 'Economic Criteria for Deep-Sea Minerals,' 2 International Lawyer, 1968, p.224; Young, R., 'The Legal Regime .....,' supra note 45; Ely, N., 'The (Contd.)

A. The Division of the Sea Floor Among Coastal States

This is effected by the extension of the shelf doctrine to all deep sea areas so that none of it remains outside the jurisdiction of some coastal state. Under this division, islands play a particularly important role, because of their strategic locations off the coasts of the continents. Such tiny rocks as Clipperton Island would give France a vast territory in the eastern tropical Pacific, and the U.K. would acquire half the South Atlantic because of Ascention, St. Helena, and Tristan da Cunha. The Soviet Union, on the other hand, would obtain relatively litte. States without territory fronting on the great oceans would be excluded entirely. If rights are limited to those islands that are sovereign states, the U.S., for example, would be able to leap over Bermuda and the Bahamas, but would have to give up areas accruing to Hawaii and the Aleutians.

Another scheme along these lines has been suggested by Bernfield.[74] It provides that the beds of all the Great Seas shall be divided by a median line through the longest dimension of each, and then run each coastal nation's rights

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Laws Governing Minerals Beneath the Sea,' American Institute of Mining, New York, Jan.13, 1966; also by the same writer, 'The Administration of Mineral Resources underlying the High Seas,' Long Beach Conference, loc. cit., and, 'Options in Under Sea Mineral Resources,' Long Beach Conference; and Goldie, 'The Geneva Conventions' in Lewis Alexander's The Law of the Sea, 1967, pp.273-283.

74. Bernfield, S. S., "Developing the Resources of the Sea-Security Investment," International Lawyer, 1967, pp.67-73.

to the seabed to that median between the lines of latitude and longitude, as the case might be, from the nation's coastal extremities.

It is most unlikely that the Soviet Union, in addition to many other nations that have little or no toe-hold on the oceans, would find such schemes to its advantage.[75]

B. The Flag-Nation Approach: A Revision of the Occupation Theory

Under this approach, the "mineral resources" which are beyond the coastal states exclusive jurisdiction would be treated as open to appropriation and exploitation by the flag of the discovering expedition. There is no argument about the geographical extent of the appropriative right unless and until a neighbour sets up operations close enough to create friction. This system would presumably require some affirmative declaration by the flag nation, or some kind of international registry office in which national claims to specific ocean floor would be recorded in order to acquire validity as against other states, and to assure the entrepreneur that he would be protected in exploiting a particular area for a sufficient length of time to get an adequate return on his investment. Competing claims might be refused registration until settled by negotiation or by decision of the registry or some other impartial body.[76]

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75. In this context, Christy, 'Economic Criteria .....' supra No.73, says, "It is unrealistic to think that any solution would be viable in the absence of Soviet acquiscence."

76. Ely, 'The Laws Governing Exploitation.....', supra No.73, at pp.377 and 378.

Since rights can only be acquired through actual exploitation, and since not more than a handful of nations are likely to have bona fide interests in exploitation, the opposition to such an alternative would indeed be heavy.

C. An International Registry Office

This alternative might be considered as falling somewhere between the flag nation approach and that of an international authority. Like the flag approach, the initiative, under this scheme, would lie with the entrepreneur. He would record his claim with his country, and his country would then record its international claim to exercise jurisdiction and control over the entrepreneur's activity with the recording agency. The agency would have power to issue instruments defining the recording state's 'Zone of Special Jurisdiction.' The zone would be limited with respect to purpose, duration, area and time in which to prove development. International recorded claims would be protected by their recognition in the courts of all states parties to the agreement. Finally, charges by the agency for the registration of the requisite instruments should not exceed the costs incurred by the agency for purposes of administering its registering system.[77]

77. Goldie, 'The Geneva Conventions,' supra No.73 at pp.281, 282 and 283.

An effective regime of this sort would provide more security of title than a flag-nation regime. However, it is difficult to see how this regime would operate on anything but a 'first come, first served' basis, and it would tend to stimulate 'over-capitalisation' and 'congestion' rather than avoid them.[78] It would appear that the exclusive rights would go to the first entrepreneur to record them; but the first to record would not necessarily be the most efficient producer. As a result the losers are not only those who might be best equipped to exploit the resources, but also society in that less productive units of capital and labour may be employed. In addition the performance requirement "use it or lose it" would tend to stimulate excessively rapid rates of output.[79] Those who had recorded claims would have the incentive to produce, even though net returns were inadequate or negative, since they might lose the claim by not producing.[80] All of these difficulties could be a stumbling block to general acceptance.

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78. Ibid. p.280; such tactics were rejected by Goldie before he spelt out the principles of his regime.

79. Christy, supra No.75, p.238.

80. Goldie, supra, suggests, at p.283, that states which record instruments giving notice of their sovereign rights over the working of a resource should be required to exercise effective control over the working; otherwise they lose the right to such appropriations.

D. An International Authority

This fourth proposal is an extension of the above; the chief difference is that it envisages some form of regime in which exclusive rights over the resources of the deep sea bottom would be vested in the international community and administered by some international body. It is based on the belief that it would be in the best interest of mankind generally that these resources, now outside national jurisdiction, should continue to remain so and be developed under the auspices of and for the benefit of the international community as a whole.

It is suggested that the authority need not operate under the aegis of the U.N.[81] However, the U.N. does not have, at present, an agency that is equipped to deal with such an authority. If the international authority were to be established within the U.N. structure, it would be clearly desirable for the authority to have a high degree of autonomy, similar to that of the World Bank, so that it might operate without pressure from the General Assembly.

It is also suggested that the authority should not have the function of distributing the revenues received from the market.[82] The revenues above the costs of administration should be turned over to another agency for distribution.[83]

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81. Christy, loc.cit., at p.240.

82. Ibid.

83. Ibid. In 'Alternative Regimes.....', supra No.73, at p.76, Christy suggests the General Assembly as the body for such distribution.

The revenues might be distributed in any of several ways. At one extreme, they might be used for the general support of the U.N. At another extreme, the revenues might be returned to the exploiting nations. A more likely possibility is that the revenues would be devoted to some widely accepted goal, such as the overcoming of malnutrition.

These suggestions for the operation of an international authority do no more than characterise its nature. Obviously, many difficulties would have to be overcome and many interesting questions of law would have to be answered. However, the acceptability of such a regime would depend upon how the exploiting nations would view their ability to compete in the market and upon how the non-exploiting nations would view their returns. With regard to the latter, the first two regimes would provide them nothing. The third alternative would also provide them nothing unless there is a provision for sharing revenues. Hence, they would do better if they support an international authority scheme which it is hoped to work under the U.N. for the benefit of all mankind.

Conclusion

The conclusion to be drawn from these observations is that the freedom of the high seas in regard to use means that each state has the right to use and exploit the high seas, and each state has the duty to respect the similar right of other states. Freedom of the high seas in regard to jurisdiction does not mean that the high seas are subject

to no state's jurisdiction. It means that the high seas are subject to the jurisdiction of each state but only as to its nationals and ships.

For years international jurists have debated whether the seabed of the high seas is res communis like the waters above it or whether it is simply territory covered by water and therefore res nullius. The latter view seems now to be well on its way to victory by reason of the Continental Shelf doctrine which assigns sea bottom sovereign rights to the adjacent coastal state.

Propinquity is the basis for allocating to the coastal state sovereign rights in the seabed and subsoil of the Continental Shelf. In the absence of a conventional outer limit, the juridical shelf terminates where propinquity terminates. It must be anticipated that claims to sovereignty of the deep sea bottom will be predicted upon "effective occupation." Short of claims to sovereignty, states may seek to carve out an area of sea bottom for a particular exclusive use, or for all purposes, for a short or longer period.

Propinquity as the basis for allocating rights in the Continental Shelf has the virtue of preserving shelf resources for the benefit of the coastal state until it can exploit them by itself or by lease to others. Effective occupation as the basis for allocating rights in the deep sea

bottom will mean a race between the technological "have" states, with the technological "have nots" as spectators. The undesirability of such a race is self-evident.

Perhaps the biggest challenge to the emerging law of ocean space will be to balance the interests of the world community and the individual states in order to maximise the beneficial uses of global ocean space in the self interest of all. Such a policy was charted by President Johnson in his remarks at the Commissioning of the Coast and Geodetic Survey's new ship, OSS Oceanographer, on July 13, 1966:-

> "We meet here today at the beginning of a new age of exploration. To some this might mean our adventures in outer space. But I am speaking of exploring an unknown world at our door step. It is really our last frontier here on earth. I am speaking of mountain chains that are yet to be discovered, of national resources that are yet to be tapped, of a vast wilderness that is yet to be charted.
>
> This is the sea around us ..... Truly great accomplishments of oceanography will require the co-operation of all the maritime nations of the world. Today I send out from this platform calling for such co-operation, requesting it and urging it ..... under no circumstance, we believe, must we ever allow the prospects of rich harvest and mineral wealth to create a new form of colonial competition among the

maritime nations. We must be careful to avoid a race to grasp and to hold the lands under the high seas. We must ensure that the deep seas and the ocean bottoms are, and remain, the legacy of all human beings."

It may be hoped that this would be regarded as a declaration of the true intention of the U.S. to devote its best efforts in oceanic science and technology to the promotion of peace and happiness for the international community as a whole.

Appendix I

Convention on the Continental Shelf
Done at Geneva on 29 April 1958[1]
Entry into Force: 10 June 1964, in accordance with article 11.

State	*Signature*	*Ratification, accession (a), notification of succession (d)*
Afghanistan	30 October 1958	
Albania		7 December 1964 *a*
Argentina	29 April 1958	
Australia	30 October 1958	14 May 1963
Bolivia	17 October 1958	
Bulgaria		31 August 1962 *a*
Byelorussian SSR	31 October 1958	27 February 1961
Cambodia		18 March 1960 *a*
Canada	29 April 1958	
Ceylon	30 October 1958	
Chile	31 October 1958	
China	29 April 1958	
Colombia	29 April 1958	8 January 1962
Costa Rica	29 April 1958	
Cuba	29 April 1958	
Czechoslovakia	31 October 1958	31 August 1961
Denmark	29 April 1958	12 June 1963
Dominican Republic	29 April 1958	11 August 1964
Ecuador	31 October 1958	
Federal Republic of Germany	30 October 1958	
Finland	27 October 1958	16 February 1965
France		14 June 1965 *a*
Ghana	29 April 1958	
Guatemala	29 April 1958	27 November 1961
Haiti	29 April 1958	29 March 1960
Iceland	29 April 1958	
Indonesia	8 May 1958	
Iran	28 May 1958	
Ireland	2 October 1958	
Israel	29 April 1958	6 September 1961
Jamaica		8 October 1965 *a*
Lebanon	29 May 1958	
Liberia	27 May 1958	
Madagascar		31 July 1962 *a*
Malawi		3 November 1965 *a*
Malaysia		21 December 1960 *a*
Malta		19 May 1966 *d*
Mexico		2 August 1966 *a*
Nepal	29 April 1958	
Netherlands	31 October 1958	18 February 1966
New Zealand	29 October 1958	18 January 1965
Pakistan	31 October 1958	
Panama	2 May 1958	
Peru	31 October 1958	
Poland	31 October 1958	29 June 1962
Portugal	28 October 1958	8 January 1963
Romania		12 December 1961 *a*
Senegal		25 April 1961 *a*

1- Status as at April, 1969.

State	Signature	Ratification, accession (a), notification of succession (d)
SIERRA LEONE		25 November 1966 *a*
SOUTH AFRICA		9 April 1963 *a*
SWEDEN		1 June 1966 *a*
SWITZERLAND	22 October 1958	18 May 1966
THAILAND	29 April 1958	2 July 1968
TUNISIA	30 October 1958	
UGANDA		14 September 1964 *a*
UKRAINIAN SSR	31 October 1958	12 January 1961
UNION OF SOVIET SOCIALIST REPUBLICS	31 October 1958	22 November 1960
UNITED KINGDOM	9 September 1958	11 May 1964
UNITED STATES OF AMERICA	15 September 1958	12 April 1961
URUGUAY	29 April 1958	
VENEZUELA	30 October 1958	15 August 1961
YUGOSLAVIA	29 April 1958	28 January 1966
Trinidad& Tobago		2 July 1968*a*

Declarations and Reservations[2]

FEDERAL REPUBLIC OF GERMANY

"In signing the Convention on the Continental Shelf of 29 April 1958, the Federal Republic of Germany declares with reference to article 5, paragraph 1 of the Convention on the Continental Shelf that in the opinion of the Federal Government article 5, paragraph 1 guarantees the exercise of fishing rights (*Fischerei*) in the waters above the continental shelf in the manner hitherto generally in practice."

FRANCE

In depositing this instrument of accession, the Government of the French Republic declares:

Article 1

In the view of the Government of the French Republic, the expression "adjacent" areas implies a notion of geophysical, geological and geographical dependence which *ipso facto* rules out an unlimited extension of the continental shelf.

Article 2 (paragraph 4)

The Government of the French Republic considers that the expression "living organisms belonging to sedentary species" must be interpreted as excluding crustaceans, with the exception of the species of crab termed "barnacle"; and it makes the following reservations:

Article 4

The Government of the French Republic accepts this article only on condition that the coastal State claiming that the measures it intends to take are "reasonable" agrees that if their reasonableness is contested it shall be determined by arbitration.

Article 5 (paragraph 1)

The Government of the French Republic accepts the provisions of article 5, paragraph 1, with the following reservations:

(*a*) An essential element which should serve as the basis for appreciating any "interference" with the conservation of the living resources of the sea, resulting from the exploitation of the continental shelf, particularly in breeding areas for maintenance of stocks, shall be the technical report of the international scientific bodies responsible for the conservation of the living resources of the sea in the areas specified respectively in article 1 of the Convention for the Northwest Atlantic Fisheries of 8 February 1949 and article 1 of the Convention for the Northeast Atlantic Fisheries of 24 January 1959.

(*b*) Any restrictions placed on the exercise of acquired fishing rights in waters above the continental shelf shall give rise to a right to compensation

(*c*) It must be possible to establish by means of arbitration, if the matter is contested, whether the exploration of the continental shelf and the exploitation of its natural resources result in an interference with the other activities protected by article 5, paragraph 1, which is "unjustifiable".

Article 6 (paragraphs 1 and 2)

In the absence of a specific agreement, the Government of the French Republic will not accept that any boundary of the continental shelf determined by application of the principle of equidistance shall be involved against it:

— if such boundary is calculated from baselines established after 29 April 1958;

— if it extends beyond the 200-metre isobath;

— if it lies in areas where, in the Government's opinion, there are "special circumstances" within the meaning of article 6, paragraphs 1 and 2, that is to say: the Bay of Biscay, the Bay of Granville, and the sea areas of the Straits of Dover and of the North Sea off the French coast.

IRAN

"In signing this Convention on the Continental Shelf, I am instructed by the Iranian Government to make the following reservations:

[2] For objections by certain States to some of these declarations and reservations, see p. 333.

(a) *Article 4*: With respect to the phrase "the Coastal State may not impede the laying or maintenance of submarine cables or pipe-lines on the continental shelf", the Iranian Government reserves its right to allow or not to allow the laying or maintenance of submarine cables or pipe-lines on its continental shelf.

(b) *Article 6*: With respect to the phrase "and unless another boundary line is justified by special circumstances" included in paragraphs 1 and 2 of this article, the Iranian Government accepts this phrase on the understanding that one method of determining the boundary line in special circumstances would be that of measurement from the high water mark."

VENEZUELA

In signing the present Convention, the Republic of Venezuela declares with reference to article 6 that there are special circumstances to be taken into consideratio in the following areas: the Gulf of Paria, in so far a the boundary is not determined by existing agreement; and in zones adjacent thereto; the area between th coast of Venezuela and the island of Aruba; and th Gulf of Venezuela.

Reservation made upon ratification: . . . with expres reservation in respect of article 6 of the said Conven tion.

YUGOSLAVIA

Subject to the following reservation in respect o article 6 of the Convention:

In delimiting its continental shelf, Yugoslavia re cognizes no "special circumstances" which should in fluence that delimitation.

Objections[3]

FRANCE

The Government of the French Republic does not accept the reservations made by the Government of Iran with respect to article 4 of the Convention.

NETHERLANDS

"In depositing their instrument of ratification regarding the Convention on the Continental Shelf concluded at Geneva on April 29th 1958, the Government of the Kingdom of the Netherlands declare that they do not find acceptable

"the reservations made by the Iranian Government to article 4;

"the reservations made by the Government of the French Republic to articles 5, paragraph 1, and 6, paragraphs 1 and 2.

"The Government of the Kingdom of the Netherlands reserve all rights regarding the reservations in respect of article 6 made by the Government of Venezuela when ratifying the present Convention."

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

"*Article 1:* The Government of the United Kingdom take note of the declaration made by the Government of the French Republic and reserve their position concerning it.

"*Article 2 (paragraph 4):* This declaration does not call for any observations on the part of the Government of the United Kingdom.

"*Article 4:* The Government of the United Kingdom and the Government of the French Republic are both parties to the Optional Protocol of Signature concerning the Compulsory Settlement of Disputes done at Geneva on the 29th of April, 1958. The Government of the United Kingdom assume that the declaration made by the Government of the French Republic is not intended to derogate from the rights and obligations of the parties to the Optional Protocol.

"*Article 5 (paragraph 1):* Reservation (*a*) does not call for any observations on the part of the Government of the United Kingdom.

"The Government of the United Kingdom are unable to accept reservation (*b*).

"The Government of the United Kingdom are prepared to accept reservation (*c*) on the understanding that it is not intended to derogate from the rights and obligations of parties to the Optional Protocol of Signature concerning the Compulsory Settlement of Disputes.

"*Article 6 (paragraphs 1 and 2):* The Government of the United Kingdom are unable to accept the reservations made by the Government of the French Republic."[4]

UNITED STATES OF AMERICA[5]

"The United States does not find the following reservations acceptable:

1. The reservation made by the Iranian Government to article 4.

2. The reservation made by the Federal Republic of Germany to article 5, paragraph 1."[6]

"The reservations [made by France] to articles 4, 5 and 6. The declarations by France with respect to articles 1 and 2 are noted without prejudice."[7]

YUGOSLAVIA

The Government of Yugoslavia does not accept the reservation made by the Government of the French Republic with respect to article 6 of the Convention on the Continental Shelf."[8]

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[3] Unless otherwise indicated, the objections were made upon ratification or accession.

[4] Communication received on 14 January 1966.

[5] See footnote 9, p. 323.

[6] Communication received on 19 September 1962.

[7] Communication received on 9 September 1965.

[8] Communication received on 29 September 1965.

APPENDIX II

Bilateral Agreements on the Continental Shelf

Parties	Date	Reference
U.K.-Venezuela	26.2.42.	Cmd.6400
Bahrein-Saudi Arabia	22.2.48.	ICLQ, 1958, p.518.
Federal Republic of Germany-Netherlands	1.12.64.	26(1966), ZAORVR, p.780
U.K.-Norway	10.3.65, 29.12.65(a)	Cmnd.2626
Finland-U.S.S.R.	20.5.65.	6(1967) ILM, p.727
Denmark-Federal Republic of Germany	9.6.65.	26(1966), ZAORVR, p.782
Kuwait-Saudi Arabia	7.7.65.	
U.K.-Netherlands (Two agreements)	6.10.65, 23.12.66.(a)	Cmnd.2830, and 2831
Denmark-Norway	8.12.65.	26(1966), ZAORVR, p.775
U.K.-Denmark	3.3.66. 6.2.67.(a)	Cmnd.2973
Denmark-Netherlands	31.3.66.	26(1966), ZAORVR, p.778
Italy-Yugoslavia	8.1.68.	
Iran-Saudi Arabia	(Concluded recently)	

(a) Date of ratification.