THE STATUS OF THE DEEP SEA-BED AND ITS RESOURCES IN INTERNATIONAL LAW

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TABLE OF CONTENTS

TABLES

FIGURES

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ABSTRACT

This thesis deals with the issue of the legal status of the deep sea-bed and its resources, particularly in the light of the new developments of international law since 1967. The thesis consists of five chapters. *Chapter I* and *Chapter V* are the *INTRODUCTION* and *CONCLUSION* respectively. Chapters II, III, and IV comprise the substance of the thesis.

Chapter II begins with a physical description of the deep sea-bed and its resources. Geological and geomorphological connections between the physical continental shelf and the deep sea-bed, are given special attention. This is because the determination of the legal limits of the deep sea-bed, depends, to a large extent, on its physical configuration. The definition of the legal continental shelf in Article 76 of the Convention on the Law of the Sea, is extremely complicated. Hence, great efforts are devoted to analyzing the details of the provision. Many problems may arise out of interpreting and applying the provision. Possible remedies to the defects in the provision are also suggested. It has been found that the principal content of Article 76 are well entrenched in international law.

The theories of res nullius and res communis are examined in *Chapter III*. After scrutinizing their juridical content and their applicability to the deep sea-bed and its resources, the author rejects res nullius as a proper regime for the deep sea-bed and its resources, and distinguish-

es the doctrine of res communis from the concept of common heritage of mankind.

Chapter IV addresses the development of the concept of the common heritage of mankind, its juridical content, and its legal status in international law. The basic content of the common heritage has not undergone any significant change since 1967. Its essential elements, i.e., the duty to refrain from any claims unauthorized by the international community, and the duty to share benefits with the international community, remains steadfast. The concept has been supported by three sources of international law: jus cogens customary international law; and conventional international law. The concept of the common heritage as jus cogens is the least tenable of the three. The paper goes on to establish that the concept of the common heritage derives its validity from customary international law. From the traditional perspective of customary international law, it contains the essential elements of a customary norm, including the opinio juris Reliance is also placed on the emerging perception by some jurists that the resolutions relating to the common heritage has the character of a law-creating resolution of the UN General Assembly, as well as the property of "instant customary international law". Lastly, the concept of the common heritage is now also rooted in treaty law by virtue of its incorporation into the UN Convention on the Law of the Sea.

In short, this thesis has attempted to clarify the problems surrounding the legal status of the deep sea-bed and its resources in international law.

Chapter I

INTRODUCTION

The deep sea-bed beyond the limits of national jurisdiction comprises approximately 60% of the submarine area. It is rich in natural resources, mainly in the form of manganese nodules composed of nickel, cobalt, copper and manganese. The rapid progress of modern marine technology, has made the extraction and utilization of these nodules possible.[1]

The issue of the deep sea-bed has caught the attention of the international community, ever since the concept of "common heritage of mankind" was introduced in connection with the use of the deep sea-bed for peaceful purposes and in the interest of mankind as a whole, by the Maltese Ambassador, Arvid Pardo at the Twenty-Second Session of the United Nations General Assembly in 1967.[2] Subsequent developments include the set-up of the Ad Hoc Sea-Bed Committee (later renamed as the

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[1] Three trends of changes in the use of the sea have been identified by a well-known author in the law of the sea. They are: "(1) the transformation of a marine economy based on hunting and gathering to one based on husbanding aquatic animals and cultivating aquatic plants -- that is, the large-scale emergence of acquaculture, including mariculture; (2) a gradual shift from land-based mining to ocean mining including both the sea-bed and water column; and (3) the large-scale extraction of energy from the oceans." See Elizabeth Mann Borgese, "The Convention Is Signed, What Does the Future Hold?", 4 Ocean Yearbook (1983), at 13-14.

[2] UN Doc. A/6695(1967). In this document, Dr. Pardo proposed a declaration and a treaty concerning the reservation for peaceful purposes of the sea-bed and the ocean floor, underlying the high seas beyond the limits of present national jurisdiction, and the use of their resources in the interests of mankind.

Standing Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction) to study the matter;[3] the passage of General Assembly Resolution 2574D (XXIV), the so- called "Moratorium Resolution" albeit with substantial opposition;[4] the adoption of the Declaration of Principles Governing the Sea-Bed and Ocean Floor and the Subsoil thereof beyond the Limits of National Jurisdiction (Declaration of Principles) by the General Assembly with 108 in favour, none against and 14 abstentions in 1970;[5] and the convening of the Third United Nations Conference on the Law of the Sea (UNCLOS III).[6] After ten years of labour since 1973, the participants of the Conference produced the present United Nations Convention on the Law of the Sea (1982

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[3] Resolution 2340: 18 December 1967 -- Examination of the question of reservation exclusively for peaceful purposes of the sea-bed and the ocean floor, and the subsoil thereof, underlying the high seas beyond the limits of present national jurisdiction, and the use of their resources in the interests of mankind. (See UN Doc. A/6716(1967)).

Resolution 2467(XXIII): 21 December 1969 -- Examination of the question of the reservation exclusively for peaceful purposes of the sea-bed and the ocean floor, and the subsoil thereof, underlying the high seas beyond the limits of present national jurisdiction, and the use of their resources in the interests of mankind. (See UN Doc. A/7218(1968)).

[4] Resolution 2574(XXIV):15 December 1969 -- Question of the reservation exclusively for peaceful purposes of the sea-bed and the ocean floor, and the subsoil thereof, underlying the high seas beyond the limits of present national jurisdiction and the use of their resources in the interests of mankind. See UN Doc. A/7834(1969). Resolution 2574D was adopted with 62 in favour, 28 against and 28 abstentions.

[5] Resolution 2749(XXV): 17 December 1970 -- Declaration of Principles Governing the Sea-Bed and the Ocean Floor, and the Subsoil Thereof, Beyond the Limits of National Jurisdiction. See UN Doc. A/8028(1970), 25 UN GAOR Supp. No.28, at 24.

[6] Resolution 2750(XXV): 17 December 1970 -- Reservation exclusively for peaceful purposes of the sea-bed and the ocean floor, and the subsoil thereof, underlying the high seas beyond the limits of present national jurisdiction and use of their resources in the interests of mankind, and convening of a conference on the law of the sea. See UN Doc. A/8097(1970).

Convention). On 30 April 1982, at the specific request of the United States, a vote on the draft Convention was take with the result of 130 in favour, 4 against and 17 abstentions. The Convention received 159 signatures from States and other entities as of December 10, 1984.[7] These signatories encompass almost all developing States and the majority of the developed countries (inclusive of the majority of the deep sea-bed mining States), constituting the majority of the international community. As predicted, there were no labour-pains for the Preparatory Commission (PrepCom) for the International Sea-Bed Authority and the International Tribunal for the Law of the Sea, since 119 States and other entities affixed their signatures to the Convention on the first day of its opening for signature, far outnumbering the required 50 signatories for the establishment of the PrepCom. Thus far, the PrepCom has held five sessions: two devoted to organizational matters and three to substantive issues. The latter consisted of the registration of application for exploration of the area from the pioneer investors, regulations, rules and procedures provisionally applicable to the activities in the Area of the International Sea-Bed before the functioning of the International Sea-Bed Authority (ISA), and resolution of overlapping among pioneer investors for the mining sites.[8]

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[7] Table of Signatories and Ratifications: United Nations Convention on the Law of the Sea and Final Act as of 30 September 1985, Office of the Special Representative of the Secretary-General of the United Nations for the Law of the Sea, 6 Law of the Sea Bulletin 1-5 (October 1985).

As of 30 September, 1985, the Convention had been ratified by 23 States and the United Nations Council for Namibia.

[8] Kimball, Lee, "Conference Report: Preparatory Commission: The Long Road to Success", 8 Marine Policy 363-377(1984); Kimball, Lee, "Conference Report: Short-Term Dilemmas and Long-Term Prospects at PrepCom", 9 Marine Policy 73-77(1985); Kimball, Lee, "Holding Pattern or

It is reported that progress of work in the Commission has slowed down. This could cause undue delay in bringing the Convention into force. The satisfactory completion of the work of the Commission is one of the major considerations of some States in ratifying the Convention.[9]

It is hoped and believed that a workable regime, acceptable to most of the deep sea-bed mining States, can be somehow developed to attract their participation to the sea-bed mining regime under the 1982 Convention.

Roughly parallel with the foregoing developments, is progress of another sort. The United States, in possession of the most advanced technology and financial capacity, has so far preferred to stay out of the 1982 Convention, followed by the United Kingdom and Federal Republic of Germany. In July, 1980, the U.S. enacted the first deep sea-bed mining law,[10] and the FRG, the UK, France, Japan and Italy followed suit.[11] On September 2, 1982, France, FRG, UK, and US. reached an agreement for the mutual recognition of claims under their respective municipal law and for the resolution of overlapping claims.[12] Two years later, eight

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Forward Motion?" 9 Marine Policy 340-343(1985).

[9] Kimball, Lee, "Holding Patterns or Forward Motion?" 9 Marine Policy 340-343(1985).

[10] United States: Deep Seabed Hard Mineral Resources Act, 19 International Legal Materials (hereinafter cited as ILM) 1003-1020(1980), 20 ILM 1228(1981), and 21 ILM 867 (1982).

[11] The German legislation is at 20 ILM 393(1981) and 21 ILM 832(1982), the British legislation at 20 ILM 1219(1981), the French legislation at 21 ILM 808(1982), the Japanese legislation at 22 ILM 102(1983), and the Italian legislation at 24 ILM 983(1985).

[12] France -- Federal Republic of Germany -- United Kingdom -- United States: Agreement Concerning Interim Arrangements Relating to Polymetallic Nodules of the Deep Sea Bed, 21 ILM 950-962(1982).

deep sea-bed mining States arrived at another accord,[13] which purported to resolve overlapping claims and to secure safe tenure over their mine sites, thus serving as a step further towards a "Reciprocating States Regime(RSR)" or "mini-treaty" that is not necessarily in congruence with the conventional regime.[14] The survey would not be complete without

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Though the agreement is without prejudice to the decisions of the Parties with respect to the Convention on the Law of the Sea (preambular paragraph 5), its content is likely to put back on its purpose. For example, preambular paragraph 7 states: "Desiring further to insure that adequate areas containing polymetallic nodules remain available for operations by other States and entities in conformity with international law", paragraph 4 (d) stipulates: "The parties shall consult together before entering into any other bilateral or any multilateral arrangement between themselves or any arrangement with other States, with respect to deep sea bed operations", paragraph 9 articulates: "The Parties shall not enter into any supplementary international agreement inconsistent with this agreement.".

[13] Belgium -- France -- Federal Republic of Germany -- Italy -- Japan -- Netherlands -- United Kingdom -- United States: Provisional Understanding Regarding Deep Seabed Mining (done at Geneva) August 3, 1984, entered into force on September 2, 1984, 23 ILM 1354-1365(1984).

Again in this Understanding is inserted a provision declaring: "This agreement is without prejudice to, nor does it affect, the positions of the Parties, or any obligations assumed by any of the Parties, in respect of the United Nations Convention on the Law of the Sea."(paragraph 5).

[14] The intentions of the parties to the 1982 Agreement and the 1984 Understanding are by no means unambiguous. The United States, as predicted, has definitely headed toward creating a separate regime independent of or even opposeable to the 1982 Convention to provide a legal basis for its consortia to engage in deep seabed mining. For other Parties, this may not be the case at all because, except for the US, UK, and FRG, all other States Parties to the two agreements have signed the 1982 Convention.

Mr. Brian J. Hoyle, director of the Office of the Oceans Law and Policy of the U.S. State Department, stated very recently:

> The reciprocating States agreement that we are at the present time negotiating outside the treaty is not a mutual recognition of rights agreement. It is a noninterference agreement among those countries with the capability of engaging in seabed mining in which each will agree not to interfere with each other's activities.

mentioning the Private Industrial Arbitration Agreement(PIAA) concluded among the consortia of the U.S., the U.K., the FRG, France and Japan, which has had the effect of strengthening the governmental agreements.[15]

Against this background, legal uncertainties around the deep sea-bed mining keep rising and lead to a hot battle of words in the relevant literature. In particular, the legal status of the deep sea-bed beyond the limits of national jurisdiction is perhaps the ultimate cause for the seemingly irreconcilable disputes between those under the conventional regime and those under the reciprocating States regime. The issue, once thought to have been laid at rest, has again risen to the surface to bewilder the most astute international legal scholars. This time, however, unlike the pre-1967 period, during which the dispute was centred around the doctrinal debate between *res nullius* and *res communis*, the status of the deep sea-bed, together with newly vitalized resources, becomes the subject of controversy between the omnipotent

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Dyke Jon M. Van, ed., *CONSENSUS AND CONFRONTATION: THE UNITED STATES AND THE LAW OF THE SEA CONVENTION*, A Workshop of the Law of the Sea Institute, January 9-13, 1984, Honolulu, Hawaii, U.S.A., 1985, at 250, (hereinafter refered as *CONSENSUS AND CONFRONTATION*).

Practically, the differences between the reciprocating regime and the conventional regime provided by the 1982 Convention and Resolutions I and II of the Annex I to the Final Act of the UNCLOS III, are barely concealable and reconcilable, and therefore the rift between words and deeds of the Parties to the reciprocating regime is quite discernible.

[15] Brooke, Robert L., "The Current Status of Deep Seabed Mining", 24 *Va. J. Int'l. L.*, 361-417(1984), at 398-399,

"The PIAA actually consists of two agreements between the five consortia which filed applications. The *first* agreement was a confidentiality Agreement that covered the exchange of information to allow for the identification of possible and potential conflicts. The *second* agreement was the crucial Conflict Resolution Agreement, which allowed for a negotiation period between the Parties, followed by compulsory and binding arbitration."

principle of the freedom of the high seas, with the support of <u>res nullius</u>, and the concept of the common heritage of mankind.

So, there are two competing regimes concerning the deep sea-bed and its resources. Some States have to make a tough decision to follow one or the other when they ratify or accede to the Convention or to the reciprocating States agreement. It is not entirely clear yet how the division of States will be on this issue.

To ascertain clearly the legal status of the deep sea-bed beyond the limits of national jurisdiction in international law, is not only fundamental but urgent. All other problems, such as the regime for the exploitation of the resources of the deep sea-bed, the rights and obligations of various States with different legal standing with respect to the two competing regimes, and the settlement of disputes between parties under the same as well as different regimes, arise more or less out of the uncertainties over the status of the deep sea-bed and its resources. Without a favourable and secure legal environment, a large amount of investment is unlikely to be made, so that the exploitation of the resources will be undesirably delayed, to the detriment of the interests of the international community as a whole, and the developing countries in particular. The delay also has the impact on the ocean mining industry, which is against the interests of the developed countries.

The purpose of this thesis is to determine as precisely as possible, the legal status of the deep sea-bed and its resources. In attempting this determination, it will not be necessary to deal with the principle of the freedom of the high seas as such, since the study is limited to the deep sea-bed and its resources, and does not encompass the actual freedom of the high seas. Also, discussion of sedentary species will take place only to the extent that it may be related to the doctrine of res nullius.

As part of my study on the question of the deep sea-bed and its resources, the present thesis will not cover the legal regime of the exploitation, the rights and duties of Parties under the two regimes, and the settlement of disputes within and between the two regimes. These topics will be the subject of another, more comprehensive, study.

I will begin with the physical description of the deep sea-bed and its resources, proceed to elucidate the legal limits of the deep sea-bed, then review the traditional doctrines of res nullius and res communis in light of the changed circumstances, and finally, analyze the new concept of common heritage of mankind and its standing in international law.

Chapter II

LIMITS OF THE DEEP SEA-BED

The recognition of different features of the submarine area by man, had not been realized until as recently as 1940s. It was, at that time, that some fundamental distinctions between the continental margin and the deep sea-bed were discovered. Not long after, in 1945, the United States proclaimed that the continental shelf contiguous to its coast would be under its control. From then on, the legal separation of different submarine features became commonplace, bringing on a new era --- an era with astonishing diminution of the areas reserved for common use, and unprecedented expansion of national jurisdiction, both in functional and geographical terms.

The question of the limits of the deep sea-bed is paramount, not only because it will carry with it the juridical nature of various zones, along with rights and duties of States, but also because their definition will reduce the potential of conflicts between the ISA (International Sea-Bed Authority) and its Enterprises, and other deep sea-bed miners on the one hand, and the coastal States on the other. The difficulty, however, consists in that the legal limit of the deep sea-bed as defined in the 1982 Convention, does not always follow the line based on physical conditions. Indeed there are many deviations.[16] It is the

[16] The 200-mile limit is one of the most striking deviations from the physical definition of continental shelf.

purpose of this chapter to give a fairly full description of the deep sea-bed and its resources, to clarify the ambiguities and to minimize, whenever possible, the vagueness and imprecision of the provisions of the 1982 Convention. International law recognizes that there is a definite limit between the deep sea-bed and the submarine areas under national jurisdiction. This point has been solidly proved by Ambassador Kronmiller in his book on deep sea-bed mining.[17]

While internationally, the question is to map out the limit of the international sea-bed area, nationally the issue is to determine the outer contour of national jurisdiction, which happens in this case to be the extent of continental shelf. Such a caveat will, hopefully, make it easier to understand the intricate relationship between the two.

The term "deep sea-bed" is not exclusively used in the literature. Other nomenclatures appear here and there, for instance, the deep sea, sea-bed, ocean floor, ocean bottom, seabed and its subsoil, the Area, the international area, the area beyond national jurisdiction. Some of them can be interchangeably employed both in legal sense and in physical sense, while others may merely be applied with juridical meaning, e.g. "the Area" equals "the area beyond national jurisdiction". The term "deep sea-bed" bringing with it legal as well as physical meaning, has gained more popularity as compared with others. Therefore, unless indicated otherwise, the phrase "deep sea-bed" is preferred in referring to the area beyond national jurisdiction, including its subsoil and the

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[17] The analysis by Mr. Kronmiller concerning ascertainment of the limits of national jurisdiction is quite convincing. See Kronmiller, Theodore G., THE LAWFULNESS OF DEEP SEABED MINING, London, Oceana, 1980, at 108-130.

ocean floor, both physically and juridically.[18]

2.1 *Section A. Physical Description*

2.1.1 *Subsection One. The Deep Sea-Bed*

2.1.1.1 *1. CONTINENTAL MARGIN*

Physically, the continental margin is

> "the area of the sea floor adjacent to the continent and generally consisting of a continental shelf, slope, and rise, thereby separating the continent from the abyssal plain or deep ocean bottom."[19]

The area of the continental margin is approximately 50% of the total land area of the world, and 20% of the total ocean, that is, over 72 million square kilometres.[20] The physical appearances of the continen-

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[18] "Deep" not merely conveys the physical perception of the depth of the sea, but has the implication that the area is most unlikely to lie within the limits of national jurisdiction simply because the shallow submarine areas contiguous to the coast are subject to the regime of continental shelf and the deeper part of the submarine area will be placed under a different legal regime though the emergence of the regime of Exclusive Economic Zone and the 200-mile criterion for continental shelf has somehow undermined the direct conversion of legal meaning by the word "deep".

Physically, the term "sea" is seen as the water column overlying the sea-bed. Juridically, the word turns out to be complex because some have the propensity of linking the legal regime for the high seas with the legal regime for the deep sea-bed.

The noun "bed" dictates a conception of land and soil with their characteristics of plain, plateau, trench, trough, ridge, mount and so on. Indeed, the International Court of Justice regarded the continental shelf as more akin to land than to sea.(see North Sea Continental shelf cases, ICJ Rep. para. 43.)

[19] Langeraar, W., SURVEYING AND CHARTING THE SEA, Amsterdam, Elsevier, 1984, p.104.

[20] "The ocean has two major topographic features: the continental margin and the deep sea. The continental margin is that portion of the ocean immediately adjacent to land. It in turn can be divided into four major parts: coastal region, continental shelf, continental slope, and continental rise." See David A. Ross, OPPORTUNITIES AND USES OF THE OCEAN, New York, Springer-Verlag, 1980, p.135, 107, 11.

tal margin vary considerably from place to place throughout the world.[21] Generally, however, several factors seem to suggest themselves to determine the width of the continental margin:

(1) The Abruptness of the Gradient:

There is a sudden change of gradient from the province of the continental margin to that of the deep sea-bed.[22]

Each of these features is defined below:

> "Continental Shelf (in the geological sense): The zone adjacent to a continent (or around an island) and extending from the low water line to a depth at which there is usually a marked increase of slope towards oceanic depth.
>
> Continental Slope. This is the slope seaward from the shelf edge to the beginning of a continental rise, or the point where there is a general reduction in slope.
>
> Continental Rise. This is the area of the ocean floor that slopes oceanward more gently than does the continental slope and extends from the base of the continental slope to the abyssal depths, usually in 2,000 to 5,000 metres of water."

(See supra note 19, at 104.)

[21] Emery, K.O., "Geological Limits of 'Continental Shelf'", 10 Ocean Development and International Law (hereinafter cited as Ocean Dev. & Int'l L.) 1-12(1982), at 1-2.

"Conventionally, the edge is taken at 100 fathoms (or 200 metres) but instances are known where the increase of slope occurs at more than 200 or less than 65 fathoms."

[22] "That this slope is much steeper than that of the shelf follows from the fact that the total area of the sea floor of the continental shelf, i.e. between 0 and 200 m depth, amounts to 27,600,000 km , whereas the total surface of the sea floor between 200 and 2,000 m depth does not exceed 30, 500,000 km . The average gradient of the continental shelf lies around 1 to 1,000. For the continental slope this gradient lies between 1 to 40 and 1 to 6." See supra note 19, at 24.

The table is from Langeraar, supra note 19, at 501.

Table 1: Sea floor areas with their limiting gradients and -- the minimum and maximum distances of their outer limits from baseline

Feature:	Gradients	Depths	Distance of outer limit or isobath from the base line
shelf	1/100-1/1000	0-200(metres)	20-200(kilometres)
slope	1/10-1/50	200-2000	38-290
rise	1/90-1/500	2000-5000	308-1790
abyssal plain	1/600 hor.	>5000	-------
2500 m isobath	--- - ---	2500	83-540

(2) The Thickness of the Sediments.:

The sediments on different sections of the continental margin vary considerably. For example, the sediments on the shelf is usually thicker than those on the slope or the rise. On the other hand, sediments on the deep sea-bed are very thin.

(3) The Depth of the Waters.:

The continental shelf, usually starting at the shallow water submarine area and spreading to no more than 200 meters deep, falls down to 2,000 meters deep or so after the 200 metre isobath within a very short distance, followed by another gentle and flat submarine area called the rise, which gradually merges with the abyssal plain at greater depth something between 4,000 and 7,000 metres. Throughout the evolution of the legal regime of continental shelf, this factor has played an extremely important role.[23]

[23] This formula has been extensively used in Article 76.

(4) Distance from the Coast.:

It is always presumed that the prolongation of continental shelf cannot be limitless. Actually, the physical continental margin varies between a few miles, such as the eastern submarine area of the Pacific along the coast of the south American continent, to a few hundreds of miles such as the area off the coast of the USSR on the Arctic. Distance from the coast, due to its convenience and importance, serves as one of the key measurements to define the limit of the legal continental shelf.

(5) Composition of the Underlying Rocks.:

The difference between the composition of the oceanic crust and the continental crust is noteworthy:

> "The crustal structure beneath the deep sea and beneath the continent is different, and the continental margin is the transitional area between the two. The crust is considerably thicker under the continent and is composed of mainly of grantic rock, whereas basaltic rocks are typical under the oceanic basin."[24]

This basic distinction does not help very much in drawing the boundary line because the "geomorphological change from the rise to the ocean floor is generally very small; if the geological continental margin was to be used the boundary between continental crust and oceanic crust may be transitional in the area of interest."[25]

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[24] Ross, supra note 20, at 35.

[25] McMillan, Duncan J., "The Extent of the Continental Shelf", 9 Marine Policy 148-156(1985), at 149.

While an imprecise belt marking the distinction between the two crusts may be permissible in geology, it is certainly inappropriate to insist upon such a belt as boundary between the continental margin and the deep sea-bed in law. Clearly, the transitional character of the continental margin prevents the limit of the deep sea-bed from being an unequivocal demarcation, as one expects it to be. Consequently, the physical uncertainty would make the legal limits of the deep sea-bed very vulnerable to manipulation by the coastal States.

2.1.1.2 2. THE DEEP SEA-BED

The deep sea-bed begins where the continental margin ends.

> "It includes the main ocean basins, trenches, rises, and the ocean ridges, totals about 79.4% of the ocean and covers an area of about 287 million square kilometres or about 110 million square miles.[26] In size the deep sea is about four times the size of the continental margin.[27]

The scarcity of knowledge of the deep sea-bed means it not easy to depict a genuine picture of the deep sea-bed. Several apparent features are briefly described below.

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[26] Table 2 is made by Ross, supra note 20, at 13.

But another estimate is at variance with it. The deep sea-bed is "an area of at least 225 million square kilometers, out of a total area of the ocean which is abut 361 million square kilometers." See Manobar Lal Sarin, "Reflection on the Progress Made by the Third United Nations Conference in Developing the Law of the Sea", in Rafael Gutierréz Giraudot,(ed.), NEW DIRECTIONS IN INTERNATIONAL LAW -- ESSAYS IN HONOR OF Wolfgang Abendroth Festschrift zu Seinen 75. Geburtstag, Frankfurt am Main, Campus Verlag, 1982,(hereinafter cited as Giraudot), pp.278-315, at 281.

[27] Ross, supra note 20, at 132.

Table 2: Percentage of the Deep Sea-Bed

	abbysal plain	oceanic ridges	other areas	total
Pacific	43.0	35.9	6.3	50.1
Atlantic	39.3	32.3	2.7	26.0
Indian	49.2	30.2	5.8	20.5
Arctic	0.0	4.2	6.8	3.4
Total	41.8	32.7	4.9	100.00

(1) Oceanic Ridges and Oceanic Islands.:

Stretching out for thousands of miles, the oceanic ridges, as part of the deep sea-bed complex, are just like mountain ridges under water, but the composition of the oceanic ridges are in no way the same as the mountain ridges that are found on the continent. Some oceanic ridges are long and others are short.[28]

Oceanic islands are sometimes the higher part of the oceanic ridges, and sometimes the components of the seamounts or sea plateau. The three great archipelagoes in the Pacific: Melanesia, Micronesia and Polynesia

[28] Map: The Floor of the Oceans, based on bathymetric studies by Bruce C. Heezen and Marie Tharp of the Lamont Doberty Geological Observatory, Columbia University Palisades, New York, American Geographical Society, copyright by Editions Pierre Charron, Mercator Project 1:48,000,000 at the Equator.

Map: Major Topographic Divisions of the Continental Margin, bathymetric studies by Bruce C. Heezen and Marie Tharp, Office of the Geographer, Department of State, USA, 1970, Mercator projection: 1:60,000,000.

Map: WORLD OCEANS AND SEAS -- Maritime Claims by Countries and Categories: 200-nautical mile exclusive economic zones, by McBryde, F. Webster, Washington, D.C., U.S., Transemantics, Inc., 1982. Approximate Scale: 1:53,080,000.

are such oceanic islands. Physically speaking, those oceanic islands do not possess any geological continental shelf, because within their immediate vicinity, the depth of the sea can reach 5,000 or 6,000 metres or more (abyssal plain or trench).[29]

(2) Abyssal Plain.:

This is normally a very flat area of the deep sea-bed with a thin layer of sediment. Here the metal-rich manganese nodules usually lie.

(3) Trenches and Troughs.:

Trenches and troughs are frequently found in the deep sea-bed. The most conspicuous submarine area where trenches and troughs flourish, is the Pacific Ocean; for example, the Philippine Trench, the Okinawa Trough, and Peru-Chile Trench.[30] Some trenches lie quite contiguous to

[29] Ibid.

[30] Fisher, Robert L. and Revelle, Roger, "The Trenches of the Pacific", Scientific American (Nov. 1955). The notable trenches and troughs are listed below:

name	depth(meters)	location
Aleutian Trench	6,000	south of Aleutian Archipelago
Kuril-Kamchatka Trench	8,000	Southeast of Kuril Islands
Japan Trench	8,000	east of Housho of Japan
Okinawa Trough	2,000	northwest of Ryukyu Islands
Ryukyu Trench	7,000	east of Ryukyu Islands
Sulu Trough	5,000	west of the Philippines
Philippine Trench	9,000	east of the Philippines
Ceram Trough	5,000	within Indonesia Archipelago
Java Trench	7,000	south of Java Island
Ayu-Palau-Yap Trough	7,000	east of the Philippines
New Guinea Trough	2,000	north of New Guinea
Mariana Trench	10,000	near Mariana Islands
New Britain Trough	6,000	northeast of New Guinea
South Soloman Trench	7,000	near Solomon Islands

the coast, such as the Manila Trench off the Philippines, and others may occur in far distance from any land or island, such as Ob Trench in the Indian Ocean.

(4) Other Features of the Deep Sea-Bed.:

There are other features in the structure of the deep sea-bed, such as sea plateaux, seamounts, fracture zones, escarpment, etc.

2.1.1.3 3. TYPES OF CONNECTION BETWEEN DEEP SEA-BED AND CONTINENTAL MARGIN

(1) Trench-Trough -- Continental Slope.:

In some places, the deep sea-bed begins with the trench or trough that terminates the continental margin by its slope. One notable example is the Peru-Chile trench off the west coast of South American continent, and another is the Okinawa Trough off the east coast of China.[11] The question was raised as to whether such a trench or trough really cuts off the continental margin, or merely serves as part of its complex. It is believed that such a trench or trough often has the effect of dividing the deep sea-bed from the continental margin.

(2) Abyssal Plain -- Continental Rise.:

New Hebrides Trench	7,000	near New Hibrides
Hikurangi Trough	3,000	off New Zealand
Tonga Trench	9,000	near Tonga
Middle American Trench	4,000	west of Central America
Peru-Chile Trench	6,000	west of South America

[11] Though legally disputed, the Okinawa Trough geologically (subject to different interpretations) separates the continental shelf of East China Sea from the oceanic Ryukyu Island and oceanic Ryukyu Trench.

Perhaps no type of connection between the deep sea-bed and the continental margin is as common as is this one throughout the submarine area. In some places, the abyssal plain will be close to the coast, because the rise does not extend too far away from the continent. But there do appear situations where the abyssal plain lies far far away from the shoreline, as a result of the extensive reach of the continental rise: for example, that off India, Sri Lanka and Argentina.

(3) Oceanic Ridge -- Continental Margin.:

This type of connection is found on the submarine area off Iceland, Namibia, India, Mozambique, and South Africa.[32]

2.1.2 Subsection Two. Resources of the Deep Sea-Bed

It has been revealed that the deep sea-bed abounds in natural resources. Presently, only the manganese nodules scattered over the flat ocean floor arouse commercial interest. Professor W. Langeraar rightly pointed out:

> "Still untapped are the earth's inconceivably large metal resources contained in the manganese nodules, irregularly spherical shaped accretions named after the metal manganese and its oxide, which is their main constituent. Their size may vary from a few milimetres to some 30 centimetres. Their importance, however, does not lie in the manganese, but in the relative large percentage of other metals which they contain, mainly nickel, copper and cobalt, with iron and zinc as less valuable additions."[33]

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[32] Map: Ocean Floor Sediment and Polymetallic Nodules, by Martine Drefus Rawson and William B.F., drafted by Anastasia Sotiropoulos, sponsored by U.S. Department of State, Office of the Geographer, 1978, World Ocean Floor Panorama, copyright by Bruce C. Heezen and Marie Tharp 1977, horizontal scale: 1:23,230,300.

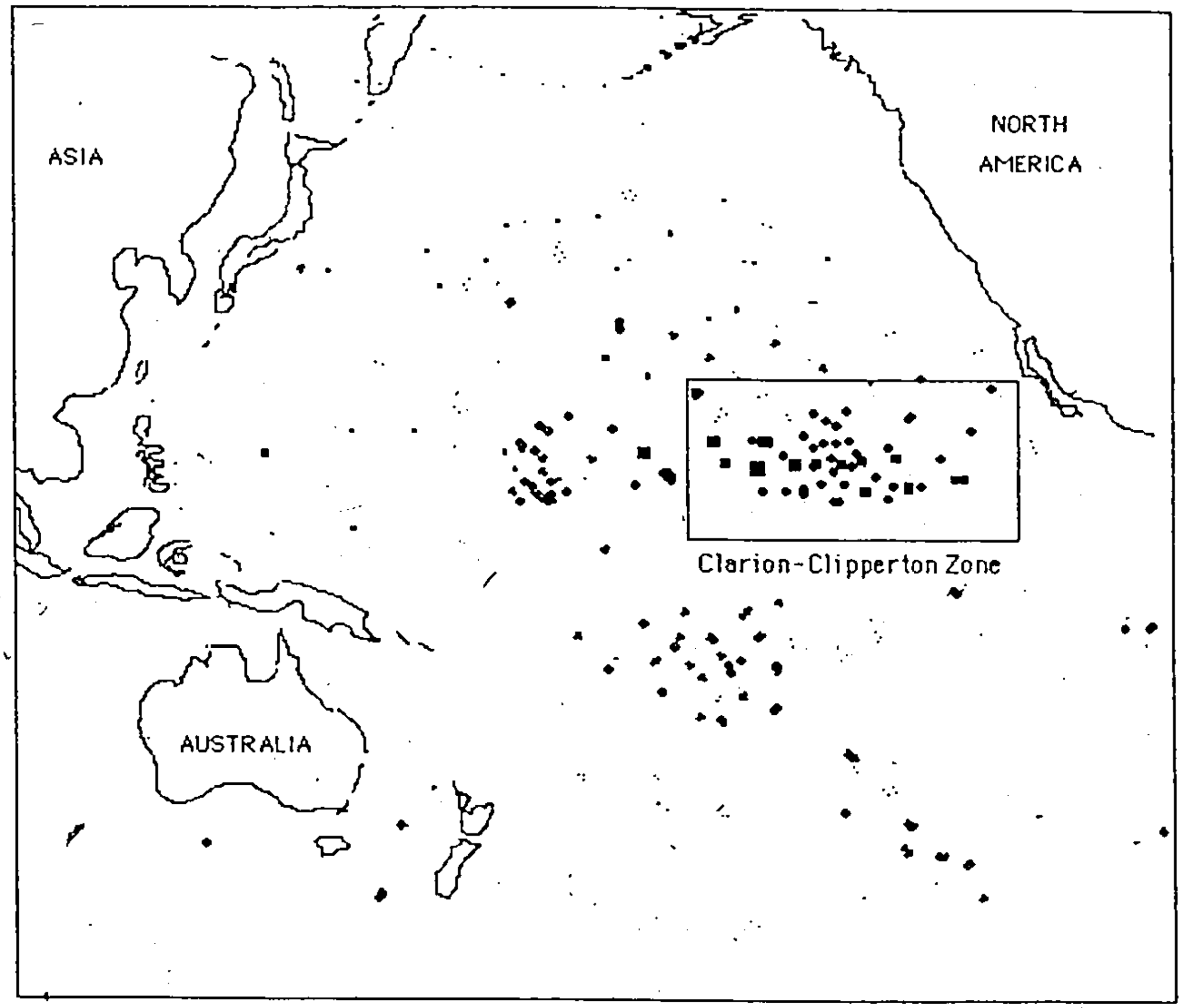
[33] Supra note 19, at 72.

2.1.2.1 1. DISTRIBUTION

Although nodules are discovered in every ocean, the most concentrated zone is in the East Pacific, particularly the Clarion- Clipperton Fracture Zone (CCFZ).

Map 1

Deposits of Ferromanganese Nodules in the Pacific and Clarion-Clipperton Zone



Source: Horn, D., Horn, B. and Delach, M., "Ocean Manganese Nodules - Metal Values and Mining Sites," Technical Report No. 4 , National Science Foundation, 1973.

"The area considered most valuable covers a territory of 200 km width and 1,500 km length between the Clarion and Clipperton Fault Zone, approximately between 8 and 30 north latitude and 131 and 145 west longitude. The nodule concentration density ranges from 8 to 20 kg/m under a water column of about 3-5 km."[34]

It is known that nodules are located within the limits of the legal continental shelf of Japan, Australia, Chile, Peru, Ecuador, Madagascar, South Africa, the United States, and Sweden.[35] Many Pacific islands are also in a position to own these nodules.[36]

2.1.2.2 2. APPEARANCE

Manganese nodules are potato-shaped with a variety of irregularities,[37] uncovered or half-covered with a thin layer of sediment of the deep ocean floor.

"The most attractive nodules are spherical and range from a centimetre or so to several tens of centimetres in diameter. In reality, though, spherical nodules are quite rare. Discordal or irregular shapes are much more common".[38]

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[34] 4 Ocean Yearbook (1983), supra note 1, at 113.

[35] Supra note 32.

[36] Supra note 32.

[37] Post, Alexandra Merle, DEEPSEA MINING AND THE LAW OF THE SEA, The Hague, Martinus Nijihoff Publishers, 1983, at 11.

"Having the odd appearance of burnt black potatoes on the outside, and a visible onion-ring structure on the inside growing out from a nucleus of small shells, shark's teeth, whale ducts, and the like, manganese nodules are scattered about the surface of the ocean floor."

[38] Heath, G. Ross, "Deep-Sea Ferromanganese Nodules", in W.G.Erhst and J.G. Morin, eds., THE ENVIRONMENT OF THE DEEP SEA, Englewood Cliffs, U.S., Prentice Hall, Inc., 1982, at 114.

2.1.2.3 3. ORIGIN

The phenomenon that the existence of nodules is limited to areas where pelagic sediments are accumulating at rates of less than 7 m per 1 million years, inspires some to look for their origin.[39] Further investigation suggests that nodules are rare or non-existent on the hemipelagic deposits of the continental margin area, on the turbid abyssal plain, on the great deep-sea drift by bottom currents, or on calcareous and siliceous biogenic oozes along the equator and at high latitude.[40]

2.1.2.4 4. COMMERCIAL FEASIBILITY

To be commercially profitable, large quantities of manganese nodules as well as a degree of concentration is indispensable and it is estimated by Dr. Post that an average density of nodules in an area of 5-10 kg/m be needed and nickel be at the level of rough 2%).[41]

2.1.2.5 5. RENEWABILITY

The accretion rates of nodules are estimated to be between one to a few milimetres per million years.[42] At such a slow pace of growth, it

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[39] Charlier, Roger H., "Water, Energy, and Nonliving Resources", supra note 34, at 114.

[40] Heath, supra note 38, at 107.

[41] Post, supra note 37, at 15. Also see Post, supra note 37, at 14. "The commercial feasibility of nodule mining depends on: (1) the combined value of the metal content of the nodules, (2) the population or concentration of nodules at the mine site, (3) the feasibility and efficiency of recovery of nodules at a given water depth and given area topography, and (4) the costs of nodule mining as compared to costs for competitive land-based mining." (at 14).

[42] Heath, supra note 38, at 123-124.

must be considered a non-renewable resource, when compared with the speed of recovery and consumption. Unlike fish and other living resources, the prime sites, once mined, will not be replaced for thousands of years.[43] Numbering altogether between 14 to 56, 10 or more of the prime sites will be taken by the first generation of deep sea-bed miners.[44]

To conclude, it is imperative to note that manganese nodules, though lying between the sea-bed and the water column, are nonetheless to be mined or scooped with the inevitable linkage with the sea-bed itself. To extract nodules, one has to use a given area of the sea-bed for a period of time, temporary though it may be. In this sense, nodules are inseparable from its underlying sea-bed.

2.2 *Section B. Legal Limits of the Deep Sea-Bed*

The limits of the deep sea-bed, due to the elusive limits of national jurisdiction that determines the former, have undergone several major changes over the centuries. There is no doubt that in international law, as it stands today, the submarine area under national jurisdiction cannot be limitless. In other words, the deep sea-bed is not susceptible to being divided into national lakes.[45]

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[43] Breen, James H., "The 1982 Dispute Resolving Agreement: The First Step Toward Unilateral Mining Outside the Law of the Sea Convention", 14 Ocean Dev. & Int'l L. 201-233(1984), at 227, note 65.

[44] Dyke, Jon Van and Yuen, Christopher, "'Common Heritage' v. 'Freedom of the High Seas': Which Governs the Seabed?", 19 San Diego L. R. 493-551(1982), at 510 note 70.

[45] The analysis by Mr. Kronmiller concerning ascertainment of the limits of national jurisdiction is quite convincing. See Kronmiller, Theodore G., THE LAWFULNESS OF DEEP SEABED MINING, London, Oceana, 1980, at 108-130.

The problem confronting us is not whether or not such a limit exists, but rather where such a limit should be and why in law. Historically, when the law of the sea took shape, the only national non-functional jurisdiction with regard to the submarine area was the legal regime of the territorial sea. Later, some countries claimed or exercised exclusive jurisdiction, in various forms, over the sedentary species, outside the submarine area of their territorial sea, but adjacent to their coast. After World War II, the doctrine and regime of the continental shelf came into being. And with the adoption and signing of the 1982 Convention, the regime of the continental shelf, though not completely restructured, embraced some not insignificant innovations. As emphasized earlier, the limits of the deep sea-bed depend, to a great extent, on the seaward limits of the continental shelf of the coastal States.

In contemporary international law, the submarine area is divided into five zones for legal purposes :

(a) internal waters submarine area, where sovereignty pervades the sea-bed and the subsoil;

(b) territorial sea, where the same sovereignty applies to the sea-bed and the subsoil;

(c) exclusive economic zone, where the sea-bed and the subsoil are subject to sovereign rights concerning living and non-living resources;

(d) continental shelf, where the sea-bed and its subsoil are subject to exclusive sovereign rights with respect to both living resources belonging to sedentary species and non-living natural resources;

(e) the deep sea-bed and its subsoil beyond national jurisdiction.[46]

In accordance with the chronological evolution of the regime applicable to the submarine area, I will proceed under three subheadings in this section:

(1) legal limits of the deep sea-bed prior to the emergence of the regime of the continental shelf;

(2) legal limits of the deep sea-bed posterior to the birth of the regime of the continental shelf;

(3) legal limits of the deep sea-bed in the 1982 Convention on the Law of the Sea.

2.2.1 Subsection One. Legal Limits of the Deep Sea-Bed Prior to the Emergence of the Regime of Continental Shelf

Before the regime of continental shelf, there were three sorts of non-functional national maritime jurisdiction: internal waters, territorial sea, and contiguous zone, with the instances of sedentary species as a rare addition. Besides, historical title might come into play either over the sea or over the submarine area, but rarely in the latter case. The submarine area within internal waters was under complete sovereignty of coastal States, as was the contiguous zone for the purpose of regulating sanitary, fiscal, immigration, and customs matters, having nothing to do with submarine area. Over the submarine area of the territorial sea, most coastal States exercised sovereignty up to a limit of three nautical miles from the low-tide mark of the coast. However, Scandinavian countries insisted upon a four-mile territorial sea, and

[46] O'Connell, D.P., THE INTERNATIONAL LAW OF THE SEA, v. 1, Oxford, Clarendon Pr., 1982, at 439.

Russia, twelve miles since 1909. Beyond this limit lay the unknown great submarine areas not subject to sovereignty of any State.

With regard to sedentary species that lay on the submarine area outside the jurisdiction of territorial sea, a number of States asserted their exclusive rights to exploit such resources.[47] But compared with the widespread practice of three-mile limit of territorial sea, this was an exception to the rule. Thus, it was observed:

> "Before the doctrine of the Continental Shelf emerged as a positive rule of international law, the seabed beyond the limits of national jurisdiction embraces the abyssal ocean floor as well as the continental margin up to the seaward limit of the coastal State's territorial sea."[48]

It is an undisputed fact the non-functional national jurisdiction went as far as the outer limit of territorial sea. The precedent of sedentary species, though acquiesced in by other States, did not alter the basic picture that the assertion of sovereignty was based upon contiguity to the coast and long usage, not effective occupation. I will refer to this question in more detail in connection with the doctrine of res nullius below.

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[47] Fulton, T.W., THE SOVEREIGNTY OF THE SEA, New York, 1911, at 697-698.

[48] The author went on: "Indeed, scientists were not even aware of the geomorphic difference between the continental shelf and deeper seabed area until the late nineteenth century. It was not until the middle of the twenties century that this geomorphic difference was recognized in international law, and a distinction was made between the continental shelf and the deeper submarine areas."

See Gibson, R. Sebastian, "An Illusion of Camelot, the Validity of a Claim, and the Consequences of the Negotiations: the Great Nodules Spectacle", 13 San Diego L. R. 667-706(1976), at 674.

2.2.2 Subsection Two. Legal Limits of the Deep Sea-Bed Posterior to the Birth of the Regime of the Continental Shelf

The completion of the law-making process of the continental shelf was effected with a series of events: the 1945 Truman Continental Shelf Proclamation of the United States; the assertion of a 200 mile resource zone by a group of Latin American countries; the deliberations within the International Law Commission in the 1950's; widespread support evidenced by State practice; scholarly opinions; and, finally, the adoption of the 1958 Geneva Convention on the Continental Shelf. The evolution was so swift that its legal implications were not entirely clear until the issue of the deep sea-bed surfaced.

Article 1 of the Continental Shelf Convention provides:

> "For the purpose of these Articles, the term '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 area; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands."

Of the two criteria stipulated in this Article, the 200-metre isobath test, imperfect as it may appear, offered a workable and objective standard to determine the outer limit of continental shelf. On the other hand, the exploitability test, based upon the elusive and fluid conception of the progress of marine technology, introduced a subjective and uncertain element into the delineation, which was to destabilize the whole structure of the intricate network of the law of the sea. The restriction imposed upon the exploitability test by the notion of adjacency, was meaningful merely in the sense that the littoral States were barred from extending indefinitely their non-functional jurisdiction far into the deep sea-bed, with the precise limit of continental shelf open to encourage States to gobble up the vast submarine area outside the 200-metre isobath. This was at odds with the proposition that boundless furtherance of coastal States' jurisdiction over the vast submarine area was impermissible in international law. The only remaining method to check such a trend, was to determine the conditions to apply exploitability test, in conformity with customary international law, which itself remained vague on the novel regime of the continental shelf.[49]

A provision on sedentary species was inserted in Article 2 (4) of the Continental Shelf Convention, evidencing the incorporation of the precedential value of sedentary species into the regime of the continental shelf.

2.2.3 Subsection Three. Legal Limits of the Deep Sea-Bed in the 1982 Convention on the Law of the Sea

2.2.3.1 1. COMMENT ON ARTICLE 1 (1)

There are two provisions in the Convention relevant to the limits of the deep sea-bed. Article 1 (1) defines the "Area" as follows:

> "'Area' means the sea-bed and ocean floor and subsoil thereof beyond the limits of national jurisdiction."

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[49] In reality, though, most coastal States did not rely upon the exploitability criterion when they enlarged their jurisdiction because the exploitability test, as it was associated with the advanced technology, favored undoubtedly the industrial States and only gave them the possibility of expansion in practical terms. What the coastal States counted upon was still the inherance underpinning which was the basis of the regime of continental shelf.

Two comments are at point on this provision. *First*, it is often presumed that 'national jurisdiction' means present day national jurisdiction. This presumption is in no way guaranteed, because it is doubtful whether "national jurisdiction" is equal to "present day national jurisdiction", or some national jurisdiction of the past. The related resolutions of the General Assembly, sometimes used the qualifying adjective "present day", and sometimes not.[50] The draft articles drawn up by the Sea-Bed Committee and considered by the First Committee, comprised four options. Only alternative (c) was adopted as the final text, as it appeared in the 1982 Convention.[51] Thus, the insufficient attention given to this provision has resulted in temporal ambiguity of the jurisdiction. However, in light of the fact that Article 1(1) is within the Convention, the meaning of the phrase "national jurisdiction" must be construed as that provided by the Convention itself, namely, national jurisdiction over continental shelf as contained in Article 76.

Second, there is also a spatial uncertainty, for the phrase "national jurisdiction" does not specify whether it refers to non-functional or functional jurisdiction, since both types of national jurisdiction exist in the Convention. If it means functional jurisdiction, the jurisdiction of a flag ship, as has been argued, would be the ultimate limit of national jurisdiction.[52] So, it must be non-functional jurisdiction,

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[50] For instance, the Moratorium Resolution used the phrase "present national jurisdiction", while the Principles Declaration omitted it.

[51] UN Doc. A/CONF.62/C.1/L.3.

The other three alternatives are : 500-meter isobath plus 200-mile limit; seaward of the outer limit of the coastal sea-bed area; and outer lower edge of the continental margin which adjoins the abyssal plains plus the 200-mile criterion.

akin to territorial jurisdiction.

2.2.3.2 2. OVERVIEW OF ARTICLE 76

This Article consists of detailed and complex formulae defining the outer limit of continental shelf.[53]

Five key concepts have been employed to determine the limits:

(a) natural prolongation of land territory (paragraph 1);

(b) continental margin (paragraph 2);

(c) outer edge of the continental margin (paragraph 4 <a>);

(d) foot of the continental slope (paragraph 4 <b>); and

(e) submarine elevations (paragraph 6).[54]

Of these, the last three are more specific than the first two, and hence more useful in identifying where the outer limit lies. The first two concepts may be more valuable in judging what the continental shelf

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[52] Oxman, Bernard H., "The Third United Nations Conference on the Law of the Sea: the Tenth Session (1981)", 76 American Journal of International Law (hereinafter cited as AJIL) 1-23(1982), at 18.

"The Draft Convention describes precise coastal zones with precise limits, in particular the territorial sea, the exclusive economic zone, and the continental shelf. No one of the provisions regarding these areas uses the term 'national jurisdiction'. Expressis verbis, there are no 'limits of national jurisdiction' in the Convention. Indeed, flag States exercise 'national jurisdiction' wherever their ships go ... Thus, for all the attention being paid to the content of the common heritage principle, the Draft Convention does not contain a correct definition of the limits of the 'Area' that is the common heritage, and accordingly does not contain a properly defined prohibition on claims beyond 200 miles or the continental margin."

[53] A useful diagram of Article 76 was provided by Professor Oxman, Bernard H., "The Third United Nations Conference on the Law of the Sea: the Ninth Session(1980)", 75 AJIL 211-256(1981), at 229. It is reproduced as Appendix B.

[54] Allot, Philip, "Power Sharing in the Law of the Sea", 77 AJIL 1-30(1983), at 17-18.

is, and whether it is existent rather than in locating where it ends.

The outer edge of the continental margin is qualified by the 350 nautical mile line from the baseline, or 100 nautical mile limit from 2,500-metre isobath, if the physical margin extends beyond the 200 nautical miles, and further than the other two limits. Consequently, the outer edge of continental margin is effective, only when the continental margin goes beyond the 200-mile limit, but not up to either the 350-mile limit, or the 100-mile limit from the 2,500-metre isobath.

The foot of the continental slope, though crucial to the demarcation, has not been properly defined in the Convention, and a troublesome situation may well arise over where the foot of the slope lies, and by what standard this is determined.[55]

Submarine elevations that are natural components of the continental margin are not easily distinguishable from the oceanic ridges, such as the submarine elevation off Iceland.

In principle, therefore, there are at least five possible outer limits of continental shelf:

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[55] Hedberg, Hollis O., "A Critique of Boundary Provisions in the Law of the Sea Treaty", 12 Ocean Dev. & Int'l L. 337-342(1982-83), at 339.

```
|___|----200 miles----|
|   \______           |
|    shelf\           |
|          \ slope    |
|           \_________|______________________
|                 abyssal plain
```

Figure 1: 200-Mile Limit. 200 miles from baseline, which is applicable to the situation where the physical continental margin ends within 200 miles of the baseline.

```
|_____|-outer edge of margin-|
|     \_________             |
|      shelf   \             |
|               \ slope      |
|                \___________|   abyssal plain
|                    rise    \___________________
```

Figure 2: Outer Edge of the Margin. The outer edge of continental margin, when the physical margin sits between 200-miles and 350 miles, or 100 miles from 2,500-metre isobath.

```
|____|--- 350-mile limit ----|
|    \___________            |
|     shelf      \           |
|                 \ slope    |
|                  \_________|__________   abyssal plain
|                      rise            \_________
```

Figure 3: 350-Mile Limit. 350-mile limit, if the physical continental margin reaches further than 350 miles, and there is an absence of submarine elevations that comprise natural components of the continental margin.

```
|____           |--- 100-mile ---|
|    \__________|                |
|     shelf   \| 2500-meter      |
|        slope\_______________|__     abyssal plain
|                   rise        \_______________
|
```

Figure 4: 100-Mile Limit from 2500-meter Isobath. 100-mile limit seaward from the 2,500-metre isobath, when the continental margin stretches outside the 200-mile line and within or extending beyond the 350-mile line, and there is no submarine elevation that can be regarded as the natural component of the continental margin.

```
|____|-- outer limit by elevations --|
|    \__________ ___        _         |
|       shelf       \    |‾\__   ___  |
|              slope |_/      \___|‾‾/ |
|                     elevations    \_|_____________
|                                  abyssal plain
```

Figure 5: Outer Limit by Submarine Elevations. The outer limit set by submarine elevations that are natural components of the continental margin, such as its plateau, rises, caps, banks, and spurs beyond the 350-mile contour.

2.2.3.3 3. SOME WORDING AMBIGUITIES

(1) Distinction between "Continental Shelf" and "Shelf":

Some textual ambiguities have been found with regard to the use of some terms. It is inconceivable that "continental shelf" in paragraph 1 will be the same as "shelf" in paragraph 3.[56] Indeed, the legal conti-

[56] Langeraar, supra note 19, at 500.

"This would mean that the outer edge of the continental margin in nental shelf in the case where it exceeds 200 miles, might well be equal to the physical continental margin. However, as can be discerned, "outer limits" is used for "continental shelf", while "outer edge" is chosen for "continental margin", which may be an indication that those nuances are intentionally designed to avoid confusions between continental shelf and continental margin, and between the legal continental shelf and the shelf as a component of the continental margin.

(2) <u>Distinction between "the Rise" and "Rises":</u>

Similarly, "the rise" in paragraph 3 differs from the "rises" in paragraph 6. The former is a gentle and flat submarine area, usually extensive, whereas the latter is a submarine elevation that is a natural component of the continental margin and quite possibly very small, as it may resemble a small mount. Were "the rise" in paragraph 3 the same as the "rises" in paragraph 6, there would be no need of specifically listing the "rises" in paragraph 6. Conversely, the cut-off provisions in establishing the outer edge of continental margin, i.e. the outer edge of the continental rise in the sense of paragraph 3, which purports to terminate the legal continental shelf, not at the natural outermost edge of the continental rise that may well exceed 350 miles, but within 350 miles (at the middle of the physical continental rise in such circumstances), would be paralized. And the whole system under Article 76 would contain serious conflicting provisions. Henceforth, the correct interpretation of "the rise" in paragraph 3 is not at all identical to the "rises" in paragraph 6.

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paragraph 1 coincide with the outer edge of the rise in paragraph 3. This also implies that the shelf i paragraph 3 cannot be the continental shelf in paragraph 1."

(3) Distinction between "Land Territory" and "Land Mass":

Another vagueness is the wording pertaining to prolongation. In paragraph 1, it is the "natural prolongation of its land territory", while in paragraph 3, it becomes the "submerged prolongation of the land mass of the coastal States." This subtle difference might not be so impressive, if the phrase "land territory" conveyed identical meaning, as does the phrase "landmass". The question pertains to whether a small piece of land territory (it could be an island), will be entitled to possess continental margin beyond 200 miles, or only the land mass of the coastal States would be bestowed with the continental margin beyond 200 miles. The phrase in paragraph 3 may simply describe the physical continental margin, which is normally attached to the land mass instead of island. In light of the choice of expressions and other considerations, "submerged prolongation of the land mass of the coastal States" in paragraph 3 seems more suitable to the case where the physical continental margin goes beyond 200 miles. On the other hand, "natural prolongation of its land territory" in paragraph 1, may imply the legal nature of the continental shelf, that is, coastal States have exclusive sovereign rights over it, independent of a need to claim or actually exercise over the area, in short, an inherent title.

2.2.3.4 4. DEFINITION OF THE FOOT OF THE CONTINENTAL SLOPE AND SEDIMENTARY ROCK

The 1982 Convention adopted the Irish formula which put the concept of the foot of the continental slope in a key position, as it appears in paragraph 4(a)<i>, 4(a)<ii>, and 4(b).[57] The foot of the continental slope is defined as "the point of maximum change in gradient at its base in the absence of evidence to the contrary." The criticism that the Convention merely shifted the problem of defining the foot of the continental slope to that of defining the base of the continental slope, seems to be justifiable.[58] Coastal States may manipulate this to satisfy their claims, though they are confined to between 200 miles and 350 miles, or to between 200 miles and 100 miles from the 2,500 metre isobath.

It seems that the foot of the continental slope cannot in any event be based upon oceanic crust, since the definition of continental shelf imposes this restriction. Besides, whatever evidence could be regarded to indicate that a particular foot of the slope is not located on the point at the maximum gradient, needs to be determined. However, the

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[57] Ireland: Continental Shelf (Article 62 of the Revised Single Negotiating Text, Revision II), 10 August 1976, in Renate Platzoder, compilator and editor, THIRD UNITED NATIONS CONFERENCE ON THE LAW OF THE SEA: DOCUMENTS, v.IV, Dobbs Ferry, Oceana Publication Inc., 1983, (hereinafter cited as Platzoder), pp.456-466.

[58] Hedberg, supra note 55, at 339.

"The 'foot of the continental slope' can be better defined as the lowest point in the 'oceanwardmost' major course of downward inclination in the generally descending profile of the continental slope, beyond which the gradient either flattens very gently to merge eventually with the abyssal plain, or reverses to form the other side of an oceanic trench."

Another view held: "It could be argued that morphological characteristics should be the sole determinant of the foot of the slope. However, in view of the relationship between the land mass of the coastal State and the continental margin, it would be inconsistent for the foot of the slope to be on oceanic crust. It seems reasonable where there is ambiguity in the positioning of the foot of the slope to use geological evidence to support a claim. (McMillan, supra note 25, at 149).

scarcity of data and information on the foot of the slope makes it difficult to accurately determine where the foot of the slope lies.[59]

Another possible loophole is the definitional problem of sedimentary rocks, which is seen by some geologists to include unconsolidated, as well as consolidated sediments, and by other geologists to encompass only consolidated sediment.[60] This confusion could well alter the outer limit of the continental shelf. The discretionary power is vested in the coastal States, as will become clearer in a subsequent analysis.[61]

Hopefully, the Commission on the Limits of the Continental Shelf will clarify and elaborate these problems, when making recommendations to the coastal States.

There is an exception to 4(a)<i> (which spells out the use of sedimentary rocks in measuring the distance from the foot of the slope to somewhere on the rise), which applies to the continental shelf of Sri

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[59] McMillan, supra note 25, at 156.

"The main determinants of the accuracy with which the edge of the continental margin can be determined using the formulae are the nature of the foot of the slope, and the paucity of information on strata velocities in rocks outward from the foot of the slope in many parts of the world."

[60] McMillan, supra note 25, at 150.

"The boundary between metamorphic rocks and diagenetically altered sedimentary is often hard to determine. Additionally, some rocks, eg volcaniclastic rocks, can be classified as either sedimentary or igneous depending on the purpose of the classification.

The term 'rock' is often defined geologically as including unconsolidated mineral matter; however in common language and amongst other professions the term usually only refers to consolidated material."

[61] Pardo, Arvid, "The Convention on the Law of the Sea: A Preliminary Appraisal", 20 San Diego L. R. 489-503(1983), at 499.

Lanka and other countries contiguous to the southern part of the Bay of Bengal, where the thickness of the sediment is calculated to be not less than 1 kilometre.[62]

2.2.3.5 5. SUBMARINE ELEVATIONS THAT CONSTITUTE NATURAL COMPONENTS OF THE CONTINENTAL MARGIN, AND OCEANIC RIDGE

At first glance at paragraph 6 of Article 76, one gets the impression that the draftsman intended to prevent paragraph 5 from applying to submarine elevations that are natural components of the continental margin. And the 350 mile cut-off is geared to the formula of 100 miles from the 2,500 metre isobath, even if the latter might provide further limits for the outer edge of the continental margin.

It is observed that

> "Ridges are long, narrow elevations with relatively steep sides. They may be of two basic kinds: submarine ridges constituting a natural prolongation of the land mass, or oceanic ridges formed by an upward thrust of oceanic crust".[63]

Lack of data about the composition of the sea ridges, oceanic or submarine, will further disturb the already murky waters over whether they belong to oceanic ridges or submarine ridges. Oceanic ridges are expressly precluded from the domain of the legal continental shelf in

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[62] Annex II to the Final Act of UNCLOS III, "Statement of Understanding Concerning a Specific Method To Be Used In Establishing the Outer Edge of the Continental Margin".

[63] O'Connell, supra note 46, at 496.

Examples of oceanic ridges include: the Mid Atlantic Oceanic Ridge extending southward of Iceland, the Nazco Ridge off the coast of Peru, the Walfisch Ridge off Namibia, Walters Shoals, and Southwest Indian Ocean Ridge to the south of Madagascar.

the Convention.[64] The question left to be answered is what difference exists between submarine ridges and oceanic ridges. Article 76, however, is silent on this point. Many expressed their concern about the situation that the coastal States may well make use of this imperfection to extend their continental shelf.[65] These concerns are not without reason, for the failure to delimit neatly the boundary on sea ridges could well trigger another dangerous movement of national enclosure of the ever-diminishing international sea-bed area. If the coastal States can succeed in proving this feature to be of continental crust rather than oceanic crust, then the 350-mile limit is not going to apply.[66] Professor V.E. Mckelvey illustrates:

> "Could it be argued that the submarine ridges of the first sentence of paragraph 6 refer to ridges that are natural components of the ocean floor, but that might be considered to be prolongations of an island (as the Mid-Atlantic Ridge could be of Iceland) or of a land mass (as Walvis Ridge might be of Namibia), and where national jurisdiction under paragraphs 4(a)<ii> and 5 might be considered to extend outward from the base of the ridge or from the 2,500 meter isobath for long distance?"[67]

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[64] O'Connell, supra note 46, at 496.

[65] Alexander, Lewis M., "the Ocean Enclosure Movement: Inventory and Prospect", 20 San Diego L.R. 561-594(1983), at 584; also see McMillan, supra note 25, at 151.

[66] McKelvey, V.E., "Interpretation of the UNCLOS III Definition of the Continental Shelf", in Douglas M. Johnston and Norman G. Letalik eds., Proceedings, Law of the Sea Institute, 16th Annual Conf., June 21-24, 1982, Halifax, Canada, 1984, at 469.

"The point is, however, that regardless of what a feature had been called -- be it a ridge, plateau, rise or whatever -- If it can be shown to be a natural component of the continental margin, the second sentence of paragraph 6 clearly provides that the 350-mile limit not apply."

[67] Ibid. at 469.

Besides, there are other submarine ridges that are probably susceptible of being claimed, such as Shirshov ridge off USSR, Menclesi-

On this point, the last sentence of paragraph 3 is of assistance. If the submarine ridges in paragraph 6 are of oceanic character, they cannot be considered as the prolongation of the coastal States. Besides, the second sentence of paragraph 6 names several features (plateaux, rises, caps, banks and spurs) as submarine elevations, without mentioning anything about ridges. Again, the determinant factor is the composition of any such feature. Furthermore, customary international law recognizes the notion of adjacency which restricts the indefinite extension of the continental shelf of the coastal States. It should be abundantly clear that submarine elevations are distinct from submarine ridges, not only by virtue of geological composition; but also because of geomorphological differences.

In view of the nature and definition of continental shelf as reflected in paragraph 1 and 3, however, the abyssal plain and ocean floor are not susceptible of national jurisdiction so as to avoid any fundamental conflict with the very nature of the regime of continental shelf.

2.2.3.6 6. THE ISSUE OF THE CONTINENTAL SHELF OF ISLANDS

There has grown a fear that the deep sea-bed beyond national jurisdiction will be put into danger, unless the many small islands scattered throughout the oceans, the Pacific in particular, are denied the right to claim their own continental shelf or EEZ. For example, in or near the

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no Ridge off US, Kelvin Seamounts off US east coast, Cocos Ridge off Central America, Carnegie Ridge off Columbia, Nazca Ridge off Peru, Ninety East Ridge off Nicobar and Andaman Islands of India, Chagos Laccadive Ridge off India, Mozambique Ridge off Mozambique and South Africa, and Murray Ridge off Parkistan. See <u>supra</u> note 28.

Map: <u>General Bathymetric Chart of the Oceans (GEBCO)</u>, 5th ed., 1:10,000,000, Ottawa, Canadian Hydrographic Service, 1978.

nodule-rich Clipperton-Clarion Fracture Zone, at least the following islands present threats to the area beyond national jurisdiction: Islas Revilla Gizedo of Mexico, Clipperton Island of France, and Line Islands of the U.S. and the U.K.[68] Some of them are uninhabited, like Islas Revilla Gezido and Clipperton, and some sustain human habitation, like Line Islands.

The 1982 Convention groups islands into two kinds (Article 121): islands that can "sustain human habitation" and "economic life of its own"; and rocks that "cannot sustain human habitation or economic life of its own." The former are entitled to possess both continental shelf and EEZ, whereas the latter have no continental shelf or EEZ. Besides, the definition of an island is provided: "an island is a naturally formed area of land, surrounded by water, which is above water at high tide". The blurring line between island and rock will contribute to the real danger of offering all islands and rocks continental shelf and EEZ. Sustainability of human habitation and economic life of its own are very elastic, because with the progress of technology, almost every island or rock are capable of being made inhabitable for human species, and sustainable of its own economic life. As a result, this criterion will be rendered increasingly irrelevant.[69] Should this become reality, the area reserved as the common heritage of mankind would be diminished further, and could be as small as one third of the submarine area of the

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[68] Alexander, <u>supra</u> note 65, at 583-584.

[69] Dyke, John M. Van and Brooks, Robert A., "Uninhabited Islands: Their Impact on the Ownership of the Ocean's Resources", 12 <u>Ocean Dev. & Int'l. L.</u> 265-300 (1982-83); Verner, Jimmy L., Jr., "Legal Claims to Newly Emerged Islands", 15 <u>San Diego L. R.</u> 525-545(1978); Synopsis, 14 <u>San Diego L. R.</u> 732(1977).

world, as compared with the two-thirds under national jurisdiction. This picture, after all, is not fanciful even at present. The deep sea-bed mining will be conducted by coastal States such as France (through its Polynesian possessions), Mexico, Chile, Ecuador, the U.S., the U.K., Japan, and Australia, by virtue of the islands they possess.[70] The importance of islands in acquiring continental shelf and EEZ cannot be better demonstrated than in the controversy between the U.S. and Japan over the recently discovered submerged islands in the Pacific.[71]

. To check this undesired trend, we are bound to adopt a restrictive interpretation of the provisions on island regime in the Convention. That is, size should be taken into account in determining whether it is a rock or an island.[72] Sustainability of human habitation should not be construed as to embrace prospective habitation and a time limit should be worked out for the determination of all the islands and rocks. Economic life should be interpreted in such a way that the island in question be the principal base or link in a chain of economic activities.

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[70] Borgese, Elisabeth Mann, "The Role of the Sea-Bed Authority in the '80s and '90s -- the Common Heritage of Mankind", in Rene-Jean Dupuy,(ed.), THE SETTLEMENT OF DISPUTES ON THE NEW NATURAL RESOURCES, workshop, the Hague, 8-10 November 1982, The Hague, Martinus Nijihoff Publishers, 1983. at 38.

[71] Dyke and Brooks, supra note 69, at 269.

[72] For an excellent discussion about islands, see Hodgson, Robert D., "Islands: Normal and Special Circumstances" in LAW OF THE SEA: THE EMERGING REGIME OF THE OCEANS, Ballinger Publishing Co., 1973, at 150-151. Four categories are suggested:

- i. rocks, less than 0.001 sq mile in area;
- ii. islets, between 0.001 and 1 sq mile;
- iii. isles, greater than 1 sq mile but not more than 1,000 sq miles;
- iv. islands, larger than 1,000 miles.

2.2.3.7 7. THE ROLE OF THE COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF (CLCS)

The Commission on the Limits of the Continental Shelf (CLCS), outlined in Annex II of the Convention, is to:

> "consider the data and other material submitted by coastal States concerning the outer limits of the continental shelf in areas where those limits extend beyond 200 nautical miles, and to make recommendation in accordance with Article 76 and the Statement of Understanding ; and to provide scientific and technical advice, if requested by the coastal State concerned during the preparation of the data." (Article 3<i>)

The CLCS shall be composed of 21 members, who will stay for a term of five years and are eligible for reelection. The coastal State that intends to establish the outer limits of its continental shelf exceeding 200 miles, shall submit a document containing the delineation, as well as scientific and technical data for such delimitation. The CLCS shall, on the basis of the submission, make a recommendation to the coastal State and to the Secretary-General of the United Nations. If the coastal State accepts the recommendation and delimits the line accordingly, the limits as drawn shall be final and binding. If the coastal State disagrees on the recommendation, it should present a revised or new submission to the Commission.

Because of the textual, as well as interpretative and applicative problems with the outer limit of continental shelf, there is a widespread expectation that the CLCS will solve or ease these problems, before they become worse, and will serve as an effective vehicle to reduce disputes between coastal States and the International Sea-Bed Authority. Due to the fact that ISA is not given any role in defining the limits of the area beyond national jurisdiction,[73] the role of CLCS is growing and hopefully some kind of cooperation will eventually developed between the CLCS and the ISA. This will greatly aid in the delimitation of the deep sea-bed.

2.2.3.8 8. LEGAL STANDING OF ARTICLE 76 OF THE CONVENTION

As a whole, Article 76 is a mixture of customary international law and conventional rules. Conventionally, the Convention has witnessed widespread support. Perhaps it is safe to regard Article 76 as a set of emerging treaty rules. Customarily, it has been stated:

> "Except for the technicalities of delineation, and the granting of seabed rights to States with continental shelf narrower than 200 nautical miles, the Draft Caracas Convention provisions may be taken to represent the present position in customary international law."[74]

This statement seems to overlook the problematic technicalities in Article 76. As a matter of fact, it is the detailed provisions that result in disagreement among States. Precisely, it is the question of how far and by what criteria a State can have its continental shelf that divides States.

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[73] Pardo, supra note 61, at 499, note 42,

> "art. 134 is cryptic, but it seems that the future Authority:
> (a) must passively wait notification by coastal States of the limits of their continental shelf;
> (b) may not question in any way the limits notified to it;
> (c) may not remind any coastal State of its obligation to establish firm limits to its continental shelf; and
> (d) may not establish provisional boundaries for the International Seabed Area in the event that coastal State notifications are delayed."

[74] O'Connell, supra note 46, at 497.

However, this is not to say that a State can lightly ignore or disregard the detailed provisions of Article 76, even the technicalities in it. Besides, even the United States and other States that have thus far declined to sign the 1982 Convention, allege that they will abide by the terms of the Convention other than those concerning the deep sea-bed mining. It seems that the U.S. may pursue consistent policy with respect to non-seabed mining provisions of the LOS Treaty, as the reply of Ambassador James L. Malone indicated.[75] The position of the United States is more clearly expressed by the Assistant Legal Adviser of the U.S. Department of States, Mr. David A. Colson:

> "The United States has therefore accepted the text, not as binding law (even in a customary-international-law sense) but as a guide for conduct and as the measure of the rights of others that we will recognized."[76]

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[75] "Exchange Between Expert Panel and Reagan Administration Officials Provisions of LOS Treaty on Non-Seaged-Mining", 79 AJIL 151-158(1985), at 156.

A group of law of the sea expert in the United States presented the following proposal to the Reagan Administration:

1. "The United States should adopt a clear and consistent policy applicable to all organs of the U.S. Government, of adherence to all of the rules of the Convention, excluding at most only those dealing with the regulation of mining by the International Sea-Bed Authority. The United States need not exercise all its rights (e.g., it need not extend its territorial sea or require consent for scientific research in its economic zone if it prefers not to), but it must scrupulously respect all its duties, including the limitations on its rights.

2. The United States should encourage and urge other States, including its allies, to do the same.

3. Means should be sought to make compulsory dispute settlement an effective part of our policy and that of other nations, binding at least on the basic issues of navigation and pollution."

[76] Consensus and Confrontation, supra note 14, at 45.

Professor Bernard Oxman also pointed out:

> "As a matter of planning and strategy, I believe it is very important for the U.S. Government to avoid giving the impression that it regards its own laws and activities as inconsistent with the common heritage principle. I also believe it is very important that the United States retain its credibility as an authoritative interpreter of the common heritage principle."[77]

However, the boundary delimitation provision in the U.S. President EEZ Proclamation of 1983, appear different from the LOS Convention.[78] The main elements of the delimitation, the Irish formula, though proposed only during the negotiations at UNCLOS III, has won widespread support and there is so far no contrary indication to it by State practice. The loopholes in Article 76, with the refining by the participation of CLCS, will be eradicated to the extent that they are admissible into customary international law.

2.3 Section C. Summary to Chapter II

The deep sea-bed is physically inseparably connected with the continental margin. Considerable work needs to be done in order to protect the international sea-bed from infringement by the coastal States. The issue of the limits of the deep sea-bed has caused us many problems in determining the boundary between the deep sea-bed and the legal continental shelf.

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[77] "Remarks by Bernard H. Oxman", 77 <u>Proceedings of American Societry of International Law</u> 157-161(1983), at 160.

[78] LOS Convention: "to achieve equitable solutions"; U.S. EEZ Proclamation: "in accordance with equitable principles".

Further scientific investigation of the deep sea-bed as well as its resources is indispensable for a thorough understanding of the problems involved. At this stage, regional survey of the adjacent deep sea-bed and its resources, as well as the particular difficulties in determining the outer limits of the legal continental margin, is advisable. Then, a comprehensive international survey can be organized by co-operation under the auspices of the United Nations. Some countries that have long coasts or have special interests in the deep sea-bed and its resources can undertake their own survey and report the result to the competent international organizations concerned.

As regards the legal delimitation line between the continental shelf and the deep sea-bed, the difficulty is enormous but not insurmountable. Through appropriate organizational arrangement, the Commission on the Limits of the Continental Shelf can play an active and constructive role in solving the problems. The International Tribunal for the Law of the Sea and its Sea-Bed Disputes Chamber are expected to give a restrictive interpretation of the provisions of Article 76 of the Convention on the Law of the Sea, and henceforth will make their contribution to the stabilization of the rules and norms on the delimitation between the international deep sea-bed and the national continental shelf. Also, each State should be deterred from claiming unwarranted areas of the deep sea-bed, which is most likely to be part of the international deep sea-bed area, through proper mechanisms available in the present international arena. These mechanisms may include the ISA and its related organs, the UN and its related organs, the CLCS, and judicial organs, such as the International Court of Justice, the International Tribunal for the Law of the Sea, the Sea-Bed Chamber of the International Tribunal for the Law of the Sea, and arbitration bodies. Except in the case of the 200-mile limit of the continental shelf, no any other serious derogation of the legal continental shelf from the physical continental shelf, ought to be admissible. The question of the submarine elevations that constitute the natural components of the continental margin, should be cautiously examined. Such elevations are not common to most parts of the submarine areas. It is still too early to give accurate evaluation to the provisions of Article 76 of the Convention on the Law of the Sea. Yet, we must admit that this Article has already gained widespread support. Its effect in the long run will be positive, though it is not free from ambiguity. The review of the evolution of the legal regime regarding the submarine areas including both the areas under national jurisdiction and those under non-national jurisdiction, has revealed that the present limits of national jurisdiction appear to be the final boundary between the deep sea-bed under international control and the continental shelf under national jurisdiction.

Chapter III

TRADITIONAL STATUS OF THE DEEP SEA-BED

Before the inception of the common heritage of mankind, there were two seemingly incompatible doctrines that attempted to elaborate the legal status of the deep sea-bed. They are res nullius and res communis. Whether they have been rendered obsolete by the emergence of the concept of common heritage of mankind, is yet to be determined, because they had no prospect to be applied until the 1960s, when technology progressed to be able to tap the resources of the deep sea-bed.[79] But what interests us relates also to the doctrinal value of these theories which could well have been transformed into applicable customary international law, had the course of history since 1967 been otherwise.

Even now, there seems no rarity of arguments defending the free use of the resources by anyone based on these theories, mainly the theory of res nullius. Indeed, the opponents of common heritage do employ these theories in support of their thesis. These doctrines do not stand out in the current stream of legal debates, but involve themselves in it, though playing a limited role as compared with that in previous period.

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[79] Friedheim, Robert L., "The Political, Economic, and Legal Ocean", in Friedheim, Robert L. ed., MANAGING OCEAN RESOURCES: A PRIMER, Boulder, US, Westview Pr., 1979, at 27-28.

It should be noted that at this juncture the investigation is confined to the legal content of the two doctrines, as they apply to the deep sea-bed and their legal status in international law.

3.1 Section A. Res Nullius

3.1.1 Subsection One. Content

The theory of res nullius, stemming from the Roman law tradition, regarded certain kinds of objects as belonging to no one, the acquisition of which could be effected by means of occupation, or arguably, prescription. Things that were res nullius must possess the characteristics of being capable, by appropriation, of becoming the objects of private property.[80] For example,

> "living things, such as wild beasts, birds, and fishes, and with regard to precious stones in a state of nature, such as pebbles and the like, found on the shore, which become at once the jus naturale, the property of the finder."[81]

Things relinquished by the owner with the intention of abandoning them were also res nullius.[82] However, certain things were not susceptible of being res nullius, among which were:

> "(a) things common to all men (res communis) and (b) things belonging to the State (res publicae) which were understood to belong to the Roman people as a whole."[83]

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[80] Biggs, Gonzalo, "Deep Seabed Mining and Unilateral Legislation", 8 Ocean Dev. & Int'l. L. 233-257(1980), at 227.

[81] Ibid. at 227.

[82] Biggs, supra note 80, at 227.

[83] Biggs, supra note 80, at 227-228.

Thus, res nullius is a kind of ownership which could be acquired by occupation that was defined as the taking of possession of what belongs to nobody with the intention to keep it as one's own property.[84]

Juridically, res nullius is not complicated. But when applied to the deep sea-bed as well as its resources, many variations are produced. The sea-bed, the subsoil, the resources, and the mode of acquisition are combined in many ways to vindicate the deep sea-bed and its resources as res nullius.

3.1.1.1 1. RES NULLIUS -- THE SEA-BED, THE SUBSOIL AND THE RESOURCES.

One view holds that the sea-bed, the subsoil and the resources beyond the limits of national jurisdiction are res nullius, and therefore, capable of being appropriated at least through occupation. The rationale behind this contention is: most early scholarly writings deemed the sea-bed, the subsoil and the resources as res nullius the sea-bed, the subsoil, and the resources form a juridical unity;[85] the resources thereof resembled fish that were considered res nullius in the water columns of the high seas.

Some authors did regard the sea-bed and the subsoil as res nullius, and consequently, to be subject to either sovereignty, or sovereign rights, or ownership, or appropriation.[86] It seems that the sea-bed,

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[84] Biggs, supra note 80, at 227.

[85] Kronmiller, supra note 17, at 131-132.

[86] Oppenheim, L., INTERNATIONAL LAW, V.1, 8th ed., 628-635(1954), at 628-629; Smith, Herbert Arthur, THE LAW AND CUSTOM OF THE SEA (1959), at 81; Goldie, L. F. E., "A General International Law Doctrine for Seabed Regime, 7 Int'l Law. 796-824(1973), at 797-798.

the subsoil and the resources were deemed to be res nullius for quite some time. This might even be the prevailing view at the time when scholars began to pay attention to the deep sea-bed. But it would be not possible to infer that this source alone defines the status of the deep sea-bed. For in Article 38 of the Statute of the International Court of Justice, the opinions of learned scholars are only a secondary source of international law. Consequently, two counter-arguments can be made. *First*, the scholarly opinions were not conclusive because some prominent writers upheld the theory of res communis,[87] which tended to counterbalance the debates. *Second*, the early writings pertained little to the resources as we envisage today. The only resources that had practical value, were the sedentary species adjacent to the territorial sea, which will be dealt with later.

3.1.1.2 2. RES NULLIUS -- THE RESOURCES.

This understanding is that the resources of the sea-bed, juridically different from the underlying sea-bed or subsoil, akin to living resources of the high seas,[88] belong to no one, before they are exploited, and hence the first finder or first captor will be legally entitled

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[87] For example, Brownlie,I., PRINCIPLES OF PUBLIC INTERNATIONAL LAW, 233-236(1979); Young, Richard, "The Legal Status of Submarine Areas Beneath the High Seas", 45 AJIL 225(1951),at 229; Scelle,G., Yearbook of the International Law Commission (hereinafter cited as ILC Yb) (1951), V.1,at 276; Garcia, Amador, The Establishment and Implementation of the 200 Mile Exclusive Economic Zone, International Law Association Committee on the Law of the Sea, Interim Report, Krueger, Nordquist, August 15, 1978; Colombos, C.J., THE INTERNATIONAL LAW OF THE SEA, 6th,ed., 1969, at 67.

[88] Shigleton, Brad, "UNCLOS III and the Struggle for Law: the Elusive Customary Law of Seabed Mining", 13 Ocean Dev. & Int'l. L. 33-63(1983-84), at 43.

to appropriate or own these resources.[89] The proponents of this view envision the manganese nodules lying on the sea-bed, not the mineral resources embedded in the subsoil. Because of the difficulty in justifying exclusive title over these manganese nodules, when analogous to the status of the swimming fish of the high seas, it is said that exclusivity could be abandoned as a prerequisite to title over the resources.[90]

Several doubts remain regarding this inference. *Firstly,* the resources, the sea-bed and the subsoil constitute an inseparable juridical unity, which is manifested by the contemporary developments of international law of the sea. *Secondly,* the exploitation of the resources constitute, at present, the whole benefits that can be derived from the sea-bed and the subsoil. It goes without saying that the non-sovereignty, non-sovereign rights, non-ownership would be meaningless if the above theory could stand. And *thirdly,* to obtain the resources of the deep sea-bed, without acquiring exclusive rights of exploitation over the same area at the same time, appears improbable both juridically and technologically. Detailed analysis will be given below.

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[89] Barkenbus, J., DEEP SEABED RESOURCES, 30 (1979); Brown, E.D., "Freedom of the High Seas versus the Common Heritage of Mankind: Fundamental Principles in Perspective", 20 San Diego L.R. 521-560(1983), at 528-529; Goldie, supra note 87, at 797.

[90] Biggs, Gonzalo, "Deepsea's Adventures: Grotius Revisited", 9 Int'l Law. 271-281(1975), at 281.

"Perhaps there is a sophisticated procedure by which seabed resources may be taken, used transported, processed and sold without establishing exclusive rights over the same."

3.1.2 *Subsection Two. Applicability*

3.1.2.1 *1. SCHOLARLY OPINIONS.*

(1) Deduction from the Res Nullius of the High Seas.:

Professor Hurst found that to own a portion of the sea-bed was "not inconsistent with the universal right of navigation in the open sea or with the common right of the public to fish in the high seas."[91] Ownership or other uses of the subsoil was seen as lawful, exemplified by the case of laying submarine cables and tunnelling. However, the occupation by laying cables is not exclusive.

Lauterpacht with a view of reconciling claims to the sea-bed and freedom of the high seas, observed:

> Its true purpose is to ensure freedom of navigation, unhampered by exclusive claims of individual States, and freedom of utilization of the seas to a degree to which they can be equitably utilized by all. ... The true object of the freedom of the sea is not invariably to prevent its use for the purpose of securing the individual interest of any particular State ..., Neither can it be interpreted as demanding an absolute prohibition of jurisdiction on the part of foreign States or of the community of nations."[92]

(2) Inference from the Case of Sedentary Species.:

Westlake, keeping in mind the notion of stability which is a prerequisite for effective occupation, based his theory upon the pearl fishery exploitation in Ceylon and Persian Gulf.[93]

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[91] Hurst, Sir Cecil, "Whose Is the Bed of the Sea?", 4 Brit. Y.B.I.L. (1923-1924), at 43.

[92] Lauterpacht, E., "Sovereignty Over Submarine Areas", 27 Brit. Y.B.I.L. 376-433(1950), at 407.

[93] Westlake, J., INTERNATIONAL LAW, V.1, 186-187(1904).

Fulton, like Westlake, supported the theory of res nullius by implying that the sedentary fisheries were closely associated with the locality, and ought not to be looked upon the same as fisheries in the high seas, which constantly change location. Furthermore, he considered that sedentary species, unlike the fisheries in the high seas, which were inexhaustible, could be depleted without the protection of the littoral States.[94]

Hurst, also citing sedentary species as evidencing res nullius of the sea-bed and the subsoil, wrote:

> "Where effective occupation has been long maintained over portions of the bed of the sea outside of the three-mile limit those claims are valid and subsisting claims entitled to recognition by other States."[95]

As to the *first* viewpoint, it is necessary to point out that the sea-bed and the subsoil is a juridical unity and quite distinguishable from the water column of the high seas. Professor Lauterpacht observed in 1951:

> "There is no principle of international law -- and certainly no principle of international practice -- which makes the submarine areas share automatically the status of high seas."[96]

The high seas is regarded either as res communis or as res nullius. This split of the opinions concerning the status of the high seas hindered, to a certain degree, the achievement of consensus on the sea-bed and subsoil as res nullius among scholars. The inconclusiveness of the scholarly opinions might be regarded as evidence of non-existent or dis-

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[94] Supra note 47, at 686-689.

[95] Supra note 91, at 43.

[96] Supra note 92, at 414.

puted character of the norm of res nullius. This point is often concealed in the over-emphasized linkage between the status of the high seas and that of the sea-bed and the subsoil. One may argue that the sea-bed and the subsoil beyond the limits of national jurisdiction are inappropriate to be labelled as res nullius. The reasons are as follows:

1. the sea-bed and the subsoil are terrace, not water column;
2. they appeared to have no practical value when the theory of res nullius was put forward, with the exceptional instance of sedentary species which was, at any event, assimilated into the regime of continental shelf;
3. there was no domestic legislation pertaining to the sea-bed and the subsoil until 1980 when the development of the law of the sea had assumed a completely different appearance.

In effect, whether or not the status of the deep sea-bed is res nullius or res communis, may not be decisively determined by the legal status of the high seas, since the high seas serves mainly as a route to the sea-bed and the subsoil.

But, what legal weight can the case on sedentary species have?

3.1.2.2 2. PRECEDENTS OF SEDENTARY SPECIES.

It is an undeniable fact that sedentary and demersel species , such as pearl, oyster, chank, coral, and sponge, which lay outside the three-mile limit of territorial sea, were claimed and exploited in a variety of forms by Australia, Bahrain, Ceylon, Columbia, Ireland, Malaysia, Mexico, France, the Philippines, Tunisia, Italy, Venezuela and others.[97]

[97] Fulton, supra note 47, at 697-698; O'Connell, supra note 46, at 453.

This practice, in its historical context, was tolerated and acquiesced to by other nations and, therefore contributed to the thesis of res nullius.

Nonetheless, this contention could be rebutted on the following grounds. *First*, all the resources of sedentary species that were claimed or exploited, were contiguous to the coast of the claiming or exploiting States, which can be seen as a vital factor in justifying their legitimacy. Professor Lauterpacht remarked in 1950:

> "The resources of the submarine areas adjacent to the coast of the State cannot be feasibly and reasonably utilized by all. They can be so utilized mainly by the adjacent coastal State."[98]

Second, these claims were primarily based on historical usage.[99] Fulton, in respect of pearls off Ceylon, wrote:

> "These pearl fisheries are very valuable, and have been treated from time immemorial by the successive rulers of the island as subjects of property and jurisdiction; and the law referred to applies also to foreigners."[100]

Though Mexico, Columbia, the Philippines and Venezuela are relatively new States, their inhabitants claimed the oyster fisheries for centuries.[101] Without exception,

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[98] Supra note 92, at 407.

[99] Arrow, Dennis W., "The Customary Norm Process and the Deep Sea-Bed", 9 Ocean Dev. & Int'l. L. 1-59(1981), at 14-15; Arnold, Frederick, "Toward a Principled Approach to the Distribution of Global Wealth: An Impartial Solution to the Dispute Over Seabed Manganese Nodules", 17 San Diego L.R. 557-589(1980), at 271, note 45.

[100] Fulton, supra note 47, at 686-689.

[101] Cited by Arrow, supra note 99, at 14.

"prior to the Truman Proclamation (1945), those rights recognized to sponges and the like were exclusively granted to the corresponding coastal State but never to the first discoverer."[102]

This is a very significant element and demonstrates the difficulty in vindicating effective occupation as the sole, or primary mode to acquire title to these sedentary species. To that extent, it might be that the sea-bed and the subsoil at most could not be res nullius, and at least could not be appropriated by effective occupation.

Third, even if these precedents had been valid until the middle of this century, they would have ceased to be so, because the regime of continental shelf has already incorporated the precedential value of this practice, having completed the process of crystalization started with instances of sedentary species.[103] Moreover, the establishment of the regime of the continental shelf ruled out the principle of effective occupation as unnecessary for acquiring title over continental shelf. In consideration of continental shelf by the International Law Commission, Professor Brierly proposed that the continental shelf belong ipso jure to the littoral States.[104] Henceforth, continental shelf, not res nullius, belongs inherently to the bordering coastal States by virtue of the natural prolongation of its land mass or territory. The Continental Shelf Convention is less ambiguous on this point,[105] which was reaf-

[102] Shigleton, supra note 88, at 40.

[103] Brown, supra note 89, at 530; 1958 Geneva Convention on the Continental Shelf, Article 2(4).

[104] ILC Yb V.1,(1951), at 214-240.

[105] Article 2(2),(3) of the Continental Shelf Convention provide:

"2. The rights referred to in paragraph 1 of this article are firmed by the International Court of Justice in the North Sea Continental Shelf cases.[106] Professor Dyke declared:

> "The evolution of the 'continental shelf doctrine' makes res nullius obsolete as an explanation for the regulation of sedentary species."[107]

The conclusion we may draw is:

1. the manganese nodules are located far away from the coast of the littoral States;
2. there is no historical usage whatsoever with regard to the nodules;
3. and since continental shelf is not subject to res nullius, the possibility of rendering the deep sea-bed and its resources to be res nullius, implied by the precedents, was ended with the creation of the continental shelf regime.

Actually, the application of res nullius had still been theoretically possible, prior to the surge of the concept of common heritage of mankind, though there ~~are~~ no authoritative legal sources in support of this position.[108]

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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 any express proclamation."

[106] North Sea Continental Shelf cases, (1969) ICJ Rep., at 3,19.

[107] Supra note 44, at 516.

[108] Dyke and Yuen, supra note 44, at 518.

> "It would thus appear that State practice on the continental shelf prior to the doctrine, as well as State practice beyond the continental shelf, can be looked to as evidence of the law applicable to the seabed beyond the limits of national jurisdiction today."[109]

This inference demands careful scrutiny. *First*, it is highly questionable whether any customary rule, had crystalized prior to the continental shelf regime. *Second*, even if there had been such settled rules, it is sceptical whether they are still independent of the doctrine of continental shelf, since the regime of continental shelf had the effect of having assimilated the precedential weight brought about by exploitation of sedentary species. *Third*, after examining the new developments since the regime of continental shelf, then it might be possible to arrive some more solid conclusion which may not seem to confirm the theory of res nullius.

3.1.2.3 3. LAND-BASED PRECEDENTS DEMONSTRATING FLEXIBILITY OF OCCUPATION.

No judicial decisions have been directly concerned with the status of the sea-bed, the subsoil or the resources. However, some judicial decisions are useful, insofar as the requirements for effective occupation in remote or inaccessible areas are concerned. Among the oft-cited cases are: the Island of Palmas case, Clipperton Island case, and Eastern Greenland case.

In the Island of Palmas case, the arbitrator, after listing the requirements for effective occupation as a mode to gain title over a remote or inaccessible land, proclaimed:

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[109] Gibson, supra note 48, at 674.

> "Manifestation of territorial sovereignty assumes, it is true, different forms, according to conditions of time and space. Although continuous in principle, sovereignty cannot be exercised in fact at every moment on every point of territory. The intermittence and discontinuity compatible with the maintenance of the right necessarily differ according as inhabited or uninhabited regions are involved, or regions enclosed within territories in which sovereignty is uncontestably displayed or again regions accessible from, for instance, the high seas."[110]

The Clipperton Island Arbitration, in which it had been found that French naval landing on the island, granting of a guano concession (though never executed) by France, and the proper following by French Government of the rules in respect to the claim, were sufficient evidence for the establishment of French sovereignty over the island. This award, once again, demonstrated the elasticity of the requirements for effective occupation.[111]

The above line of flexibility was reaffirmed by the Permanent Court of International Justice in Eastern Greenland case in which the Court held that Denmark, though only conducted limited activities: issuing some permits for tourism, supporting hunting expeditions and assisting and authorizing scientific expeditions, had, nonetheless, met the two

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[110] Arbitral Award Rendered in Conformity with the Special Agreement Concluded on January 23, 1925 Between the United States of America and the Netherlands Relating to the Arbitration of Differences Respecting Sovereignty Over the Island of Palmas (or Miangas), April 4, 1928, 22 AJIL 867(1928), at 877.

[111] Arbitral Award on the Subject of the Difference Relative to Sovereignty Over Clipperton Island (France v. Mexico), January 28, 1931, 26 AJIL 390(1932), at 393-394.

> "Thus, if a territory, by virtue of the fact that it was completely uninhabited, is, from the first moment when the occupying State makes its appearance there, at the absolute and undisputed disposition of that State, from that moment the taking of possessions must be considered as accomplished, and the occupation is thereby completed."

requirements for sovereignty: intention to exercise sovereignty and manifestation of State activities.[112]

Following these cases, some argued that the sea-bed is more akin to terra nullius, and therefore can be appropriated by a combination of claims, and peaceful, continuous, and sufficient exercise of sovereignty.[113]

Two questions can be raised concerning this view:

(a) Could the sea-bed and the subsoil be analogized to the uninhabited territories alluded to in these cases?

(b) Is it logical to deduce that the sea-bed and the subsoil are undisputed res nullius, since they are susceptible of effective occupation?

To answer the *first* question, it is necessary to appreciate the unique nature of the sea-bed and the subsoil that makes them fundamentally dissimilar to the terra nullius enunciated in the cases. The territories in question in these decisions were disputed between States. The territories were regarded as res nullius and therefore subject to national jurisdiction, albeit leaving the question open under which

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[112] Legal Status of Eastern Greenland case, PCIJ, Series A/B, No 53(1933), at 63.

"It is impossible to read the records of the decisions in cases as to territorial sovereignty without observing that in many cases the Tribunal has been satisfied with very little in the way of actual exercise of sovereign rights, provided that the other State could not make out a superior claim. This is particularly true in the case of claims to sovereignty over thinly populated or unsettled countries."

[113] Burton, Steven J., "Freedom of the Seas: International Law Applicable to Deepsea Mining Claims", 29 Stan. L.R. 1135-1180(1977), at 1165.

State's jurisdiction. The real issue for the judges or arbitrators to decide upon, is not so much whether or not they ought to be subjected to national sovereignty, but rather under whose sovereignty they should be placed in accordance with international law. Whereas in the case of the sea-bed and the subsoil, as well as the resources, the matter relates more to whether they should be put under exclusive national jurisdiction or not. This difference makes the principle of effective occupation inapplicable to the sea-bed, the subsoil, or the resources. Because the principle of effective occupation can not be applied to something which is not res nullius.

Unlike the territories in the cases, the sea-bed and the subsoil were not subject of occupation in practical terms at that time, which could justify the assertion of sovereignty, sovereign rights, ownership, or exclusive appropriation, except in the case of sedentary species. Professor Shingleton rightly stated:

> "The problem with the analogy is simply put, that the nature of land acquisition by appropriation is different in kind from that for the seabed ... Appropriation of the seabed under some adaptation of the terra nullius appropriation test would be a misapplication of the doctrine, for it would allow geographically unbounded claims over vast areas without any correlative obligation."[114]

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[114] Supra note 88, at 39.

Professor Arrow also pointed out, though from a distinct perspective: "While the flexibility of the occupation standard as applied to remote and inhospitable land areas is unquestionable, the attempted application of these precedents to the seabed fails to appreciate that the freedom of the seas doctrine, as to which there is no land-based equivalent, operates ipso facto to remove the seabed as a whole from terra nullius status." (Supra note 99, at 13).

Besides, the mining of manganese nodules does not require stationary emplacement[115] and such emplacement is technologically unfeasible.[116]

> "While the rules of international law for acquisition of title in remote and inhospitable places are loose and adaptable, they are at least sufficiently rigorous to deny that title could be based only upon spasmodic acts of recovery of minerals."[117]

Also, it is noteworthy that not all uninhabited land is automatically treated as terra nullius in international law, being susceptible to exclusive possession of the first occupier.[118] For example, the Moon and other celestial bodies are excluded from occupation and sovereignty.[119] However, there is room to assert that the Moon and other celestial bodies are not land per se, but something different from land. One could perhaps argue that the sea-bed and subsoil are not land, but something different from land. It is doubtful in the first place whether the sea-bed and the subsoil could be terra nullius in international law.

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[115] Dyke, Jon Van and Yuen, Christopher, "'Common Heritage' v. 'Freedom of the High Seas': Which Governs the Seabed?", 19 San Diego L. R. 493-551(1982), at 508, 511, 544-546. Also see Miles and Allan (eds.) THE LAW OF THE SEA AND OCEAN DEVELOPMENT ISSUES IN THE PACIFIC BASIN 15 Law of the Sea Institute Proceedings(1981), 206, 208-212, 236-237.

[116] Shigleton, supra note 88, at 40.

[117] O'Connell, supra note 46, at 457. Also see Kindt, John Warren, "Deep Seabed Exploitation", 4 UCLA Environmental Law and Policy 1-56(1984), at 5. Three types of technology now is available to deep seabed mining, namely, ALP, HD and CLB.

[118] Dyke and Yuen, supra note 44, at 518-519.

[119] Agreement Governing the Activities in the Moon and Other Celestial Bodies, U.N.G.A. Res. 34/68, U.N. Doc. A/34/664(1979), also see 18 ILM 1434 (1979).

As to the *second* question, it is evident that, even though the sea-bed could be effectively occupied under flexible standards in circumstances where only minimal display of States' intention and activities is required, it would not automatically follow that the sea-bed was terra nullius. As put by Professor Dyke:

> "These analogies are unconvincing because the writers assume their conclusion; they start from the perspective the sea-bed is like unclaimed land, which is the assumption that divided commentators into the res nullius and res communis camps."[120]

Thus, the illogical analogy and erroneous inference are manifest.

3.1.2.4 4. OTHER CASES.

Other cases, such as, Guano Islands, Spitzbergen, and Antarctica, suffer from the same defect. Guano Islands and Spitzbergen were regarded as res nullius, and subject to effective occupation, no matter which jurisdiction it would be.[121] The case of Antarctica, which is after all

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[120] Supra note 44, at 518.

[121] Moore, J., INTERNATIONAL LAW DIGEST, V.1, 556-580(1906).

The United States passed the Guano Islands Act in 1856. This Act allowed US citizen to claim the islands on the basis of discovery of guano on the unclaimed islands which had the status of terra nullius. The US Congress could permit US citizen to assert exclusive claims to the unsevered guano resources as res nullius. The US Department of State defended the claims of its nationals to guano resources on the following islands: Aves Island (against Venezuela), Christmas Island (against Great Britain), the Lobos Island (against Peru), the Mongos and Los Islands (against Venezuela), Navassa Island (against Haiti), Quito Sereno Island (against Colombia), and the Serrano Keys (against Great Britain).

Right of mining coals in Spitzbergen were claimed by Britain, the Netherlands, Germany, Norway, Sweden, Russia, United States. The Norwegian sovereignty over the island was recognized in Treaty of Paris, signed Feb.9,1920.

One of the characteristics of these precedents is the individualistic action, inaction and reaction. However, the deep sea-bed and not a settled problem in international law, is bound to give rise to new disputes in addition to the old national territorial claims.[122] It should be noted that the Antarctic Treaty has had the effect of freezing existing national claims and allowing no further claims.[123] From a strict legal point of view, the Antarctic is perhaps res nullius. The status of the Antarctic is in the transitional period or in a limbo. Its future is quite uncertain. The problem is not easy to be solved in a way complete satisfactory to the claimant States.

Two contemporary events are worth mentioning. One is related to the resources in the Red Sea. In 1968, Grawford Marine Specialists registered an application with United Nations for "a protected and exclusive exploitation license covering 38.5 square miles of international floor in the Red Sea."[124] The United Nations refused the application and the Company did not proceed to exploit these alleged resources, probably because they were not sure whether or not these resources would be under national jurisdiction, if not, they would still suspect if these

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its resources concern every State, and hence are subject to the consent of the international community for any of its use.

[122] Quigg, Phillip W., A POLE APART -- THE EMERGING ISSUE OF ANTARCTICA, New York, McGraw-Hill, New Pr., 1983; Shusterich, Kurt M., "The Antarctica Treaty System: History, Substance and Speculation", 39 International Journal 800-827(1984).

[123] Article 4(2) reads:

"No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica. No new claims, or enlargement of an existing claim, to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force."

[124] Rembe, Nasila S., AFRICA AND THE INTERNATIONAL LAW OF THE SEA, Alphen aan den Rijn, the Netherlands, Sijthoff & Noordhoff, 1980, at 47.

resources would be res nullius, or res communis, or even common ~~heri~~tage of mankind.

Another more challenging event occurred in 1974, when Deepsea Ventures Inc., a U.S. company, filed a claim with the United States, requesting for the granting of exclusive right to exploit the manganese nodules in an incontrovertibly seaward area (60,000 sq. km.) of the limits of national jurisdiction, and requesting for diplomatic protection and protection of their investment.[125] The United States did not entertain the requests, but issued a statement which insisted that the law governing the exploitation of the resources of the deep sea-bed was the principle of the freedom of the high seas.[126]

By this time, however, the theory of res nullius was increasingly rendered irrelevant by the concept of the common heritage of mankind. This claim was based on the rubric of freedom of the high seas. In all, four countries responded to the claim and all of them were in the negative, or expressed their opposition.[127]

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[125] Deepsea Ventures, Inc.: Notice of Discovery and Claim of Exclusive Mining Rights, and Request for Diplomatic Protection and Protection of Investment, 14 ILM 51-65(1975). Also see NEW DIRECTIONS IN THE LAW OF THE SEA -- DOCUMENTS, V.5, compiled and edited by Robin Churchill, Myron Nordquist, and S, Houston Lay, Dobbs Ferry, New York, Oceana, 1977, at 376-392.

Australia utterly rejected the US claims, so did Canada. UK did not recognize the US claim either.

France reserved its rights to exploit these resources.

[126] Statement on Claim of Exclusive Mining Rights by Deepsea Ventures Inc., 14 ILM 66(1975).

[127] Supra note 125, at 67-68.

3.1.2.5 5. *ANALOGY OF THE RESOURCES OF THE DEEP SEA-BED TO SWIMMING FISH.*

The famous metaphor cited by Hugo Grotius is still alive:

> "When the slave says:' The sea is certainly common to all persons,' the fisherman agrees; but when the slave adds:'Then what is found is the common property,' he rightly objects, saying: 'But what my net and hooks have taken, is absolutely my own.'"[128]

It was argued that:

> "No ocean resources has ever been specifically immune from capture, and therefore no derogation of the right of capture in the case of nodules has ever been acknowledged. Second, the presence of nodules has been known since 1873. No State has suggested until recently that nodules should be distinguished from other resources of the water column or seabed."[129]

However, it is possible to argue on the following grounds. In the *first place*, the so-called right of capture is applicable at most to moving fish, not to fixed nodules. There is no precedent to support the right of capture with respect to nodules. Even if there had been such a right, it would have had to be exercised under the condition of non-exclusivity. Exclusive exploitation on site can be technologically very difficult. It involves the difficulty in consistency with the status of the high seas. *Secondly*, though nodules were taken as early as more than one hundred years ago by the British ship, the Challenger, the Challenger conducted scientific research with no intention or activity to undertake commercial extraction. So, the expedition cannot be calculated as a legal precedent. As a matter of fact, the content of nodules

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[128] Cited by Shingleton, supra note 88, at 42.

[129] Shigleton, supra note 88, at 43.

was not revealed until the 1950's.

In the end, one may conclude that unlike fish, nodules have never been subjected to appropriation. As soon as commercial recovery is in sight, the international community responded with the creation of the concept of common heritage of mankind. To deny claiming the sea-bed and the subsoil, while at the same time to appropriate the nodules, is prima facia incompatible. "The spuriousness of this denial is apparent once it is realized that, today, nodule mining represents virtually the full enjoyment value of that seabed area."[130]

3.1.2.6 6. THE CASE OF CABLE-LAYING.

This view goes as follows: since laying cables occupies an area of the sea-bed, however small it might be, this precedent evidenced the res nullius status of the sea-bed.[131] Sir Cecil Hurst rebutted this view by saying that cable-laying was not exclusive as other cables could still cross it, and therefore it is unnecessary to employ the principle of effective occupation to justify this activity.[132]

3.1.3 Subsection Three. Legal Standing

As early as 1951, the International Law Commission rejected res nullius as the basis for legal rights in submarine areas, because it "would lead to chaos."[133] After more than thirty years, the credibility of the

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[130] Arnold, supra note 99, at 572, note 71.

[131] Article 2 of the High Seas Convention.

[132] Hurst, supra note 91, at 42.

[133] ILC Yb, V.2, 1951, at 142.

doctrine has been decreasing. If it was once true that res nullius might appear to be applicable to the exploitation of the resources of the sea-bed and the subsoil, now it seems to be no longer so. Customary international law is at least not conclusive on the applicablity of res nullius to the sea-bed, the subsoil, or the resources. It is very arguable whether the doctrine can be employed to justify the deep sea-bed mining outside the 1982 Convention regime without serious legal challenge. As analyzed above, the doctrine of res nullius is incapable of adapting itself to the sea-bed, the subsoil, as well as the resources. At any rate, it has primarily remained at the level of doctrine for centuries without acquiring any operational meaning. On the contrary, there were serious detractions from it, for instance, the contention of scholars, the emergence of the regime of continental shelf as positive international law, possibly, the concept of the common heritage of mankind. The last fatal blow to res nullius came with the adoption and signing of the 1982 Convention on the Law of the Sea, which, in the words of the Secretary-General of the United Nations, "irrevocably" transformed the international law of the sea.[134] If nothing more, at least the Law of the Sea Convention did not confirm res nullius. Therefore, implicitly the doctrine was rejected by the Convention.

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[134] Statement by Javier Perez de Cuellar, "International Law Is Irrevocably Transformed", in THE LAW OF THE SEA -- Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, Final Act of the Third United Nations Conference on the Law of the Sea, Introductory Material on the Convention and the Conference, New York, United Nations, 1983, at xxiv.

3.2 Section B. Res Communis

3.2.1 Subsection One. Content

What is res communis? According to Professor Oscar Schacter, res communis has two characteristics.

> "One is that the benefits of a user do not diminish another's benefits (in that sense, they are 'jointly available goods'). A second is that their use and enjoyment cannot be divided up for individual benefits; in effect, the collective good is indivisible. ... A collective good is nonappropriable and freely accessible to all."[135]

The sea-bed, the subsoil may be res communis. Because their use by one nation do not diminish the enjoyment of benefits of another nation. They are certainly jointly available. Also, they are accessible to all States, irrespective of geographical locations. Appropriation may not be possible technologically and legally.

The resources of the deep sea-bed, on the other hand, could be different from the deep sea-bed itself. They are diminishable in terms of exploitation of the concentrated prime sites. But are they divisible, too? Physically, they can be divided by drawing coordinates. Then, can we draw the conclusion that the resources of the deep sea-bed are not res communis? What they really are have to be found out.

It is very important in this connection to bear in mind that the notion of res communis is not entirely dependent on the physical facts. It is a legal concept and contains something which is not completely explainable merely by the physical conditions. Therefore, there is such

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[135] Schacter, Oscar, SHARING THE WORLD'S RESOURCES, New York, Columbia University Pr., 1977, at 38.

an argument stating that the deep sea-bed as well as the resources are res communis before the principle of the common heritage of mankind.

The theory of res communis, holds that the sea-bed, the subsoil, and the resources belong to or are open to everyone, and consequently no sovereignty, or sovereign rights, or exclusive ownership, or exclusive appropriation are permissible.[136]

The difference between the verbs "open" and "belong" is very significant. For the former, it meant that the resources are free for taking by anyone. Thus,

> "By calling the oceans res communis, the Roman jurists never intended that the property of the oceans belonged to everybody; what they meant was that the use of the oceans was open to everybody on equal terms, in accordance with the words of Celse."[137]

The essence of this contention is that inclusive use or taking is permissible, provided that due regard be paid to the interests of others. It is said that everyone has a right to the resources before they are appropriated, but the real value for the individual comes only when the communal right is converted into a private right by capture or occupation.[138]

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[136] Hugo Grotius reasoned:

> "to be sure it would be an intolerable outrage for any one to snatch away, even if he could do so, from public use a large area of the sea ... Therefore, the sea is one of those things which is not an article of merchandise, and which cannot become private property. Hence, it follows, to speak strictly, that no parts of the sea can be considered as the territory of any people whatsoever." (Hugo Grotius, THE FREEDOM OF THE SEAS, edition of Carnegie Endowment for International Peace, 1916, at 33-34); Also see Young, supra note 87, at 229.

[137] Arnold Raestad, cited by Biggs, supra note 80, at 228.

[138] Eckert, Ross, "Ocean Enclosures: A Better Way to Manage Marine Resources", in Park, Choon-ho, ed., THE LAW OF THE SEA INSTITUTE,

Another interpretation maintains that the sea-bed, the subsoil, and the resources belong to everyone, and communal consent is required before the establishment of sovereignty, sovereign rights, non-exclusive ownership or non-exclusive appropriation over them. Professor Colombus held:

> "A res communis is a thing belonging to everybody. If title is vested in the community of States, the seabed, qua res communis could theoretically be carved up after proper authorization."[139]

Professor Henkin, also supported the idea that before proper authorization by the international community, no unilateral exploitation may be effected or legitimized.[140]

The notion of trusteeship is related to the doctrine res communis. Trusteeship means that a legal entity is authorized on behalf of, in the name of another legal entity to act in accordance with the agreed authorization. In 1970, the then U.S. President, Richard Nixon made a policy statement on the law of the sea.[141] In the statement, President Nixon proposed a trusteeship zone comprised of the continental margin beyond a depth of 200 meters off their coasts. Coastal States would act as trustees for the international community to manage and control the trusteeship zone.[142]

14th Annual Conf., Oct. 20-23, 1980, Kiel, Germany, printed in the United States, 1983, at 94.

139 Colombos, supra note 87, at 65-69.

140 Henkin, L., LAW FOR THE SEA'S MINERAL RESOURCES, 29 (ISHA Monograph No.1, 1967), at 25.

141 Statement of President Nixon, 112 U.S. Department of State Bulletin 737-738 (June, 1970)

142 The then Legal Adviser of the Department of State, John R. Steven-

The International Sea-Bed Authority to be established is the materialization of the idea of trusteeship in the sense that the deep sea-bed is managed by an international body on behalf of humankind. The Authority has certain rights and at the same time bears some duties in fulfilling its objectives.

To summarize, the principal content of <u>res communis</u>, if it were applicable to the sea-bed, the subsoil, and the resources, unfolds in two ways: positively, the sea-bed, the subsoil, and the resources, are not only open to every nation, but also quasi-owned by all States in the name of the international community, which has the sole right to consent to the use of those resources by individual States. Individual States may use or explore the sea-bed and the subsoil, and exploit the resources, but only on the condition that the international community has given its consent either by acquiescence or by express authorization. Negatively, <u>res communis</u> prohibits sovereignty, exclusive sovereign rights, exclusive ownership, or exclusive appropriation of the sea-bed, the subsoil, and the resources. Nor is the mode of effective occupation permissible under <u>res communis</u>.

> "The true substance of the doctrine must be found in the prohibition it contains against exclusive rights and unilateral appropriation."[143]

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son, made an explanation on the subsequent U.S. proposal on the trusteeship zone. See Lay, S. Houston, (ed.), <u>NEW DIRECTIONS IN THE LAW OF THE SEA</u>, Vol. 2, Dobbs Ferry, New York, Oceana Publications, Inc., 1973, at 751-768. Also see Statement by Mr. Stevenson, Ambassador Phillips and Summary of Draft Convention, 113 U.S. Department of State Bulletin 209-218(August, 1970).

[143] Shigleton, <u>supra</u> note 88, at 41; See also Breen, <u>supra</u> note 43, at 208-209.

The doctrine of res communis is not free from faults. Like res nullius, res communis is related mainly to the deep sea-bed, not to the resources. Also, it is criticized in that it leads to inefficient use pattern.[144] This critique is candid and sound, especially in light of the international scene where sovereign States care more about themselves than about the interests of the international community. Another defect of res communis arises from its ambiguity, "it can be regarded as endorsing common, or unrestricted exploitation as much as outlawing exploitation altogether."[145] This view, however, goes too far to be true because certain acts would be barred, if the doctrine could be regarded as customary international law.

3.2.2 Subsection Two. Applicability

There are prominent authors in vindication of res communis as the legal status of the sea-bed, the subsoil, and the resources. When commenting on the sedentary species, Professor Arrow remarked:

> "The appeals to historical rights by these States must therefore be interpreted as indicating that they perceive their claims to be specially justifiable as a derogation from the recognized customary norm which mandates both the freedom of the seas, and concomitant status for both its surface and its bed."[146]

This comment seems convincing because the instance of sedentary species did appear to have recourse to usage from time immemorial and to contiguity to the territorial sea of claiming or exploiting States.

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[144] Eckert, supra note 138, at 94.

[145] O'Connell, supra note 46, at 458.

[146] Arrow, supra note 99, at 14.

After noting the imprecision of its content and the limitedness of its application, Professor Shingleton stated:

> "At any rate, res communis does have some generally undisputed prohibitive content, namely, that 'common things' are not subject to unilateral appropriation, and that use of these 'things' requires the consent of all."[147]

The emergence of the regime of the continental shelf was seen as a confirmation of the res communis status of the sea-bed, the subsoil, and the resources. As Professor Henkin stated:

> "It is because the sea-bed is not subject to national sovereignty that it was necessary to make new law to permit exploitation of the shelf as an exception to the general rule. Indeed, the law of the shelf affirms the general character of the sea-bed as res communis even on the shelf nations cannot occupy the seabed and claim general sovereignty over it; the coastal State has rights, and only limited rights ... specifically provided by law."[148]

If the continental shelf cannot be subject to effective occupation, how could the sea-bed, subsoil, and the resources be subject to effective occupation? This is certainly contrary to the notion of res nullius. Instead, it may show the status of the deep sea-bed as res communis, which is still different from that applied to the high seas.

If it were true that res nullius was the customary norm before the emergence of the regime of continental shelf, the situation has changed since 1945. Because the continental shelf doctrine implied that the deep sea-bed and the resources might be res communis. However, more than res nullius, res communis remained in more abstract form because its execution required some kind of international consensus on the institutions

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[147] Supra note 88, at 41.

[148] Supra note 140, at 30.

and machinery which did not become possible until the convening of UNCLOS III.

3.2.3 *Subsection Three. Legal Standing*

Unlike res nullius which was rendered increasingly irrelevant by the concept of common heritage of mankind, res communis is seen as a precursor to common heritage in respect to the sea-bed and the subsoil. Its prohibitive content, which imposes duty on the part of States, is particularly noteworthy. If there was a definite legal status of the sea-bed and the subsoil " res communis seems to be for reasons of logic, consistency, and history, the most likely customary sea-bed regime."[149] The resources, however, remains uncertain. And the argument of res nullius is probably the better one for the resources from traditional perspective of international law.

It should be emphasized that the development of international law, at least since 1967, has gradually ruled out the possibility of application by either res nullius or res communis.[150] Therefore, the value of res communis can only be doctrinal and not operational, even if only applied to the sea-bed and the subsoil.

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[149] Shigleton, supra note 88, at 41.

[150] Zuleta, Bernaldo, "The Law of the Sea After Montego Bay", 20 San Diego L.R. 475-488(1983), at 482.

3:3 *Section C. Summary to Chapter III*

The doctrine of res nullius is unlikely to have applied to the deep sea-bed, for it did not win the conclusive support from scholarly opinions, nor did it gain legal authority from State practice or judicial decisions. As we have seen, the various arguments, invoked in support of the application of res nullius to the deep sea-bed beyond the limits of national jurisdiction, are inconclusive because of their misapplication to the deep sea-bed which has a distinctive nature, demanding a distinct legal regime and legal status from the overlying high seas. Furthermore, the res nullius theory has remained at the doctrinal level and has never applied to the deep sea-bed or its resources. Still further, the developments of international law with respect to the deep sea-bed and its resources, since 1967, has foreclosed the possibility of res nullius applying to the deep sea-bed and its resources. Therefore, it is not possible to invoke res nullius to justify any unilateral exploration or exploitation outside the regime of the 1982 Convention.

The doctrine of res communis could only explain the status of the deep sea-bed, not its resources. It contains the notion of common control and management of the deep sea-bed, and it prohibits exclusive appropriation, exclusive ownership, exclusive sovereign rights, or sovereignty. Nonetheless, res communis has had no operational meaning and is clearly inapplicable to the deep sea-bed or its resources.

The conclusion we may draw is that there exists a legal gap before the emergence of the concept of the common heritage of mankind, in respect of the actual exploration of the deep sea-bed beyond the limits of national non-functional jurisdiction and in respect of the actual exploitation of the resources thereof. Historically, the lack of legal status and applicable regime to the deep sea-bed and its resources should not be looked upon as a gap, since there was no practical need to devise legal regulation for the deep sea-bed and its resources.

Chapter IV

COMMON HERITAGE OF MANKIND

Perhaps no concept in the development of the law of the sea, since the birth of the principle of the freedom of the seas, presented conceptually first by Hugo Grotius, can be comparable with the common heritage of mankind, both in theoretical vicissitude and practical repercussion. This concept has revolutionized the entire law of the sea. Its impact is being felt in nearly every quarter of the globe, and on some thorny international issues, such as the exploitation of outer space, the question of the moon, the problem of Antarctica, the distribution of the frequency spectrum, the regulation of the orbit of geostationary satellites, the preservation and utilization of the cultural heritage, and the concern for transfer of technology, and so on.[151] From its initial stage, this concept has been inseparably linked with the exploration of the deep sea-bed and the exploitation of its resources beyond the limits of national jurisdiction.

Understanding of the current legal status of the deep sea-bed cannot be realized without a thorough and profound comprehension and scrutinization of the development, content, and legal standing of the concept of common heritage of mankind. The concept intends to establish a novel legal status for the deep sea-bed and its resources. It is not yet

[151] Dupuy, Rene-Jean, ed., THE SETTLEMENT OF DISPUTES ON THE NEW NATURAL RESOURCES, workshop, the Hague, Martinus Nijhoff Publishers, 1983, at 477.

quite clear whether the principle of the freedom of the high seas can be applied to the deep sea-bed and its resources, because of the creation of the distinct legal status, legal regime, and legal machinery for the deep sea-bed and its resources, brought about by the common heritage. On the other hand, the United States and a few other industrialized countries insist that deep sea-bed mining is a freedom of the high seas. And in the absence of a universally agreed-upon treaty, deep sea-bed mining is still a lawful exercise under the freedom of the high seas.

Now that the 1982 Convention on the Law of the Sea has been endorsed by the majority of States, it seems that there is a competing situation, a conflict case. It remains to be seen how the two regimes can be reconciled. One author suggest that the softening of the U.S. position is the key to the solution.[152] This seems very unlikely under the present Reagan Administration. In this context, there is a possible situation in which the principle of the common heritage of mankind takes its form, i.e., the two regimes have their own interpretation of the common heritage and upon their interpretation build their respective regimes for deep sea-bed.[153] But the respective understanding and interpretation of the concept of the common heritage is so apart that there can hardly be any be any bridge between the two. From the statement of Mr. David A. Colson, it seems that the United States is ambiguous on its definite

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[152] McDorman, Ted L., "The 1982 Law of the Sea Convention: the First Year?", 15 Journal of Maritime Law and Commerce 211-232(1984), at 232.

[153] See Professor Anthony D'Amato's comment, CONSENSUS AND CONFRONTATION, supra note 14, at 172. Also see Professor Bernard H. Oxman's remark, 77 Proceedings of American Society of International Law 157-161(1983), at 160.

attitude toward the common heritage.[154] The practice of the United States, however, suggests that it does not support the common heritage as a matter of law. To establish an alternative regime and openly deny the concept of the common heritage to have any legal force could scarcely be reckoned with merely as a different understanding of the common heritage. Perfaps at most this practice may embrace the idea of benefits-sharing and that of non-appropriation.

4.1 Section A. Development of the Concept

4.1.1 Subsection One. Development of the Concept before 1967

Although formally the concept of common heritage of mankind was presented by Dr. Arvid Pardo at the UN General Assembly in 1967, the idea had been dwelt upon by others much earlier. At the outset, perhaps we should say that the doctrine of res communis, stemming from Roman law tradition, might well have served as the first precursor.[155] Although conceptually in respect to the deep sea-bed, there might be a logical link between res communis and the common heritage, there is no histori-

[154] CONSENSUS AND CONFRONTATION, supra note 14, at 178.

> "The United States has not rejected the common heritage of mankind. We have clearly rejected the Moratorium Declaration. What our position will be with respect to the 1970 Common Heritage Declaration, in light of the unacceptable outcome of the Sea Conference, has not been clearly established yet."

[155] UNCLOS III, Official Records, Vol.II, at 20.

The representative of Madagascar, Mr. Rakotosihanaka made the connection between the common heritage of mankind and the notion of res communis. It is said that the common heritage of mankind is not a novel concept because the old law of the sea had known the principle of 'res communis'. What is really new is its 'proposed application' for the benefits of whole mankind.

cal connection between the two. And they were brought about for completely different reasons and under different context. The former stresses non-sovereignty, non-sovereign rights, non-exclusive ownership, or non-exclusive appropriation, all of which have been retained in the concept of common heritage. It requires that the exploitation of the resources by any nation be approved by the international community, albeit in unorganized and inchoate form, i.e. prescription or acquiescence.[156] However, there are fundamental differences that ought not to be overlooked. *One* of them is that the concept of the common heritage is regarded by most countries to ban exclusive as well as non-exclusive sovereign rights, ownership, or appropriation without authorization, while arguably, res communis may tolerate non-exclusive appropriation. *Secondly*, the common heritage imposes a duty to share the benefits derived from exploitation of the resources, whereas no such duty can be found in the notion of res communis. This point is shared by the United States. *Thirdly*, the common heritage, in the opinion of the majority of States, requires the establishment of machinery for international control and management of the activities in the Area, while no such machinery is required under the rubric of res communis. These are just a few conspicuous differences.

Despite the great changes in the law of nations,

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[156] Just as Professor Post observed:

> Res communis, "in essence refutes ownership of any kind, but in more recent years has been referred to as a justification for common ownership, e.g. as regards international control of an international public good such as the area and resources of the high seas, including manganese nodules." (Supra note 37, at 89.)

> "the idea that there were goods in the oceans that could belong to the indivisible patrimony of humankind and should not be marked with individual seals of ownership was not forgotten."[157]

Indeed, a French publicist, De Lapradelle, went so far as to suggest that such common goods in the oceans be administered by a society of nations.[158]

Admiral M.W. Mouton insisted that the sea-bed beyond the limits of national jurisdiction belong to the international community as a whole.[159] And the idea that the international community as a whole is a unity and should hold ownership over the sea-bed was significant in that it gave the legal meaning to the international community as a distinct legal entity.

During the First United Nations Conference on the Law of the Sea in 1958, the Tunisian delegation made reference to the common heritage of mankind in the context of the environmental protection of the resources of the high seas.[160] Also at this Conference, Cyprus stated:

> "They <the high seas> come under no sovereignty. Their resources, are therefore, the common heritage of mankind, and should be treated as such."[161]

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[157] Zuleta, supra note 150, at 481.

[158] Cited by Zuleta, in Lapradelle, A. G., "Le Droit de L'Etat Sur La Mer Territoriale", 5 Revue Generale de Droit International Public 309-347(1898), supra note 150, at 481.

[159] Mouton, M.W., "The Continental Shelf", Recueil des Cours, 1954 (I), at 456-458 and 350ff.

[160] Statement by Tunisia, Second Committee, 10th Meeting, UN Doc. A/CONF.13/40,(1958), p.21, at para.24.

[161] UN Doc. A/C1/P.U. 1958, p.21.

Though this suggestion was made in respect of article 2 of the High Seas Convention, nonetheless, it indicated a possible regime for the resources of the high seas, which, in the perception of Cyprus, might be seen also to encompass the resources of the deep sea-bed.[162]

It should be noted that the notion "mankind" was incorporated into a preambular paragraph in the Antarctic Treaty, which was adopted in 1959 and entered into force in 1961.[163] This may reflect the idea that a kind of trusteeship system was envisioned regarding the Antarctica.

On the occasion of the commissioning of the research vessel, "Oceanographer" in 1966, the then President of the United States, Lyndon Johnson proclaimed:

> "We greatly welcome this type of international participation. Because under no circumstances, 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 grab and to hold the lands under the high seas. We must ensure that the deep seas and ocean bottoms are, and remain, the legacy of all human beings."[164]

While there is the interpretation of this statement that President Johnson was opposed to the phenomenal expansion of national jurisdiction over ocean spaces,[165] he did not mean to place the deep sea-bed and its

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[162] Zuleta, Bernardo, "Introduction", 17 San Diego L.R. 517-525(1980), at 524, note 18.

[163] Paragraph 1 of the Preamble of the Antarctic Treaty reads:

> "Recognizing that it is in the interest of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord;"

[164] Cited by Zuleta, supra note 162, at 524-525.

[165] Pardo, Arvid, "Foreword", 14 San Diego L.R. 507-522 (1977), at 516.

resources under international control of any kind sanctioned by the legacy of all human beings; another possible interpretation is that the deep sea-bed and its resources should not be subject to exclusive exploitation of any sort by any State. A rush-and-grab approach was to be avoided and the deep sea-bed and its resources should be put under a regime other than exclusive exploitation.

In addition to the reference to mankind in the Antarctic Treaty, there are other international legal instruments that embody the concept of mankind.[166] Among these are: the Charter of the United Nations;[167] the Non-Proliferation Treaty; the constituent instrument of the International Telecommunications Union, and The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and Other Celestial Bodies;[168] the Agreement Governing the Activities of States on the Moon and other Celestial Bod-

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Ocean space is defined as "comprising the surface of the sea, the water column, the seabed, and its subsoil."

[166] Supra note 124, at 51.

[167] The Preamble of the UN Charter begins with
"We the Peoples of the United Nations,
determined
to save succeeding generations from the scurge of war,
which twice in our lifetime has brought untold sorrow to
mankind......"

[168] Article 1 of the Treaty states the primary interests of the international community:

> "The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefits and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind."

Adopted in United Nations General Assembly Resolution 2222 (XXI), 19 Dec. 1966. (1967) 610 United Nations Treaty Series 206. Opened for signature 27 January 1967; entered into force 10 Octover 1967.

ies(1979).[169]

As we have seen, the culmination of the concept of common heritage of mankind in 1967 was not accidental, but was instead a cumulative effect. Before 1967, the concept consisted not of specific rules, but general reference in most cases. However, an awareness grew that there must be something in the oceans that could be regarded as belonging to mankind as a whole. But the obligation of refraining from claiming or exercising sovereignty, sovereign rights, ownership, or appropriation over the deep sea-bed and its resources was derived from a mixture of the <u>res communis</u> status of the high seas and <u>res communis</u> status of the deep sea-bed and its resources, as regarded by some States at this point of time. This gap was filled by the development of the law of the sea after 1967.

4.1.2 Subsection Two. Development of the Concept since 1967

The common heritage of mankind was formally proposed as a significant concept in the international law of the sea in relation to the status, the regime, and the machinery for the exploration of the deep sea-bed and the exploitation of its resources by the Maltese Ambassador, Arvid Pardo, at the 22nd session of the UN General Assembly.[170] The proposal

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[169] Entered into force on 11 July 1984 and as of 31 March 19894 there are only four parties to this Treaty. Article 4 (1) provides that exploration and use of the moon shall be the province of all mankind and shall be carried out for the benefits and in the interests of all countries regardless of their degree of economic or scientific development.

[170] Among the four conceptual alternatives: freedom of the high seas, increasing the common property to be divided up through appropriate application of scientific knowledge and technological skill, national enclosure of ocean space, and international enclosure of ocean space, Pardo chose the international enclosure around the axis of common heritage of mankind. (See Robert L. Freidheim, "Arvid Pardo, the Law of the Sea Conference, and the Future of Oceans", in Park,

envisaged that:

(a) the deep sea-bed and ocean floor and the subsoil thereof as well as the resources beyond the limits of national jurisdiction be declared the common heritage of mankind;

(b) prohibition of any sovereignty, sovereign rights, ownership, and appropriation of any kind be effected except in accordance with the regime and machinery to be set up;

(c) sharing of the benefits derived from the area be enshrined;

(d) international machinery to administer and manage the resources be established;

(e) the use of the deep sea-bed be reserved exclusively for peaceful purposes.[171]

The change in the law of the sea was necessitated by two factors, *first* the proliferation of States and *second* the acceleration of technological progress. The old law of the sea, as widely held, was unable to keep pace with the changes that had been taking place. Therefore, "it was necessary to elaborate a new concept which could replace freedom or sovereignty as the basis of the law of the sea ... in order to preserve the greater part of ocean space as a commons accessible to the international community."[172] One of the motivations for Malta to present this proposal was to reduce, and ultimately to eradicate the glaring inequalities between the developed and the developing countries, as was elo-

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Choon-ho, ed., supra note 138, at 153.)

[171] Supra note 2.

[172] Pardo, Arvid, "Law of the Sea Conference -- What Went Wrong", in THE NEW LAW OF THE SEA (C.L. Rozakis and C.A. Stephanou eds., 1983, at 139-140)

quently put by the Yugoslavian delegate.[173] The freedom of the high seas was felt by developing countries not only inadequate in the face of the new trends, but also very prejudicial to their interests. It should be sufficient to quote one paragraph to illustrate this point:

> "Although the doctrine of the freedom of the seas theoretically based on Grotius's view of the inappropriability of the vast expanse of the oceans and the inexhaustibility of their resources, the big European powers insisted upon it and enforced it during the last three centuries. Actually, they used it to control the seas for the furtherance of their respective imperial ends. In practice, the freedom of the seas, therefore, meant undoubtedly control as well as to exploit the seas."[174]

The UN General Assembly responded very swiftly and positively. Subsequent events, which have already been briefly reviewed in the *INTRODUCTION*, include the set-up of the Sea-Bed Committee, the passage of the Moratorium Resolution, the adoption of the Principles Declaration, the convening of UNCLOS III, the adoption of the Convention on the Law of the Sea, the signing of the Convention, and the functioning of the PrepCom.

During this period, the concept of common heritage of mankind had crystalized, and embodied in the 1982 Convention. Now, it has more specific content.

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[173] Sarin, supra note 26, at 284-285.

> "The Yugoslavian delegate remarked that the existing international law was not sufficient as it reflected the 'prevailing inequalities and situations' which we would certainly like to 'avoid being transplanted to relationships in this area'. Therefore, we 'need to formulate new legal principles and to adopt such concepts as would prevent sanctioning' of the exploration, exploitation and use of the seabed and its resources 'for the benefits of the richer, technologically more advanced', in other words, developed States."

[174] Sarin, supra note 26, at 281.

4.2 Section B. Content of the Common Heritage of Mankind

It is true that there are divergent interpretations on the meaning of the common heritage,[175] but this should not prevent us from understanding their basic elements, or from deriving legal significance from it. Since the concept has been incorporated into the 1982 Convention, some analysis will be devoted to the relevant provisions of the Convention besides taking into consideration the evolutionary stages of the concept, as reflected mainly in the Principles Declaration.

Then, it is imperative to examine the divergence of meanings given to the common heritage by various interpretations in order to dispel the the clouds over whether it has specific legal content. Insofar as the issue is pertinent as to whether the concept has legal meaning or not, it would be better to leave the question aside and treat it in the next section.

Literally, there is no place in the Principles Declaration or the 1982 Convention where the common heritage is defined. But, the ensuing. resolutions of the General Assembly, the statements made by States, the analysis by legal scholars, and the negotiating history of the 1982 Convention, provide ample evidence to define the content of common heritage.

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[175] Arrow, supra note 99, at 28-29. Four models were discussed to interpret the common heritage of mankind.

4.2.1 *Subsection One. Basic Elements*

The word "heritage" is said to have two meanings: one relates to material possessions that are heritable, the other pertaining to immaterial principles of good, civilizing truths and wisdom that are handed down through ages.[176] The phrase "common heritage of mankind" carries with it the common meaning, but adding significant innovations.

The notion of mankind is known to international law as mentioned earlier. Professor Jean-Rene Dupuy's comprehension is quite profound:

> "It is transpatial, in that it regroups all contemporaries irrespective of the location of their establishment; its scope is transtemporal, because mankind does not include only today's peoples, but also those which will come. Mankind thinks beyond the living."[177]

He further analyzed the universal and egalitarian elements of the concept, which means "to join all the peoples without discrimination in collective ownership".[178] After repudiating the oligarchic formula for the common ownership of international space, which is exemplified by the Antarctic Treaty system where a small number of States with technological and financial abilities dominate,[179] Professor Dupuy insisted upon

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[176] Goldwin, Robert A., "Common Sense vs. 'the Common Heritage'", in LAW OF THE SEA -- US POLICY DILEMMA, 59-75, at 74.

[177] Dupuy, Rene-Jean, "The Notion of Common Heritage of Mankind Applied to the Seabed", in Rozakis and Stephanou, *supra* note 172, at 200-205.

[178] *Ibid.*

[179] Forster, Malcolm J., "Question of Antarctica", 14 Environmental Policy and Law 2-4(1985).

The Antarctic Treaty regime is unique in its decision-making because of which it is charged as an "exclusive club". There are two categories of Parties to the Treaty:

the democratic mechanism "which rejects this demand of effectiveness so as to join all the States in common ownership".[180] Furthermore, he devised three levels of participation of all countries to manage the common heritage: the institutional level; the activity level and the benefits level. The duties of conservation and rational development, as well as the protection of environment, were seen as emanating from the transtemporal nature of the common heritage of mankind.[181]

The first articulater of common heritage in relation to the deep sea-bed and its resources, Dr. Pardo, considered the content of the concept as:

> "*First*, the common heritage of mankind could not be appropriated; it was open to use by the international community but not owned by the international community. *Second*, it required

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(1) *Contracting Parties* which include all Parties to the Treaty, but they play little role in decision-making; (There are now 15 nations which have acceded to the Antarctic Treaty and which are contracting Parties only: Bulgaria<1978>, Czechoslovakia<1962>, Denmark<1965>, Finland<1984>, German Democratic Republic<1974>, Hungary<1984>, Italy<1981>, the Netherlands<1967>, Papua New Guinea<1981>, Peru<1981>, Romania<1971>, Spain<1982>, and Sweden<1984>.)

(2) *Consultative Parties* that have full right to participate in decision-making, which will be binding upon all Parties irrespective of Consultative or Contracting Parties. The Consultative Meeting of the Antarctic Treaty is held every two years in the capital of a Consultative Party. Of origin, the present Consultative Parties consist of two groups: the original signatories of the Treaty (US, USSR, UK, France, Japan, Australia, New Zealand, South Africa, Norway, Belgium, Argentina, and Chile); and the late comers (Poland<1977>, West Germany<1981>, India<1983>, Brazil<1983>, China<1985>, and Uruaguy<1985>).

By 1991, there will be an opportunity for optional review of the Treaty. In view of the mounting complaints against the oligarchic pattern of the Antarctic Treaty regime by developing countries, there have grown lots of speculations about the future of the Treaty regime. (Also see supra note 122)

[180] Supra note 177, at 200-205.

[181] Supra note 177, at 200-205.

> a system of management in which all users have a right to share. *Third*, it implied an active sharing of benefits, not only financial but also benefits derived from shared management and transfer of technology, thus radically transforming the conventional relationships between States and traditional concepts of development aid. *Fourth*, the concept of common heritage implied reservation for peaceful purposes, insofar as politically achieveable, and *Fifth*, it implied reservation for future generations, and thus had environmental implications."[182]

Professor Van Dyke and Yuen found three elements in the concept of common heritage.

1. Developing nations must receive genuine benefits from the resources of the deep seabed;
2. No nation can claim exclusive rights to any deep seabed mining site;
3. If a generally agree-upon treaty does come into force, it will be binding on all nations.[183]

In Professor Larshan and Brennan's article,[184] they have found four components in the concept:

1. non-appropriation;
2. participation of all nations in the management of deep sea-bed;
3. distribution of benefits from the exploitation of resources;
4. uses exclusively for peaceful purposes.

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[182] Supra note 172, at 141.

[183] Van Dyke and Yuen, "'Common Heritage' v. 'Freedom of the High Seas': Which Governs the Seabed?", 19 San Diego L. R. 21-43(1982).

[184] Larshan and Brennan, "The Common Heritage of Mankind, Principles in International Law", 21 Columbia Law Journal 305(1983).

Mr. Shingleton considers the concept of the common heritage contains several associated elements, such as:

> "inalienable title to the area and its resources, implied trustee duties over it for the benefit of present and future humanity, internationally exercised exploitation and administration rights, through international machinery, equitable distribution of the benefits of the area."[185]

Mr. Anatoly Kolodkin, President of the Soviet Maritime Law Association, constructs the common heritage in a much similar way.[186] But he interpreted the element of participation in such a way that it can only be effected through the regime under the LOS Convention. Therefore, participation through unilateral action or a mini-treaty is not meant by the common heritage.[187]

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[185] Shigleton, supra note 88, at 53.

[186] Dyke Jon M. Van, ed., CONSENSUS AND CONFRONTATION: THE UNITED STATES AND THE LAW OF THE SEA CONVENTION, A Workshop of the Law of the Sea Institute, January 9-13, 1984, Honolulu, Hawaii, U.S.A., 1985. at 248.

[187] Id. Professor Kolodkin stated:

1. The deep seabed and its resources can neither be subject to the sovereignty of any State nor appropriated by any State or its natural or juridical bodies.

2. Economic and other benefits from the exploration and exploitation of the deep seabed and its resources are to be distributed for the interests of all nations but taking into account the special interests of developing countries even if they do not conduct any such exploration and exploitation.

3. Unilateral actions of States to appropriate or exploit the deep seabed and its resources are not allowed. Unregulated and uncontrolled access to the deep seabed and its resources is excluded. At the same time, the so-called parallel system shall be preserved. States as members of the international community and sovereign subjects of international law cannot be refused their right to participate in the exploration and exploitation of the deep seabed and its resources, but this right shall be exercised only through the Authority.

4. The area of the deep seabed which is the common heritage of

Professor Elisabeth Mann Borgese has tried to define the concept.[188] She also regarded environmental protection and conservation for the future are two more elements in the concept in addition to the aforementioned four elements.[189]

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mankind shall be used exclusively for peaceful purposes.

[188] Draft Definition of Common Heritage

First Article

The Area and its resources are the common heritage of mankind.

Second Article

For the purposes of this Convention "Common Heritage of Mankind" means that:

1. No State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor shall any State or person, natural or juridical, appropriate any part thereof. No such claim or exercise of sovereignty or sovereign rights, nor such appropriation shall be recognized.

2. The Area and its resources shall be managed for the benefits of mankind as a whole, irrespective of the geographical location of States, whether coastal or landlocked, and taking into particular consideration the interests and needs of the developing countries as specifically provided for in this part of the Convention.

3. The Area shall be open to use exclusively for peaceful purposes by all States, whether coastal or landlocked, without discrimination and without prejudice to the other provisions of this Part of the present Convention.

4. Necessary measures shall be taken in order to ensure effective protection for the marine environment from harmful effects which may arise from activities in the Area, in accordance with Part VII of the present Convention.

See Borgese, Elisabeth Mann, "A Constitution for the Oceans: Comments and Suggestions Regarding Part XI of the Informal Composite Negotiating Text", 15 San Diego L.R. 371-408(1978), at 376.

[189] CONSENSUS AND CONFRONTATION, supra note 14, at 257.

Professor Anthony D'Amato added the seventh element on the list, that is the ability to restrict mining that has an adverse effect on land-based minerals sold on the market.[190] But this seventh element may not be warranted since it goes into the production policy of the seabed minerals, which is subject to diverse interpretations. Also this element has not been refered to elsewhere. It may well become part of the growing common heritage in the future. At present, this element cannot be said to be contained in the principle of the common heritage.

The 1982 United Nations Convention on the Law of the Sea incorporated the idea of common heritage into its Preamble, Article 1(1), Part XI, Article 309, Article 311(6), Annex II, Annex III, Annex IV, Article 14 of Annex VI, Section 4 of Annex VI, Resolution I and Resolution II of Annex I of the Final Act, and Annex II of the Final Act.

Article 136 consists of a single sentence "The Area and its resources are the common heritage of mankind." This article simply signifies and highlights the paramount importance of the principle of the common heritage. It also has the effect of reaffirming the previous convictions and efforts within the framework of the United Nations. It should be noted that not only the resources but also the Area itself are the common heritage. From a sense, the principle of the common heritage is placed on the top of all the rules relating to the deep sea-bed and its resources. This may suggest some hierarchical structure existing within at least the rules relating to the deep sea-bed and its resources.

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[190] CONSENSUS AND CONFRONTATION, supra note 14, at 258.

Entitled "Legal status of the Area and its resources", Article 137 contains the non-appropriation clause. Paragraph 2 is partly innovative in comparison with the Principles Declaration. It states that any alienation of the resources is prohibited. Further, alienation of the minerals recovered from the Area may only be effected in accordance with the Convention and with the regulations of the Authority. The prohibition of the alienation of the resources by the United States, who still regards that these resources may be lawfully extracted by any nation under the freedom of the high seas. At present, there are some difficulties to conclude that this Paragraph has been totally assimilated into customary international law. Part of it can be said so. The restriction on alienation of the minerals is even more disputed by the United States and others. If the Convention comes into force, this restriction may crystalize and become part of customary law. At present, it may not be an integral element of the common heritage as customary law.

Article 140 is about the sharing of benefits derived from the exploitation of the resources of the Area. This is by and large accepted as one element of the common heritage of mankind by both the industrialized countries and the developing countries. For instance, in the UK, FRG, USA's deep sea-bed mining legislations, there are provisions for a special fund for the benefits of mankind, although it remains questionable as to how and when these funds should be distributed.

Article 141 spells out the requirement that the use of the Area be exclusively for peaceful purposes. This Article is ambiguously drafted and intended to be. However, no matter what interpretation one might give, this provision can be said to be part of the concept of the common heritage of mankind with respect to the deep sea-bed.

Article 148 is designed to ensure the effective participation of the developing countries in particular. It may be possible to observe that this provision is less acceptable to the major developed States. But still Article 148 is generally regarded as not so offensive to the major developed States.

Articles 145, 146, and 147 reflect the concern about the marine environment. This could be in the fabric of the common heritage. But it need not be necessary, since any sea-bed treaty will address the question of the protection of the marine environment. It would be fair to treat this element not as an indispensable one in the concept of the common heritage of mankind. Article 150 (b) talks about the conservation and rational management of the resources in the Area. Again, this does not necessarily derive its root from the notion of the common heritage.

In Section 2 of Part XI, one of the principles enumerated is the transfer of technology. This obligation is one of the main reasons why the United States withdrew from the Convention regime. Mandatory transfer of technology is criticised as impractical and unacceptable to the consortia. It also conflicts with the ideology of free market. If the suppliers of the technology do not accept this imposed duty, as do not the United States, the United Kingdom, and the Federal Republic of Germany, it would be very difficult to argue that this principle has become a constituent part of the accepted concept of the common heritage of mankind. How this principle is to be executed and modified remains to be seen. The discussion could be in the framework of the PrepCom, or under the auspices of the United Nations. Alternatively, the United States would prefer to have a small-scale conference among the major suppliers and recipients.

From the above analysis it becomes clear that the basic content of the common heritage has not undergone any significant changes from the Principles Declaration to the 1982 Convention. It is possible to spell out the basic content of the concept as consisting of the following elements:

(a) in comparison with res communis, the concept of common heritage not only prohibits sovereignty, sovereign rights, ownership of any kind, but also prohibits appropriation in any form;

(b) individual States can obtain rights with respect to the Area and its resources, by way of conforming to the legal regime agreed by the international community as a whole, for example that in the 1982 Convention;

(c) sharing of benefits in the broader sense is to be effected;

(d) use of the Area for peaceful purposes is to be respected;

(e) universal participation in management of the Area and its resources is to be safeguarded;

This content has been accepted and recognized by the international community as a whole through such means as the Principles Declaration, the statements of States, State practice, and the 1982 Convention. The relevant provisions in the LOS Treaty are basically in line with the basic content of the common heritage as formulated above. The following are a few instances where the basic content of the common heritage has been developed and specified.

(1) the specification of rights to minerals in Article 137(3);

(2) the enumeration of the responsibility and liability of States in more concrete terms in Article 139;

(3) the embodiment of the participation provisions for developing countries in Article 148.

Comparing with the the content of the 1970 Principles Declaration, Part XI of the 1982 Law of the Sea Convention is basically in conformity with the essential ideas contained in the principle of the common heritage of mankind. Detailed comparison will be made in another study following this thesis.

With the above explanation, it is conclusive that the essential ideas or elements of the concept which have been by and large consistent can be deemed to be accepted by the international community.[191]

The developing countries' position is that the Moratorium Resolution had the effect to bar all States, persons, natural or judicial, from making claims over, or exploiting the Area and its resources.[192] But

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[191] UN Doc. A/AC. 138/SC.1/SR. 12-29, 6 November 1969, at 16.

Mr. Debergh, Representative of Belgium proclaimed at the Sea-Bed Committee:

> Although some countries took an objection to the expression 'common heritage' on the ground that it had no juridical content, and that it lacked precision, yet it seemed that there was an implicit general agreement that the concept of the common heritage was very valuable and might be taken as the keystone in the construction of the new law of the sea. The common heritage may apply to all hydrocarbon spaces.

[192] Sarin, supra note 26, at 280.

this position is weakened by the formidable negative vote and large number of abstentions on the adoption of this resolution. What the developing States have been trying to do is nationalize what is within their own ambit by recovering the ownership of the resources, and internationalize what is elsewhere, and in particular wealth which is not yet appropriated.[193]

> "To developing nations the concept of common heritage implies not only sharing in the benefits to be obtained from the exploitation of the resources of the Area, but also, and above all, an effective and total participation in all aspects of the management of this common heritage."[194]

Thus, by rejecting the criteria based on financial and technological capability, they are striving to transform the unequal relationship between the poor and the rich countries.[195] In their view, the common heritage must and will become part of the basis of the New International Economic Order, of which the Law of the Sea Convention is both a forerunner and an essential part.[196] Thus, the Chairman of Group-77 stated:

> "It had to imply the idea of a common administration and therefore, not only the freedom of access and utilization but also the regulation of that exploitation and of an equitable sharing of the benefits between the members of the international community."[197]

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[193] Dupuy, supra note 177, at 202.

[194] Aguilar, "How Will the Future Deep Seabed Regime Be Organized?", in LAW OF THE SEA -- THE EMERGING REGIME OF THE OCEANS, (J.Gamble & G. Pontecorvo eds.,1974), at 43, 47.

[195] UN Doc. 1/AC/130/SC.1/SR. 12-29, 6 November 1969, pp. 33ff; UN Doc. A/C.1/PV./673, 31 October 1969, pp. 18ff.

[196] Borgese, supra note 188, at 376.

[197] Carias, M., "Seabed Mining in the 1980 Draft Convention on the Law of the Sea", in Chen, DEEP SEABED MINING AND FREEDOM OF THE SEAS, 13 (Westport, Conn.: U.N. Assoc. of Conn., 1981)

There are at least two consistent interpretations of the common

Whether the concept is understood as to imply the notion of trusteeship through an international machinery, or as to contain the conception of common ownership does not matter, since both ramifications are compatible with the basic elements of the concept.

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heritage of mankind. *One* is to see it as entailing the notion of common ownership, as presented by Ambassador Pinto:

> Common heritage "means that those minerals cannot be freely mined. They are not there, so to speak, for the taking. The common heritage of mankind is the common property of mankind. The commonness of the 'common heritage' is a commonness of ownership and benefit. The minerals are owned by your country and mine, and by all the rest as well. In their original location, these resources belong in undivided and indivisible share, to your country and mine, and to all the rest -- to all mankind, in fact, whether organized as States or not. If you touch the nodules at the bottom of the sea, you touch my property. If you take them away, you take away my property."

(Statement by Ambassador of Sri Lanka, M.C.W. Pinto, in ALTERNATIVES IN DEEP SEA MINING, proceedings, Law of the Sea Institute, workshop, 11-14 December 1978, at 13-14, edited by S. Allen and J. Craven, 1979.)

Another interpretation seems to suggest the conception of trusteeship because mankind manage and control the area and its resources through the international community in general which consists of States and through the ISA in particular. Professor Arvid Pardo stated:

> "the common heritage of mankind was not owned by mankind or by the international community, however defined but was held in trust by mankind. Mankind through the international community has the jus utendi but not the jus abutendi or the right of disposal."

(See Pardo, Arvid, "An Opportunity Lost", in LAW OF THE SEA: U.S. POLICY DILEMMA, at 21.)

4.2.2 Subsection Two. Different Understandings

There was no scarcity of opposition to the introduction of common heritage into the domain of the law of the sea.[198] But the most adamant stance is that of the United States. The Statement of the U.S. Department of State on the Claims by Deepseas Venture alleged:

> "'Common heritage' does not require the ownership of nodules by a world authority for the benefits of all nations, but only that the seabed or at least the nodules, is 'commonly' available to all."[199]

The effect of this Statement is to minimize the legal significance of common heritage. It is equated with the notion of res communis, because under the doctrine of res communis, it is not difficult to extrapolate common availability therefrom. This contention might have been warranted in 1976, but certainly not in 1985. It is at variance with the basic meaning of the concept.

Professor Oxman regarded the common heritage as having only procedural significance.[200] This means that all States are required to attempt in good faith to agree upon the substantive content of a regime. But this interpretation seems too narrow to contain the scope of the common

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[198] Early objections to the common heritage of mankind pertained to the moral meaning and imprecision mainly. See Oda, Shigeru, "Sharing of Ocean Resources -- Unresolved Issues in the Law of the Sea", supra note 1, at 61-62; Brown, E.D., "The 1973 Conference on the Law of the Sea: The Consequences of Failure to Agree", proceedings, 6th Annual Conf. of the Law of the Sea Institute, University of Rhode Island, June 1971, Kingston, USA,1972, at 35; Barkenbus, J., DEEP SEABED RESOURCES, 41(1979); UN Doc. A/AC.138/SC.1/SR.9, 24 March 1969, p.96 (Yonkov of Bulgaria); UN Doc. A/C.1/PV.1798, at 6, 1970 (USSR Statement); UN Doc. A/AC. 138/SC. 1/SR. 14, p.24 (Oda, Japan); UN Doc. A/AC. 138/SC. 1/SR. 13, p.18 (Beesley, Canada).

[199] Supra note 125, at 66.

[200] CONSENSUS AND CONFRONTATION, supra note 14, at 259.

heritage. As discussed earlier, the principle has sustantive elements. Those elements are accepted in various degrees. Certainly, the common heritage cannot be said to have procedural content only. With the passing of time, the substantive meaning of the concept will become more discernible.

Other opinions against the basic content of the common heritage include the charge that it lacks definite meaning,[201] the accusation that it creates inequalities among individuals and States,[202] and the belief that it embodies no prohibitive rules against unilateral mining of the deep sea-bed.[203]

Mr. Theodore Kronmiller wrote:

> "What all States agreed upon was that the deep seabed and subsoil and the resources thereof are the common heritage of mankind, however that is defined. Those States also agree that claims or exercise of sovereignty or sovereign rights over, or ownership of, the deep seabed are impermissible and that deep seabed mining must benefit in some manner the international community."[204]

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[201] Shigleton, supra note 88, at 54-55.

[202] Bandow, Doug, "UNCLOS III: A Flawed Treaty", 19 San Diego L.R. 475-492(1982), at 479-480.

"This new concept of the 'common heritage of mankind' necessarily places the well-being of some nations and individuals arbitrarily ahead of those of others. In the case of the seabed, the interests of the ruling establishment in a few developing countries are to take precedence over the fundamental rights of all individuals, including those of citizens of developing countries; the oligarchy of a few will appropriate in the name of the many."

[203] Cited by Sarin, supra note 26, at 280.

[204] Kronmiller, supra note 17, at 534-535.

What is accepted in the above paragraph is the obligation to share benefits derived from the Area and its resources and the element of non-appropriation principle in a cursory form. One of the effects of this statement is that the common heritage is nearly equalized with the notion of res communis. over the deep sea-bed and its resources is sanctioned even under the rubric of res communis. However, this statement did not recognize the participation principle and the peaceful use principle.

Besides several statements made by the United States during UNCLOS III,[205] President Reagan made the U.S. position very clear in his EEZ Proclamation:

> "United States participation in the Conference and its support for certain General Assembly resolutions concerning sea-bed mining do not constitute acquiescence by the United States in the elaboration of the concept of the common heritage of mankind contained in Part XI, nor in the concept itself as having any effect on the lawfulness of deep sea-bed mining. The United States has consistently maintained that the concept of the common heritage of mankind can only be given legal content by a universally acceptable regime for its implementation which was not achieved by the Conference."[206]

This statement demonstrates the change of the U.S. attitudes between the early stage and the later stage of UNCLOS III. The United States' intention had been to commit itself to UNCLOS III until the Reagan Administration rejected the Convention. The U.S. objection may be arguably construed as sufficient to constitute the non-universal character of the regime under the 1982 Convention. How this will be developed

[205] U.S. Department of State Bulletin, 1981: Malone, James L., July, 48; 1982: Reagan Ronald, March 54; Malone, May 61, October, 48; 1983: Reagan, April 82, June 70.

[206] US Exclusive Economic Zone (Reagan), U.S. Department of State Bulletin, June 1983, at 70-71.

remains to be seen. If the conventional regime attracts sufficient, not only ratifications and accessions, but also technological and financial capacity, then it could be developed to include the participation of the United States. Therefore, there will be little doubt as to the universal character of the regime. If the mini-treaty has the power to command most of the technology and finance to undertake deep sea-bed mining, and to undermine effectively the conventional regime, then it will become stronger. In accordance with the rules of formulation of customary international law, such a mini-treaty regime might be regarded as the major actual State practice in deep sea-bed mining. But still there is the problem of contention from the developing countries. If both regimes keep a fairly balanced equilibrium, there will be a true competing situation in deep sea-bed mining.

To summarize, what the United States and other States asked for are unacceptable to the majority of the international community, and perhaps not compatible with the basic content of the concept of common heritage as it has evolved.

4.3 Section C. Legal Status

Since 1967, the deep sea-bed and its resources have been designated the common heritage of mankind. If its content is objected to, much more is its status in international law, because it is the legal status that creates rights and imposes duties. Whether the concept can define the legal status of the deep sea-bed and its resources will be examined below.

As early as 1968, Professor Louis Henkin expressed his doubt over the lawfulness of unilateral sea-bed mining:

> "As to the law governing the extraction of minerals from the deep sea-bed, the only certainty is that the law is uncertain. It is not clear whether any nation can acquire and claim sovereignty in the seabed, and if so, by what measures. It is not clear whether, without any claims of sovereignty any State (or private entrepreneurs) can lawfully proceed to dig and keep what it extracts."[207]

Though the Convention on the Law of the Sea has been signed by 159 States and other entities, it is still not clear whether Part XI of the Convention can come into the corpes of international law due to the strong U.S. objection. The common heritage of mankind has been, however, undeniably consolidated in international law, both customary and conventional. It is acknowledged now that the concept may be regarded as legal but differences remain as to its precise legal meaning. Now the question is mainly no longer whether the concept is a legal one, but rather, is what legal status it is to be attributed. Indeed, the notion of *jus cogens*, customary international law, and conventional international law have been invoked in support of the common heritage. For a legal concept, with such broad support from the sources of international law, to be considered to have merely moral or political force is not justified. International law may not be so feeble, fragile, and flexible as to embrace something that is legal and non-legal at the same time.[208]

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[207] *Supra* note 140, at 24.

[208] See Statement made by Bernardo Zuleta at the Twenty-Third Session of the Asian-African Legal Consultative Committee, Tokyo, 16-18 May 1983, Office of the Special Representative of the Secretary-General for the Law of the Sea, 3 *Law of the Sea Bulletin* 6-7(March 1984).

"International law cannot be so illogical as to produce the effect of accepting that something can be and not be at the same

4.3.1 Subsection One. Jus Cogens

4.3.1.1 1. WHAT IS JUS COGENS

This expression originates from the Roman law which invalidated transactions and obligations involving infringement of rules of law with respect to "public order".[209] It exists in most municipal legal orders in the form of juris cogentis or a general concept of public policy which invalidates legal actions that are contrary to certain generally defined criteria.[210] That a contract to kill someone is null and void in domestic law, represents one example. In international law, treaties contemplating or conniving at the commission of acts, such as trade in slaves, piracy or genocide; treaties violating human rights, the equality of States or the principle of self-determination; treaties contemplating an unlawful use of force contrary to the principles of the Charter of the United Nations; or treaties contemplating the performance of any other act criminal under international law, are nullified by jus cogens.[211] The treaties would be invalid if they are contemplating terrorism.

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time ... It would be equally difficult to argue that a Convention supported by the vast majority of nations can co-exist with another regime based on a nimble application by analogy of traditional freedoms that were recognized to satisfy needs totally unrelated to deep sea-bed mining."

[209] Suy, E., THE CONCEPT OF JUS COGENS IN PUBLIC INTERNATIONAL LAW, Carnegie Endowment for International Peace, Geneva, 1967, at 18-20.

[210] Khushalami, Yougindra, DIGNITY AND HONOUR OF WOMEN AS BASIC AND FUNDAMENTAL HUMAN RIGHTS, The Hague, Martinus Nijhoff Publishers, 1982, at 133.

[211] General Assembly Official Records (21st sess.) suppl.9 (A/6309/Rev.1), Report of the International Law Commission on the second part of its 17th session, January 3-28, 1966, and on its 18th session, May 4-July 19, 1966, p.77, para. 3, and p.89, para. 1.

According to Professor Milenko Kreca, the normative content of jus cogens,

> "reflects an objective necessity of peaceful co-existence and equitable co-operation of States and peoples. Emanating from the positive international order, jus cogens possesses substantially qualitative characteristics of that order. In the formal sense, the characteristic features of international jus cogens in public law are objective character, peremptoriness, universality and dynamic nature."[212]

In light of this observation, it is convenient to prove the existence and functioning of jus cogens from three sources: scholarly writings, judicial decisions and Vienna Convention on the Law of Treaties.

(1) Scholarly Writings.:

Professor V.V.Pella, in his memorandum to the United Nations, regarded peaceful co-existence as jus cogens.[213] Professor Kreca proclaimed:

> "Interdependence and interrelationship of interests resulted in the recognition that peace -- positively viewed not only as the absence of war, but as an on-going process in the solution of economic, political and other contradictions by way of wide-ranging co-operation -- constitutes a universal primordial value, and as such, exercises vital influence on the conduct of States. Peaceful and active co-existence, as a theory of indispensable, overall and universal cooperation and solution of disputes and contradictions by peaceful means, represents the conceptualization and reflection of those realities."[214]

This statement affirms that peaceful co-existence and equitable co-operation are recognized as peremptory norm. In this connexion, Professor A. McNair's comment is on point:

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[212] Kreca, Milenko, "Some General Reflections on Main Features of Jus Cogens as Notion of Public International Law", in Gieraut, supra note 26, at 29.

[213] Pella, V.V., "Memorandum concerning a Draft Code of Offences Against the Peace and Security of Mankind", UN Doc. A/CN.4/39, at 17(1950).

[214] Supra note 212, at 28.

"There are, however, many rules of customary international law which stand in a higher category and which cannot be set aside or modified by contracting States; it is easier to illustrate these rules than to define them. They are rules which have been accepted either expressly by treaty or tacitly by custom, as being necessary to protect the public interests of the society of States or to maintain the standards of public morality recognized by them."[215]

It could be no more evident that in the majority of scholarly opinions, jus cogens does exist. The concept contains the features of peremptoriness, universality, objectivity, a dynamic nature, indelibility, and a reflection of general interests of the international community. Having summarized the writings of scholars, the International Law Commission declared:

"But whatever imperfections international law may still have, the view that in the last analysis there is no rule from which States cannot at their own free will contract out has become increasingly difficult to sustain."[216]

(2) Pronouncement by Judicial Tribunal:

Two cases in which the International Court of Justice elucidated aspects of jus cogens are worth mentioning. In the Advisory Opinion to Reservation to the Genocide Convention, the Court considered that genocide "is contrary to moral law and to the spirit and aims of the United Nations." Even without any conventional obligation, "the principles underlying the Convention are principles which are recognized by civilized nations as binding on States."[217]

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[215] McNair, A., LAW OF TREATIES, Oxford, Clarendon Pr., 1961, at 213-215; Also see Hermann Mosler, THE INTERNATIONAL SOCIETY AS A LEGAL COMMUNITY, Alphen aan den Rijn, the Netherlands, Sijhhoff & Noordhoff, 1980, at 139.

[216] ILC Yb, V.2, 1963, at 198.

[217] Reservation to the Convention on the Prevention and Punishment of the Crime of Genocide, Advisory Opinion, ICJ Rep. 1951, at 12.

Similarly, the Court in Barcelona Traction case, stated that there were obligations owed by States to international community as a whole that derives from outlawing acts of aggression, and of genocide, and from principles concerning basic human rights, such as freedom from slavery and from racial discrimination.[218]

Suffice it to say that there is an element in the consideration of the decisions of the Court that jus cogens does occasionally come into play.

(3) Vienna Convention on the Law of Treaties.:

Two Articles in the Vienna Convention on the Law of Treaties are specially pertinent. Article 53 reads:

> "A treaty is void if, at the time of its conclusion, it conflicts with a peremptory norm of general international law. For the purposes of the present Convention, a peremptory norm of general international law is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character."

Article 64 provides:

> "If a new peremptory norm of general international law emerges, any existing treaty which is in conflict with that norm becomes void and terminates."

Read together, it is not difficult to find that a rule of jus cogens must be in the realm of general international law, must be recognized and accepted by international community as a whole, must prohibit any derogation from it, and must have the character of taking precedence over other norms of international law.

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[218] Barcelona Traction, Light and Power Company,Limited, Second Phase, Judgment, ICJ Rep. 1970, at 3ff.

The difficulties now are no longer whether there is jus cogens, but how it can be identified. The criteria are by no means clear-cut. There is no exhaustive authoritative list of peremptory norms in existence, let alone those in emergence. Nevertheless, a peremptory norm is identifiable. The following features are essential to jus cogens:

1. A rule of jus cogens must be a rule of general international law;
2. It must be a norm of peremptory character;
3. Such character must be accepted and recognized by the international community;
4. Such international community must consist of an entirety as a whole;
5. Any rule or norm of international law conflicting with jus cogens is null and void.

To prove a norm of international law as having peremptory character is very difficult. The burden of proof is on the invoking side.

4.3.1.2 2. COMMON HERITAGE OF MANKIND AS JUS COGENS

(1) A Norm of General International Law.:

It could be argued to the effect that the common heritage might be regarded as an emerging norm of jus cogens. Beginning in 1970, when the Principles Declaration was adopted at the General Assembly, the concept of common heritage of mankind has been gradually assimilated into the stream of general international law, as soon as it was recognized and accepted as a legal concept. As a matter of fact, the two processes happened almost simultaneously so that one could hardly distinguish one from the other. The law governing the exploration and exploitation of the deep sea-bed and its resources must be of a general character, because it grants rights and imposes duties to every State, regardless of their geographical location. The concept of common heritage lays down foundations for all the operative paragraphs of the Principles Declaration. The principle of the common heritage of mankind also governs all provisions on deep sea-bed mining in the 1982 Convention.

However, it is very arguable whether the common heritage has been accepted and recognized as a norm of general international law by the international community as a whole. The non-participation of the three major industrialized nations, namely the U.S., the U.K. and the FRG, do pose serious problems to the general acceptance of the common heritage. At least, the effective materialization of the requirements of the common heritage will need the support of technology and finance, which are largely in the hands of the three economic giants. But the international community by and large invented the common heritage not to meet the individual State's needs, or a group of States' interests but the interests and needs of the international community as a whole.

It might be of help to examine the constituent elements of the common heritage in this connection. Non-appropriation and non-sovereignty of any form could be regarded as necessity to protect the interests of the international community against the encroachment of the individual State. Sharing of benefits stems from the general concern about the inequitable distribution of wealth between the North and the South. Universal participation seems to be a procedural device to fulfill the requirements of the common heritage. Exclusively peaceful use of the deep sea-bed and its resources appears to be a measure to prevent the militarization and arms race in the international sea-bed.

As regards the general character of a peremptory norm, Professor Alfred Verdross put it this way:

> "The criterion for these rules consists in the fact that they do not exist to satisfy the needs of individual States but the higher interest of the whole international community. Hence these rules are absolute. The others are relative, because the rights and obligations created by them concern only individual States inter se."[219]

The introduction of the common heritage is not isolated. It is part of the growing concern for international social justice and the welfare of mankind.[220] It is also part of the evolution of new international law using the community of States as the starting point.[221] There is still room, it seems, to regard the common heritage as a norm of general international law, albeit in emergence.

(2) A Specially Agreed Peremptory Norm.:

Because of its peremptory character, the generation of a norm of jus cogens requires double consent: a norm of general international law and a norm specially agreed upon to possess a peremptory nature.[222] The common heritage might be deemed to be such a norm though there are disagreement as to this.

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[219] Verdross, Alfred, "Jus Dispositium and Jos Cogens in International Law", 60 AJIL 55-63(1966), at 58.

[220] Rembe, supra note 124, at 51.

[221] Rembe, supra note 124, at 52.

[222] Rozakis, Christos L., THE CONCEPT OF JUS COGENS IN THE LAW OF TREATIES, Amsterdam, North-Holland Publishing Company, 1976, at 75-76.

While considering the general provisions of the Convention on the Law of the Sea at UNCLOS III during the resumed eighth session, Chile presented an informal proposal on the concept of jus cogens.[223] At the suggestion of the President of the Conference, the matter was eventually taken up when negotiating the outstanding final clauses, though it is not strictly related to final clauses.[224]

At the resumed ninth session, Chile presented a similar proposal on jus cogens clause to the informal plenary session of the Conference.[225] The report of the President of the Conference summarized the discussion on jus cogens proposal as follows:

> "During the resumed session, it appeared that the majority of delegations strongly supported the proposal but although most delegations found the concept unexceptionable, yet the proposal itself was not entirely acceptable to some."[226]

After a modified proposal by the President proved to be unacceptable, it was suggested to continue consultation and return to it at a later stage of the session.

During the recess, a compromise formulation on the subject emerged that could be inserted as a paragraph in Article 305 (now paragraph 6 of Article 311). On august 15, 1980, the new text was presented:

> "The States Parties to this Convention agree that there can be no amendments to the basic principle relating to the common heritage of mankind set forth in article 136 and that they shall not be party to any agreement in derogation thereof."

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[223] UN Doc. A/CONF.62/L.53, para. 1. (See UNCLOS III Official Records, V. 13, at 87.)

[224] Ibid. at para. 4.

[225] UN Doc. A/CONF.62/L.58, Report of the President on the work of the informal plenary meeting of the Conference on general provisions. (See UNCLOS III, Official Records, V.14, at 128-129.)

[226] Ibid.

Drafting changes to this formulation were met with opposition. This formula was adopted by consensus "subject to the expression of certain delegations of reservation which did not amount to objection to its acceptance by consensus."[227] It is not known to this writer which States made such reservations and under what circumstances. It might well be the major Western industrialized States.

The location of this provision was thought not to be crucial, as its content would be given effect to wherever it was incorporated.[228]

The record of the Conference shows that common heritage was presented as a jus cogens provision and was accepted by the Conference in the form of consensus adoption of this provision, as it now appears in paragraph 6 of Article 311. So the U.S. contention that "the Convention text and the negotiating record of the Conference demonstrate that a proposal by some delegations to include a provision on jus cogens was rejected" is not a true reflection of the record of the Conference and may be dismissed.[229]

Indeed, as early as the adoption of the Principles Declaration in 1970, the peremptory character of the concept of common heritage of mankind was implicitly suggested by developing countries. Some States were of the view that the principle in the first operative paragraph, namely,

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[227] Supra note 225, at 129.

[228] Supra note 225, at 129.

[229] US Statement, Pursuant to the announcement made by the President of the Conference at the 185th plenary meeting on 6 December 1982, statements made in the exercise of the right of reply. See UN Doc. A/CONF.62/WS/37 and Add.1 and 2.(UNCLOS III, Official Records , V.17, at 243.)

the designation of the deep sea-bed and its resources as the common heritage of mankind, was a peremptory norm from which no derogation be permissible.[230]

> "All sides respected the agreement not to submit amendments subsequently, thus implicitly recognizing the Declaration of Principles as the outcome of a process of universal co-operation in the search for new rules of law having the character of jus cogens, namely, that of peremptory rules of international law from which no derogation is permitted."[231]

The position of Group-77 on the peremptory nature of the concept of of common heritage also starts from the Principles Declaration:

> "The very nature of these principles, according to which mankind as a whole owns the resources, of which the regime is established by a treaty of a universal nature and the management of which is to be entrusted to an international organization, makes them incompatible with regional interests based on unilateral legislation or limited agreements ... As a result, the principle of the designation of the Area as the common heritage of mankind can only be considered as a rule having universal application and it cannot coexist with individual regulations of one or more States."[232]

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[230] Statement by Guyana, UN Doc. A/C.1/PV.1788, at 10(1970); Statement by India, Kronmiller, *supra* note 17, at 302-303.

When signing the Convention on the Law of the Sea, Chile made a Declaration that deems the concept of the common heritage of mankind as designating the status of the deep sea-bed and its resources to have the force of *jus cogens.* See Office of the Special Representative of the Secretary-General for the Law of the Sea, 5 *Law of the Sea Bulletin* 9 (July 1985).

[231] Declaration of the South Pacific Commission, issued at Lima on 22 July 1980, see UN Doc. A/CONF.62/101, letter dated 28 July 1980 from the representatives of Chile, Columbia, Ecuador and Peru to the President of the Conference (*UNCLOS III, Official Records,* V.14, at 107).

[232] UN Doc. A/CONF.62/106, Legal Position of the Group of 77 on the Question of Unilateral Legislation Concerning the Exploration and Exploitation of the Sea-Bed and Ocean Floor and Subsoil Thereof Beyond National Jurisdiction. (See *UNCLOS III, Official Records,* V.14, at 110.)

Article 136 together with Preambular paragraph 6 are also invoked. The Preambular paragraph reads:

> Desiring by this Convention to develop the principles embodied in resolution 2749 (XXV) of 17 December 1970 in which the General Assembly of the United Nations solemnly declared inter alia that the area of the sea-bed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction, as well as its resources, are the common heritage of mankind, the exploration and exploitation of which shall be carried out for the benefits of mankind as a whole, irrespective of the geographical location of States.

The principles of the common heritage are highlighted and signified both in the Preamble and in Part XI. What does this really mean? It may mean that the principle of common heritage has a special legal force. It may also suggest the heightened role played by the principle of the common heritage.

(3) Universal Endorsement.:

It is a bit redundant to reiterate the near-unanimity received by the Principles Declaration, the unprecedented participation in UNCLOS III, and the impressive support for the Convention on the Law of the Sea.

As to the voting, there is some confusion. Many commentators and documents use the word "unanimous", "unanimity", and "unanimously" to describe the adoption of the 1970 Principles Declaration.[233] On the

[233] For example, in 1974, John Norton Moore, then Chairman of the National Security Council Interagency Task Force on the Law of the Sea of the United States, stated:"While we support the U.N. General Assembly's unanimous declaration that the seabed beyond the limits of national jurisdiction is the common heritage of mankind......". Hearings before the Senate Subcommittee on Minerals, Materials and Fuels, 93rd Cong., 2 Sess., at 989, 994 (1974).

Another well-known author in the law of the sea, Professor R.P. Anand, also stated: "In 1970 the Assembly unanimously adopted a Declaration of Principles Governing the Seabed and Ocean Floor......". Anand, R.P., "Odd Man Out: The United States and the UN Convention on the Law of the Sea", CONSENSUS AND CONFRONTATION, supra note 14, other hand, the supporting vote to the Principles Declaration is not without abstentions.[234] Early international organizations and diplomatic conferences used unanimity in their decision-making. This often resulted in ineffectiveness because each participant was in effect given a veto power. For instance, in the League of Nations, the Council was obstructed on several occasions by this procedure.[235] Rules of decision-making were evolved. Now, although strictly speaking, a resolution with abstentions cannot claim its adoption by unanimity, States, and legal authors do not seem to hesitate to employ the word "unanimous" and its noun and adverb forms to describe such a resolution.[236]

The International Court of Justice stated in its advisory opinion on South West Africa:

> Voluntary abstention by a permanent member as not constituting a bar to the adoption of resolution. By abstaining, a member does not signify its objection to the approval of what is being proposed; in order to prevent the adoption of a resolution requiring unanimity of the permanent members, a permanent member has only to cast a negative vote.[237]

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at 78.

[234] The result of the vote is 108 in favour, 14 abstentions. The abstainers are from the Soviet Union and Eastern European Socialist States.

[235] See Suy, Erik, "Consensus", ENCYCLOPEDIA OF PUBLIC OF INTERNATIONAL LAW vol. 7, Amsterdam, North-Holland, 1984, at 49-52; Munch, Fritz, "Veto", ENCYCLOPEDIA OF PUBLIC OF INTERNATIONAL LAW vol. 5, at 389-392; Schermers, Henry G., "International Organizations, Resolutions", ENCYCLOPEDIA OF PUBLIC OF INTERNATIONAL LAW vol. 5, at 159-162. Schermers, Henry G., "Voting Rules in International Conferences and Organizations", ibid. at 395-398.

[236] Ibid.

[237] ICJ Rep. 1971, at para. 22.

This is in the context of the Security Council. But perhaps in a wider sense, there are two meanings stemming from the word "unanimous". One is that only those decisions that are made without not only dissenting voices but also abstentions can be properly called unanimous. The other is that decisions without dissenting votes but with abstentions could be said to have been made unanimously. In light of the practice in the United Nations General Assembly, the latter interpretation appears more accurate.[238]

The distinction between a decision with and without abstentions is thus made obscure in terms of the rule of unanimity. Because of strict unanimity may easily paralyze the effective operation of an international organization, Professor C. Wilfred Jenks, strongly recommended the use of consensus, instead of unanimity.[239]

The abstainers from the Principles Declaration later expressed the view that they regarded the concept of common heritage of mankind as an expression of current international law with respect to the deep sea-bed and its resources.[240] The question now is whether a group of States

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[238] Generally see Castaneda, Jorge, LEGAL EFFECTS OF UNITED NATIONS RESOLUTIONS, New York, Columbia University Pr., 1969.

The Council of Organization for Economic Co-operation and Development makes its decisions by unanimity under Article 6. However, it is expressly provided that the abstention of any Member will not invalidate decisions or prevent them from becoming binding on other Members; so unanimity is not equivalent to veto here. 21 United Kingdom Treaty Series 1646(1962).

[239] Jenks, C. Wilfred, "Unanimity, the Veto, Weighted Voting, Special and Simple Majorities and Consensus as Modes of Decision in International Organizations", in CAMBRIDGE ESSAYS IN INTERNATIONAL LAW, ESSAYS IN HONOUR OF LORD MCNAIR, London, Stevens & Sons, 1965, at 48-63.

[240] Supra note 232, at 110.

opposed to the common heritage are in a position to render it as non-universal, and consequently non- peremptory norm.

When explaining the meaning of the phrase "the international community as a whole" in article 50 (now Article 53) in the Vienna Convention on the Law of Treaties, the President of the Drafting Committee, Mr. Rasseen stated:

> "It appeared to have been the view of the Committee of the Whole that no individual State should have the right of veto, and the Drafting Committee has therefore included the words 'as a whole' in the text of article 50."[241]

Actually, the 1982 Convention, especially Part XI (the Area), was to include all States' participation (operative paragraph 9 of the Principles Declaration as well). It is not clear whether the failure of a number of States to endorse the 1982 Convention can impede the concept of common heritage of mankind from becoming a norm of *jus cogens*, recognized and accepted by the international community as a whole. The three major Western countries do have power to prevent the 1982 Convention from becoming genuine universal, but may not stop it from claiming quasi-universal. It should be noted, though, that the contention of *jus*

[241] *United Nations Conference on the Law of Treaties*, 1st session, 80th meeting of the Committee of the Whole, *UN Doc. A/CONF. 39/11*, at 472, para. 12:

> "By inserting the words 'as a whole' in article 50 the Drafting Committee had wished to stress that there was no question of requiring a rule to be accepted and recognized as peremptory by all States. It would be enough if a very large majority did so; that would mean that, if one State in isolation refused to accept the peremptory character of a rule, or if that State was supported by a very small number of States, the acceptance and recognition of the peremptory character of the rule by the international community as a whole would not be affected."

The phrase "as a whole" was approved by 57 votes to 3, with 27 abstentions in the Committee of the Whole. Then, the whole text of Article 50 (now Article 53) was approved by 72 votes to 3, with 18 abstentions. (See *UN Doc. A/CONF. 39/11*, at 472, para. 15-16.)

cogens does not rest its argument entirely on the LOS Treaty alone. Are the basic elements of the common heritage universally accepted? The answer can only be made with a careful analysis of the domestic legislation of the three outsiders and other Western countries. For the time being, it could be that the benefits-sharing principle, and the non-appropriation principle, as well as the peaceful use principle, appear to be acceptable to the developed States. The participation principle, if without the obligation of transfer of technology to the Enterprise and the developing nations, may also be considered as accepted by the developed States. Therefore, the basic content of the common heritage are probably characterized with universality.

The principle of the common heritage in the Convention is intended to be universal. Otherwise, it would be absurd to impose such duties as provided in Article 137 and Article 138 on a third State without its consent.[242]

At the adoption of the Draft LOS Convention on 30 April 1982, the four States which voted against the Convention were the United States, Venezuela, Turkey, and Israel. Turkey was opposed to the delimitation provisions and the island provisions in the Convention text because of her disputes with Greece in the Aegean Sea. Venezuela objected to the delimitation provisions in the Convention. Israel was concerned with the participation of Palestine Liberation Organization.

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[242] Articles 137 and 138 refer to States or State only without using the phrase "States Parties".

The abstainers in the voting are the Eastern European States and the Soviet Union, and the Western industrialized States plus Thailand.[243] Their reasons for abstaining vary from group to group. The Western industrialized countries are generally dissatisfied with the provisions on the deep sea-bed mining. This group adds the legal weight of the U.S. argument. The Eastern European countries were not completely satisfied with the provisions on the compulsory settlement of disputes. Thailand was displeased by the delimitation provisions and the fishery provisions. The Thai decision was heavily influenced by the position of the United States.[244]

The intention of the draftsman was to make the content of the common heritage universally applicable. As a matter of fact, perhaps no country had ever thought that the United States would opt to stay outside the Convention until the announcement made by the Reagan Administration.

The Assistant Legal Adviser of the State Department of the United States, Mr. David A. Colson, argued that jus cogens must be based on virtually unanimous support for the principle on the part of all affected States.[245] Secondly, he asserted that the membership in the International Sea-Bed Authority is surely only consensual in nature. Therefore, the principle of the common heritage is not jus cogens. The first argu-

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[243] Those States are the following: Belgium, Federal Republic of Germany, Italy, Luxemberg, the Netherlands, Spain, United Kingdom, Bulgaria, Byelorussian SSR, Czechoslovakia, German Democratic Republic, Hungary, Mongolia, Poland, Ukrainian SSR, and Thailand.

[244] McDorman, Ted L., "Thailand and the Law of the Sea Convention", 9 Marine Policy 292-309(1985), at 294.

[245] Colson, David A., "The United States, the Law of the Sea, and the Pacific", in CONSENSUS AND CONFRONTATION, supra note 14, at 43.

ment has its merits since the United States possesses the deep sea-bed mining technology and the finance. Together with the United Kingdom and the Federal Republic of Germany, they are in possession of about more than half of the technology for sea-bed mining. Do those States have a veto power in respect of the formulation of the rule of jus cogens? The answer probably is yes. It remains to be seen, however, whether the claim of peremptory character of the common heritage can be grounded with the strengthening of the conventional regime.

The second argument is indefensible because the membership of the International Sea-Bed Authority hardly affects the content of the common heritage.

Consent of States, admittedly, is a general principle of international law, which provides the basis of legal obligations in most cases. But in the opinion of some scholars, consent of States no longer provides the sole or exclusive source for legal obligation.[246] Further light was shed by Professor Kreca when he said:

> "The consent of States as one of the fundamental principles of international law lies at the root of the concept of jus cogens, --- that consent, at least in relation to jus cogens, has lost its individualistic features. As an expression of the free will of States, consent can neither be viewed in the sense of certain unlimited autonomy, indetermination, nor, as a formal manifestation of a total determination of will, since this could lead to the negation of the sovereignty of States. As a category linked with the achieved level of the organiza-

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[246] Allot, supra note 54, at 25.

"The LOS Convention causes us, once again, to realize that such a notion of consent is no longer able to contain and sustain the reality of the post-1945 development of international government."

Also see Leo Gross, "The Development of International Law through the United Nations, in Gross, Leo, ESSAYS ON INTERNATIONAL LAW AND ORGANIZATION, (hereinafter cited as Gross) 183-224, at 206.

> tion of the international community, the consent should reflect, on the one hand, the undeniable role of States, as original subjects, in the creation of international legal rules and on the other hand, the importance of the general framework, of general norms of the international community which cannot be left to individual, egoistic evaluation."[247]

Apparently the interest of the international community in the deep sea-bed and its resources take precedence over that of the individual State. But if the opposing States are specially affected and possessive of the means to realize the common heritage, it can be possible for them to deny the universal character of the common heritage.

Altogether, there are 15 States, 4 liberation organizations, and 3 non-self-governing territories which have not signed the 1982 Convention. The common heritage may be strengthened with the increase of the number of ratifications. So far there are 23 States and one entity which have deposited their ratifications. In the end, we might say that the common heritage has quasi-universal character. It could be regarded, at most, as an emerging norm of peremptory character.

(4) No Derogation.:

Article 311(6) contains the phrase "no derogation", which is seen as an indication of the peremptory character of the common heritage.

Article 309 allows no reservation to the Convention, directly as a result of the package deal of the negotiating history. It also has the effect of implicitly acknowledging the peremptoriness of the concept of the common heritage.

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[247] Kreca, *supra* note 212, at 27, 30.

The provision relating to the review conference (Article 155) expressly provides that the maintenance of the principle of the common heritage of mankind, and other related fundamental principles, shall be ensured.

Though Article 317 permits States Party to denounce the Convention, paragraph 3 of the Article made it clear that the denunciation shall not affect in any way the duty of State Party to fulfill obligations derived from international law independently of this Convention. It could be argued that States, whether party or non-party to the Convention, may not be free to contract out the obligations flowing from the common heritage.[248]

4.3.1.3 3. LEGAL STANDING

The concept of the common heritage of mankind, reflecting the interest of the whole international community, backed by undiminished moral stimulation, and being of humanitarian character, could be an emerging norm of jus cogens. A peremptory norm can exist in a specific area as to be exemplified by the common heritage.[249] Furthermore, the common heritage may prospectively apply to other areas of general international concern. However, it is in the interests of each and every State as well as international community as a whole to employ the notion of jus cogens cautiously, as pointed out by Professor Sir Ian Sinclair in his treatise.[250]

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[248] Kreca, supra note 212, at 31, 32; Rembe, supra note 124, at 78.

[249] Kreca, supra note 212, at 27.

[250] Sinclair, Sir Ian THE VIENNA CONVENTION ON THE LAW OF TREATIES, Second Edition, Manchester University Press, 1984, at 223.

It is probably permissible to assert that the common heritage of mankind is, at least, an emerging norm of jus cogens. Its final development is beyond our present grasp. We can only discern some emerging characteristics of the common heritage as jus cogens. Its content as jus cogens may only be the basic elements summarized above. It has the quasi-universal character but fails to be universally accepted as jus cogens. It is still inconclusive whether the common heritage is intended to be a peremptory norm in the LOS Convention. This confusion may lead to more differences of opinions and misuse of the notion of jus cogens. The proper mechanism to clarify such confusion is the International Court of Justice or, alternatively, the review conference under Article 155 of the LOS Treaty yet to be convened.

4.3.2 Subsection Two. Customary Law

More often is the concept of common heritage of mankind vindicated on the ground of customary international law. Categorically, there are three bases from which the concept is advanced as a customary norm.

The *first* basis, rooted on the traditional conception of customary international law, contends that the common heritage acquired legal validity, not on the adoption of the Principles Declaration, but after, though the accurate time span remains unidentifiable. The *second* basis, which emphasizes the significance of the legal effect attributed to the resolutions of the UN General Assembly under well-defined circumstances, leads to the finding that the Principles Declaration was so significant that it could not be ignored, much less contravened by States, and to the finding that the conditions under which the common heritage was generated, were such that they could be considered as constituting "instant customary international law". The *third* basis is that the concept can be viewed as a treaty-generated customary norm on the basis that it was articulated in the 1982 Convention.

4.3.2.1 1. VINDICATION FROM TRADITIONAL CUSTOMARY INTERNATIONAL LAW

(1) Elements of Customary International Law.:

Broadly defined as a generally accepted practice among States, which is recognized as binding, customary international law consists of the following elements:

(a) a number of States sufficient to evidence a general practice must refrain from certain conduct;

(b) the self-restraint must be the result of the States' perception that it is obligatory and not the result of of politics, comity, or incapacity;

(c) the practice must be adhered to by a significant majority of the specially affected States;

(d) the practice must be continuous over a reasonable length of time, although this requirement appears relatively flexible.[251]

The *usage* element, which can be existent between a group of States, or even between two States, so that a local or even bipartite customary rule is being created,[252] is said to be purely evidentiary, i.e.

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[251] Joyner, Christopher C., "U.N. General Assembly Resolutions and International Law: Rethinking the Dynamics of Norm Creation", 11 California Western International Law Journal 445(1981); Arrow, supra note 99, at 3.

[252] Right of Passage case, ICJ Rep. (1961), at 6; Cheng, Bin, "United Nations Resolution on Outer Space: 'Instant' International Customary Law?", 5 Indian J. Int'l L. 23-48(1965), at 37.

revealing the content of the rule and manifesting the involvement of opinio juris.

> "Not only is it unnecessary that the usage should be prolonged, but there need also be no usage at all in the sense of repeated practice, provided that the opinio juris of the States concerned can be clearly established. Consequently, international customary law has in reality only one constitutive element, the opinio juris. Where there is opinio juris, there is a rule of international customary law."[253]

The presumption that any rule of customary international law is universally binding is challenged by some legal writers. A general custom is binding on all States, for instance, diplomatic law and consular law. But a regional custom may just bind on a limited number of States. But in areas where individual actions and reactions are necessary and frequent, the usage element cannot be eliminated completely in establishing rules of customary law.

The *second* element, namely, opinio juris is critical in the sense that only those rules recognized or accepted explicitly or implicitly as legally binding have the quality of a customary rule. Motivations, such as political expediency, international courtesy, incapacity, or convenience, other than legal obligation, which result in action or omission of action, cannot constitute opinio juris. This point was elaborated by the International Court of Justice in the North Sea Continental Shelf cases:

> "Not only the acts concerned amount to a settled practice, but they must also be such, or be carried in such a way, as to evidence a belief that this practice is rendered obligatory by the existence of the rule of law requiring it. The need for such a belief , i.e. the existence of a subjective element, is implicit in the very notion of the opinio juris sive necessitatis. The States concerned must therefore feel that they are conforming to what amounts to a legal obligation. The frequen-

[253] Cheng, ibid at 36.

cy, or even habitual character of the acts is not in itself enough. There are many international acts, e.g. in the field of ceremonial and protocol, which are performed almost invariably, but which are motivated only by considerations of courtesy, convenience, or tradition, and not by any sense of legal duty."[254]

However, identifying opinio juris is made difficult by the number of factual and value judgments involved. There is ample room for divergent or even opposite explanations of one practice.[255] With the reorientation of the contemporary international law-making process to consensus, stemming from the enlargement of the international community and interrelation of the issues involved, more often it is the consensus of States that is indicative and the foundation of opinio juris. "State practice has thus become less the embodiment of old rules than the vehicle for producing new one quickly."[256] What is implied here is that the generation of general customary international law, in contrast to local or bipartite customary international law, requires the adherence of a vast majority of States, no matter how difficult this may be to achieve.

As regards the *third* element, the number of States with respect to the settled practice and opinio juris, and the specially affected States, there are two aspects to be addressed. The first aspect, referred to as the *quantitative element*, requires that the practice, not

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[254] North Sea Continental Shelf cases, ICJ Rep. (1969), at 44. In other cases, the International Court of Justice also endorsed the element of opinio juris: Lotus case, (1927) PCIJ, sr.A, No. 10, at 19, 28; Asylum case, (1950) ICJ Rep., 266, 277; Case Concerning Rights of Nationals of the United States of America in Morocco, (1952) ICJ Rep., 176, 199, 200.

[255] O'Connell, supra note 46, at 35-36.

[256] O'Connell, supra note 46, at 30-31.

only be reflective of opinio juris, but also be widespread and uniform in order to result in the generation of a universal customary rule. This requirement, though demanding majority support for the rule, cannot be understood requiring unanimity of the entire international community, which is most unlikely in the kaleidoscopic world. With the transition from individualistic customary law-making to collectivistic customary law-making, consensus is playing an ever-increasing role in the areas of general international concern.[257] Consensus, including the consent of the most affected States, is at the heart of customary law-making. But is it necessary to include all mostly affected States in order to generate a customary rule? It seems unnecessary if the majority of those States have endorsed the rule in question and if the majority of other States show their support for the said rule. Therefore, it is inconceivable that a few States, albeit with technological and financial ability, could divide or exploit unilaterally the deep sea-bed and its resources, without the assent of the vast majority of States. The importance of this quantitative factor cannot be overrated.

The practice of specially affected States who have particular interests in the matter, is the *qualitative component* of the customary rule-making process. Though Lauterpacht insisted upon the vitality of the maritime States in the formulation of the rules of the law of the sea,[258] O'Connell rightly discerned the impact of the enlargement of the international community on the law of the sea, when he suggested that the attitude of Bolivia be considered along with the conduct of the

[257] South-West Africa case, ICJ Rep. (1966), at 294 (opinion of Judge Tanaka).

[258] Supra note 92, at 394.

United States, and that the legislation of Nauru be relevant together with that of France.[259] But still, the specially affected States, especially the powerful ones among them, might be in a position to block the rule in question from coming into being or to block the rule from applying to itself at least.[260]

The act of the specially affected powerful States may outweigh the efforts of a large number of States. In each case, this has to be carefully examined. In this sense, the individualistic process of customary rule-making is biased against the small and weak States, because they are not equal in terms of capacity to act or counter-act.[261] If all specially affected States are not in agreement with the majority of States on the emerging rule, then it would be quite reasonable to conclude that the rule has not gained the force of customary law. If the capacity of the opposing States outweighs the other consenting States within the group of specially affected States, then probably the opposing States can effectively prevent the said rule from being crystalized.

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[259] Supra note 46, at 30-31.

[260] Professor Anthony D'Amato totally disagree with this contention. He argues: "No nation can legally be in a better position than another nation." He cited the instance of the spy satellite practice. That practice affects France, England, and Australia, for instance, but still that practice was accepted and acquiesced by States. CONSENSUS AND CONFRONTATION, supra note 14, at 173.

[261] O'Connell, supra note 46, at 36.

"For example, it would not matter if a hundred non-shipping countries enacted legislations to exercise jurisdiction over ships, if all the shipping countries resisted."

Short of this, i.e., only a very small group of States among all specially affected States stands to resist the emerging rule, the rule cannot be effectively blocked, in anyway, from becoming a positive or negative rule of customary international law.

The *fourth* element is the passage of time, short though it might be. This standard is treated very flexibly and is actually so flexibly that it can be reduced to zero under well-defined circumstances.[262]

(2) Common Heritage Perceived from Traditional of Customary International Law.:

The concept of common heritage of mankind was introduced not by State practice as such, but through the awareness of the need for regulation of the exploitation of the deep sea-bed and its resources by the international community. If there is any practice relative to its formation, it is generally confined to the discussions within the Sea-Bed Committee, the negotiation at UNCLOS III, and the sessions of the PrepCom.

State practice outside these plays a marginal role only. The consortia of the industrial countries have done some prospecting work and the development of the sea-bed mining technology. Currently, there are all together seven nations that have enacted domestic sea-bed mining legislations. They are: the United States, Federal Republic of Germany, the United Kingdom, France, Japan, the Soviet Union, and Italy. The Soviet

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[262] Cheng, supra note 252, at 37.

Probably, this is one of the effects of a rule of instant customary international law. The immediate response in law by the international community to a particular problem which receives common opinio juris, and which often relates to a legal lacuna, results in zero span of time in bringing the proposed rule into customary law.

legislation does not intend to provide a basis for exploitation of the resources of the deep sea-bed, but simply to regulate national activities in this aspect. The Soviet Union is not a party to either the 1982 Agreement or the 1984 Understanding among the Western industrial countries. Furthermore, the Soviet Union is a pioneer State under Resolution II of the LOS Convention. It is reported that the Soviet Union has exchanged its coordinates of mine sites with India and France that are also pioneer States.[263]

France is a very interesting country in this game. On the one hand, she is a signatory to the UN Convention on the Law of the Sea, and acquired the status of pioneer States; on the other hand, she is a party to both the 1982 Agreement and the 1984 Understanding. This situation may ultimately get the French into trouble, as a Chinese saying goes: One foot cannot take step on two boats. How the French will manage the problem will be seen. On the one hand, she bears specific duties by being a party to the two reciprocating treaties; on the other hand, she is legally bound not to act in a way that will defeat the purposes and objectives of the LOS Treaty by being a signatory.

The same dilemma is faced by Japan, Italy, the Netherlands, and Belgium to varying degrees. In this regard, Japan is especially in a difficult position. As a major industrial country, Japan is closely linked with the US, and Western Europe. There is a growing ocean mining industry in Japan, which is demanding free access to the minerals on the deep sea-bed. As a resources-poor nation, Japan is heavily dependent on the

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[263] Kimball, Lee, "Holding Pattern or Forward Motion?" 9 Marine Policy 340-343(1985), at 341.

import of raw materials from the developing countries. The industry in Japan needs these resources for growth. Consequently, on the one hand, the Japanese do not want to offend their Third World friends by conducting unilateral exploitation outside the 1982 UN Convention; on the other hand, Japan has to entertain her industry's concern and the U.S. requests. As a matter of politics, this may well be permissible. But as a matter of law, Japan may be easily caught. Japan is also a national pioneer under Resolution II of the LOS Convention.[264]

Finally, there are the United States, the United Kingdom, and the Federal Republic of Germany that are opposed to the Law of the Sea Convention very strongly. The position of these three giants is widely publicized and analyzed. Their demand cannot be satisfied easily with some minor modifications of the LOS Treaty. The United States is the extreme among the three. Whether they can successfully create another regime outside the UN Convention will depend on the support of such countries as France, Japan, the Netherlands, Italy, Belgium and possibly others. But the danger may come from the Soviet Union, which may have overlapping mine sites with theirs in the Pacific.

From the above analysis, it seems that there exists an inconsistent practice outside the Law of the Sea Convention. How this practice will evolve is not certain and there is a lack of predictability on the conduct of the States. Therefore, since this practice does not appear to be uniform, it might not be permissible to conclude that a legal rule outside the Convention regime has been formed.

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[264] Generally see Freidheim, Robert L. and others, JAPAN AND THE NEW OCEAN REGIME, Boulder, Westview Pr., 1984.

It is true that, at the beginning, quite a few States from the developed world were suspicious and dissatisfied with the concept of common heritage, and hence reluctant to accept or even resist to recognize it as designating the status of the deep sea-bed and its resources.[265] But from the adoption of the Principles Declaration to the conclusion of the LOS Convention, a majority of States of both the developed and developing countries, shared a common conviction that not only was the concept no longer confined to the province of morality, humanitarianism, or politics; but it contained specific obligations that States should fulfill as a matter of law. The moderate remark by the Chairman of the Legal Subcommittee of the Seabed Committee, Galindo-Pohl, is illustrative:

> "With regard to that regime, the necessary treaties will have to be framed through which international obligations will be more clearly defined ... of course, those who support it <the Declaration> must be obviously deemed to be prepared to abide by its content in good faith and to ensure that the regime will be consistent with those principles."[266]

Thus, the majority of States had the common opinio juris that the common heritage defined juridically the status of the deep sea-bed and its resources, and that the obligations, such as, sharing benefits, refraining from claiming or exercising sovereignty, sovereign rights, ownership or appropriation, were perceived to be required by the Principles Declaration.

The Declaration was adopted without dissent, and the deliberations in the Seabed Committee and the negotiation at UNCLOS III revolved around the axis of the common heritage all the way from Caracas through Geneva

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[265] Kronmiller, supra note 17, at 246-284.

[266] UN Doc. A/PV.1781, at 3(1970).

and New York to Montego Bay. States, at this time, found it difficult, if not impossible to object to the common heritage.[267] No nation, perhaps excluding the three giants, have substantive reservations to the basic content of the common heritage. All deep sea-bed mining States did refrain from undertaking sea-bed mining and from enacting domestic law until 1980, when the United States took the lead in passing the first municipal law relating to deep sea-bed mining, followed by the FRG, the UK, France, Japan, and Italy. However, by this time the common heritage had been deeply entrenched in the provisions of the Draft Convention on the Law of the Sea dealing with deep sea-bed mining, and had been fairly accepted by most States. Thereafter, the Conference was over and the Convention was produced.[268] What does all this signify? It might demonstrate that the concept of the common heritage has been gradually accepted as a legal norm with specific rights and obligations. It may also indicate that the basic content of the common heritage, namely, the non-appropriation principle, the benefits-sharing principle, the participation principle, and the peaceful use principle, has entered the domain of customary international law.

One could also argue that the overriding importance of the interests of specially affected States is not convincing. The interests of the developing countries are as demanding, if not more so, as those of the opponents to the common heritage. It is not so clear whether the deep sea-bed mining States have a superior interest to that of the land-based

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267 President Richard M. Nixon, "United States Policy for the Seabed", U.S. Department of State Bulletin 62(1972), at 737.

268 Gamble, John King, Jr. and Frankowska, Maria, "The Significance of Signature to the 1982 Montego Bay Convention on the Law of the Sea", 14 Ocean Dev. & Int'l. L. 121-160(1984)

mining developing countries. Around deep sea-bed mining, there could be as many as four clearly defined interest groups: potential deep sea-bed mining States; land-based producers of sea-bed metals; consumers; developing countries with a claim on revenue-sharing from the international sea-bed.[269] Nevertheless, this argument could overlook the requirement of effectiveness of any rule of law. If the three major industrialized countries all take an irreversible position not to become parties to the Convention on the Law of the Sea, the difficulty to realize the vision of the common heritage of mankind is tremendous, if not insurmountable. At least, the effect of the staying-out of these three countries will create a conflict situation, if nothing more.

4.3.2.2 2. THESIS OF UN GENERAL ASSEMBLY RESOLUTION

(1) Effect of the Resolution of UN General Assembly.:

The role of the General Assembly in forming international law is expanding in three distinct ways. *First*, by maintaining and developing the UN Charter system, it is trying to deal with the fundamentals of a new international legal order. *Second*, it is promoting the progressive development and codification of traditional international law. And *thirdly*, it is attempting to fill in a legal void in the international field.[270] Though there is a lack of expressly or impliedly granted legislative power to the General Assembly,[271] subsequent evolution of the

[269] Richardson, Elliot L., "The Politics of the Law of the Sea", 11 Ocean Dev. & Int'l. L. 9-23(1982).

[270] Gross, Leo, "Sources of Universal International Law", in Gross, supra note 246, at 146.

[271] The Philippine proposal to give General Assembly legislative power was turned down in the 1945 San Francisco Conference by a vote 26 to 1. (See Doc. 507, II/2/22, p.2, UNICIO Docs., V.9,(1945), p.70.)

practice of General Assembly has altered the original picture to the extent that, under specific circumstances, a resolution of the General Assembly may represent customary international law. It may also initiate the process of the making of a specific customary rule. Whether it can complete the process depends on the specific circumstances. And this is very rare. It may be unwarranted to assert that resolutions of the General Assembly are an independent source of international law. But resolutions of the General Assembly may evidence the formation of an emerging rule, or evidence the existence of a pre-existing rule.

Judge of the International Court of Justice, Hermann Mosler discussed the effects of the UN General Assembly resolutions in the following terms:

1. "They may be binding within the legal order of the international organization concerned, for example, upon the organs of the United Nations;
2. They may influence the formation of new international law and so constitute a step in the emergence of new rules;
3. They may be persuasive evidence that rules of international law, as defined in the resolutions, exist;
4. Finally, their most far-reaching effect may be a legislative one creating new international principles or rules firstly for member States and secondly for the international community as a whole."[272]

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[272] Mosler, supra note 215, at 88.

In the dicta of the International Court of Justice, there is an indication that a customary rule may be crystalized through the intermediary of a resolution of the General Assembly. In its advisory opinion on continued presence of South Africa in Namibia, the Court, after stating that "the subsequent development of international law in regard to non-self-governing territories, as enshrined in the Charter of the United Nations, made the principle of self-determination applicable to all of them", went on to say:

> "A further important development stage in this development was the Declaration on the Granting of Independence to Colonial Countries and Peoples (General Assembly resolution 1514 (XV) of 14 December 1960)."[273]

In a recent arbitral award, it was found that certain provisions of the 1962 "Resolution on Permanent Sovereignty Over Natural Resources" were binding international law because (i) the Resolution had been supported by members of all of the geographical groups and economic systems, and (ii) it gained universal recognition at the time of voting.[274]

However, it is also important to look at the intentions of the Member States as well as the General Assembly.[275] If States intend to declare the preexisting customary norm through the vehicle of resolution, or to interpret the preexisting rules of international law, the resolution in question will become more important than other housekeeping resolutions.

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[273] South-West Africa (Namibia) case, ICJ Rep. (1970), (advisory opinion).

[274] Texaco Overseas Petroleum Company and California Asiatic Oil Company v. The Government of the Libyan Arab Republic, 17 ILM 1(1978), at 28-31. (Rene-Jean Dupuy, sole arbitrator).

[275] Garibaldi, Oscar M., "The Legal Status of General Assembly Resolutions: Some Conceptual Observations", 73 Proceedings of the American Society of International Law 324-327(1979), at 327.

Moreover, the authoritativeness of such declaratory or interpretative resolutions depends largely on the the strength of support they receive and the composition of the proponents and opponents.

The resolutions ~~of the~~ General Assembly can also serve as the convenient tool to form the inchoate or embryonic emerging consensus of the international community on a given question. Judge of the International Court of Justice, Stephen M. Schwebel considers that genuine consensus is the basis of customary international law. If a particular resolution of the General Assembly is the genuine expression of the consensus of States, then it may well develop into customary law.[276]

In principle, the resolutions of the General Assembly do not have the binding force of rules of customary international law. It may be exagerated to assert that the General Assembly is the de facto legislature of the present international community. The resolutions of the General Assembly are unlike the laws of the national legislatures. But this is not to say that the resolutions of the General Assembly have no legal effect at all.[277] Under well-defined circumstances, resolutions of the General Assembly, particularly those containing legal principles, might

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[276] Schwebel, "The Effects of Resolutions of the U.N. General Assembly on Customary International Law", 73 Proceedings of the American Society of International Law 301-309(1979), at 309.

[277] Mosler, supra note 215, at 88-89.

"After quite a long and fierce dispute it now seems that extreme views, on the one hand that resolutions have no binding effect at all or on the other hand that they have a legislative effect, have been abandoned and that a generally accepted view is emerging. There can be no single answer to the question -- resolutions must be distinguished according to various factors, such as the intention of the General Assembly, the content of principles proclaimed and the majority in favour of their adoption."

become customary international law.

There is the view that a resolution of the General Assembly is merely recommendatory in nature and no more.[278] The International Court of Justice observed in its advisory opinion on Namibia:

> "It would not be correct to assume that, because the General Assembly is in principle vested with recommendatory powers, it is debarred from adopting, in specific cases within the framework of its competence, resolutions which make determinations or have operative design."[279]

The French text, the only authoritative one, is not as strong, though. It is worth noting that resolutions of the General Assembly may be adopted in a context of law-making, where other factors such as, the lack of any legal norm in a particular field, the strong intentions of the States Parties, the necessity of urgent regulation as in a crisis or a similar situation, and the widespread and genuine support of States, especially those mostly affected. Under such circumstances, it seems that there is no reason why States may not use the vehicle of resolutions of the General Assembly to express their common will and make it binding, if they so wish and decide. Here the resolutions are the expression of the consensus reached among States. Resolutions of the General Assembly, regarding outer space and permanent sovereignty over natural resources, are such resolutions.[280] These two resolutions have a very strong legal effect. Member States are almost legally bound to follow the provisions of the resolutions.

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[278] Supra note 270, at 154; Ely, Northcutt, INTERNATIONAL LAW APPLICABLE TO DEEP SEA MINING, 52-62(1974); Schwarzenberger, Georg, ANNUAL OF INTERNATIONAL LAW (1947), at 124.

[279] ICJ Rep. 1971, at 16, 50.

[280] Cheng, supra note 252.

(2) Effect of Resolutions Embodying the Common Heritage.:

Five grounds have been invoked as the basis for a resolution of the General Assembly to become customarily binding. They are: nature of the subject-matter; unanimous or non-dissent adoption; frequent confirmation; legal lacuna; and the prospect of being incorporated into a treaty.

<a> Nature of the subject-matter of the deep sea-bed and its resources.:

The deep sea-bed and its resources are of such a nature that they are a concern of every State; indeed, of mankind, because everyone has a vital stake in managing the resources and sharing the benefits. They are actually one of the well-known international commons; as such, the General Assembly, as the most representative organ of the international community, may have a primordial and fundamental right to deal with their regulation, especially at the initial stage.

<b> Legal lacuna.:

Before the adoption of the Moratorium Resolution and the Principles Declaration, there existed a legal gap with respect to the deep sea-bed and its resources, and their exploration and exploitation. The argument was advanced that law is a means of regulating human activities, and therefore if there are no activities, there is no necessity of regulation. In this respect, it is the resolutions of the General Assembly that brought this matter within the purview of an international legal regime.[281] The same line was taken by Professor Gonzalo Biggs, when he

[281] Zuleta, supra note 162, at 523.

remarked:

> "Just as there was no aviation law prior to the invention of the airplane nor rules applicable to the celestial bodies prior to the development of cosmonautics, there was no law until very recently for the exploitation of the deep seabed."[282]

This fact is important in light of the awareness that the General Assembly, as the most representative organ of the present international society, may make decisions on behalf of the international community, and such decisions are, in the sense of creating a provisional regulating framework for the exploitation of the deep sea-bed and its resources, to be legally respected by the United Nations and its Member States.[283] It should be made clear that the legal authority of this resolution came from the strong expectations from the Member States. These expectations could be justified or rejected by States practice. In the case of the Principles Resolution, subsequent States practice is fairly conclusive. On the part of majority of States, including some developed countries, such as, Australia, Canada, New Zealand, Scandinavian countries, Denmark, Swiss, Austria, Spain, Portugal, Ireland, Iceland, Greece, their practice shows that the content of the common heritage is received customary international law. On the part of the Soviet Union and Eastern European States, the basic content of the common heritage is also

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[282] Professor Biggs further pointed out the weakness of the argument based on sedentary species, since the nature of sea-bed mining and that of exploitation of sedentary species are juridically different. (See supra note 80, at 225-226. Also see Brewer, William C.,Jr., "Deep Seabed Mining: Can an Acceptable Regime Ever Be Found?", 11 Ocean Dev. & Int'l. L. 25-67(1982), at 29.)

[283] Dyke and Yuen, supra note 44, at 525.

> "The most important question, especially with respect to novel activities such as seabed mining, is the extent to which the process of enacting a resolution may establish law when little relevant State practice exists."

regarded as part of customary law. On the part of 'one-foot-two-boat' States, such as, Japan, France, the Netherlands, Luxemberg, Italy, and possibly others, they seem to be undecided as to which line of practice they should follow. On the part of the U.S., the U.K., and the FRG, their practice undermines the Law of the Sea Convention, and is against the enlarged content of the common heritage as reflected in the Convention.

The final picture will depend on the development of the two competing regimes. Being aware of the gap between legal prescription and States practice, one should be cautious in drawing a clear-cut line with respect to the final form of the concept of the common heritage will take as a norm of customary international law.

<c> Near-unanimous adoption.:

It is factual that the Principles Declaration was adopted without a single dissenting voice. In evaluating the legal effect of a particular resolution, the conditions of voting, which is a phenomenon within the organizational framework of the General Assembly, can, to a considerable extent, determine the legal weight of the resolution in question.[284]

The Principles Declaration was passed in the First Committee of the General Assembly with a result of 90 in favour, 0 against, and 11 abstentions. It was adopted in plenary by a vote of 108 in favour, 0 against and 14 abstentions.

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[284] Supra note 274.

Judge Mosler also attaches great importance to the support in the General Assembly to a particular resolution. He observed:

> "An indication of the extent to which a resolution reflects the general opinion of the international legal community, which is almost co-existensive with the membership of the United Nations, is the strength of support in the General Assembly."[285]

In most cases, the resolutions of the General Assembly are not an independent source of international law. They may be evidence of customary international law by defining or interpreting a specific norm or rule. They may also reflect the general expectations of the international community. Such expectations have to be justified through States practice. However, if such practice is limited to the framework of the United Nations, it is still a law-making practice. The United Nations has become one of the most important places for States to act, interact, react, and counter-act with their respective perception of a particular problem. It may be that the practice happens exclusively within the activities or related activities of the United Nations. The Membership of the United Nations is almost co-extensive with the international community. In such a circumstance, the said rule may acquire the legal force of customary international law exclusively within the framework of the United Nations.

Considering the factor of the sheer number of States composing the international community, unanimity or near-unanimity becomes the symptom of consent to establish the legal status of the deep sea-bed and its resources as the common heritage of mankind, together with its corollary

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[285] Mosler, _supra_ note 215, at 90.

obligations.[286]

<d> Reiteration and confirmation.:

After the adoption of a resolution, its frequent reappearance in subsequent resolutions or other instruments continuously over a period of time, may also be conducive to crystalizing the norm or rule embodied in the resolution. Certainly, in most circumstances, mere repetition of a resolution cannot result in the creation of binding content.[287] This, of course, is not the case of the Principles Declaration, because of the particular environment in which the concept of common heritage was born and evolved. Their cumulative effect may be explained as the continuous attention of the international community. But this accumulation may also be seen as evidence of consensus over a span of time so as to constitute consistency and uniformity regarding the obligations and the content. Over the years, the General Assembly has paid attention to the evolution of the concept of common heritage.[288] And the effect of this reaffirma-

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[286] In the absence of a world legislative body, the resolution passed by the General Assembly can either initiate the process of customary rule-making if it received majority vote, or start and complete the process of customary rule-making simultaneously if it is unanimously or almost unanimously supported.

[287] Gross, supra note 246, at 215.

"How can it be explained that an accumulation of such nonbinding resolutions results in a binding norm of international law?" (Also see Gross, supra note 246, at 216.)

[288] See, eg, G.A. Res. 2340, 22 UN GAOR Supp. (NO.16) at 14 UN Doc. A/6964(1967) G.A.Res. 2467, 23 UN GAOR Supp. (No.18) at 15, UN Doc. A/7477(1968) G.A. Res. 2881, 26 UN GAOR Supp. (No.29) at 38, UN Doc. A/8623(1971) G.A.Res. 3029, 27 UN GAOR Supp. (No.30) at 21-22, UN Doc. A/8949(1972) G.A.Res. 3067m 28 UN GAOR Supp. (No.30) at 13, UN Doc. A/9278(1973) G.A.Res. 3334, 29 UN GAOR Supp. (No.31) at 10, UN Doc. A/L.747(1974) G.A.Res. 3483, 30 UN GAOR Supp. (No.34) at 9, UN Doc. A/L.782(1975) G.A.Res. 31/63, 31 UN GAOR Supp. (No.39) at 23, UN Doc. A/31/1.4(1976).

tion has been the consolidation of the legal status of the common heritage of mankind.[289]

<e> Prospect of being the basis of a subsequent treaty.:

A resolution, if there is a prospect that it will be followed by a treaty containing its basic content may, not surprisingly, be indicative of its strong legal character. Not only is there the expectation that States abide by it, but also it will foreclose considerations other than legal ones, because the draftsman know that it is to embody principles which will, without much change, be incorporated into a treaty that is binding upon States Members.

> "For in many instances, resolutions and declarations were followed by conventions. Thus the various resolutions and declarations, particularly Resolutions 1962 (XVII) and 2130 (XX) on legal principles governing the activities in outer space, were followed by Resolution 2222 (XXI) promulgating the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space."[290]

In the case of the common heritage, the Principles Declaration expressly stipulated in operative paragraph 9:

> "On the basis of the principles of this Declaration, an international regime applying to the area and its resources and including appropriate international machinery to give

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[289] Sarin, supra note 26, at 286.

"Naturally, the General Assembly resolution 2749(XXV) remained valid for the Group of 77 and, in the absence of an international treaty which is in the course of preparation, all States and all natural or juridical persons are required to refrain from exploiting the Area."

[290] Gross, supra note 270, at 154.

Another example is the Universal Declaration of Human Rights of 1948 which was followed by Resolution 2200(XXI) promulgating the International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, and the Optional Protocol to the latter.

> effect to its provisions shall be established by an international treaty of an universal character, generally agreed upon. The regime shall, inter alia, provide for the orderly and safe development and rational management of the area and its resources and for expanding opportunities in the use thereof and ensure the equitable sharing by States in the benefits derived therefrom, taking into particular consideration the interests and needs of the developing countries, whether land-locked or coastal."[291]

When they voted for the Principles Declaration, the Member States were well aware of the outcome and the implications emanating from their act, which amounted to a consensus to set the common heritage as a binding norm without change, from the adoption of the Declaration to the conclusion of the treaty.

Now the United States interpreted the phrase "generally agreed upon" as to include the United States and its partners. If not, there is no generally agreed upon treaty to define the meaning of the common heritage of mankind. In the U.S. view, the regime cannot simply be an agreement among a few States in a region, or in one group or another.[292] It is true that the United States and its partners are very important sea-bed miners. The LOS Treaty without the participation of the U.S. cannot easily be effective and successful. However, it is also true that the positions of the developing countries are not easy to change. Perhaps under financial strain and technological difficulties with respect to deep sea-bed mining under the PrepCom, the developing nations will concede more to the demands of the western industrialized States.

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[291] Supra note 5.

[292] U.N. Doc. A/C.1/PV.1799, at 3, 4 (1970).

The use of a "declaration" rather than a normal resolution for the Principles Declaration represented some solemnity, though it alone could not be of legally binding instrument.[293] That its content was drafted in such a way similar to a treaty was also suggestive of its legal authoritativeness, though in the context of the resolutions of the General Assembly.

From the above analysis, it could be that common heritage is received as a norm of customary international law. It is designated as the status of the deep sea-bed and its resources in the absence of international law therein. At least, there is an absence of operational norm or rule with respect to deep sea-bed and its resources. Consequently, the legal force of the concept is becomes more significant. Even at the doctrinal level, there is a lack of conclusive norm to govern the deep sea-bed and its resources. Pronounced by the most representative organ of the present international community, the General Assembly, the common heritage may claim the force of customary international law. Thus, the Principles Declaration, in and of itself, initiated the process of customary norm-making. The completion of this process seems to come with the adoption of the 1982 Convention on the Law of the Sea and the subsequent signing and ratifications.

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[293] 18 UN ECOSOC, UN Doc. E/CN.4/L.610(1962), para. 3,4.

> "However, in view of the greater solemnity and significance of a 'declaration', it may be considered to impart, on behalf of the organ adopting it, a strong expectation that Members of the international community will abide by it. Consequently, in so far as the expectation is gradually justified by State practice, a declaration may by custom become recognized as laying down rules binding upon States."

(3) Instant Customary International law.:

Being characterized by the short time span, absence of State practice, and common opinio juris, common heritage may be argued to be instant customary international law, as outlined by Professor Bin Cheng in his article.[294] Theoretically, it could be that a rule or a norm of customary law may obtain the required opinio juris instantaneously without being accompanied by State practice which was absent before.

Indonesian Ambassador to Canada, Mr. Jasjim Djalal, stated in the context of the law of the sea discussions that time is not a necessary element for rules to become customary law.[295] Citing the case of legality of spy satellite, Professor Anthony D'Amato asserted "in matters of rapid technological development, a custom can arise quickly."[296] This is especially true in the areas where the collectivistic process of customary norm-making is more adaptable. In the contemporary international community, this process occurs almost exclusively within some institutional framework, such as that of the UN General Assembly. Indeed, this is one of the ways by which the international community, through the General Assembly, responds in law to its emerging concerns.

The necessary conditions for a resolution of the General Assembly to become instant customary law are several, unanimous or near-unanimous approval in particular, which means the achievement of consensus on a subject.[297] In other words, a common opinio juris is formulated immedi-

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[294] Cheng, supra note 252.

[295] CONSENSUS AND CONFRONTATION, supra note 14, at 181.

[296] CONSENSUS AND CONFRONTATION, supra note 14, at 171.

ately in the absence of State practice, as put by Professor Bin Cheng:

> "There is no reason why an opinio juris communis may not grow up in a very short period of time among all or simply some Members of the United Nations with the result that a new rule of international customary law comes into being among them. And there is also no reason why they may not use an Assembly resolution to 'positivize' their new common opinio juris."[298]

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[297] On the question of unanimity, the positions of the following States in respect of General Assembly resolutions on outer space are available:

Australia: "It is our view that a declaration of legal principles by the General Assembly, especially if universally adopted and adhered to in practice, may be valuable evidence of international custom, which in turn is a most important source of law." (A/AC. 105/PV. 24(22, 11, 1963), p.18)

India: "A declaration had moral force and, when adopted unanimously, was generally accepted as part of international law." {A/AC.105/C.2/SR.22 (24, 6, 1963), p.10}

Soviet Union: "The Soviet Union ... undertook also to respect the principles enunciated in the draft declaration if it were unanimously adopted." {A/C.1/SR.1342 (2, 12, 1963), p161}

United Kingdom: "Although as stated by the USSR delegation, resolutions of the General Assembly were not -- save in the exceptional cases provided for in the Charter -- binding upon Member States -- a resolution, if adopted unanimously, would be most authoritative." {A/C.105/C.2/SR.17 (17,4,1963) p.9}

United States: "When a General Assembly resolution proclaimed principles of international law -- as resolution 1721(XVI) had done -- and was adopted unanimously, it represented the law as generally accepted in the international community." {A/AC.105/C.2/SR.20 (22,4, 1963), pp. 10-11}

Also see Deep Seabed Mining: Hearings on H.R. 3305, H.R. 3652, H.R. 4922, H.R. 5624, H.R. 6846, and H.R. 6784 before the Subcommittee Oceanography of the House of Comm.on Merchant, Marine and Fisheries, 95th Cong., 1st Sess., 181-184. John Quigley stated: "unanimous adoption of Common Heritage Resolution enables it to legally bind all voters."

[298] Cheng, supra note 252, at 37.

In his opinion, a resolution of the General Assembly is looked upon as merely a vehicle to express the new common opinio juris. This fits the situation of the Principles Declaration in which the new opinio juris communis regarding the deep sea-bed and its resources were dictated as the common heritage of mankind. This is so even though the format of the new common opinio juris was a mere resolution of the General Assembly.

It is no good using the resolution of General Assembly alone to support the above contention, for States can act very differently within the General Assembly and outside that body. The instant nature of customary international law is not so obvious and it is often subject to contraversy. And it would be preferable not to invoke this argument in front of a judicial body, such as the World Court.

4.3.2.3 3. TREATY-GENERATED CUSTOMARY INTERNATIONAL LAW

The 1982 Convention was adopted by 130 in favor, 4 against, with 17 abstentions on 30 April, 1982. It received 119 signatures on the first day of its opening for signature, and there are now 159 signatories. So far, it has been ratified by 23 States and one entity. It is now possible to argue that the common heritage is grounded on the articulation of treaty-generated customary norm.

Professor D'Amato is of the opinion that the treaty process (negotiating, concluding, adopting, signing, ratifying, and executing) is as important as any other form of States practice. Therefore, it is beyond doubt, in his view, that a norm or rule of customary international law can be generated by treaty.[299] Whether this opinion carries much weight will be tested in practice. For the moment, one can point out that the process of treaty-making and that of customary law-making are different when it comes to terms of States practice. The various processes of treaty-making can only be relevant and significant when there is consistent and uniform practice behind these formalities. To count these formalities alone in the measurement of customary international law may go superfluous. But that a norm or rule of customary international law can be generated by treaty is a generally indisputable view.

According to a dictum of the International Court of Justice in the North Sea Continental Shelf cases, four components are necessary for a treaty norm to be equipped with customary force:

(a) the provision concerned should, in all events potentially, be of a fundamentally norm-creating character such as could be regarded as forming the basis of a general rule of law;

(b) it must be that, even without passage of any considerable period of time, a widespread and representative participation in the convention might suffice of itself, provided it included that of States whose interests were specially affected;

(c) State practice, including that of States whose interests are specially affected, should have been both extensive and virtually uniform in the sense of the provision invoked -- and should moreover have occurred in such a way as to show a general recognition that a rule of law or legal obligation is involved;

(d) passage of some time is necessary, short though it may be.[300]

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[299] CONSENSUS AND CONFRONTATION, supra note 14, at 171.

Firstly, Article 136 and related provisions are of a norm-creating character, since it lays the foundation on which the whole structure of the regime governing the exploration of the Area and the exploitation of its resources is built. In addition, its potential scope of application is not confined to the law of the sea but may reach out to many international commons.

This norm-making process must be linked to the acceptance by States. The concept as a legal norm containing several principles is still contended by the United States. What this signifies is that the norm-making process cannot be called universal, but quasi-universal at best. Nonetheless, it is still a norm-making exercise conducted by large number of States.

Secondly, thus far there has been no international conference and no multilateral convention that is comparable with UNCLOS III and the 1982 Convention in terms of widespread and representative participation. The UN Secretary-General, Javier Perez de Cuellar in his statement of 10 December 1982 at the final session of UNCLOS III at Montego Bay declared:

> "The new law of the sea thus created is not simply the result of a process of action and reaction among the most powerful countries but the product of the will of an overwhelming majority of nations from all parts of the world, at different levels of development and having diverse geographical characteristics in relation to the oceans, which combined to make a wind of change blow at the universal level."[301]

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[300] North Sea Continental Shelf cases, ICJ Rep. (1969), at 42-45.

[301] De Cuellar, supra note 134, at xxx.

The question is whether any genuine consensus has been reached regarding the deep sea-bed regime. And as the specially affected States, the United States together with the United Kingdom and Federal Republic of Germany opt to stay outside or even to confront the Law of the Sea Treaty in respect of deep sea-bed mining. It may not be sufficient to rely solely on the number of States participating in the Convention regime. Nevertheless, if the PrepCom satisfactorily completes its mandated work, those 'one-foot-two-boat' States are determined to go along with the LOS Convention, then the argument for the common heritage will be stronger.

Thirdly, as far as State practice is concerned, there has been occurring a quasi-consistent practice throughout the period after the Convention was adopted on the part of the majority of States. The United States, the United Kingdom, and the Federal Republic Germany may object to this view. Their practice is contrary to that of the majority of States. Perhaps there will be a conflicting situation where the two opposing practices clash. Given the present situation, there is a likelihood that the International Court of Justice will make an adverse decision against the United States. Before this, there are still some uncertainties regarding the deep sea-bed mining. There is a common opinio juris behind the practice of the majority of States. It is not entirely clear which practice will prevail over the other. The LOS Treaty is likely to command the participation of most States.

And *lastly*, the time span is still short, but it is not indispensable in the formation of a customary norm.

Professor D'Amato presented a novel theory that a customary norm in a convention should be generalizable. This means that a provision of the Convention must be transmutable into a customary norm. Because the Convention does not bar deep sea-bed mining as such, but rather makes it subject to the regulatory regime under the Convention, nations that do not become Parties to it would be disfavored. Therefore, mining-subject-to-Convention-regulation is not a generalizable norm, and hence not amenable to be admitted into customary law.[302]

In so far as the four principles in the notion of the common heritage is concerned, the Convention did not change them but rather preserved these principles. Other claimed content, such as production ceilings, transfer of technology, and structure of decision-making, is short of universal support due to the fact that the United States' utter objection. What the Convention has accomplished is the embodiment and concretization of the principles set out in the Principles Declaration, as put by the Brazilian delegation at UNCLOS III:

> "The principle of the common heritage of mankind, as expressed in that resolution, had been incorporated into international law and stood per se. The draft convention was aimed at implementing that principle in concrete terms."[303]

Not because the Convention is prejudicial to non-adherents, but because the common heritage contained in the Principles Declaration and the 1982 Convention has become a set of customary rules binding upon all States.

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[302] D'Amato, Anthony, "An Alternative to the Law of the Sea Convention", 77 AJIL 281-285(1983), at 282.

[303] 126th Meeting of UNCLOS III, UNCLOS III, Official Records, V.13, at 20.

4.3.2.4 4. *THE QUESTION OF CONSENT OF STATES IN THE FORMULATION OF CUSTOMARY INTERNATIONAL LAW*

It is truism that consent of States is the source of legal obligations. This principle has been well established in international law.[304] There are two questions to be addressed.

First, can non-assenting States prevent a customary rule from being universally binding? Second, can the said rule be stopped from applying to the dissenting States? The answer is dependent on which States dissent, and what rule it is. The United States might be in a position to prevent the common heritage from applying to itself at least. This may discredit the universal character of the common heritage. In this case, the two questions are integrated into the same answer. Deep sea-bed mining without the United States, and other important sea-bed mining nations, can be successful but not completely universal.

In view of the fact that the vast majority of States, inclusive of some of very important deep sea-bed mining States, for example, Japan, France, USSR, Italy, Canada, the Netherlands, India, and Belgium, and almost of all the potential deep sea-bed mining States, for instance, Norway, China, South Korea, Brazil, Mexico, Australia, New Zealand, and Poland, have appeared to endorse the concept of the common heritage to

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[304] Vienna Treaty Convention, Article 34 provides:

ARTICLE 34
General rule regarding third States

"A treaty does not create either obligations or rights for a third State without its consent."

Also see Gross, Leo, "Treaty Interpretation: The Proper Role of an International Tribunal", in Gross, supra note 246, at 414.

various degrees, the LOS Convention regime is likely to survive even in terms of technology and finance. On the other side, the reciprocating regime, though not short of technological know-how and monetary resources, may suffer from the lack of general support on the part of the majority of States. It is still early to predict the exact outcome of the competing claims between the two regimes. Further implications of this situation will be the lawlessness in deep sea-bed mining, and the deterioration of the international machinery in regulating international commons.

At least, the obligation to refrain from exploring and exploiting the Area and its resources ought to be fulfilled in order not to do irreparable damage to the superior interests of the international community. A State that acts contrary to the solemnly and repeatedly expressed opinion of the world community "may find that it has overstepped the imperceptible line between impropriety and illegality, between discretion and arbitrariness, between the exercise of the legal right to disregard the recommendation and the abuse of that right, and that it has exposed itself to consequences legitimately following as a legal sanction."[305]

The circumstances of the deep seabed mining are not quite the same as in the case of South West Africa. Perhaps one can argue that the mini-treaty regime has a number of States, and they are all important States in deep sea-bed mining. This fact has certainly weight. Customary international law cannot be effectively developed by disappointing the most directly affected States. Those States happen to be the most power-

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[305] Dissenting Opinion of Judge Lauterpacht, South-West Africa (Voting Procedure) 1955, ICJ Rep. (1955), p.67, at pp.118-119, 122.

ful States in the World in the present case. If the mini-treaty regime progresses fast, the legal uncertainty will highly increase. If some of the States, for instance, the Federal Republic of Germany joins the Convention regime, the legal validity of that regime, as opposed to the mini-treaty regime, will become more defensible.

The principle of consent has been understood to include the conviction that no single State nor a very small number of States may be granted the right of veto in resisting the creation of a customary norm. States, including the disagreeing States are bound to act in a way not contradictory to the common heritage of mankind as generally accepted.

Judge Mosler is very careful in this regard. In his opinion, whether a rule can be applied even to the opposing State itself depends on the necessity of the participation of the State in question in order to establish the quasi-universal consent required.[306] If the opposing State is particularly affected, the Norwegian Fisheries case would be applicable. That is, the mostly affected State will invoke its consistent resistence to the emerging rule and as result, render the rule inapplicable to itself.[307] The United States and other deep sea-bed mining States are probably in a position to invoke this rule. But the matter is not simply a State vis-a-vis another State or a group of States. The United States and its followers have to face the rest of the world, which have the interests of sharing the benefits to be derived from the resources of the deep sea-bed. It is very difficult to reconcile the two competing interests. Perhaps some further modifications of

[306] Mosler, supra note 215, at 118.

[307] ICJ Rep. 1951, at 131.

the deep sea-bed mining provisions in the LOS Convention can do good. The softening of the U.S. position is essential. But the question is whether the PrepCom is an appropriate forum to bridge the two since the United States does not even attend the sessions as an observer.

4.3.3 Subsection Three, Conventional Norm

Aside from all the arguments made in vindication of the customary law status of the deep sea-bed and its resources as the common heritage, there appears another distinctive way to support the concept as a result of the adoption and signing of the 1982 Convention.

The concept may acquire the binding force of a treaty during the intermediary period between the signing and the coming into force of the Convention. The Convention helps to enhance its customary law status and to inject into it new legal authority derived from the Convention itself.

Considering the wide participation in the Convention regime, the common heritage as a conventional norm is as important as a customary norm. If, however, the Convention fails to attract a sufficient number of States to bring itself into force, the common heritage will gain ground very slowly through the process of customary law-making. It appears that it is just a matter of time to bring the Convention into force. The slowness of the ratification process is mainly due to the following reasons:

1. The Law of the Sea Convention is not available in particular languages, such as the Scandinavian countries (Nandan's view);

2. Some States have to adjust their national legislations in order to ratify the Convention;
3. Due to the U.S. staying-out, some States have to evaluate the financial burdens carefully before ratifying the Convention.
4. The 'one-foot-two-boat' States take a wait-and-see approach as a result of the two regimes.
5. Some third world countries are not pleased with some provisions of the Convention other than deep sea-bed mining, such as, the provisions on delimitation, the provisions on fishing, and the provisions on passage of warships through the territorial sea.
6. The Eastern European countries and the USSR are very concerned with the mechanisms on compulsory settlement of disputes.
7. Some States have to evaluate their overall interests in order to ratify the Convention.[308]

The provisions on the common heritage, inasmuch as they are reflective of its basic content as a customary norm, will continue to bind non-parties. This principle is expressly written into the Vienna Convention on the Law of Treaties.[309] Professor Lee seemed to echo this by recognizing:

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[308] See Nandan, Satya, "The Law of the Sea Convention Today", in <u>CONSENSUS AND CONFRONTATION</u>, <u>supra</u> note 14, at 28; alse see Lee, Kimball, "Holding Pattern or Forward Motion?", 9 <u>Marine Policy</u> at 340 (1985).

[309] Article 38 is as follows:

<u>Article 38</u>

Rules in a treaty becoming binding upon third States through international custom

"Nothing in article 34 to 37 precludes a rule set forth in a treaty from becoming binding upon a third State as a customary rule of international law, recognized as such."

> "Where a treaty rule incorporates existing customary international law, its binding force is attributable not only to the treaty qua treaty, but also to the incorporated customary law, which remains binding on all States, whether or not parties to the treaty. Accordingly, a rule of international law may be simultaneously conventional for some States and customary for others."[310]

Without dwelling further upon the question of third States to a treaty, one point must be looked at. Because there is no discontinuity in time and in State practice, and because the basic content of the common heritage is transplanted virtually unaltered from the Principles Declaration indicative of customary law into the provisions of the 1982 Convention reflective of customary law and creative of conventional law, there is no inconsistency between the common heritage as customary law and it as conventional law, that is Part XI of the Convention on the Law of the Sea.

4.4 Section D. Summary to Chapter IV

The emergence of the concept of common heritage of mankind in the international law of the sea is very swift. The concept of the common heritage may be said to have acquired the force of law. As soon as modern marine technology provided the potential for the exploration of the deep sea-bed and of the exploitation of its resources, the international community responded with the adoption of the Moratorium Resolution and the Principles Declaration through the mechanism of the United Nations General Assembly. Shortly afterwards, UNCLOS III was convened under the auspices of the United Nations to tackle all issues involving the law of

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[310] Lee, Luke T., "The Law of the Sea Convention and Third States", 77 AJIL 541-586(1983), at 553.

the sea. During this period, the concept of common heritage of mankind was greatly consolidated through the negotiations in the Conference and through State practice outside the Conference. In 1982, a monumental step in the development of the law of the sea was made when the Convention on the Law of the Sea was adopted and signed by the overwhelming majority of States all over the world. From 1967 to 1982, this short span of time has witnessed the gradual crystalization of the concept of common heritage of mankind as customary international law, the incorporation of the concept into the 1982 Convention as conventional international law, and the emerging character of the concept as jus cogens in public international law.

Though, at the initial period of the development of the concept of common heritage of mankind, the concept was fraught with ambiguity and imprecision, the concept has gradually refined to the extent that it contains specific legal rules to be followed by States in their behaviour. This is evidenced by the relevant provisions in the Law of the Sea Convention.

The basic content of the concept of the common heritage has emerged during its evolution. It consists of four principles:

1. Non-appropriation principle;
2. Benefits-sharing principle;
3. Universal participation principle;
4. Peaceful use principle.

The legal force of the concept of common heritage of mankind is derived from three distinctive and yet related sources of international law: namely, jus cogens, customary international law, and conventional international law. Article 311 of the 1982 Convention is the express provision on the peremptory character of the concept of the common heritage of mankind. And this provision was adopted by consensus and accepted by a very large majority of States, but expressly objected to now by the United States. To claim the common heritage as jus cogens incurs very heavy burden of proof. At most it could be said to be in emergence.

The concept of common heritage of mankind has the status of customary international law. Unlike the usual way of formulation of the rules and norms of customary international law through the action, inaction, reaction and counter-action of individual States, the formulation of the concept of common heritage of mankind as customary law has been effected through the institutions of the United Nations by means of consensus of the international community. This fact cannot deprive the concept status of customary law, simply because its process of formation is different from other traditional rules and norms of customary international law. In view of the fact that the present international community lacks a formal legislative body to deal with the emerging legal issues confronting the international community, and that the UN General Assembly is the most representative organ of the international community, that body has the right to respond to these legal questions in the form available to it, namely, resolutions. Thus, not surprisingly, under well-defined specific circumstances, a particular resolution of the General Assembly may acquire the force of law justified by subsequent States practice. If its contents become generally accepted by States practice, then there seems no reason why such resolution could not claim the force of law.

The essence of the theory of "instant customary international law", is the formulation of the common <u>opinio juris</u> within a short period of time, possibly in the absence of State practice. But the question remains as to its acceptance and recognition in international law. Most legal scholars do not think there is instant customary international law. States practice has not been developed enough to justify its use in international law. As a theoretical model, it may be useful to the extent that it can illustrate the special situation where there are factors of short time span, absence of States practice, and common <u>opinio juris</u>.

Three years has passed since the signing of the Convention on the Law of the Sea. The Convention enjoys almost equal support from States, as does the concept of the common heritage of mankind as customary international law, insofar as the basic content of the concept is concerned. Besides the conventional force derived directly from the Convention, the latter also strengthens the customary status of the concept of the common heritage of mankind. This point is easy to be overlooked, though.

If the 1982 Convention comes into force, the common heritage of mankind, as designating the legal status of the deep sea-bed and its resources, will be implemented through the mechanisms established by the 1982 Convention. If it does not, the common heritage will suffer from ambiguity and diverse interpretations.

Chapter V

CONCLUSION

More than ever the deep sea-bed, with its promising resources, stands as a challenge to humankind, especially a challenge to international law. Indeed, the challenge goes to the very roots of international law, affecting the nature and process of customary international law, the importance of consensus, and the role of State sovereignty.[311] The task of the international lawyers and publicists is to clarify the legal uncertainties over the status of the deep sea-bed and its resources.

As has been presented in this thesis, we are confronted with the conclusion that the status of the deep sea-bed and its resources is now enshrined in the concept of common heritage of mankind, which in turn has been consecrated by both customary international law, and by the widespread support for the Convention on the Law of the Sea. Customary international law, in its present stage, has been unable to rid itself of ambiguity or imprecision. However, it is not left totally to the discretion of individual States. The United States together with other like-minded nations, may successfully construct another regime outside the Law of the Sea Convention in terms of strength and practice. But will other nations, especially the extremist developing countries, be pressed or persuaded to give up what they have under the Convention? In other words, is there any possibility of reconciliation between the two

[311] Shigleton, supra note 88.

regimes? The reply is most probably no at present. Under such a situation, the consolidation of the concept will take an unusual process of obstruction, fluctuation or even destruction. The concept of the common heritage can be regarded as emerging customary international law, at least. Moreover, this concept is regarded by the vast majority of States as a peremptory norm from which no derogation is permitted. Since the concept of common heritage of mankind can be advocated by jus cogens, customary law, and conventional law, it would be impossible to deny its legal validity in international law. Indeed, it is rare for a legal norm to be buttressed by three such vital sources of international law. This fact, it is hoped, will convince those who persist in their denial of any validity of the common heritage, if specific legal arguments has failed to do so. As to its precise legal content, its basic content has remained almost the same over the period of its evolution. However, its exact scope of application and parametres of each constituting element are still subject to disputes between the United States and its like-minded allies on the one hand, and the rest of the world on the other.

LEGAL LIMITS OF THE DEEP SEA-BED

The legal limits of the deep sea-bed are by no means clear. The loopholes in Article 76 of the 1982 Convention will diminish the scope of the common heritage of mankind, unless they are closed, or minimized. One possible way to safeguard the common heritage is to increase the role to be played by the Commission on the Limits of the Continental Shelf. Another is to give the ISA the power to make suggestions or recommendations on the question of delimitation affecting the international sea-bed. Also, individual States can protect the deep sea-bed area through more traditional means, such as protest and institution of an action in an international tribunal. In this respect, the forum of the United Nations system can also be very important, through such actions as the passage of resolutions by the General Assembly.

RES NULLIUS AND RES COMMUNIS

Res Nullius

The doctrine of res nullius does not apply to the deep sea-bed and its resources. Its prospective application to the deep sea-bed and its resources is circumvented by the emergence of the concept of the common heritage. It is futile to invoke the theory of res nullius in front of the development of international law since 1967. For example, one of the difficulties with res nullius is that its proponents assume their conclusion before constructing their arguments.

Res Communis

This doctrine is as imprecise as res nullius. It does not apply to the deep sea-bed and its resources. Unlike res nullius, however, res communis contains some duties. It imposes the obligation upon the individual States to refrain from claiming exclusive title, exclusive ownership, exclusive sovereign rights, and sovereignty. Res communis also contains the idea of approval or authorization by the international community for the use of the deep sea-bed and its resources, it is unimaginable how such approval or authorization can be effected.

THE COMMON HERITAGE OF MANKIND

Content

The basic elements of the concept of the common heritage of mankind have not undergone any significant change since its inception. The concept itself, as well as its basic content are accepted by the majority of the international community, and by the developed States as well. Perhaps the three economic giants (US, UK, FRG) do not agree with some of the principles or some of the forms of the principles.

Legal Validity

Jus cogens

The concept of the common heritage is deemed by the majority of States, in particular the developing States, as a peremptory norm. Article 311 of the Convention on the Law of the Sea makes direct reference to the phrase "in derogation therefrom". In any event, the emerging peremptory character of the common heritage can be invoked. But it is not convincing to infer that the common heritage is already a norm of jus cogens.

Customary international law

The concept of the common heritage has a fairly solid basis in customary international law. It could be now entrenched in the restrictive traditional perception of the process of customary norm-making. The concept is also rooted in "instant customary international law", and ~~in~~ UN General Assembly resolution-generated customary international law. The unique circumstances in which the concept was born and grew, contribute to its legal significance. With the signing of the Convention on the Law of the Sea, the legal validity of the concept will be strengthened in customary international law.

However, the concept cannot claim ~~to be a~~ universally accepted norm due to the strong objections from the major Western developed Countries. It can be at best described as a quasi-universal norm.

Conventional law

It is significant that the Convention on the Law of the Sea is adhered to by the vast majority of the international community. The concept of the common heritage is thus supported by emerging treaty law. Whether the Convention can be applied universally or even against the opposing group remains to be seen.

The concept of common heritage of mankind has established a novel legal status for the deep sea-bed and its resources beyond the limits of national jurisdiction by creating specific rights and duties. It has had the effect of rendering the traditional doctrines of <u>res nullius</u> and <u>res communis</u> things of the past, with respect to the deep sea-bed and its resources, if they were ever applicable to the deep sea-bed and its resources. The development of the concept also has the effect of making the principle of the freedom of the high seas inapplicable to the deep sea-bed and its resources, if it did.

It was understood at the beginning of the UNCLOS III negotiations that every State had to make some concessions. No nation could, or should expect to bring back all it wanted. This understanding, despite the ideologization in the First Committee, contributed to the successful completion of the comprehensive Convention on the Law of the Sea.[312] Not only is the Convention as a whole an outcome of a package deal and consensus throughout the entire process, Part XI (the Area) is also achieved through a package deal and consensus. This is one of the reasons why it is practically, as well as legally unfeasible for a State to choose a selective approach to the Convention. In this aspect, the Convention is unique.

Since the United States has definitely opted to remain outside of the conventional regime, there are many speculations, both optimistic and pessimistic, about the future of the Convention, particularly the provisions on deep sea-bed mining.[313] The status of the deep sea-bed and its resources as the common heritage of mankind is increasingly warranted by international law. With the functioning of the PrepCom the common heritage will undergo the process of refining and possibly some modifications within the permissible limits to accommodate the interests of the United States and other countries.

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[312] Mink, Patsy T., "Foreword", 15 San Diego L.R. 357-364(1978), at 363.

[313] For example, Grolin, Jesper, "The Future of the Law of the Sea: Consequences of a Non-Treaty or Non-Universal Treaty Situation", 13 Ocean Dev. & Int'l. L. 1-32 (1983-1984); Larson, David L., "The Reagan Rejection of the UN Convention", 14 Ocean Dev. & Int'l. L. 337-361(1984); Borgese, Elisabeth Mann, "The Convention Is Signed, What Does the Future Hold?", in 4 Ocean Yearbook Juda, Lawrence, ed., THE UNITED STATES WITHOUT THE LAW OF THE SEA TREATY: OPPORTUNITIES AND COSTS, proceedings, 7th Annual Conf. June 12-15, 1983, Center for Ocean Management Studies, University of Rhode Island, Times Pr., Narragansett Graphics, Inc., 1983.

To explore and exploit Neptune, we will need international cooperation. In the end, the words of the former U.S. Ambassador Richardson to UNCLOS III, ring true:

> "In a world of irreversibly growing interdependence there is no alternative to international cooperation in the exploration of mankind's 'common heritage', be it on the ocean floor, on the moon and other celestial bodies, or on the Antarctic continent."[314]

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[314] Supra note 269, at 22-23.

Appendix A

ARTICLE 76 -- DEFINITION OF THE CONTINENTAL SHELF

1. The continental shelf of a coastal State comprises the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.

2. The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 and 6.

3. The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the sea-bed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

4. (a) For the purposes of this Convention, the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either:

(i) a line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or

(ii) a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope.

(b) In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base.

5. The fixed points comprising the line of the outer limits of the continental shelf on the sea-bed, drawn in accordance with paragraph 4 (a)(i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 metre isobath, which is a line connecting the depth of 2,500 metres.

6. Notwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs.

7. The coastal State shall delineate the outer limits of its continental shelf, where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude.

8. Information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under Annex II on the basis of equitable geographical representation. The Commission shall make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding.

9. The coastal State shall deposit with the Secretary-General of the United Nations charts and relevant information, including geodesic data, permanently describing the outer limits of its continental shelf. The Secretary-General shall give due publicity thereto.

10. The provisions of this article are without prejudice to the question of delimitation of the continental shelf between States with opposite or adjacent coasts.

Appendix B

DIAGRAM OF ARTICLE 76 OF THE LAW OF THE SEA CONVENTION

Table 3: Diagram of Article 76

```
        Limit of continental shelf may not
        beyond further seaward of either
                          |
        ----------------or------------------
        |                                  |
natural prolongation of         200 miles from
land territory to outer         baseline(coast)
edge of continental margin
                          |
        ------------------------------------
        |                                  |
continental margin             continental margin
comprises submerged            does not include
prolongation of land           deep ocean floor
mass, and consists             with its oceanic
of shelf, slope and            ridges
rise
          |
coastal State may establish outer
edge of continental margin by straight
lines(up to 60 miles long)
connecting points located either
                          |
        ---------------or--------------------
        |        (Irish formula)           |
where thickness of             not more than 60
sedimentary rocks              miles beyond foot of
is at least 1% of              continental slope
distance beyond                            |
foot of continental                        |
slope                                      |
        |                                  |
        -------------provided---------------
                          |
          those points are
          also not beyond
          further seaward of
          either
                          |
        ----------------or------------------
        |           (cutoff)               |
100 miles beyond                350 miles from
2500-meter isobath              baseline(coast)
          |
except that
          |
only the 350-mile cutoff
may be applied on
submarine ridges if those
ridges are not submarine
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elevations that are natural components of continental margin such as its plateaux, rises, caps, banks and spurs.

Appendix C

DECLARATION OF PRINCIPLES GOVERNING SEA-BED AND OCEAN FLOOR, AND SUBSOIL THEREOF, BEYOND THE LIMITS OF NATIONAL JURISDICTION

This Declaration was passed by a vote of 108 ih favour, 0 against and 14 abstentions in 17 December 1970 (See UN Doc. A/8028(1970), 25 UN GAOR Supp. No.28, at 24).

The General Assembly,

- Recalling its resolutions 2340 (XXII) of 18 December 1967, 2467 (XXIII) of 21 December 1968, and 2574 (XXIV) of 15 December 1969, concerning the area to which the title of the item refers,

- Affirming that there is an area of the sea-bed and the ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction which are yet to be determined,

- Recognizing that the existing legal regime of the high seas does not provide substantive rules for regulating the exploration of the aforesaid area and the exploitation of its resources,

- Convinced that the area shall be reserved exclusively for peaceful purposes and that the exploration of the area and the exploitation of its resources shall be carried out for the benefit of mankind as a whole,

- Believing it essential that an international regime applying to the area and its resources and including appropriate international machinery should be established as soon as possible,

- Bearing in mind that the development and use of the area and its resources shall be undertaken in such a manner as to foster healthy development of the world economy and balanced growth of international trade, and to minimize any adverse economic effects caused by fluctuation of prices of raw materials resulting from such activities;

Solemnly declares:

1. The sea-bed and the ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction (hereinafter referred to as

the area), as well as the resources of the area, are the common heritage of mankind.

2. The area shall not be subject to appropriation by any means by States or persons, natural or juridical, and no State shall claim or exercise sovereignty or sovereign rights over any part thereof.

3. No State or person, natural or juridical, shall claim, exercise or acquire rights with respect to the area or its resources incompatible with the international regime to be established and the principles of this Declaration.

4. All activities regarding the exploration and exploitation of the resources of the area and other related activities shall be governed by the international regime to be established.

5. The area shall be open to use exclusively for peaceful purposes by all States whether coastal or land-locked, without discrimination, in accordance with the international regime to be established.

6. States shall act in the area in accordance with the applicable principles and rules of international law including the Charter of the United Nations and the Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations, adopted by the General Assembly on 24 October 1970, in the interests of maintaining international peace and security and promoting international co-operation and mutual understanding.

7. The exploration of the area and the exploitation of its resources shall be carried out for the benefits of mankind as a whole, irrespective of the geographical location of States, whether land-locked or coastal, and taking into particular consideration the interests and needs of the developing countries.

8. The area shall be reserved exclusively for peaceful purposes, without prejudice to any measures which have been or may be agreed upon in the context of international negotiations undertaken in the field of disarmament and which may be applicable to a broader area. One or more international agreements shall be concluded as soon as possible in order to implement effectively this principle and to constitute a step towards the exclusion of the sea-bed, the ocean floor and the subsoil thereof from the arms race.

9. On the basis of the principles of this Declaration, an international regime applying to the area and its resources and including appropriate international machinery to give effect to its provisions shall be established by an international treaty of a universal character, generally agreed upon. The regime shall, inter alia, provide for the orderly and safe development and rational management of the area and its resources and for expanding opportunities in the use thereof and ensure the equitable sharing by States in the benefits derived therefrom, taking into particular

consideration the interests and needs of the developing countries, whether land-locked or coastal.

10. States shall promote international co-operation in scientific research exclusively for peaceful purposes:

a. By participation in international programmes and by encouraging co-operation in scientific research by personnel of different countries;

b. Through effective publication of research programmes and dissemination of the results of research through international channels;

c. By co-operation in measures to strengthen research capabilities of developing countries, including the participation of their nationals in research programmes. No such activity shall form the legal basis for any claim with respect to any part of the area or its resources.

11. With respect to activities in the area and acting in conformity with the international regime to be established, States shall take appropriate measures for and shall co-operate in the development and implementation of international rules, standards and procedures for, inter alia:

a. Prevention of pollution and contamination, and other hazards to the marine environment, including the coastline, and of interference with the ecological balance of the marine environment.

b. Protection and conservation of the natural resources of the area and prevention of damage to the flora and fauna of the marine environment.

12. In their activities in the area, including those relating to its resources, States shall pay due regard to the rights and legitimate interests of coastal States in the region of such activities, as well as all other States in the which may be affected by such activities. Consultations shall be maintained with the coastal States concerned with respect to activities relating to the exploration of the area and the exploitation of its resources with a view to avoiding infringement of such rights and interests.

13. Nothing herein shall affect:

a. The legal status of the waters superjacent to the area or that of the air space above those waters;

b. The rights of coastal States with respect to measures to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat thereof resulting from, or from other hazardous occurrences caused by, any activities in the area, subject to the international regime to be established.

14. Every State shall have the responsibility to ensure that activities in the area, including those relating to its resources, whether undertaken by governmental agencies, or non-governmental entities or persons under its jurisdiction, or acting on its behalf, shall be carried out in conformity with the international regime to be established. The same responsibility applies to international organizations and their members for activities undertaken by such organizations or on their behalf. Damage caused by such activities shall entail liability.

15. The parties to any dispute relating to activities in the area and its resources shall resolve such dispute by the measures mentioned in Article 33 of the Charter of the United Nations and such procedures for settling disputes as may be agreed upon in the international regime to be established.

Appendix D

RATIFICATIONS TO THE LOS CONVENTION AS OF 30 SEPTEMBER 1985

Bahamas	Egypt	Iraq
The Philippines	Belize	Togo
Fiji	Tunisia	Ghana
Cuba	Gambia	Tanzania
Jamaica	Guinea	Mexico
Saint Lucia	Ivory Coast	Namibia (United Nations Council for)
Bahrain	Sudan	Mali
Iceland	Senegal	Zambia

Appendix 5

NON-SIGNATORIES TO THE 1982 CONVENTION ON THE LAW OF THE SEA

Albania	Jordan	Tonga	Peru
Israel	Syria	Kiribati	Ecuador
	Turkey	San Marino	Venezuela

Federal Republic of Germany
United Kingdom
United States

African National Congress
Pan Africanist Congress of Azania
South West Africa People's Organization
Palestine Liberation Organization

Netherlands Antilles
Trust Territory of the Pacific Islands
West Indies Associated States

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This bibliography will be an integral part of the thesis and therefore those sources that have already been referred to in the footnotes will not be selected generally. Only most updated sources have been chosen for this bibliography. It is divided into three parts: I. *GENERAL REFERENCES*, II. *PHYSICAL ENVIRONMENT OF THE DEEP SEA-BED AND ITS RESOURCES*, and III. *LEGAL STATUS OF THE DEEP SEA-BED AND ITS RESOURCES*.

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