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THE NEW INTERNATIONAL ECONOMIC ORDER AND THE LAW OF THE SEA

by

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Introduction

The Fourth Session of the Third United Nations Conference on the Law of the Sea opened in New York on March 15. Stressing the unique historic importance of this Conference, Secretary-General Kurt Waldheim made three significant points in his brief inaugural statement.

First, he made it clear that the Conference had to deal with all major economic uses of the sea, not merely with the mining of minerals from an international seabed area however defined. "The hard realities of the formidable increase of the world's population over the next twenty five years provides us with the need to find, and manage efficiently and equitably the immense resources of the sea....The establishment of a Seabed Authority /for the mining of nonliving resources in the international area/ presents, perhaps the most difficult, but the most important issue of all. Then, a satisfactory solution must be found to ensure the optimum utilization and protection of fish stocks, and we must meet and resolve the very important problem of the conduct of scientific research." Waldheim did not mention directly the fourth of the major peaceful uses of the oceans, namely navigation and seaborne international trade, except by indicating that "the issue of unimpeded passage through straits must also be resolved."

Second, Waldheim pointed out that the new law of the sea must advance the New International Economic Order in general. "We will have lost a unique opportunity," he said, "and one that may not occur again if the uses made of the sea are not subjected to orderly development for the benefit of all, and if the Law of the Sea does not succeed in contributing to a more equitable global economic system. There is a broad and growing public understanding and appreciation of the issues involved, and the successful outcome of your work would also have a major impact on the establishment and implementation of the New International Economic Order."

Thirdly, Waldheim made it clear that, although the oceans themselves are of immense importance to the ecology and economy of our planet, more even than the oceans is at stake in this conference. "For it is not only the law of the sea that is at stake. The whole structure of international co-operation will be affected, for good or for ill, by the success or failure of this Conference."

In essence, these are the three basic points of a study by Arvid Pardo and myself on The New International Economic Order and the Law of the Sea, undertaken within the context of Jan Tinbergen's Project RIO (Reviewing the International Order) and financed by the Minister for Development Cooperation of the Government of the Netherlands. The study has been made available to all U.N. Missions and offices.

Recently, this study was the subject of a three days' seminar, held at the Center for the Study of Democratic Institutions in Santa Barbara, in cooperation with the Charles F. Kettering Foundation. The purpose of these pages is to analyse the results of that seminar, from the particular angle of their possible usefulness to the current session of the Law of the Sea Conference. For this purpose, the analysis is divided into seven sections. The first gives a general assessment of the present stage of the Law of the Sea Conference, as seen by the seminar participants (a list of the participants is attached as Appendix I). The second deals with the management of the living resources of the ocean and the New International Economic Order; the third with the impact of the International Seabed Authority on the New International Economic Order; the fourth, with scientific research and the role of IOC in the building of the NIEO; the fifth, with the economics of shipping and navigation and the role of IMCO; the sixth, with integrative machinery and the settlement of disputes; and in the seventh, an attempt is made to extrapolate a few concrete suggestions that might be useful for the Conference.

An effort has been made to focus, in particular, on the discussion of peaceful uses and dispute settlement since it is on these two issues that a general plenary debate has been scheduled by the President of the Law of the Sea Conference, and it is felt that our discussion could make a contribution to this debate.

In appendix, finally, two additional papers are reproduced, which were engendered by the Seminar.

I. General Assessment

The claim that history will mark this as one of the most important conferences of modern times still leaves some ears incredulous. Yet it should be obvious. For, as the New York Post put it in its report on the opening of this session, "It involves the fate of half the world's potential oil reserves, $3 trillion [sic] worth of hard minerals, a sizable chunk of mankind's potential food stuffs, the vital strategic interests of the world's military powers, the protection of the most vulnerable section of the globe's environment, and the first major attempt to establish true international sovereignty over a huge area of the earth's surface." It is obvious -- and this is the first point that was agreed on by all participants -- that, due to these very factors, the economic importance of the oceans in the life of each nation and to the international community is such that one cannot possibly build a New International Economic Order without applying it to the oceans: without making the oceans a part of it.

As one participant put it, "The main problem before us is how we are going to ensure that the principles we have adopted, and the developed countries have accepted these principles -- how these principles which have been adopted in the framework of the Sixth and Seventh Special Session of the General Assembly are going to be translated into practical terms in the Law of the Sea. That is the problem. Surely the Single Negotiating Text should be revised according to the new elements which were developed in the framework of the Sixth and Seventh Special Session."

Secondly, the Conference is actually mandated to build new institutions in the oceans: the Seabed Authority; the Dispute Settlement System -- and this provides a unique opportunity to create for the first time an institutional framework to take the New International Economic Order out of the lofty realm of principles or rhethorics and embody it in concrete institutions and processes.

Thirdly, the Law of the Sea Conference may turn out to be a test case for the building of the New International Economic Order. Certainly, there are great pressures to keep the subject out of the Conference, as something that would sidetrack and slow down more essential work. If these pressures prevail at the Law of the Sea Conference: if the Law of the Sea Conference is successfully turned into a lawyers' exercise, then we can be quite sure that the same pressures will have the same effects in other fora of the United Nations and that the new international economic order

will remain a beautiful flourish of rhethorics, but as soon as we want to be serious about it and embody it in a concrete, practical framework, we will be stifled.

Fourth, a number of developments have taken on momentum during these last two years in the United Nations. There is a broad movement towards a restructuring and streamlining of the whole United Nations system and harmonizing the activities of the specialized agencies, and the work of the Law of the Sea Conference must now be considered in this broader context.

Has the Conference moved with the times and inserted itself into the broader developments of restructuring the U.N. system and building the new international economic order?

At the end of the Geneva session of the Conference last year, an unofficial Draft Treaty was released, as is well known: the so called Informal Single Negotiating Text which embodies major conference trends with regard to the structure and functions of the International Seabed Authority, the limits of national jurisdiction and continuity and change in traditional sea law; the protection of the environment, scientific research and the transfer of technology, and dispute settlement.

Would a Treaty based on this text reasonably fulfil the purpose of purposes of the Conference? If not, what should be done? What are the purposes of the Conference at this point?

The answers one participant gave to these questions were rather negative. There is no unanimity with regard to the stated purposes of the Conference, he said. Three main points of view may perhaps be discerned. For some, the Conference is merely a forum within which to seek wide and comprehensive accomodation of national interests in the marine environment, an accomodation which has become necessary owing to the grave and progressive erosion of the traditional law of the sea, due to a number of factors, including technological advance. According to this view, this participant said, general accomodation of national interests will give stability of expectation in the use of ocean space and will necessarily protect the general interest which is but the sum, or perhaps the lowest common denominator, of national interests considered as a whole.

According to a second point of view, he continued, broadly reflected in the Kampala Declaration of 1971, the Conference is called upon "to draw up a comprehensive legal order for the sea and ocean space which will ensure the common interests of the international community as a whole

and provide for orderly and equitable development and enjoyment of ocean resources."

Finally, he pointed out, there is a third point of view, which in part overlaps with the first two and which sees the Conference as a medium through which to replace an unjust traditional order based on colonialism and imperialism by a new order in the oceans, sometimes conceived as part of a new world economic order, that will both equitably recognize the rights and interests of poor countries in the seas and enable them fully to participate in the development of ocean space. Underlying all three points of view is of course the protection and interplay of national interests.

This participant came to the conclusion that the Single Negotiating Text does not achieve any of the three purposes. The accomodation of national interests has been achieved through a deliberate ambiguity in the text or through the proposed allocation to coastal States of vast areas of previously high seas. This device of ambiguity will not and cannot provide the stability of expectation which is thought, at least according to one view, to be the purpose of the Conference.

Does the Text replace an unjust traditional order by a new order in the oceans that recognizes the needs and interests of poor countries in the sea? Hardly, this participant replied. Firstly it must be noted, he said, that the attempt of the Conference, in one of its Committees, to create a new order in the sea (the International Seabed Authority) has been reduced in importance and usefulness by what has been done in other Committees of the Conference. What has been done, he explained, is merely to shift the balance between sovereignty and freedom in the traditional law of the sea. Secondly, he pointed out, there are indeed many references both direct and indirect, to the developing countries in the SNT, particularly in Parts I and III of the text, but these references are either of a general and exhortatory nature which leave matters pretty much as they are, or concern insubstantial or marginal matters.

For the majority of the developing countries, including nearly all the poorest, this participant observed, a Treaty based on the SNT as it now stands would be ruinous: a disaster that could adversely affect their chances of survival and would increase dramatically the inequality between them and other countries. In short, he concluded, none of the stated purposes of the Conference are adequately reflected in the SNT.

If this negative assessment were to be accepted without qualification, the question would arise -- and was in fact raised by the participants as it has been raised in other

places: Would it not be better to have no Treaty at all than to have one that would be counterproductive with regard to the building of the new international order, including the economic order?

This participant predicted that the consequences of a bad Treaty and the consequences of no Treaty at all would be about the same: more inequality, more conflict, more violence, more pollution; waste of the enormous potential of the development of peaceful uses of ocean space and resources.

Other participants took the view that even though inadequate, a Treaty based on the SNT still contained the seed of a new order based on the new principle of the Common Heritage of Mankind; that, at any rate, it will take decades to build this new order; that a renunciation of the Treaty at this stage would be an abnegation of the Principles solemnly adopted by the General Assembly: a waste of a decade of struggle for a new order.

There is a third view, although not represented at the Santa Barbara Seminar, which upholds that failure would be outright preferable to the adoption of a Treaty of the kind now under consideration. But preferable for whom? Cui bonum?

In a recent paper, presented at the Conference on "The World's Seas" at the Texas A & M University on February 27, 1976, H. Gary Knight opts for failure. "It is my opinion," he gloats, "that these negotiations will not conclude with a timely, comprehensive, and widely accepted Treaty." He then proceeds to examine the alternatives, ranging from unilateral action, bilateral agreements and regional arrangements to multilateral Treaties. "For example, nations possessing seabed mining technology could agree among themselves on a system of claim registration in order to preclude disputes over the right to mine nodules from particular areas of the deep ocean floor. He also considers, blithely, the use of force as a legitimate alternative to a comprehensive Treaty. "In short," he concludes,"no treaty at all appears to be better for the developed countries than a treaty on available terms." (Italics his.)

The view that only the strong nations would benefit from failure was endorsed by several participants in the Seminar.

This, of course, is a formidable weapon in the hands of the rich in the current negotiations. It does not augur well for the building of a new international economic order. It does not herald radical peaceful change.

That the no-treaty-at-all alternative would benefit the

industrialized countries only in the very short run, while, in the long run, not even they can afford the nationalization of ocean space, anarchy, pollution and waste, is another argument. It may not have the same bargaining power at the moment. For who cares for the longer run? On the other hand, it may.

The next question, then, that arises is: What kind of Treaty can be hoped for under the circumstances?

The participants in the seminar weighed several alternatives. A comprehensive Treaty? An enlarged declaration of principles, and/or a framework Treaty containing major points of agreement while leaving vital details to subsequent negotiations and/or to some dispute settlement machinery to be established?

Assuming the best of all cases: the adoption, next year, of a comprehensive Treaty following the lines of the SNT, with some improvements: removing ambiguities, contradictions, and gaps: the real task of the Conference, to build a new international order, including a new international economic order, and to deal with all peaceful uses of ocean space and resources in an interrelated way, would only be partially fulfilled. The work would have to be continued, in some form.

II. The Management of the Living Resources of the Sea and the New International Economic Order.

Our study, which served as basis for the discussion, attempts to show that present arrangements for the management of fisheries are totally inadequate and inequitable; and that the provisions proposed in Part II of the SNT do not fundamentally change this situation. Granted that a restructuring of the existing system of fisheries conventions and commissions and of the Committee on Fisheries would be beyond the scope of the Law of the Sea Conference, the Conference could, nevertheless, adopt certain resolutions and give certain directions to these bodies. That this is indeed within the scope of the Conference, is proven by Part IV of the SNT which directs FAO, IOC, and IMCO to assume new functions (dispute settlement) and to add the appropriate machinery to their structure.

The necessary changes in the existing system of fisheries management are summarized in our study as follows:

-- 1. Reduction of Fisheries Commissions to one per region [to be defined] with comprehensive [not species-oriented] competences, except for a global International Tuna Commission and a global International Commission for Marine Mammals [enlarged IWC].

-- 2. Linkage of these Commissions to a restructured COFI through

(a) a Council composed of representatives of each Commission;

(b) a dispute settlement machinery in accordance with Part IV of the SNT;

-- 3. Restructuring and strengthening of COFI through

(a) universalization of membership;

(b) establishment of a system of licensing for fishing in the international area;

(c) establishment of an independent Secretariat;

(d) establishment of an international Enterprise for the management of living resources;

(e) establishment of independent international fisheries research capacity, to be incorporated in IOC;

(f) establishment of dispute settlement machinery in accordance with Part IV of the SNT;

(g) independent financing (from a trust fund, income from licenses and the Enterprise).

Commenting on these suggestions, and introducing the discussion, one participant added the following background information:

-- The marine fish supply is considerably more important, relatively, to developing countries than it is to developed countries. That is, fish forms a higher proportion of their protein consumption than it does in the developed countries, even though this may not be apparent from available statistics which are distorted by a number of hidden factors;

-- the fishery supply is unstable; numerous fisheries have totally collapsed, due to industrialized overfishing combined with other factors;

-- the new, industrialized fishery methods are highly energy-intensive and, therefore, becoming increasingly costly. "The changes of prices of fossild energy are having a very drastic effect on the distribution of fisheries in the world, particularly through a contraction which is now going on in the distant water fisheries."

Assessing the growth potential of the world fisheries,

this participant said, "I think now no one in the business, as it were, would consider it possible to increase the catch of conventional species more than double the present amount, and probably not as much as that. And to do that requires a distribution of fishing effort such that we exploit more intensively some of the resources, but less intensively others of the resources.... This requires a pretty substantial intervention of governments and of international authority into the enterprises."

Having that this, he continued, it is clear that those who have the capacity will turn their interest elsewhere, "and this elsewhere is what we shall call unconventional resources. These are quite diverse, but those that are most well-known, though none of them are really well-known, are the so-called krill of the Antarctic area, which are distributed mainly along the oceanographic feature called the Antarctic Convergence -- the same place where the great whales were caught -- and the squids of the open oceans. There are squids over the continental shelves which are not yet harvested. They could perhaps yield another 10-20% increase in the present total catches, but there are squids also throughout the deep ocean and in the surface and middle waters, which could provide a catch, in theory, at least equal to the total world catch of all fish at present, or possibly even up to ten times as much. Some would say even higher than that. The essential problem, here again, is the energy requirement, to collect and process these resources. The krill is undoubtedly the one nearest to be economically exploited. Whereas three years ago only the Soviet Union and Japan were operating in the Southern Ocean on a pilot scale, right now, eight industrialized nations are down there carrying out experimental fishing and processing, and some of these nations are also marketing the products. At present, it seems that it would be economic to harvest these animals provided they can go straight into the human diet. It is certainly not economic, nowhere near yet, to harvest them in order to make livestock feeds and get them into human nutrition indirectly where you have a 90% loss rate of protein."

Turning to the effects of the SNT on fishing, this participant commented, "Without appearing to be simply destructively critical, I would say that it is practically 100 percent unhelpful in relation to the real problems. There are two reasons for this: "notwithstanding some lip service and some word service, there is a complete failure, I think, to recognize the reality of the mobility of living resources. There has been an attempt to distinguish between migratory species and less migratory species, and this is

a step. But it is far from the whole story. I think it is not realized how much of the resources are shared between what will be economic zones. For instance, what used to be the biggest fishery, the Peruvian anchoveta, is still shared by Chile, although Chile has a small share because of the distribution of the anchoveta; and what Peru does or does not do with the anchoveta resource affects immediately what happens to the Chilean fishery. Now, that is a case with rather little interaction but nearly all other resources are, in fact, shared. " And this is not only due to well-known migratory movements of fish along the coasts. "I have tried to show that there are many other factors and that even relatively sedentary fish over the periods of decades spread into certain areas, so that if over ten years you systematically deplete one area, you will always be sucking fish into that vacuum that you have created, in most cases with a speed that we cannot measure but theoretically could, if we did the research."

There are also much more subtle effects, he pointed out. Take, for example, the North Sea, where the seabed is affected much more seriously by gravel extraction for concrete than it is by oil drilling. "The critical thing there is that gravel comes exactly from the areas where fish breed, so the British extraction of gravel from the North Sea is destroying the recruitment into the Dutch and Danish fisheries.

The basic thing, he said, is that decisions as to who takes what must be taken on a joint basis. "And this is where I feel the discussion of the Law of the Sea Conference so far has been away from the reality." There is no real grasp of the fact that it is meaningless for a coastal State to determine unilaterally its allowable catch, independently of what adjoining States may do or what is done on the high seas beyond the limits of the economic zone.

The second, major weakness of the SNT, this participant explained, is that the concept of maximum or optimum sustainable yield, written into the 1958 Convention, has been taken over almost without change. This concept, however, is obsolete and useless. He gave a number of reasons: One is the interrelation between species. "You just cannot maximize several interrelated variables at once in mathematical terms, and so the maximum sustainable yield idea is simplistic." Another reason is that the concept of optimum sustainable yield rests on the assumption of stability of the environment. "But the fact is that the resources were not in stable states even before we started exploiting them and we have

to take this into account. If you have transient states and not steady states, again, in mathematical terms, you cannot define a maximum."

A third factor confounding our calculations is the irreversibility of many processes, and the impossibility of determining the point of no return. "Earlier fishery management, and certainly the management experience on which the 1958 definitions were based, was of reversible situations in certain kinds of fisheries." E.g., in the early years after World War II, the only over-fished resources were the bottom-living fish of the North Atlantic. The experience there was that the situation was reversible and that the war-time cessation of fishing led to a recovery of the stocks. "All our experience since then is that intensely exploited resources show changes which, at least partially, are irreversible. Furthermore, we don't know how to predict whether they are going to be reversible or not."

Lastly, this participant discussed the structure of the existing fisheries management system, which he described as very inadequate. He also deplored the lack of feedback between ongoing efforts to restructure the international fisheries management system and developments at the Law of the Sea Conference.

Responding to this exposition, other participants found themselves generally in agreement with the proposals made in the study. In particular, they stressed the importance of a licensing system in the international area, and the usefulness of regional organizations which might be charged with the responsibility of licensing fishing not only on the high sea but also for the economic zones of the States of the region. A "regional license" might facilitate procedures both for distant-water fishing enterprises applying for licenses, and for developing coastal States, who would thus be given an international guarantee that the fishing enterprises concerned would comply with the coastal State's standards and regulations.

The establishment of regional public fishing enterprises was also suggested, in which technical and financial resources could be pooled and developing nations, besides managing the exploration and exploitation of the living resources of their own region, could equip themselves jointly for the kind of industrialized distant-water fishing which they could not afford individually. This might include the exploitation of nonconventional resources in the Southern Ocean.

The question was raised whether the industrialized nations would cooperate in the establishment of such regional organizations and enterprises, which could create the kind of competition to their own efforts that no developing nation

could offer by itself, or whether it would not be more realistic to assume that the industrialized nations would apply their efforts to blocking this kind of development. It appeared, however, that some of the developed nations, in particular Holland and Sweden, would certainly cooperate.

It was suggested that the Law of the Sea Conference should adopt a resolution encouraging regional and bilateral solutions to urgent problems which cannot wait for the final comprehensive agreement. The bilateral agreement between the U.S.S.R. and Iran with regard to the pollution of the Caspian Sea and the harvesting of caviar producing sturgeon was cited as a positive example.

Another suggestion was that the Law of the Sea Conference should request COFI to request an annual report from all regional fisheries commissions. This would be a first step. The next FAO Conference would then have to make appropriate constitutional changes to establish a more organic relationship with the regional commissions. The Law of the Sea Conference should adopt a recommendation to this effect.

Considering the enormous potential of the Southern Ocean and the probably imminent crisis of the Antarctic Treaty, it was suggested that developing nations should be encouraged to accede now to the Antarctic Treaty which is open to any State. This would not entail any liability and would open the possibility for developing nations to participate in the re-negotiation of the Treaty and to ensure participation in the exploitation of the vast resources of that ocean, when the time comes.

The entire discussion clearly indicated that the work of the Law of the Sea Conference has barely scratched the real issues of fisheries management and its relevance to the building of the New International Economic Order, and in so far as it had done so, it was bending them in the wrong direction.

III. The Impact of the International Seabed Authority on the Building of the New International Economic Order.

The real nature of the common heritage of mankind is still shrouded in mystery. Who knows its value? Estimates vary between billions and trillions of dollars. Who knows what it consists of? At the moment, the only accessible wealth of the international seabed area would appear to consist of manganese nodules. But visions of oil on the mid-ocean ridges; of metalliferous brines and muds -- gold-bearing, silver-bearing, zink-bearing -- somewhere deep down in basalt basins in the middle of the abyssal depth of the oceans, still fire the imagination of explorers of ocean space and ocean law. But even restricting our minds to the famed nodules, there remains mystery:

mystery so dense as to encourage mythical thinking.

Recent research, we were told at the seminar, has concentrated on the sediments in which the nodules are bedded. Sediments that consist of the remains of planktonic microorganisms, containing silicon, quartz, feldspar and other minerals. These provide the raw material for the production of radiolarite ceramics. Important applications foreseen for these materials, one participant reported, are particularly low-cost, light-weight, hihgly insulating, earthquake-resistant building materials and fire-proof light-weight thermal and acoustic insulation materials. The recovery of this material would be a by-product of nodule mining. If properly developed, this participant concluded, such ceramics could have a considerable impact on the construction industry, on the development of deep-sea mining as well as on energy conservation programs.

No final answer has yet been found to the question: How is it that the nodules stay on top of the sediments without being buried? A tentative answer, most recently formulated, is that it is living beings, marine animals, which are probably responsible, not only for the genesis of the nodules formed by bacteria capable of oxidizing and precipitating manganese around a skeleton of tubules and chambers left by deep-ocean foraminifera -- but also for their staying atop the sediments. This, it would appear, is the work of sea cucumbers and other holothurians of the abysses.

Now comes the myth. Imagine that industrial man in his greed, applying his brand-new continuous line buckets or hydraulic suction steel pipes to dregding the mysteries of the deep sea floor, stirs up and releases hydrogene sulfide, a poisonous compound buried in the sediments: suppose that, to maximize profits or to avoid the uncooperativeness of other states showing different shades of greed, he decided to process the nodules right at sea, dumping great quantities of chemicals right on the site. Then there begins a great dying among the sea cucumbers down in the night and eternity: an epidemic of unprecedented magnitude. They no longer prop the nodules. The nodules sink into the dying ground: they disappear, like the myriads of tropical crabs in a tropical costal marsh, at the appearance of a predator. Into the ground. You see them, you see them no more. And industrial man is left high and dry, with his dredging machines built to dredge from the surface, but not from the subsoil.

This is just a myth. A myth about the rebellion of nature against the greed of man.

In our study we drew attention to the fact that, due

to the uncertainties surrounding the Common Heritage, in economic, scientific/technological, and juridical terms, there appeared to be a disequilibrium between the function and the structure of the proposed Seabed Authority. The structure is heavy. The functions are not clearly enough defined and, in view of developments in other Conference Working Committees, they may turn out to be rather slight. To re-establish a balance, it would seem necessary either to reduce the structure, thereby sacrificing some -- or most -- of the principles solemnly adopted by the General Assembly in 1970, or to redefine and bolster the functions.

We noted certain discrepancies between the stated and the real power of the Assembly vis-a-vis the Council, as well as some defects in the composition of the latter.

The Authority's competence with regard to scientific research was not clear, nor was its relation to IOC in this respect.

We observed that the International Seabed Authority could contribute more to the building of the New International Economic Order if

(a) the limits of national jurisdiction were defined more clearly by Committee II;

(b) the continental shelf concept were absorbed by the economic zone concept;

(c) hydrocarbons were somehow brought back into the purview of the Authority, (i) either by enabling its Enterprise system to enter the presently legally undefined continental shelf of the Antarctic, or (ii) by assisting developing coastal nations in the exploration and exploitation of their own nationalized offshore hydrocarbon resources, or (iii) by establishing, in addition to the technological and planning commissions already provided for by the SNT, a Commission to regulate the international activities of transnational companies operating on the seabed, especially in their relations with coastal developing nations, in accordance with the Report by the Group of Eminent Persons.

All this would contribute to broaden the resource base and bolster the functions of the Authority and thus bring them into balance with the proposed structure.

On the present resource basis of the Authority, one participant made some new calculations, indicating that the income of the Authority from nodule mining by the end of this century would be something of the order of 0.02 percent of the world's Gross National Product. This, of course, is the result of the investigation of one expert. Other estimates have been somewhat more optimistic.

Another point of serious concern with regard to the Authority's functionality arose in connection with the definition of sovereignty over national resources in areas under the jurisdiction of a coastal State. The SNT provides, as one participant pointed out, that where a particular mineral is being exploited within the territory of a developing State, the Authority must take into consideration the fact that the developing State depends substantially on the export earnings of that particular mineral.

But what is territory?, this participant asked. If only "land" is intended, the problem may not be so grave, but if all seabed areas are included in which the coastal State has sovereign rights over the resources, then serious problems may arise. This may cripple the capacity of the Authority to do anything at all.

This kind of problem, however, can be solved with legal expertise and political good will. The uncertainties about the quantity and quality of the common heritage of mankind cannot be solved, except by time. We have to learn to live, and build, with this uncertainty.

As to bringing oil back into the purview of the Authority, the question arose whether it was necessary to establish a special Enterprise or whether the Enterprise provided for in the SNT is in fact capable of assuming this responsibility as well. "The Enterprise if the business arm of the Authority," one participant said. "The Enterprise is structured in a way that it can handle any resources under the jurisdiction of the Authority -- not just nodule exploitation. There is no place where we talk exclusively about mineral resources. We talk about "resources" throughout."

According to another concept, it is the Authority as a whole, through the Assembly and the Council, that can deal with "resources" in general. But an "Enterprise" is set up for the management of a particular resource. An Enterprise is specialized. One needs differently trained managers for a nodule enterprise and a hydrocarbon enterprise. If the Enterprise of the SNT were to be competent to deal with any resource, it would, essentially, become a licensing agency and not an active Enterprise. The management of each major resource will require its own Enterprise, under the responsibility of the Assembly and the Council.

With regard to scientific research, it was pointed out that Part I of the SNT provides that scientific research shall be conducted directly by the Authority. The words scientific research are not related to the seabed but to marine research in general. The text further provides that the

Authority shall be the center for harmonizing and co-ordinating marine scientific research. From these provisions, two possibilities would seem to arise. Either Committee I intended that the IOC in its entirety be integrated into the new Seabed Authority, or it may aim at the establishment of a new international mechanism for scientific research.

Both alternatives imply a structural abnormality. The International Seabed Authority is to deal with the seabed, not with ocean space as a whole. Why should it, in one of its activities, i.e., scientific research, embrace ocean space as a whole? Would it then not be logical to bring other uses of ocean space into the purview of the Authority, since they depend on the scientific research now under the Authority?

The second alternative implies proliferation of international organizations, duplication of efforts, and confusion: unless it were to be assumed that IOC were to succumb in the competition and to disappear from the international scene.

As one participant explained, "Either IOC will adapt itself to the needs that have been created under the Convention in such a way that it becomes attractive to the new Authority to adopt it...whether this will be, politically, possible is another question which, at any rate, would have to be rather quickly decided -- before the Convention is concluded -- or, the second alternative is the going attitude at the moment, and that is, that the Conference is given no choice but to try to establish its own body which I think would be a pity, but if it is necessary it will have to be done, in order to take care of the kind of broad approach that is contemplated under the new Convention. IOC, as it exists at the moment, as it is structured at the moment, would appear not be be satisfactory, at least from the point of view of the developing countries. So, in the absence of getting that type of restructuring, the attitude of the Conference at the moment is that one has to establish a new agency at the appropriate moment, under the Authority."

To take care of the structural abnormality inherent in both these solutions, a third alternative was contemplated, and that is to take a reconstructed IOC or an appropriate new agency and make it an organic part, not of the Seabed Authority but of a system of institutions dealing with all uses of ocean space and resources which are dependent on scientific research and services, such as fishing or navigation. Such a solution would leave the Seabed Authority intact, minus the abnormal ocean-space bulge; and it would leave scientific research intact, without trying to divide seabed research from other marine research, which is an absurdity, and it would structure scientific research in

such a way that all users can benefit. The question whether it should be IOC that should be restructured for this purpose or rather a new agency, may be more academic than real. Obviously in the world in which we live, the same forces that would obstruct the restructuring of IOC would prevent the building of a new agency, or would try to make sure that the new agency should look pretty much like the old. If this were the case, it would be more economical and practical to work within IOC than to duplicate and proliferate.

IV. Scientific Research, the IOC, and the Building of the New International Economic Order.

A number of other points were raised in connection with the conduct of marine sciences.

First of all, it was agreed by all the scientists present that it is impossible to separate so-called fundamental research from so-called resource-oriented research. "It has been my experience," one participant said, "that you cannot keep research in the compartment that you put it into first, because no matter how you start you open up new lines which get you into quite a different compartment from the one you expected. My experience has been that so-called basic research can stray into resource research. And I would hope that perhaps this notion of compartmentalizing research might be abandoned."

Secondly, if it is impossible to separate fundamental research from resource-oriented research, it is equally impossible to separate it from military research. The SNT states time and again that scientific research in the marine environment -- in ocean space as a whole -- must be carried out for peaceful purposes. The meaning of peaceful purposes, however, is nowhere defined, and even if it were, who could determine, or control, the purposes for which science is used, once the research has been completed? Scientific research is a prime example of what is called, in U.N. parlance, a "dual-purpose agent." I.e., a process that can be applied both to development and to war making. The only way to cope with dual-purpose agents is international management of their positive potential. This was the fundamental principle on which the Schuman Plan for the joint management of coal and steel was based, since coal and steel, was, thirty years ago, was the most relevant "dual purpose agent"; and it was the fundamental principle of the Baruch Plan with regard to the internationalization of nuclear energy management -- no matter what the political limitations of these plans, in the historical context of their time. Scientific research in the marine environment should be internationally managed in an analogous way; only thus can one be sure that it will indeed be used for "peaceful purposes." In the context of building the New International Economic Order, it was stressed at the seminar that it is the developing countries that would benefit most from the

international management of scientific research which, individually, none of them can afford.

Thirdly, it is impossible to separate the management of seabed research from that of water-column research, or the management of marine-biological research from that of environmental, geophysical, and meteorological research. Rational fisheries management, for instance, depends on all of these, and on the interplay of factors in each of these sectors of research. The international management of science must be structured so as to coordinate these interactions and make the results available to all users.

Fourthly, it is impossible to separate research in the international area from research in national areas. "One thing that is certain, "one participant said, "is that to split the supervision of science between the international area and the rest would be absolutely disastrous."

Certainly, in the world in which we are living, there will be nationally and internationally conducted scientific research. Both are likely to be carried out in zones under national as well as international jurisdiction, but since they thus interact, it is essential that they be effectively integrated and follow compatible standards and rules of conduct. Rather than competing, they should complement each other.

In the context of building the New International Economic Order, the seminar stressed the importance, not only of research, but of science-based services, which should be managed internationally. "The outstanding need is for a change in the nature of the world date exchange system," one participant commented, "so that the international system has control of this rather than two designated superpowers as at present." He emphasized the growing importance of IOC in this area and suggested that IOC should be given over-all responsibility to ensure that adequate science-based technical services are made available to all countries and to all types of ocean users, while recognizing the continued responsibility of IMCO in certain areas, and the need to bring the International Hydrographic Organization into the U.N. system, or to replace it.

V. <u>The Economics of Shipping and the Role of IMCO in the Building of the New International Economic Order</u>.

Shipping, as is well known, is a multinational industry. It is a service industry, not a resource industry. It is an old industry, and very dependent on governments, one participant pointed out, "although perhaps many shipping interests would like to think otherwise." Frequently it has the characteristics of over-investment, he pointed out, as we have seen in tanker trade recently. There is no manda-

tory correlation between the role a country is playing in world shipping and the stage of industrialization. "There are a lot of what one might call poor country tycoons in the shipping business." But although shipping may be, in entrepreneurial terms, directed from such places as Hong Kong, it is, like many industries one in which the technologically strong have the advantage, and the small and new country industry or enterprise is definitely in a less fevorable place in this service industry than the rich and the established and the large country. This, the participant explained, has to do with its being conducted in a free market with very unequal bargaining power, which arouses the justified complaints of the poorer countries.

Shipping, he continued, reacts on other sectors of industry, such as energy and food, and it has always been a rather buccaneering industry, unwilling to be firmly controlled.

It was pointed out that, since its foundation in 1959, IMCO has consistently kept out of the economics of shipping, in spite of its stated purpose, never deleted from the Convention, "to provide for the consideration by the organization of matters concerning unfair restrictive practices by shipping concerns." UNCTAD and OECD have filled the vacuum.

Several participants expressed the view that the building of the New International Economic Order required that UNCTAD's code of conduct for liner conferences should be effectively implemented and that the liner conferences, which are, in a way, seats of the old economic order, should be brought to heel under the orbit of the emerging system of ocean institutions. How this can be achieved, is another question. As one participant pointed out, "when we are going to implement the New International Economic Order, it seems that shipping is an especially difficult area...I don't know why, but I can see that even a country like Sweden and other countries have certain difficulties.... As soon as the economics of shipping is under discussion, and especially the code of conduct, reservations are made, even by countries strongly in favor of the New International Economic Order."

Similar difficulties, of course, arise as soon as any of the major interests in the economics of marine activities is touched. To bring oil into the purview of the emerging ocean regime will not be any easier than to cope with the economics of shipping. Private multinational corporate interests are not going to embrace the New International Economic Order with unqualified enthusiasm in any field.

But the New International Economic Order must be built in spite of this. "Economic matters," one participant said, "have been shunted aside in IMCO in the sense I mentioned

earlier" -- i.e., the part of Article 1 of the IMCO Convention which concerns the forms of activity in the marketplace economics of shipping, has never been taken up. "But I might say that that article has not been in any way altered. There was no effort to take out the provisionsin recent amending sessions of the IMCO Assembly. In the early 1960s many Governments made it clear that they were not happy with them. They made declarations in accepting the Convention that they would not expect IMCO to enter into economic matters, but these very States made no objection to the continuation of these provisions. It may well be that this can be the basis for a widening involvement by IMCO when it has secured the confidence and been made the instrument of all of the world community."

VI. Integrative Machinery and the Settlement of Disputes

Part IV of the SNT may turn out to be by far the most important part of the Law of the Sea Convention. The establishment of a dispute settlement system not only is essential to take care of conflicts which will inevitably arise from the inevitable gaps and ambiguities of the Convention itself which will engender conflicting interpretations, and to provide the kind of continuity and stability which is needed if the results of the long and hard labor of this Conference are to last and are not to be overthrown in the near future by unilateral practices. The dispute settlement system as proposed in Part Iv may turn out to be a model for the whole system of emerging ocean institutions. It may be considered a first piece of "integrative machinery" proposed in our study; it may be considered an embodiment of the concept of the functional federation of international organizations; it may help to restore the unity of purpose and comprehensiveness of view the Conference has lost during the last two years: it may even pull things together to the needed break-through.

Part IV constitutes the only part of the Treaty that is truly comprehensive. It covers disputes that might arise from any use of the oceans as well as from their interaction. It includes States as well as juridical persons; it affects international as well as national ocean space; it affects the functions and the structure of all the major intergovernmental organizations dealing with the use of ocean space (the International Seabed Authority, FAO/COFI, IOC, and IMCO: the "Basic Organizations").

In our study we noted the great importance attributed by the SNT to dispute avoidance between contracting parties which may have differences, and to informal dispute settlement procedures on the theory that many problems cannot be solved on the basis of strict law and that informal procedures promote accomodations of interests and solutions often far

better than formal judicial procedures.

We observed that the SNT gives an unusual degree of importance to fact-finding and the participation (albeit without vote) in the judicial process of persons with special technical qualifications.

Lastly, we underlined the great flexibility in the settlement process: States are permitted a wide choice of dispute settlement mechanisms and the system proposed combines in a novel way functional elements with a general comprehensive system.

These observations were generally endorsed by the participants in the Santa Barbara seminar.

The great flexibility of choice, one participant said, responds to the variety of national preferences. Some countries, like France, prefer arbitration; others, like the Netherlands and Japan, prefer the International Court of Justice. There is a third large group, consisting mostly of developing nations, which do not like either. In their view, the participant explained, the Court has little understanding of the new law that is developing. The Court has turned out very conservative, and it is better to start with a clean slate with a new tribunal that understands the problem.

Where a choice of settlement procedures is available to litigants, national jurisprudence usually accepts the choice of the defendant rather than the plaintiff's. The system proposed by Part IV is, in a way, fairer to both plaintiff and defendant, and, at the same time, insures that, in case of disagreement between the two as to the procedure to be chosen, one is, in the end, accepted: It provides free choice, but if the two sides cannot agree, then they have to go to the Law of the Sea Tribunal, which, thereby, is given a kind of coordinating function. This provision, at the same time is favorable to the developing nations in the settlement of any disputes in which they may be involved; for, on the whole, they prefer general over functional procedure, and the jurisdiction of the Law of the Sea Tribunal over that of the ICJ. This, of course, is relevant to the building of the New International Economic Order.

Commenting on the relationship, in the SNT, between technical or functional approaches on the one hand and general machinery on the other, this participant explained: "You were faced, from the very beginning with the fact that you already had developed a special tribunal for the seabed. In addition, people wanted to have special commissions on fisheries, on scientific research, on pollution: each one composed slightly differently, with the assistance of various specialized agencies. As a result, one of the crucial points became the relationship between special

machinery and general machinery; and the compromise -- or synthesis -- proposed in the text is that, in principle, you use special machinery where it is provided, and this machinery, normally is final. However, if somebody raises one of those issues that have often been raised in international arbitration -- that the tribunal has been incompetent, has committed a gross violation of procedure -- in those few instances, the text permits appeal to the general machinery. In addition, the general machinery would have jurisdiction over the vast areas that are not covered by the special missions or tribunals, and would also be available to those parties who preferred the general machinery to a functional one."

This kind of jurisdictional structure corresponds very precisely to the concept of a functional federation of international organizations which we developed in our study. In this concept, the same specialized, functional organizations are involved as in the proposed dispute settlement system, namely, the International Seabed Authority, COFI, IOC, and IMCO. In principle, these should be used for the regulation and management of the uses of ocean space under their respective competence, even though, for this purpose, the process of restructuring, which they all have already initiated, will have to be accelerated, broadened, and coordinated. The taking on of dispute settlement functions, with the addition of appropriate machinery, mandated by Part IV of the SNT, is merely one aspect of the restructuring of these organizations required by the outcome of the Law of the Sea Conference.

Beyond this, however, the concept of functional federation of international organizations calls for general or integrative machinery -- among other things, to deal with the"vast areas that are not covered" by the specialized organizations.

The parallel goes even further.

The "general machinery" itself proposed in Part IV of the SNT -- the Law of the Sea Tribunal -- can establish special chambers dealing functionally with special problems, and the Tribunal itself and the special chambers can, in addition to judges, contain technical experts sitting with the tribunal, without voting.

Under the concept of functional federation of international organizations, the "integrative machinery" would similarly consist of functional "chambers" drawn from the Assemblies of the specialized or basic organizations. They would be coordinated or integrated by a general, or political chamber drawn from the General Assembly of the United Nations on a regional basis -- in a manner

analogous to that in which the "general machinery" of Part IV of the SNT would be elected by a special conference of States. There would be no objection, as a matter of fact, if the same special Conference of States, on a one-State-one-vote basis, were to elect both the Judges for the Law of the Sea Tribunal and the members of the general chamber of the "integrative machinery," both on a regional basis.

These analogies are not casual. Both concepts, that of the dispute settlement system and that of the functional federation of international organizations, are rooted in the very nature of the problems of the ocean environment and the management of its uses. They are also rooted in the existing structure of international organization and cooperation, on which the future must be based in some way.

The Santa Barbara seminar focused on another important point.

The SNT provides for a periodic meeting of States, as we have seen, to elect the fifteen Judges of the Law of the Sea Tribunal, "and when the meeting comes to elect the Judges," one participant commented, "they may want to decide to do some other things too."

In other words, the periodic special meeting of law-of-the-sea oriented plenipotentiaries of States could be regarded, in a way, as an ongoing Law of the Sea Conference, providing the kind of continuity, development, and assessment of observance performance, that will inevitably be needed for a Treaty as complex and as novel as the Law of the Sea Convention is bound to be. The special meeting presumably would be held every third year, since one-third of the Judges have to be elected every three years.

A proposal for a similar, periodic meeting of States to supervise the Treaty was proposed by Secretary-General Kurt Waldheim in Caracas in 1974.

Certainly it would be a lot better than no continuing body at all. Whether a triennial, brief meeting of all signatory States could in fact cope with the numerous and difficult problems that may arise in the wake of the Treaty, is another question, however.

Alternative suggestions, made by the seminar, included:

-- the establishment, by the Conference, of an Interim Committee for -- at least -- the period of ratification of the Treaty;

-- A Committee of Eminent Persons to prepare suggestions for the completion of the Conference mandate "to deal with all problems of the oceans in an interrelated way," a mandate which, even in the most optimistic hypothesis, cannot be fulfilled by the signing of a Treaty among presently conceived lines;

-- An UNCTAD type of continuing mechanism.

Objecting to the wide spread notion that something -- anything -- must be definitely terminated this year, or else we must proclaim failure, one participant commented: "I think the emphasis should be on machinery for continuing consensus rather than on what I call the fetish of treaties. ....Fortunately there is a chance here to create more of an UNCTAD kind of approach, a continuing conference... It should not come to an end there: it should not be wrapped up firmly in Caracas. It should be something seen as a continuing process of flexible legislative procedure, and the more flexible, the better."

VII. Summary of proposals emerging from the Santa Barbara Seminar.

We shall not attempt to summarize here the numerous proposals contained in our study. Summaries of these can be found at the end of each section. On the whole, they concern (a) detailed amendments to the SNT, to bring it into line with the requirements of the New International Economic Order; (b) detailed proposals for the restructuring of the Agencies which are to become the "basic organizations" -- which are beyond the scope of the present phase of the Law of the Sea Conference; and (c) detailed proposals for the "integrative machinery" which, in our view, is required. This is also beyond the present scope of the Conference.

Most of the proposals were reviewed favorably by the seminar, although some useful modifications were suggested, which will be incorporated in the forthcoming revised edition of the study.

We shall restrict ourselves here to the listing of a few proposals which emerged from the seminar and which it may be timely for the Conference to consider now:

1. A recommendation to FAO/COFI, UNESCO/IOC, and IMCO to initiate the process of restructuring in accordance with the requirements of Part IV of the SNT and to other requirements arising from the Convention, and to prepare the necessary constitutional amendments for consideration by their next forthcoming Assemblies.

a. A recommendation to COFI to request an annual report from the regional fisheries commissions.

2. A resolution to provide for continuing machinery to supervise the Treaty and complete the mandate of the Conference, either through a periodic meeting of Signatory States or through a structure of the UNCTAD type.

3. A resolution to appoint a Group of Eminent Persons or similar body to follow the process of restructuring of the Agencies, to make recommendations for the proper co-ordination and harmonization of this process and for the establishment of appropriate integrative machinery.

APPENDIX I

The Center for the Study of Democratic Institutions / The Fund for the Republic, Inc.

Conference on

THE NEW INTERNATIONAL ECONOMIC ORDER AND THE LAW OF THE SEA

February 4-6, 1976
10:00 a.m. - 3:30 p.m.

PARTICIPANTS

Leonore B. ABELE-EMICH
First Secretary
Permanent Mission of Austria to the United Nations

Harry S. ASHMORE
Associate, Center for the Study of Democratic Institutions

Gustaf ARRHENIUS
Professor of Oceanography, University of California at San Diego

Elisabeth BORGESE
Associate, Center for the Study of Democratic Institutions & Chairman, Planning Council of the International Ocean Institute (*Pacem in Maribus*)

Thomas S. BUSHA
Deputy Head, Legal Division
Inter-Governmental Maritime Consultative Organization

David DEESE
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James DOUGLAS
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Paul Bamela ENGO
Ambassador, Ministry of Foreign Affairs, United Republic of Cameroon, & Chairman, First Committee, United Nations Law of the Sea Conference

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Jan VAN ETTINGER
Director, RIO ("Reviewing the International Order") Project

APPENDIX II

APPENDIX III

Fifty Year Projections on Possible Revenue from Ocean Mining of Nodules for Recovery of Manganese, Nickel, Copper and Cobalt as Related to Funds Required to Achieve Tinbergen's Goals to Reduce Prosperity Ratio of Industrialized World to Developing World to 5:1 for South Asia and Tropical Africa and 3:1 for Latin America by year 2025

F. L. LaLue March 1976

Bases for Calculations

1. World value of Manganese, Nickel, Copper and Cobalt in 1975 - $10 billion

2. Rates of growth in values of nodule metals - 3% or 6%

3. Rates of growth of economies to achieve Tinbergen objective*

South Asia	8.2%
Tropical Africa	8.2%
Latin America	7%

TABLE 1*

Annual aid to developing world required from industrialized world to achieve Tinbergen's objective**

Year	Aid Required**
1985	$20 billion
1995	$50 "
2005	$120 "
2015	$230 "
2025	$550 "

Total aid required $7200 billion

TABLE 2

Projected annual value of nodule metals from 1975 base at different growth rates:

Growth Rate	Value in year 2025
3%	$43.8 billion
6%	$184.2 "

* J. Tinbergen "Two Clubs of Rome" Towards Global View of Human Problems, Tokyo, 1973

** Mesarovic and Pestel - Second Report to the Club of Rome, 1974

TABLE 3

Possible Contributions of Revenue from Ocean Nodules to Tinbergen Objective in year 2025 Assuming a Profit of 20% on Sales of Nodule Metals and Distribution of 100% of This to Developing Countries with Different Percentages of World's Needs Coming from Ocean Nodules

Percentage of World's Needs Coming from Ocean Nodules	Revenue		Percent of Requirement for Tinbergen's Objective	
	3% Growth rate	6% Growth rate	3% Growth rate	6% Growth rate
10%	$0.88 Billion	$3.7 Billion	0.16	0.7
25%	2.2 "	9.2 "	0.4	1.7
50%	4.4 "	18.4 "	0.8	3.4
100%	8.8 "	37. "	1.6	6.8

It would appear from Table 3 that disposable revenue from exploitation of metals from ocean nodules for the exclusive benefit of developing countries could contribute not more than 6.8% of the funds requited to achieve the Tinbergen objective in the year 2025. Even this percentage would require the unlikely situation that the ocean nodules become the only source of the world's needs for nodule metals.

Taking into account that the rate of growth of demand and revenue for nodule metals may be closer to 3% than 6% and that the percentage coming from nodules is likely to be closer to 50% than 100%, the contribution of revenue from nodules to achieving the

Tinbergen objective seems likely to be less than 3% of what is required.

Even the 3% figure becomes questionable because of the disparity between the ratios of world needs for the individual metals and the ratios of their occurrence relative to each other in nodules. The greatest disparity occurs in the cases of the other metals as related to copper. For example, satisfying the total world's needs for copper from nodules could provide as much as 100 times recent needs for cobalt, and as much as 15 times the needs for nickel. Similar distortions occur as well, with manganese.