SOME COMMENTS

ON

THE NEW INTERNATIONAL ECONOMIC ORDER

AND THE LAW OF THE SEA

by

Elisabeth Mann Borgese

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INTRODUCTION

After the turmoils of two World Wars during the first half of this century, the second half seems to be characterized by a profound transformation of international relations. This process has two components:

-- the technological revolution which has created activities whoseconsequences far transcend the boundaries of national jurisdiction; which make of this planet a small and interdependent place; and which make it obligatory for us to rethink time-hallowd concepts, such as property or sovereignty; and

-- the emergence of the new nations in Africa, Asia and Latin America, changing the political and economic equilibrium of the international community and making new demands on international law and international organization.

These changes, obviously, affect the activities of States both on land and in the oceans. Due to peculiar circumstances, the revolution in international relations began in the oceans. Its seat is the Third Unived Nations Conference on the Law of the Sea.

The Conference goes back to the initiative of Malta in 1967 when Ambassador Arvid Pardo proposed that the oceans and their resources, beyond the limits of national jurisdiction, be declared the common heritage of mankind, that the General Assembly adopt a Declaration of Principles governing the peaceful uses of the deep seabed, and that this Conference be called to embody the Principles in a comprehensive treaty and the necessary institutional framework.

After six years of preparatory work, the Conference embarked, in December, 1973, on the momentous task of giving a new order to the oceans, as part of, and conceivably model for, a new order for the world. Four substantial sessions have been held since then: Caracas, summer 1974; Geneva, summer, 1975; New York, spring, 1976; and New York, summer, 1976. Probably there will have to be two more substantial sessions before the great work can be concluded.

The search for the new international order on land, in the meantime, went other ways. What Malta did for the oceans, Algiers and Mexico did for the land. It was on the initiative of Algiers that the Sixth, and then the Seventh Special Session of the General Assembly of the United Nations was called (1974, 1975) which adopted a Declaration on the Establishment of a New International Economic Order and a Programme of Action. It was Mexico who was responsible for the drafting and adoption of the Charter of Economic Rights and Duties of States in 1974. The quest for a new international economic order has been pursued by various organs and institutions since then, among which one might mention, in particular, UNCTAD (Nairobi, 1976) and the Fifth Conference of Heads of State or Governments of Non-Aligned Countries (Colombo, 1976), as well as a great number of efforts at the nongovernmental level (RIO, 1976).

While the early documents of the New International Economic Order still mention the Law of the Sea[1] it is unfortunate -- it is irrational -- that the two branches of this one great historical development, instead of interlinking and reinforcing each other, have somehow managed to drift apart, even to contradict each other.

Some spokesmen for the Law of the Sea Conference have referred in formal statements to the New International Economic Order.[2] In fact, however, the Conference on the Law of the Sea has done very little in the direction of building a new international economic order. The suggestion that it should do so tends to be brushed aside, especially by the delegations of the developed countries, as an intrusion or a damaging distraction. On the other hand, the law of the sea and ocean management has almost totally disappeared from the declarations and programmes of actions adopted by the other fora engaged in building the new international order on land. The two developments are moving, as it were, on separate and often divergent tracks. This is tragic, both for the new international economic order and the law of the sea.

There are several reasons:

-- first, the law of the sea appears to be a highly specialized and rather complicated matter, an exercise for lawyers mostly, and most people engaged in the general effort of building the new economic order simply have not done their "hom-work" in the law of the sea;

-- second, the bureaucratic division of labor within States is such that it is difficult to integrate policies. This compartmentalization is so entrenched that even within the marine sector of many Governments it is difficult to form a unified policy, and the divergent interests of shipping, mining, fishing, the marine sciences, and the military are hard to harmonize. Few countries have made as much as a beginning to harmonize the marine sector as a whole with the other sectors of international enonomic policy;

-- third, the marine revolution, that is, the penetration of the industrial revolution into the oceans, is of such recent date that its far-flung implications are not yet generally understood;

-- fourth, the law of the sea has become a very controversial, divisive issue. Such as it has developed over the past few years, it threatens to divide developing nations: coastal from landlocked States, mineral importing from mineral exporting States, Latin American from African States. Yet it is these States, those who most need a change in the structure of international relations, on whom both the building of the new international economic order and the making of the law of the sea depend.

INTERACTIONS

The relations between the emerging new law of the sea and the emerging new international economic order ought to be examined in two ways: What is the contribution of the new law of the sea to the building of the new international economic order? And: How far do the Parts of the Revised Informal Single Negotiating Text fulfil the requirements of the resolutions and of the Programme of Action adopted by the Geeneral Assembly as well as of the Charter of Economic Rights and Duties of States?

Tentatively, one might make a check-list of ten points on which the documents of the Sixth and Seventh Special Session of the General Assembly and the Charter of Economic Rights and Duties of States require action from the Conference on the Law of the Sea:

1. The development of landlocked and developing island States;

2. The study of raw materials and development;

3. Permanent sovereignty over natural resources and international cooperation. In particular: efforts to ensure that competent agencies of the U.N. system meet requests for assistance from developing countries in conneciton with the operation of nationalized means of production;

4. Unexploited or underexploited resources which, put to practical use, would contribute considerably to the solution of the world food crisis;

5. Strengthening of economic integration at the regional and subregional level;

6. Formulation and implementation of an international code of conduct for multinational corporations;

7. Transfer of technology;

8. Equitable participation of developing countries in the world shipping tonnage;

9. Enhancement of participation of developing countries in decision-making bodies in development-financing and international monetary problems;

10. Definition of a policy framework and coordination of the activities of all organizations, institutions, and subsidiary bodies within the U.N. system for the implementation of the Programme of Action and the New International Economic Order.

These points could be grouped under four main headings. We shall examine, under each heading, what the new Law of the Sea does, and what it could do, to advance these goals and maximize benefits for developing countries.

I. RAW MATERIALS AND DEVELOPMENT

This heading covers points 2, 3, 4, 6, 7, and 9.

A. Nonliving Resources

1. The international area

The establishment of the International Seabed Authority for the management of the resources of the international seabed is, potentially, the greatest and most innovating contribution of the new Law of the Sea to the building of the New International Economic order.

The deficienciesof Part I of the Revised Single Negotiating Text, however, are numerous and quite fundamental. It is clear that the First Committee, dealing with this matter, has come to a deadlock. In somewhat blunt terms, the alternatives before the Committee are one that is unworkable because it is unacceptable, and another that is unacceptable bec ause it is unworkable.

The position of the industrialized States who insist on free access to the resources of the area under the jurisdiction of the Authority, under a so-called "contract" from the Authority, which the Authority can in no way refuse, means simply a return to the "licensing system," that reduces the Authority to a weak pro forma entity and relegates the concept of the common heritage of mankind to the realm of rhetorics and myth. It does not appear that this alternative is acceptable to the majority of States. It is therefore not a workable option.

On the other hand, the position of the majority of developing States advocating the Enterprise system in its present form is not viable: it is not workable, and therefore, not acceptable.

One of the great challenges in building the Authority is to find a new synthesis, as it were, between economic and political processes. Such as the Authority is constructed now in the Re-

vised Single Negotiating Text, however, these two processes appear confused. The Authority is a political body, but it has institutionalized, in its decision-making organs, interest groups: poor and rich States, producers and consumers. The Enterprise, on the other hand, which should be an economic, operational entity, is instead largely a political body, duplicating the structure of the Authority itself. Like the Authority, it is non-operational and depends on "contracts" with States and companies. The Enterprise, such as it is conceived in the Text, is a very costly and unwieldy entity, not likely to be very effective.

Hence the search for a compromise. But can there be a compromise between an unacceptable and an unworkable alternative? Such a compromise probably would be both unworkable and unacceptable.

This is in fact just what the "parallel system" is. The "parallel system," proposed by the United States and other industrialized nations, under which both the Authority's Enterprise and States and their companies would operate on equal terms under the Authority, not only puts the Enterprise into a position of competition which it simply cannot sustain, it also makes it unnecessary. For if the States and Companies who have the technology and the means are free to mine all the minerals they need for their own use and for international trade, where is the incentive for the international community to pour aid into an artificial "Enterprise"? Secretary of State Kissinger's offer to "finance the Enterprise" in return for the acceptance of free access to States and their companies means, in simple terms, to try to buy such free access -- which, of course, may be worth quite a lot. It also means to offer to pay with public funds for private profits. But that is not all. The "parallel system" completely changes the significance of the Authority's Enterprise.

The Authority's Enterprise was to embody a new form of active, participatory cooperation between industrialized and developing countries. Sharing in the common heritage of mankind was to replace the humiliating concept of foreign aid. This was to be a breakthrough. This was to be the historic significance of the Enterprise.

Now, by a sleight of hand, we are faced with a completely different concept. The industrialized States and their companies "do their own thing." They take what they need or want on the basis of "free access,"[3] provided merely with a "contract" which the Authority cannot refuse. The Authority's Enterprise becomes the status symbol of the poor. It depends, once more, on aid from the rich nations and grant-giving institutions. Do the poor nations really need this kind of aid? There might even be more useful ways to spend such aid money than deep seabed mining which, in development terms, is certainly not the thing developing nations need most.

Thus the "parallel system" in any form or fashion or disguise is unacceptable and unworkable.

This means that on this one point we really need a fresh start, a breakthrough. Both alternatives have to be abandoned.

Here the question arises: What is an Enterprise? Is it a building? Must it be a fixed structure that needs to be maintained even when it is not operational? Or can it be conceived as something functional, operational, that ceases when its function or operation ceases? Perhaps the second concept is more practical, more economical. An Enterprise, in this case, would be established only in the context of precise projects of exploration and exploitation. There would not only be one Enterprise but, between now and 1985, there might be a dozen. Their operation, furthermore, need not be restricted to the international area. They might assist developing coastal States in the exploitation of nodules in areas under national jurisdiction. This may be an important consideration to which we shall return in the next section.

If this approach were persued, Article 41 of the Single Negotiating Text would have to be redrafted somewhat along the following lines:

Article 41

The Enterprises[4]

1. Enterprises operating in the Area must operate under a charter from the Authority.

2. Enterprises under a charter from the Authority are governed by a Board whose members are appointed in the following manner:

(a) At least one half plus one of the members are appointed by the Assembly of the Authority, upon the recommendation of the Council, in accordance with Article 28 (2) (iii). In its appointments, the Assembly shall give special regard to the participation of developing countries and of organizations representing consumers and labor.[5]

(b) Up to one half minus one of the members are appointed by States Parties, or State enterprises, or persons natural or juridical which possess the nationality of States Parties or are effectively controlled by them or their nationals, or any group of the foregoing, in proportion to their investment in the Enterprise.

3. The Authority must provide at least 51% of the investment capital for any Enterprise operating under a charter from the Authority.

4. Profits shall be apportioned between the Authority and the associated States or State enterprises or persons natural or juridical which possess the nationality of States Parties or are effectively controlled by them or their nationals, or any group of the foregoing, in proportion to their investment.

5. Enterprises shall have international legal personality and such legal capacity as may be necessary for the performance of their functions and the fulfilment of their purposes. Enterprises shall function in accordance with their Statutes[6] as set forth in Annex II to this Part of the Convention, and shall in all respects be governed by the provisions of this Part of the Convention.

6. Enterprises shall have their principal seat at the seat of the Authority or at any of the regional centers or offices established by the Authority.[7]

b. Practical implementation

(i) The applicants

As is well known, there are at present four major international consortia ready to go into production.[8] They should apply for a charter from the Authority; they could do so jointly, forming one single Enterprise operating in the Area, or they could do so singly. Accordingly, there might be from one to four such Enterprises operating in the Area. In addition there would undoubtedly by State Enterprises applying for a Charter: the U.S.S.R. would immediately establish an Enterprise operating in the Area, either alone, or in association with State enterprises from other socialist countries of Eastern Europe; China, likewise, might wish immediately a Charter from the Authority. Between 1985 and 2000 one might envisage a dozen Enterprises chartered by the Authority under Article 41 and in accordance with Annexes I and II. All other countries will participate in, and benefit from, these Enterprises through the provisions of Article 41. Developing countries will be represented on the Governing Boards of all Enterprises.

(ii) The Statute of the Enterprises

The existing consortia are governed by comprehensive institutional arrangements[9] which must be taken into due account in the drafting of the Statute for Enterprises operating in the Area. The same applies, obviously, for the statutes of State enterprises, which must equally be taken into account. At the same time, the Statute for the Enterprises operating in the Area must make provision for the equitable transfer of technology to the Authority and contain other aspects of an enforceable "code of conduct" for TNEs in accordance with the recommendations of the United Nations. Certain elements (e.g., representation of labor and consumers on the Board) might be taken over from the Statute for European Companies. It is likely that the Statute for Enterprises operating in the Area will have to be considerably

more complex and detailed than the one proposed in Annex II of the RSNT.

(iii) Production program

Projections for production from the international area vary according to the assumptions on which they are based. They may have to be modified rather drastically if production takes place in areas under national jurisdiction. It is already certain that this will be the case.

Without reference to production in areas under national jurisdiction, the Metallgesellschaft makes the following projection:[10]

> In our view, a manganese nodule project can be operated economically by an international consortium made up of three or four partners if three to four million tons per year are extracted in the first stage. On the basis of a working time of 300 days per year of the vessel, the mining system should have a capacity of 10,000 tons of manganese nodules a day. In the final stage, the mine should reach a capacity of about 10 to 12 million dmt (dry metric tons) per annum to form a reasonable contribution to each partner's raw material supplies.

Mining engineering[11] has the following estimate of nodule production (million dry metric tons)

Group	1979	1980	1981	1982	1983	1984	1985
Deepsea-OMA		1		1		1	
Kennecott			2		1		
Hughes	1		1	1			
INCO-AMR Sumitomo				1			1
Multinational							1
Cumulative total	1	2	5	8	9	10	12

The total production by 1985 would be 12 million tons.[12]

Johnson and Logue[13] project the following processed output from nodule mining for 1985 and 2000:

Mineral	1985	2000
Manganese (thousands of short tons)	1,500[a]	15,000[a]
Copper (thousands of short tons)	180	900
Cobalt (thousands of pounds)	79,500	405,000
Nickel (millions of pounds)	420	2,100

[a]This projection assumes that only one-third of the operations extract manganese.

(iv) Production limitation

The production limitation provided for in Article 9 of the Revised Single Negotiating Text is meaningless. Based on a growth rate of six percent, the total world nickel demand in 1985 would be 2,150 million pounds. Production from nodules will amount to only 420 million pounds. 1,730 million pounds would have to be produced from land. Total land-based production in 1973 amounted to 1,444 million pounds. There is a reasonable margin to increase land-based production.

The production of 420 million pounds of nickel from nodules, however, would yield 79.5 million pounds of cobalt. The projected world demand for 1985 is for 94.6 million pounds of cobalt, while the projected land-based capacity is 82.9 million pounds. Thus there would be an overproduction of some 67 million pounds. This might lead to a collapse of prices; or land-based production would have to be drastically curtailed, or the Authority should be able to stockpile. By the year 2000 the overproduction would assume irrational dimensions. Probably Frank Laque was right when he noted[14] that "nodule exploitation operation aimed at satisfying a major demand for cobalt would encounter minimum difficulty in finding a market for associated metals. This suggests, further, that the early stages of nodule exploitation might well be on a scale geared to the world's need for cobalt."

Thus it is suggested that the provision of Article 9 and Paragraph 21 of Annex I of Part I of the Revised Single Negotiating Text should be replaced with a provision making it the responsibility of the Authority's Economic Planning Commission to make long-term and short-term production plans based on worldwide demand for all the minerals involved and on all other relevant factors. If the Authority owns 51% of the investments and is entitled to 51% of the profits, it is not

likely that it will want to limit production beyond reason. It is obvious, however, that the production plans of the Enterprises operating in the Area must be brought into accord with the over-all plans of the Authority. Mining the minerals of the oceans may indeed be the beginning of a revolution in the mining industries. Experience with other aspects ofthe technological revolution shows that such developments cannot be halted. The Seabed Authority cannot, and should not, halt it. What the Seabed Authority can, and must, do is to see to it that this aspect of the technological revolution does not benefit only the rich and technologically developed nations but that it benefits all: advancing the transformation of developing mineral-exporting countries, still dependent on a post-colonial extraction economy, into industrialized consumer countries.[15]

(v) Investment and operating costs of the Enterprises

Metallgesellschaft[16] has the following estimate:

> The work to be performed during the four year research period is expected to cause a total expenditure of 30 to 35 million U.S.$, of which about 35 percent fall to the share of mining and 15 percent to the share of processing. The existing international consortia indicated amounts ranging between 30 and 50 million U.S.$. These costs are, however, moderate as compared with the investment required for the realization of a manganese nodule project. Although it is difficult in the present stage to foretell the exact amount to be invested, rough estimates range between 400 and 500 million U.S.$ at an initial production rate of 4 million dry metric tons of ore per year.

Li and Tinsley[17] estimate a total investment of between 750 and 800 million U.S. $ between the existing multinational consortia plus the Soviet Union on the assumption of an 11 million tons per year production by 1985.

The U.S. Department of Interior[18] assumes "a 3 million ton/year metallurgical processing facility located on the West Coast of the United STates, receiving materials input from two mining recovery units operating in the North Central Pacific." The total investment would range between $460 and $700 million 1975-dollars; the working capital, between $40 and $50 millions; annual operating costs, between $120 and $165 million 1975-dollars.

Assuming even a total investment of one billion dollars by 1985 -- including Enterprises chartered in cooperation with the Soviet Union and the Peoples Republic of China -- the arrangement proposed here would make the financing of these Enterprises quite feasible. To use round figures: $ 490,000,000 would come from industrialized States and established Consortia: this is well below their anticipated expenditures. $ 510,000,000 would have to be provided by the Authority. This would be reduced by the value in situ of the nodules which are the common heritage of mankind and vested in the Authority. The remainder could be

loaned by the World Bank. It is well within the range of project investment financing loans undertaken by the Bank; and the fact that Enterprises would not start ex nihilo -- without capital, without technology, without managerial skills -- but that these would in fact be provided by the industrialized States and existing consortia, would be a great encouragement to the Bank. One could also imagine, however, that the Bank provides, let us say, one half of the funds required by the Authority, and that the rest is put together by a number of national or private banks, e.g., from the OPEC countries.

(vi) The Revenues of the Enterprises

Mining Engineering[19] estimates gross revenues from a million dry metric tons per year mine in millions of U.S. $ (1974-dollars) as follows:

Manganese (if recovered)	250,000 mt @ 595	$148.7
Nickel	11,000 mt @ 1.90 per lb	45.1
Copper	9,000 mt @0.75 per lb	14.9
Cobalt	2,000 mt @1.75 per lb	7.7
Annual gross revenue		217.4

For an annual production of ten million tons, the annual gross revenue would be 2,174 million U.S. dollars. Deducting from this a working capital and annual operating costs totalling maximally $645 millions, the net revenue would amount to $1,529 million. Of these, 51% would go to the Authority, i.e., $766 million.

Johnson and Logue[20] calculate the total net revenue from the 1985 output from deep sea mining as 1,016.70 million dollars, the Authority's share of which would be $518,517,000. This would certainly enable the Authority to repay the World Bank loan in a reasonably short time.

(vii) Conclusion

The stablishment of Enterprises operating in the Area under a charter from the Authority, with all the institutional and economic implications noted here, would have a number of advantages.[21]

It would effectively separate business from politics. The Enterprises would really be Enterprises: not political bodies. They would be functional and operational: not simply duplicating what the Authority's Council should do. They would represent interest groups: investors and producers in proportion to their investment; consumers; developing nations; management; labor. Thus the representation of interest groups in the Authority's

Council could be avoided: representation in the Council might be based simply on the criterion of regional balance. The Council would be a political organ: not half business, half politics.

Second, all production in the Area would be effectively brought under the control of the Authority, which would control decision-making and investment in all Enterprises and get over half of the profits on all production. The proposal introduces a unified system which, however, is flexible enough to incorporate any form of association the majority of States might think desirable: for while the Authority would have to appoint at least half plus one of the members of the Governing Board of all Enterprises and provide at least 51% of the investment, there is nothing in the proposed system that would prevent the Authority from appointing all members of the Board and provide all of the investment: if and when the Authority has the funds and the technology and find it useful to do so. In that case, such a totally internationally owned public Enterprise could enter into service contracts with States or companies, according to the formulas elaborated by the First Committee. At such a time, and in such circumstances, such an Enterprise would be functional and operational and could realistically, and within the same unified system operate side by side with the other Enterprises chartered by the Authority. It would not be an abstract construct in search of funds and in search of work. Although it is indeed not likely that the Authority will establish such an Enterprise, at least for the next 25 years, this point is of crucial importance to make the system acceptable to developing States. The advantage of the whole system to the developing States is that if they do not choose to establish a hundred percent Authority-owned and controlled Enterprise for the time being, activities do not switch thereby to the other track of a "parallel system," railroading a licensing system, but that they remain within a unified system within which the Authority controls and co-manages everything on a sliding scale ranging from 51% to 100% control.

Third, the ominous problem of how to "finance the Enterprise" would be solved.[22] Half of the capital and technical know-how would in fact come automatically with the consortia and State enterprises applying for a charter; this, in turn, together with the fact that the resource is the common heritage of mankind, vested in the Authority (value of the nodules in situ) would be a sufficient guarantee for the World Bank and other institutions to advance the remaining needed capital.

Fourth, the proposed system goes a long way towards bringing multinational corporations under international control, a need keenly felt by the international community. The pattern of participational cooperation between rich and poor nations it provides can indeed be applied to all kinds of other enterprises. One could imagine, at a later stage, that it be applied to international shipping and liner conferences; to international distant-water fishing operations, and to transnational oil enterprises.

Finally, the proposed system would enhance the participation of developing countries in decision-making bodies in development financing and international monetary problems. As we pass from the stage of grant-giving and foreign aid in development-financing to a stage of participatory cooperation and sharing in the common heritage, the role of the new international institutions and the Enterprises in development-financing is bound to increase, that of grant-giving institutions is bound to decrease. And in this new institutional framework the developing nations will fully participate in decision making.

The establishment of Enterprises operating in the Area under a charter from the Authority thus would be an important and concrete first step towards the building of a new international order.

During the final meeting of the Fifth Session of the Law of the Sea Conference, Nigeria introduced a proposal in the First Committee. As Chairman Engo described it in his final report to the Conference[23] Nigeria suggested "in effect a joint venture system applying to all activities of exploration and exploitation in the Area; this...would avoid the problem of the types of relationships proposed between the Authority on the one hand and States and private parties on the other."

The Nigerian proposal, which consists of thirteen paragraphs, provides that States Parties, persons natural or juridical, have a right to enter into a joint venture with the Seabed Authority and that the Seabed Authority shall be an effective partner to the joint venture. This proposal, it has been reported, met with the approval of Secretary of State Kissinger. Thus there appears to be the possibility of a breakthrough. The concession the industrialized States would have to make would be to accept the however theoretical possibility of the Authority's establishing a 100 percent Authority-owned and controlled Enterprise. The concession the developing States would have to make would be to re-think their own concept of the Enterprise and to accept to transform it from a rigid, structural concept to a functional, operational one.

If a breakthrough on this point could be made during the next session of the Conference, it is quite possible that the work of the First Committee could be successfully concluded within the year. A breakthrough in the First Committee, furthermore would be a breakthrough for the Conference as a whole. One of the points that became clear during the Fifth Session was that the success or failure of the First Committee will determine the success or failure of the Conference.

2. Areas under national jurisdiction

Our perception of the role of raw materials in the development process is undergoing various changes. On the one hand,

there remains the basic fact that such materials -- food and fiber as well as minerals -- are essential, and that the draining of profits and income from the exploitation of such materials by foreign companies under the aegis of a postcolonial extraction economy has been one of the basic obstacles to development. In this sense, the work of the Commission on Permanent Sovereignty over National Resources and the Report of the Secretary General[24] are of basic importance and mark a step forward in the emancipation and development of the non-industrialized nations. The numerous U.N. Resolutions, intended to strengthen the application of the principle of permanent sovereignty over natural resources stand, and there is no going back on them.

If we are serious about building a New International Economic Order, we must look forward, however, not backward, and probe deeper.

d. Resource ownership, sovereignty

There are three terms involved in the principle of permanent sovereignty over natural resources: natural resources, ownership, and sovereignty. All three are undergoing a process of transformation, under the impact of technological, economic, and political developments. By the end of the century, one cannot look at them in the same way one did in the 1950s.

The 'seventies have taught us to consider natural resources not in isolation, one by one, but as a "package" of interdependent parts, the values of which rise and fall together and can be "indexed." The "package," however, is even more comprehensive than that. For it includes technology and social infrastructure, comprising both capital and skilled labor. It is these three factors together that produce wealth and development. The relative importance of each factor varies, according to time and place. As we move up the ladder of development, the relative importance of natural resources first increases, then decreases: advanced technologies, cutting down waste and availing themselves of recycling techniques and of synthetics, are less resource-intensive than intermediate ones. Without the presence of all three factors, however, resources alone are not conducive to development.

If a resource is considered part of this wider package, including technology and social infrastructure, it becomes clear that it cannot be "owned" in the classical, Roman-law sense. Resources in this context become part of something that can be used and managed, but not owned. In other words, all natural resources are approaching the legal status of the resources of the deep sea, which are the common heritage of mankind, with its five legal/economic attributes, that is: resources that are the common heritage of mankind (1) cannot be owned; (2) require a system of management; (3) postulate active benefit sharing (not only of financial profits but of

management and decision-making); (4) are reserved for peaceful uses; (5) must be preserved for posterity.

Sovereignty, finally, is taking on a new dimension, and that is participation: participation in the making of decisions that directly affect the citizens' wellbeing. A State that does not participate in the making of such decisions -- e.g., concerning man-made climatic changes, changes resulting from pollution, or the effects of macro-engineering beyond the limits of its own jurisdiction -- has for all practical purposes lost its sovereignty. International organization, offering a forum for participation in decision-making in matters of transnational impact, thus does not detract from national sovereignty; it is a condition for its preservation and assertion. Sovereignty, in the relations between State and the international community, just like freedom in the relation between individual and society, is not conceived here as something pre-existing, something static. It is conceived as something dynamic, that has to be created and continuously recreated in the relationship between the part and the whole, between State and international community. This concept is applicable to a relationship of conflict, where sovereignty asserts (creates) and transcends itself in the threat or use of war; and it is applicable to a relationship of cooperation, where it asserts (creates) and transcends itself in the participation in decision-making. Sovereignty thus is not abolished, it is transformed assuming the new dimension of participation.

Thus while there is no going back on the principle of permanent sovereignty over natural resources, it is clear that the ongoing transformation of the concepts of resources, ownership, and sovereignty will necessitate a rethinking of the implications of that principle. Transnational or global planning for basic resources like food and energy, which is an essential tool for the building of the New International Economic Order, must be based on this new conception of resources, ownership, and sovereignty.

A growing number of experts[25] have stressed the fact that there can be no effective planning and management of fisheries at the national level without effective planning and management at the international level. The two systems must interact, complement each other: they must "knit."

Here we have stressed the need for planning with regard to the mineral resources of the international seabed. We need not stress, because it is self-evident, that any such planning would be totally ineffective if it were to take place in vacuo, i.e., without planning for the production and marketing of minerals in areas under national jurisdiction, and that the two systems of planning must interact, complement each other, "knit." International planning, however, cannot be applied to resources in areas under national jurisdiction under the obsolete concept of "ownership" and "sovereignty." It requires the new dynamic concept of the common heritage of mankind and

participatory sovereignty. There are, however, two prerequisites: (1) Not only natural resources must become common heritage of mankind but also science and technology; and (2) the management of any resource or technology that is the common heritage of mankind requires the establishment of an international decision-making organ in which all users and producers of the resource or technology participate, just as the management of the common heritage of the international seabed required the establishment of the Seabed Authority and of its Enterprises.

6. National policies of Actions and International Institutions

The Programme of Action adopted by the Sixth Special Session of the General Assembly calls for efforts to ensure that competent agencies of the U.N. system should meet requests for assistance from developing countries with the operation of nationalized means of production.

This is essential. The nationalization of resources by developing countries requires as a complement or counterpart the strengthening or establishment of international institutions or agencies to assist them in the use of these resources. In the absence of such institutions or agencies, a developing country, even if it has nationalized its resources and established a national company, will have to fall back on dependence on the services of private multinational companies. Thus the revenues accruing from the exploitation of such natural resources are shared between the country that "owns" the resources and the private sector of a rich country, thus further enriching the rich.

Suppose, on the other hand, that there were public international Enterprises for oil, such as the ones projected for deep-sea mining. There is nothing in the RSNT to prevent the International Seabed Authority from establishing such Enterprises, which could assist developing nations in the exploration and exploitation of their resources: in this case the natural wealth of the developing country would be shared between that nation and the international community which would plow profits back into development. It is obvious that both the developing country and the international community would be better off for it.

The real importance of the Seabed Authority's Enterprises is perhaps not in the mining of manganese nodules which, although important and profitable, still are and will remain of marginal importance in the total picture of the new international economic order. The real importance of the Enterprises may be that they provide a new form of active, participatory cooperation between industrialized and non-industrialized nations. If this were so, two consequences should be drawn:

1. The International Seabed Authority should charter Enterprises, within the unified joint-venture system described above, not only for the exploitation of nodules in the international area, but also for the exploitation of nodules in areas under national jurisdiction. The coastal State under whose jurisdiction the nodules are located should, in this case, appoint half plus one of the members of the board of directors of the Enterprise, provide 51% of the capital investment, and take 51% of the profits. Developing nations should, through their own appropriate fora, resolve to explore and exploit nodules under their jurisdiction through such Enterprises (joint ventures with the International Authority) rather than through private consortia on a bilateral basis. This is essential for the success of the International Seabed Authority and the building of the new international economic order.

2. The establishment of other public international Enterprises, operating under a charter from an international authority, whether in the international area or in areas under national jurisdiciton in cooperation with coastal States, ought to be considered as soon as possible: first of all for oil and gas, which constitute the real wealth of the seabed, for years to come. If the new law of the sea is to make a real contribution to the building of the New International Economic Order, it must mobilize the real wealth of the oceans for this purpose. The real wealth of the oceans is in oil, gas, food, and shipping.

B. Living Resources

1. Areas under national jurisdiction

There are vast and little exploited living resources off the coasts of some of the developing countries in the Southern oceans. They could make a considerable contribution to the solution of the world's food crisis.

For the time being, some developing countries are not in a position to do the necessary research for the conservation and management of these resources. Yet, Article 51 of Part II of the Single Negotiating Text provides that the coastal State shall promote the objective of optimum utilization of the living resources in the exclusive economic zone, and that it shall determine its capacity to harvest the living resources. Where the coastal State does not have the capacity to harvest the entire allowable catch, it shall, through agreements or other arrangements, give other States access to the surplus of the allowable catch.

Recently it has been pointed out[26] that this provision might might not at all be favorable to the economic interests of developing countries.

It was said that if a fishery source was not fully exploited it would in some sense be "wasted." From this it would follow that a coastal State should not be permitted to leave the living resources in its economic zone less than fully exploited, and this is in fact what Article 51 provides for. Mr. Holt, on the other hand suggests that the idea of waste is false and that it derives from a partial view of the dynamics of the living resources. He points out that something less than full use would be to the benefit of the developing countries. "They, on the whole, are the late-comers to modern fishing. They can develop best when stock levels are higher rather than lower. They cannot afford to waste resources of energy, metals, fibres, and the other natural resources used up in fishing, through investment in excessive capacity. Their enlightened self interests are therefore on the side of ecological sense and of economic sense in the long-term. They will not lose food potential in this way, because the resources which would otherwise have gone into excess hunting capacity could be used for improving their culture systems for food -- whether these are on land, or in the coastal zone."

Thus the optimum yield (not optimum sustainable yield) would have to be determined not only by ecological factors and their interdependence but also by economic and social factors. If a developing country were forced to yield its "surplus" by entering agreements with foreign companies it would in fact lose immediately what it was supposed to have gained with the acquisition of an economic zone. The ratio of fish harvested and consumed by rich countries and poor countries[27] would remain unchanged. The establishment of an economic zone would have contributed very little, if anything, to the building of a new international economic order.

Here again the nationalization of resources by developing countries requires as a complement or counterpart the strengthening or establishment of international institutions or agencies to assist them in the use of these resources.

Distant-water fishing is an international activity, involving big companies in possession of highly sophisticated technologies and huge capitals. These companies, in their international activities, might well be treated in exactlythe same way as the mining consortia: i.e., it could be established that only Enterprises under a charter from an international Authority -- in this case, a restructured COFI (FAO) or a regional Commission -- could engage in international operations. The international charter or statute could contain provisions similar to those proposed for nodule mining Enterprises in these pages. This would be another important step in consolidating the New International Economic Order. It would have a bearing on points 3,4,6, and 7 of our checklist.

This applies not only to traditional commercial fishing. Even more so, it applies to the development of aquaculture and fishfarming, both in coastal areas and on the high seas, which could make an enormous contribution to the world's food supply.[28]

The development of aquaculture, however, is proceeding very slowly, in spite of the fact that continuous advances are being made in the control of life cycles of animal species suitable for farming; in biological engineering to ensure efficient large-scale production; in the control of diseases and predators, in the handling of wastes; in marketing techniques and in site selection. In a recent paper[29] Simon Williams points out that the real constraint on aquaculture is institutional. "I suspect that no comparable advances are being made in organizing the business of aquaculture so that its benefits ensure the maximum satisfaction of the people of a host country...I also suspect that ventures in aquaculture are largely being considered from the traditional investment viewpoint of profit on equity -- that advances in the sciences and technology of aquaculture are far outdistancing the actual application of knowledge to commercial activities."

Aquaculture, Williams points out, is capital intensive and requires sophisticated technologies and skilled management, which is often not available in developing countries. The produce is mostly too costly for local consumption. Thus the structure of the business may have to be basically changed. "New aquaenterprises may have to be designed so that full ownership transfers, over not too long a period, in a formal, open, politically as well as legally acceptable way, to people who are employed by, or whose lands are used by, or who live adjacent to the aquafarm." Management responsibility, he concludes, may go beyond the distribution of cash benefits. "The very existence of the aquafarm and its resources of staff, technology, and management skill may require application to the general problem of economic development among the people in the area of the enterprise..." .

2. <u>The international area</u>

Aquaculture, in a variety of forms, can be carried out in the high seas as well as in coastal areas. But the Law of the Sea Conference has paid very little attention to this potential development, and there is thus far no international convention which establishes a legal system with respect to the potential use of the waters of the high seas in activities such as aquaculture.[30] "There is no doubt that it would be highly desirable for the United Nations or some other world authority to undertake the task of establishing such a legal system."

Another question that should be raised in this context is the development of unconventional living resources in international ocean space, such as squid or Antarctic krill. This should be developed through international cooperation. This vast potential -- which, with presently available technologies, could multiply food from the oceans by a factor of four or five -- is not touched upon by the Revised Single Negotiating Text. It requires, again, the creation of an effective international management system for fisheries, through the appropriate structural changes in COFI (FAO) and the integration of the activities of the regional or sectoral fisheries commissions. To maximize benefits for the international community and especially for developing countries, only Enterprises operating under a charter from an international Authority should be allowed to operate in the waters of Antarctica.

II. PARTICIPATION OF DEVELOPING COUNTRIES IN THE WORLD SHIPPING TONNAGE

This covers point 8 on the checklist.

No provision whatsoever is made in the Negotiating Texts for the equitable participation of developing countries in the world shipping tonnage. It is difficult to see how this could be done in Part II, dealing with navigation, such as it now stands. Perhaps at least a reference to the problem could be made. When the Conference on the Law of the Sea, or its successor, takes up the question of restructuring and integrating the activities of the Specialized Agencies active in ocean space,[31] this problem ought to be considered in connection with the activities of the Inter-Governmental Maritime Consultative Organization (IMCO) which, until now has not been dealing with economic questions at all. Yet if the economics of shipping and navigation are to be brought under some form of international public control in the context of a new international economic order, this responsibility would have to be assumed by IMCO.

There are two aspects to this problem. On the one hand, the role of developing nations as providers of shipping services (producers) and their role within IMCO has to be further strengthened.[32] On the other hand, as recently pointed out by A. Bahman,[33] liner conferences ought to be brought under consumer control, and the consumer interests of developing nations ought to be better organized and institutionalized. Producer interests and consumer interests in shipping might of course conflict and divide developing nations, as has been the case with regard to mineral production and consumption, or export and import. Such conflicts, however, are more perceived than real and at any rate of short duration. In a new international economic order all developing countries will be both consumers and producers. Instead of adopting a model of countervailing power to regulate producers' prices in favor of consumers, one might, inthe long run, think also here of a new type of shipping Enterprise based on the principle of a unified equity joint venture system, with consumer and labor participation in the governing boards. As the nodule mining ventures or Enterprises are chartered and controlled by the International Seabed Authority, the shipping ventures or Enterprises should be chartered and controlled by IMCO.

III. ECONOMIC INTEGRATION AT THE REGIONAL LEVEL

This heading covers points 1, 5, and 6 on the checklist.

Regional cooperation plays an important role in all Parts of the Single Negotiating Text.

Part I (Article 20 of the RSNT) provides for "regional centers or offices" of the Seabed Authority. Regional repre-

sentation is the basis for the composition of the Council and is taken into consideration in the composition of all other organs.

Regional organization will play a major role in fisheries management, as indicated in Articles 50, 53, and 106 of Part II of the RSNT. Enclosed and semi-enclosed seas are the basis for regional cooperation with regard to environmental policy, fisheries management, and scientific research (Part II of the RSNT, Article 130).

Part III of the Text provides for regional cooperation with regard to the Protection and Preservation of the Marine Environment (Articles 7, 12), monitoring (Article 15), international rules and national legislation (Article 17(3)), technical assistance (Article 12), scientific research (Article 54) and the transfer of technology (Article 82). Articles 87 and 88 provide for Regional Marine Scientific and Technological Centers. All this may play a role in strengthening economic integration at the regional and subregional level.

It should be noted that, basically, there are two different kinds of regionalism involved in building the new order for the oceans. They are overlapping and, one might say, in a dialectic relationship to each other. They are:

(1) political regionalism,

(2) ecological regionalism.

Political regionalism is predominantly continent-centered. It is articulated in the regional groupings in the U.N. and, in particular, at the Conference on the Law ofthe Sea. It forms the basis of systems of representation in various organs of the ocean regime, particularly in the Council of the Seabed Authority. It is likely, furthermore, that existing regional intergovernmental organizations, such as EEC, COMECON, OAS, etc. will have a special relationship with the organs of the ocean institutions, just as they have it at the Law of the Sea Conference [34] or even more so: they might, e.g., become Associate Members.

Ecological regionalism is predominantly ocean-centered. It is developing around environmental policy as embodies, e.g., in the Barcelona Convention for the Mediterranean, and it will be essential for the management of fisheries, for the advancement of scientific research and the transfer of technologies. Enclosed and semi-enclosed seas are the most obvious starting points.

Both political and ecological regionalism have important economic aspects.

A. Political Regionalism and Landlocked States

Political regionalism offers by far the best possibility for the resolution of the conflict between landlocked and geo-

graphically disadvantaged States on the one hand and coastal States on the other. For it removes this conflict from the narrow setting within which one party (the landlocked States) makes demands and the other party (the coastal States) has to give; and it inserts it into a wider framework in which common economic policies confer benefits and require concessions from all parties.

1. The EEC and the Low Countries.

Although marine policy has thus far not played a very important role in the over-all policy-making of the EEC, it is clear that, as far as the EEC countries are concerned, there really is no conflict between landlocked States (Luxembourg), geographically disadvantaged States (e.g., Netherlands, Federal Republic of Germany) and coastal States (e.g., France, U.K.).

There is no problem with regard to free transit which is assured in the Rome Treaty, and the Community "does have a potential field of activity by virtue of the powers which it may take in relation to 'sea transport' (Art. 84 (2)), although it has not yet acted under the provisions of the Article."[35]

With regard to fishing, nationals of member States are free to fish in the waters under the jurisdiction of any other member State. "The Community has established a common policy in the fisheries sector, which includes a common organization of the market in fisheries products and the application of common rules with respect to fishing in maritime waters under the sovereignty or jurisdiction of member States. Discussions are now being held within the Community on the future of the common fisheries policy in the light of the creation of 200-mile zones. The Community is in particular examining the arrangements to be made, on a Community basis, in order to ensure the pooling, sharing, conservation and exploitation of the biological resources of the single area formed by the future economic zones of the member States."[36] [Emphasis added]

Even with regard to the continental shelf, landlocked and geographically disadvantaged States should have no special problems. Under the provisions of freedom of establishment there can be no discrimination against the enterprises of any member country on the continental shelf of any other. It is not clear, however, whethere there exists Communitarian ownership of the continental shelf (Community territorial sovereignty), or whether all uses of the continental shelf are Communitarian (functional sovereignty of the Community). There are other important problems which remain to be solved. Thus, a regulation by the Council of Ministers of June 28, 1969, on the common definition of the concept of the origin of goods, considered as obtained in a member State, "products taken from the seabed or beneath the seabed outside territorial waters, if that country has, for the purposes of exploitation, exclusive rights to such soil or subsoil." But petoleum products are explicitly excluded from this treatment.[37] If the EEC is to go forward however, rather than backward, it is clear that the treatment accorded

to coal and steelby the Schuman Plan in the 'forties, must be extended to oil in the 'seventies or 'eighties.

2. Precedents of active cooperation

There are already some interesting precedents for active cooperation in the exploitation of the resources of the seabed under regional jurisdiction.

One such precedent can be found in the Eems-Dollard Treaties of 1960 and 1962, concluded between the Netherlands and the Federal Republic of Germany. The Treaties are very comprehensive. What is of interest here is the "cooperation agreement" they contain with regard to the exploitation of the natural resources of the subsoil of the estuary.[38]

The area under dispute is declared to be common to both countries. "Obviously," Riphagen states, "such solution requires either the establishment of a common 'authority,' or a functional division between the two national authorities. The Treaties generally opt for a combination of both, inasmuch as they provide for a duty to consult and to negotiate, for the establishment of an 'Eems Commission' composed of experts appointed by each of the two Governments, and for an Arbitral Tribunal."

As far as the seabed is concerned, the common area is divided by, roughly, a median line. "The actual exploration and exploitation activities on the German side of the line are conducted by German licensees, on the Dutch side of the line, by Dutch licensees. The products of the exploitation are equally divided between the German and Dutch licensees, as are the costs of exploration and exploitation. Operators on both sides of the line are obliged to cooperate under contracts to be concluded by them and to be approved by the two Governments..."

Another prececent is the recent agreement between the U.K. and the Norwegian Government for the joint development of a gas field located across the demarcation line in the offshore area between the two countries. "This is the first agreement concerning an offshore gas field belonging to two governments. The agreement provides the legal and administrative framework for joint operations and determines procedures for jurisdiction, taxation, inspection, production and transmission."[39] The agreement is significant for the future "because it may become a model to be followed in many other cases of offshore resources shared between two or more countries." Obviously, such countries may even include landlocked States, in the framework of an Economic Community.

These European precedents might well be applied to African regional developments such as the East African Economic Community or the West African Common Market.[40]

Such arrangements would indeed advance the New International Economic Order: for they would strengthen mutual self-reliance;

they would reduce the cost of exploration and exploitation of the continental shelf; they would redistribute income in favor of the most disadvantaged nations; and they would strengthen the position of all these nations vis a vis the multinational corporations. The regional centers or offices, proposed in Part I of the RSNT, might play a vital role in this development.

B. Ecological Regionalism and developing island States

Ecological regionalism, on the other hand, would benefit developing island States which are mentioned repeatedly in the documents of the New International Economic Order, but neglected by the Law of the Sea Conference.

The economic difficulties of newly independent small island States or oceanic States often stem, in part at least, from the fact that their economies, often distorted by the former metropolis, are land-oriented: i.e., they depend on their limited, exhaustible land resources while they do not have the necessary infrastructure to exploit the marine resources of the vast ocean spaces surrounding them. Marine-centered regional developments as initiated in the Mediterranean, in the Caribbean, or in the Baltic, should be initiated in the South Pacific and other oceanic regions. The establishment of regional scientific and technological centers as proposed in Part III of the RSNT would help to alleviate the economic problems of newly independent small island States by creating a broader framework for the development of their marine resources.[41]

A number of States might participate in both types of regional development. Italy and France, e.g., belong to the EEC on the one hand and to the emerging Mediterranean Community on the other. This does not present unsurmountable obstacles. It means that rules and standards will have to be harmonized. This could be done on the basis of bilateral negotiations between the two regional Communities concerned, or in accordance with globally established standards and rules.

IV. POLICY FRAMEWORK AND COORDINATION OF ACTIVITIES

This covers point 10 on the checklist.

The Conference, upon the initiative of Portugal, has barely begun to work towards the definition of a policy framework and coordination of the activities of all organizations, institutions, and subsidiary bodies within the U.N. system, to advance the new international economic order.

And yet, such a policy framework must be created at any rate, even within the restricted terms of reference of the Conference itself, to cope with the multiple uses of ocean space and resources. The two purposes, that of building the new international economic order and that of coping with the multiple uses of ocean space, must now be served together. This recognition, focusing the efforts on the Conference on the common goal of building new international institutions rather than on the divisive goals of conflicting national interests, would, at the same time, place the Conference into its proper context within the broader

efforts of the United Nations system.

The task falls into two parts, partly within, partly beyond the scope of the Conference.

A. Restructuring of Existing Agencies

One part is the restructuring of the agencies now dealing, very inadequately, with ocean space.

The Single Negotiating Texts, as presently conceived, create an institutional framework for only one use -- and a rather marginal one -- of the oceans, and that is the mining of minerals from the deep seabed. The other uses, far more important, such as the management of living resources, navigation, scientific research remain remain fixed in the old international order. This, however, is impossible. If one part of the system -- in this case, the seabed regime -- is changed, all other parts will be affected and require change. The Single Negotiation Texts, in fact, refer throughout to"competent international organizations," both at the regional and global level, to assist in implementing the new law of the sea. Yet, the existing agencies, with their present structures and competences, are not able to fill these new needs. So, the first task is to restructure the agencies and institutions so that they can deal with the new issues.

1. COFI and Regional Commissions

What might be done to create a viable system for the management of living resources could be summed up as follows:

At present there exists a week institution with global concern (COFI/FAO), and a network of mixed regional and species-oriented commissions with overlapping responsibilities: some functioning rather well (in the North Atlantic, for example), some completely inefficient (in the Pacific).

An efficient system for the management of living resources in international ocean space, capable of assisting coastal nations in the management of their national resources, if they so desire, and of regulating the interaction between national and international management systems would require these steps:

-- reduction of fisheries commissions to one per region (to be defined) with comprehensive (not species-oriented) competence except for a global international tuna commission and a global international commission for marine mammals.

-- Linkage of these commissions to a restructured COFI (a) through a Council composed of representatives of each Commission; (b) through a dispute settlement machinery in accordance with Part IV of the Single Negotiating Text.

-- Restructuring and strengthening of COFI through

(a) universalization of membership

(b) creation of an independent secretariat;

(c) establishment of a system of licensing of fishing in international ocean space; 414

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

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

(f) establishment of dispute settlement machinery in accordance with Part IV of the Single Negotiating Text;

(g) independent financing (from trust fund, income from license fees, and Enterprises)

2. IMCO

With regard to navigation, IMCO is already in a process of enlarging its functions and its structure. This should be continued and accelerated. The amendments of 1974 and 1975 go a long way in this direction. Additional, perhaps, longer-term changes, apt to strengthen IMCO's contribution to the building of the new international economic order, might include:

1. A restructuring of IMCO's Council, omitting discriminatory criteria;

2. an international licensing system for ships, to cope effectively with the problems of the flags of convenience or open registry;[42]

3. Effective control of shipping cartels and liner conferences;

4. strengthening of the operational aspects of IMCO's services, including an Internaional Sea Service, and, conceivably Enterprises along the lines suggested in this paper for the Seabed Authority.

3. IOC

With regard to scientific research and the transfer of technologies, IOC should make the necessary structural changes to enable it to become the scientific arm of a system of ocean institutions. This would require the following measures:

1. IOC must have independent financial means.

2. A program for marine biology and fisheries research must be added to its oceanographic program.

3. It must assume some responsibility for the transfer of technology, at least in setting basic policies and criteria.

4. It must assume responsibility for all international research projects. In other words, only projects registered by IOC or licensed by it, or approved by it or included in its program, could be carried out by States or recognized Institutions in international ocean space as well as in the national ocean space of another State. Thus IOC would guarantee to coastal States, and especially to developing coastal States, the scientific integrity of a project to be carried out in areas under its jurisdiction. Research thus guaranteed by IOC would be free, subject to noti-

fication to the coastal State; Research not thus guaranteed by IOC would be subject to consent by the coastal State, on the basis of bilateral notification. This is the only way of solving the dilemma between coastal State control and the so-called freedom of scientific research.

5. It should establish a scientific Enterprise of its own -- analogous to the Enterprises of the other ocean institutions: that is, an independent scientific capacity, for research, e.g., in the Antarctic, where such research is of crucial importance but, ~~in the present situation, makes it~~ very difficult for developing nations to participate. They could be brought in this way.

6. In accordance with Part III of the Single Negotiating Text, there should be a series to regional scientific institutions; these should be autonomous, based on the participation of the nations of the respective region, but, just as in the case of the fisheries commissions (to which they should be closely linked through thier responsibility for regional marine biological and fisheries research), this system should be linked to IOC through a Council where each Institute is represented, and through a dispute settlement system in accordance with Part IV of the Single Negotiating Text.

B. The Integrative Machinery

Thus a system of four Basic Organizations would be created, dealing with four different but interlinked and interdependent uses of ocean space and resources. Since these uses are interlinked and interdependent, the Institutions must be interlinked or integrated as well. Without impairing their autonomous functioning, this can be achieved through a minimal integrative machinery, which must be established at the policy-making, that is, at the Assembly level. The present inter-secretariat linkages are inadequate to cope with the problems.

Basically, this integrative machinery must deal with

1. technical problems in their legal and political context;

2. the interaction of uses; and

3. uses based on new technologies not covered by any existing intergovernmental institution.

It also must articulare interaction with organizations such as UNEP or WMO which, while they are not ocean institutions, yet play a crucially important role in ocean affairs.

This system, consisting of four Basic Organizations and an Integrative Machinery, linked to but independent from the United Nations system as a whole, is best described as a Functional Federation of International Organizations.[43] It has a number of advantages. Among other things, it is flexible, utilizes existing institutions and trends without creating cumbersome new institutions and bureaucracies, and it integrates functional and national interests in a new way.

CONCLUSION

Is there any chance that developments will proceed in this direction?

In a way, these developments are already in course. All elements have been discussed by, even formally introduced into, the Law of the Sea Conference. In the long run they are bound to prevail. How long it will take, and how many setbacks there will be, is another question. The present Law of the Sea Conference cannot complete the process. But voices are already heard, in the Conference and outside, that the work of the Conference must be continued in some form: that a continuing mechanism must be established to carry on and to supervise the implementation of the Convention embodying the new Law of the Sea. What is required -- and here we are witnessing merely the beginning -- is a revolution in international relations.

With this we return full circle to the beginning of these pages.

To fully integrate the work of the Law of the Sea Conference into the work of building the New International Economic Order does not mean, by any means, to distract the Law of the Sea Conference from its own urgent tasks or to ask it to try to solve all the world's problems and thereby to resolve nothing. It is a conceptual problem: it is a question of direction, of goal and purpose. In some areas the Law of the Sea Conference may indeed lead in the process of building the new order: it may be pattern-setting. In other areas, where it depends on the building of this order by other means and fora, the very recognition of this fact may facilitate compromises at the Law of the Sea Conference. In both cases the joining of the issues would enhance both the building of the new international economic order and the making of the law of the sea: they potentiate each other. The disjoining of the issues, instead, is fatal both for the new international economic order and for the law of the sea.

Footnotes

1. See, e.g., the Charter of Economic Rights and Duties of States, Chapter III.

2. In U.N. document A/CONF.62/1.16, the Chairman of the First Committee reminded the Conference that "As I explained in the introduction to [Part I of the ISNT] I worked in the light of the provisions contained in the Declaration of Principles Governing the Seabed and the Ocean Floor beyond the Limits of National Jurisdiction....Also of considerable importance for me was another international document commanding wide universal support: the "Declaration on the Establishment of a New International Economic Order" adopted by the General Assembly on 1 May 1974 at its sixth special session."

Inaugurating the Fourth Session of the Law of the Sea Conference, the Secretary-General of the United Nations, Dr. Kurt Waldheim, said: "We will have lost a unique opportunity 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....It is not only the law of the sea that is at stake. The whole structure of international cooperation will be affected, for good or for ill, by the success or failure of this conference."

3. There are interesting differences between the Western and the socialist industrialized States on the question of "free access." The United States delegation emphasizes "free access" without qualification, subject merely to a "contract" which the Authority cannot refuse. The Soviet Union stresses the importance of "free access to States" but at the same time specifies that this access must be "limited." "Access to the common heritage of mankind is not a merchandise which can be given to the highest bidder as at an auction." Both the exclusion of States and the unlimited access to States to the resources "could open up some opportunities for the multinational corporations to establish their domination on the seabed." A. Kolodkin, Proceedings of Pacem in Maribus VII, Algiers, October 1976).

4. A similar system was proposed in E.M. Borgese, The Ocean Regime Pacem in Maribus II, Malta, 1971. See Pacem in Maribus, New York: Dodd, Mead and Co., 1972. The proposal was brought to the attention of the First Committee in a statement made by the representative of the International Ocean Institute during the Second Session of the Law of the Sea Conference in Caracas.

5. See "Statute for European Companies," Bulletin of the European Communities, Supplement 4/75, Article 74a.

6. The Statute as now proposed in Annex II, will have to be greatly elaborated, is at least ten times longer.

7. Regional centers or offices are provided for in Art. 30 of Part I of the Revised Single Negotiating Text.

8. Ocean Mining Associates (OMA), formed in 1974. Members: Tenneco, Essex Iron Co. (100% US Steel subsidiary); Union Mines Inc (100% Union Miniere Belgium); Japanese Manganese Nodule Development Co. (chiefly Nichimen, C. Itoh, Kanematsu); individuals: Deepsea Ventures.

Kennecott Consortium, established in 1974. Members: Kennecott Copper Corp; Rio-Tinto Zinc; Consolidated Gold Fields; Mitsubish; Noranda Mines;

Summa Corporation: 100% owned by Howard Hughes;

INCO Consortium, founded in 1975. Members: International Nickel; AMR (Preussag, Salzgitter, Metallgesellschaft, Sumitomo.

9. These were published in Review of Activities of the Metallgesellschaft AG (Edition 18- 1975 - Manganese Nodules Metals from the Sea). They define the duties and objectives of the Consortia; the definition of shares: the definition of the particular activities of the individual partners; the rights of Partners outside the consortial arrangements; the obligation of the partners regarding the time of performance; the right of the partners to enter the stage of realization at least with equal shares; prohibition of the use of the data established during realization; right of appropriation on the products by the partners according to their shares; indemnification in case of non-compliance with the agreement; management-structure and definition of the cooperation; establishment of a Joint Venture Committee; Ruling during the Research Phase on the treatment of technical know-how contributed or conjointly created; on the right to cancellation; Fixing the annual budget; Assignment of shares, including the obligation to offer the share to the other partners and the right of assignment to bonafide buyers; on the essentials of secrety; the dissolution of the consortium. It should be noted that these elaborate consortial arrangements are conceived without any reference whatsoever to the International Seabed Authority. The implications are clear.

10. Metallgesellschaft AG, ibidem.

11. See C. Richard Tinsley, "Economics of Deep Ocean Resources - A Question of Manganese or No-Manganese," Mining Engineering, April 1975.

12. This estimate, corresponding more or less closely to others, would in no way be affected by the production limitation provision of Article 9, Part I, of the RSNT.

13. David B. Johnson and Dennis E. Logue, "U.S. Economic Interest in Law of the Sea Issues," in The Law of the Sea: U.S. Interests and Alternatives. Ryan C. Anacher and Richard Sweeney, ed.

Washington: American Enterprise Institutions, 1976.

14. Frank LaQue, "Prospects for and from Deep Ocean Mining," Pacem in Maribus, 1970.

15. In his report to the closing plenary meeting of the Fifth Session of the Law of the Sea Conference, Chairman Engo said: "Contrary to their initial reaction, developing countries increasingly recognized their interest in cheap and reliable supplies of metals, in order to facilitate their own national economic development. Consistent with these interests, developing countries have seen that other means can be devised to protect adequately the legitimate concerns of the land-based producers. The principal objective of increased availability of raw materials, originally held only by developed countries, is now shared by the developing countries as well. Thus, today there is common interest in encouraging rapid and efficient seabed mining."

16. Metallgesellschaft AG, op. cit.

17. Li and Tinsley, loc. cit.

18. Manganese nodule resources and mine site availability. Professional Staff Study. Ocean Mining Administration. Washington: Department of the Interior. Thomas S. Kleppe, Secretary. Ocean Mining Administration. Leigh S. Ratiner, Administrator. August, 1976.

19. C. Richard Tinsley, loc. cit.

20. Johnson and Logue, loc. cit.

21. Ambassador C. Pinto of Sri Lanka said at Pacem in Maribus VII:

> "Finally, in the context of contractor or partner financing as contrasted with financing of the Enterprise itself, it has been suggested that instead of concentrating on efforts to bring into being and finance an autonomous operational arm like the Enterprise, one might contemplate mining under a uniform system of equity joint ventures. Where an applicant was accepted by the Authority for participation with it in seabed mining, the Authority and the other entity would bring into being through procedures to be provided for under the Treaty, a new enterprise, a new international personality which would itself then be authorized to borrow or by other agreed means obtain the necessary financing. Thus neither the Authority nor any of its organs nor, indeed, the joint venture partner would be directly involved in the question of financing. Under this system there would be no need for a single organ called the Enterprise. On the other hand, the system would spawn several "Enterprises" -- as many enterprises in fact as there were seabed mining ventures. This sytem certainly offers many advantages and should be considered in greater depth."
>
> See Pacem in Maribus VII, Proceedings, Malta, 1977.

21a. Ambassador Zvonko Perisic of Yugoslavia said at Pacem in Maribus VII:

> My third point refers to the question of the representation of interest groups in the Council. In my view, the policy-making organ of the Authority should be the Assembly. Its executive organ is the Council. As executive organ the Council should be constituted only on the equal political -- geographical -- regional basis under the general rule of a rotation system...I do not see any need for a Council consisting of membership on the basis of representation of interest groups....The Council could not be workable if it were institutionally divided in different interest groups....

22. See U.N. Document A/Conf. 62/C.1/ L. 17, 3 September 1976, Alternative Means of Financing the Enterprise: Preliminary note by the Secretary-General.

23. U.N. document A/CONF.62/L.16, 16 September 1976.

24. U.N. Documents A/AC.97/5/Rev/2. E/3511, A/AC.97/13.

25. E.g., Francis Christy, Sidney Holt, Mario Ruivo, passim.

26. See Sidney Holt, Proceedings of Pacem in Maribus VII (Malta: University of Malta Press, 1977).

27. E.g., the developed Mediterranean countries took 79 per cent of the total Mediterranean catch in 1969, that is, four times as much as the developing countries. Sidney Holt, in The Mediterranean Marine Environment and the Development of the Region, Malta: University of Malta Press,1974.

28. Zaccharia Ben Moustapha of Tunisia estimates that food production from the oceans could be doubled by aquaculture. The best areas for aquaculture are the warm and still unpolluted waters off the shore of Africa, Latin America and ~~X~~eAsia.

29. Simon Williams, "Conflict of Interest and Its Resolution as Factors in the Commercialization of Aquaculture in the Americas," Marine Fisheries Review (NOAA), Vo. 37, No. 1, January 1975.

30. Fernando Fournier, "Institutional Constraints to the Development of Aquaculture," ibidem.

31. See Mario Ruivo and M.E. Goncalves, Trends in Ocean Uses and Related Institutional Aspects. Working paper introduced in the Fifth Session of UNCLOS, Sept. 1976, and in Pacem in Maribus VI

32. Pardo and Borgese, The New International Economic Order

and the Law of the Sea, Revised edition. IOC Occasional Paper No. 5. Malta: University of Malta Press, 1976.

33. A. Behman, "Liner Conferences, Consumer Policy, and Developing Countries," Pacem in Maribus VII Proceedings. Malta: University of Malta Press, 1977.

34. In time for the opening of the Fifth Session of the Law of the Sea Conference, the Council of the European Communities adopted various decisions among which,

-- that the Community as such should be a contracting party to the Convention.

See European Community, Background/UN, No. 1/1976, August 5, 1976.

35. Daniel Vignes, "The EEC and the Law of the Sea," in Churchill, Simmonds, and Welch, ed., New Directions in the Law of the Sea, Vol. III, London and New York: The British Institute of International Comparative Law and Oceana Publications, Inc., 1973.

36. European Community, Background Information, loc. cit.

37. Daniel Vignes, loc. cit.

38. Willem Riphagen, "Some Reflections on 'functional sovereignty'," 1976.

39. Important for the future, Vol. I, No. 4, June 1976. New York: UNITAR. Joseph Barnea, Editor.

40. James Bridgeman, "African Regionalism," Manuscript. The paper proposes four regional groupings -- Northwest Africa, Central Africa, East Africa, and Southern Africa -- within which all landlocked African States could be accomodated.

41. See A. Pardo, Proceedings. Pacem in Maribus VI. Tokyo, 1976.

41a. A licensing system for [illegible] was proposed by [illegible]

42. An international licensing system for ships was proposed by a group of experts at the University of Wales. The proposal was presented by Dr. Peter Fricke at Pacem in Maribus V (Malta, 1974. Such a licensing system, Fricke said, would in fact provide an "international passport" for merchant vessels which would allow them to trade in the seas of the world. It would be issued only upon evidence that the ship satisfied pollution regulations, was properly insured, and properly manned and constructed. Fricke suggested that such a licensing system could be "set up as an extension of some form of international authority, possibly IMCO slightly revised and developed."

43. Pardo and Borgese, op. cit.