

A Proper Order for the Oceans: An Agenda for the New Century

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It is no easy task to sum up the insights, recommendations and contending viewpoints of three dozen leading scholars and practitioners on the governance of the world's oceans, nor to suggest a 'new agenda' that will strengthen our accomplishments and find solutions for our failures. The Third UN Conference on the Law of the Sea, and its legislative and institutional outcomes, have made an important and undeniable contribution to the rule of law. Have they led the world in a direction that will allow us properly to govern ocean uses?

OCEANS AND GLOBAL GOVERNANCE: ARE WE HEADED IN THE RIGHT DIRECTION?

Let us begin with basic terms. What do we mean by global ocean governance? We mean the development of a set of ocean rules and practices that are equitable, efficient in the allocation of ocean uses and resources (including the notion of sustainability), provide the means of resolving conflicts over access to and the enjoyment of the benefits of the oceans, and specifically attempt to alleviate 'collective-action problems in a world of interdependent actors'.¹ These rules and practices, like all other products of current international governance efforts, must be developed and implemented without government.² There is still no world institution which can be said to 'authoritatively allocate values',³ though some

¹ O.R. Young, *International Governance* (Ithaca, NY: Cornell University Press, 1994), p. 15.

² For a claim that the 'anarchy' assumption is an artefact of 'liberal' thinking and that 'international relations was never a matter of anarchy', see N.G. Onuf, *World of Our Making: Rules and Rule in Social Theory and International Relations* (Columbia, SC: University of South Carolina Press, 1989), p. 163.

³ D. Easton, *The Political System* (New York: Knopf, 1953), pp. 129-141.

would claim that the recent successes in developing 'soft law' and some hard law solutions (such as the LOS Convention) have so thoroughly transformed the world political system, that the requisite political authority – a coherent and cohesive international society – exists, or is emerging. Hence the creation and implementation of the rules and practices to govern ocean uses and users require the consent of states. This notwithstanding, we all recognise that globalisation of the world economy, a change among the developed to post-modern attitudes which has made environmental issues more salient,⁴ movement along the development path which has altered the status of some developing states, and the end of the Cold War have transformed the world political system and weakened the notion of sovereignty.

Consent can be achieved only through negotiation; in fact, often only at large-scale multilateral negotiations. The problems and costs of trying to gain consent among the 200-some entities that call themselves sovereign states are familiar. Why bother – considering the difficulty of resolving a problem only if one can gain the cooperation of others, or where others, if they are free to choose, can defect (that is, not agree to cooperate), or agree to a joint outcome but implicitly or explicitly refuse to implement or comply,⁵ or otherwise 'free ride' (not cooperate with the expectation that they cannot be excluded from the benefits of the cooperation of others). Why not deal with the problem unilaterally? Most individuals and institutions would usually prefer this path for the resolution of problems – often the solutions are arrived at more rapidly, the opportunity costs less – but the class of problems characteristic of the world's oceans are collective action problems. Indeed, collective goods are what needs management in the oceans. It is necessary to get 'stakeholders' to cooperate to pursue their joint welfare.⁶ That, despite evidence that with many stakeholders negotiating with each other we are likely to 'fall short of obtaining an optimal supply of any collective good'.⁷

But try we must. Although some ocean problems are amenable to a bilateral or regional solution, many are not. The goods are in 'joint supply' and, too often, accessible to the use of all. If they are open to the use of all, and none has an incentive to conserve, they are likely to be ruined if there is congestion. And there is. We live in a world in which the human population reached about 2.5 billion in 1960, 4.5 billion in 1980 and 5.7 billion in 1995.⁸ The low-median United Nations

⁴ R. Inglehart, *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies* (Princeton University Press, 1997).

⁵ O.R. Young, *Compliance and Public Authority* (Baltimore: Johns Hopkins University Press, 1979).

⁶ For a description and assessment of the large literature on collective action, see E. Ostrom, *Governing the Commons* (Cambridge University Press, 1990), pp. 1-28.

⁷ M. Olson, *The Logic of Collective Action* (Cambridge, MA: Harvard University Press, 1971), p. 36.

⁸ United Nations, *World Population Prospects* (New York: United Nations, 1997).

projection for 2015 is 7.3 billion people. For 2100 it is 11.1 billion. But if human population growth gets out of control, we may have as many as 13.7 billion people on earth in 2100 who will be turning, in part, to the oceans for food, transportation, raw materials, recreation and, if we fail especially badly, warfare.

While there is no definitive evidence that the natural world cannot provide for the needs of the future human billions, especially since it is so difficult to predict the benefits of future technological change, it is reasonable to be cautious and plan for ways to avoid system collapse. It is reasonable because there are many signs of stress: key choke points in ocean space that will be physically incapable of accommodating vessels moving where they please when they please, degraded coasts, eroded beaches, oil spills and tanker collisions that create local catastrophes. World fisheries boomed from a 1950 catch of 20 million tons of wild fish to a catch of 93 million tons of wild fish in 1994,⁹ which in the process depleted 11 of the world's 15 major fishing grounds. We have also used the oceans as the world's sewer, never calculating the external costs we pass on to future generations.¹⁰ We also know that with the determination of Third-World states to develop in order to provide better lives for their peoples, the situation is likely to get worse before it gets better; that the development process can be plotted as an inverted U-shaped curve with more extractions of the earth's resources for human uses before it levels off and then declines.¹¹ System collapse, and establishment of a new dynamic and probably less desirable balance would, of course, be a tragedy. The first step to avoid tragedy is to admit that the Grotian notion of a right of ocean users to do as they please as long as the rights of others are not violated no longer has social utility because it grows more difficult each year to find an ocean use that does not potentially interfere with the rights of others.¹²

I have segued into Hardin's tragedy of the commons,¹³ deliberately because his conclusion, in modified form, is critical to any evaluation of what has been accomplished in ocean policy in the 20th century. Hardin provides us with a goal for what we have tried to accomplish, and what work we must complete in the 21st century. That goal is to ensure that ocean space and resources are used sustainably and that a tragedy of the commons is avoided. The first step is to bring all users and

⁹ A. Platt McGinn, 'Rocking The Boat: Conserving Fisheries and Protecting Jobs', *World Watch Paper* No. 142, June 1998, p. 12; also see L.R. Brown, M. Renner, C. Flavin, *Vital Signs 1998* (New York: Norton, 1998), pp. 34-35.

¹⁰ G. Pontecorvo and M. Wilkerson, 'From Cornucopia to Scarcity: The Current State of Ocean Resource Use', *Ocean Development and International Law*, Vol. 5, 1978, p. 383.

¹¹ A number of distinguished analysts consider the inverted U-shaped curve no sure thing as it relates to present development efforts. See K. Arrow, B. Bolin, R. Costanza, P. Dasgupta, C. Folke, C.S. Holling, B.-O. Jansson, S. Levin, K-G. Mäler, C. Perrings, and D. Pimenthal, 'Economic Growth, Carrying Capacity, and the Environment', *Science*, Vol. 268, 1995, p. 520.

¹² See R.L. Friedheim, *Negotiating the New Ocean Regime* (Columbia, SC: University of South Carolina Press, 1993), pp. 11-26.

¹³ G. Hardin, 'The Tragedy of the Commons', *Science*, Vol. 162, 1968, pp. 1,243-1,248.

uses of the oceans under some type of management, leaving no open access rights that can be abused. I believe that ocean policy in the latter third of the 20th century has moved in the right direction, but certainly has not gone far enough to assure ourselves that we have done all we could to avoid tragedy. In short, we have made important but halting attempts to limit or close access.

After 30 years of criticism that his interdisciplinary work demonstrated he was a better scientist than historian or social scientist,¹⁴ Hardin recently modified his position on the tragedy of the commons.¹⁵ His acceptance of some of the criticism is important, but leaves us with a conundrum. He recognised that not all areas or resources held in common are subject to abuse, primarily those that are unowned or unmanaged. In short, open access systems, of which oceans and atmosphere are quintessential examples, are inherently subject to possible abuse because there are no incentives to conserve. If an area or resource is 'owned' it is less likely to be abused. Ownership can be communal, socialist or in private hands as long as stakeholders are constrained by social rules or norms to take no more out than is sustainable. A managed commons owned under one or the other social systems, may succeed or fail; the 'devil is in the details'. But what details! Many complex arrangements have been developed to manage allocation, especially in fisheries,¹⁶ yet it is still difficult to sort out the successful from the unsuccessful schemes. Moreover, as Hardin has come to recognise, what might work in one set of human and ecosystem circumstances does not work in another. We have little guidance on the probability that one scheme of closing entry and managing the resource is superior to another in any given setting.¹⁷ We have to invent the details needed to do the job right, and they have to be matched to the circumstances. Does the 1982 Law of the Sea Convention and subsequent ocean policy agreements point us in the direction consistent with the goals formulated by Hardin? I believe the answer is yes. Have we been successful in beating the devils on the details? I believe the answer is – partially. To judge whether the Convention is moving us in the right direction to wrestle with the devil, I would suggest the following criteria:

- Do we have the right *principles* to guide us? Are they appropriate to the problem in its given setting?

¹⁴ See Ostrom, *Governing the Commons*; S.J. Buck, 'No Tragedy on the Commons', *Environmental Ethics*, Vol. 7, 1985, pp. 49-61; E. Ostrom, R. Gardner, and J. Walker, *Rules, Games, and Common Pool Resources* (Ann Arbor, MI: University of Michigan Press, 1994); R.O. Keohane and E. Ostrom (eds.), *Local Commons and Global Interdependence* (London: SAGE, 1995); D.W. Bromley (ed.), *Making the Commons Work* (San Francisco: ICF Press, 1992); and D.W. Bromley, *Environment and Economy: Property Rights and Public Policy* (Oxford: Blackwell, 1991).

¹⁵ G. Hardin, 'Extensions of "The Tragedy of the Commons"', *Science*, Vol. 280, 1998, p. 682.

¹⁶ See especially Oxman, chapter 2, Falk and Elver, chapter 11 and Gold, chapter 27 in this book.

¹⁷ For an illustration relating to the Southern Ocean seabed, see Vidas, chapter 20 in this book.

- Have we established *institutions* that give managers the tools needed to solve the problems? Institutions need not be organisations, but appropriate structures, rules making and implementing capacity, and available resources are likely to tell us whether, or how well a task can be completed.
- Do we have criteria for judging *performance, including both implementation and effectiveness*? Do we expect a perfect outcome with nothing else worth the effort? Is the effort worthwhile if the glass is mostly full, half full?

These are no 'scientific' criteria. Also, we do not know whether we have the time to complete the necessary tasks incrementally. It seems that UNCLOS III did create some of the necessary principles, and that the institutions based on the LOS Convention are showing promise. However, it is too early to arrive at a well thought-out judgement on whether the performance shows the glass at more than half full.

THE LAW OF THE SEA CONVENTION AND GLOBAL OCEAN MANAGEMENT

The Third UN Conference on the Law of the Sea was one of the major international diplomatic events of our time. Its product – the Law of the Sea Convention – has often been described as the 'constitution' of the oceans. That is an interesting rhetorical flourish, but I think we can invest it with meaning. The LOS Convention can be looked upon as a framework, or skeleton, for managing the oceans. It is not a full overarching regime. It is a constitution because it states the basic structure of ocean management and little more, leaving the actual management rules to those who will follow. It posits some important, if not always clear, principles and it sets up a limited number of institutions, mostly to prevent or settle quarrels.

How can this be, for a treaty of 320 articles and 9 annexes (with yet 109 more articles) and two subsequent treaties tied to it – the Fish Stocks Agreement (with 50 articles) and the Implementing Agreement for Part XI (with 10 articles and an important Annex)? It has been viewed by some commentators as a full fledged, comprehensive regime that contrasts, for example, with the atmospheric regime that originated in four 'weakly worded framework convention(s) that set the stage for further negotiation'.¹⁸ This is an ironic development for a LOS Convention process that was widely scorned by observers of the international environmental scene as too slow and unwieldy to be used for other global environmental issues, such as ozone or climate change.¹⁹ While much was made of the differences

¹⁸ M. Soroos, 'The Thin Blue Line: Preserving the Atmosphere as a Global Commons', *Environment*, Vol. 40, 1998, p. 33.

¹⁹ J.K. Sebenius, 'Crafting A Winning Coalition: Negotiating a Regime to Control Global Warming',

between a full, UN-based diplomatic treaty-making process and a framework/detail process, I suspect, when successful, both lead to similar outcomes – the creation of a framework.

Why is the LOS Convention a framework document? Because its greatest contribution has been to resolve some important jurisdictional questions. In short, it says who is responsible or has the right to make decisions relating to important aspects of ocean use. To the degree that the resolution of such jurisdictional uncertainty, and often disputes, has helped to close or limit entry, it has created the first-order conditions for resolving the problem of ocean abuse. This is a necessary, but not sufficient, condition for dealing properly with ocean management problems. It is quite possible to abuse such powers and do nothing for proper ocean management, or at best replicate the old problems in new jurisdictions (e.g., create national ocean commons subject to national overutilisation). But without clarifying the question of who should make decisions, we cannot get to the next stage of deciding what should be done and how it should be done. Answering the 'who' questions is an appropriate role for a constitution.

Answering the question is not easy. Little wonder that it took us four tries in the 20th century to get a widely accepted outcome.²⁰ Jurisdiction is a very difficult subject to negotiate because negotiators must protect sovereignty, and sovereignty in a post-Westphalian world is based on territory. Territory is not just a physical space that a geographer could describe crisply, it involves individual and group identity, nationalism, pride, political power. It is made more difficult in an era of de-colonisation when many new states are carving out their place in the world and guard jealously their new prerogatives. Negotiation is based on the notion of exchange. It is very difficult to find items to exchange or trade off when the issue under negotiation is territory, and territory is considered sacred. It is easier to 'claim value' than 'create value'.²¹ Little wonder that, when it came time to assign rights over what had been common to all, the right to allocate would fall into the hands of nation states, especially those geographically or geomorphologically favoured.

The 'who' for UNCLOS III was primarily the coastal state. From the earliest discussions of what analysts hoped UNCLOS III might accomplish, the idea was to enclose as much space and resources as possible to designated stakeholders with

in *Greenhouse Warming: Negotiating A Global Regime* (Washington, DC: World Resources Institute, 1991), p. 70; L.E. Susskind, *Environmental Diplomacy* (New York and Oxford: Oxford University Press, 1994), p. 6; R.E. Benedick, *Ozone Diplomacy* (Cambridge, MA: Harvard University Press, 1991).

²⁰ They included a League of Nations Codification Conference (1930), the First UN Conference on the Law of the Sea (1958), the Second UN Conference on the Law of the Sea (1960) and the Third UN Conference on the Law of the Sea (1973-1982).

²¹ D.A. Lax and J.K. Sebenius, *The Manager as Negotiator: Bargaining for Cooperation and Competitive Gain* (New York: Free Press, 1986), pp. 88-116.

exclusive rights of access.²² Coastal states gained sovereignty over a 12-mile territorial sea, limited only by a right of innocent passage (Part II, Sections 1-3 of the LOS Convention).²³ Coastal states also gained a 200-mile exclusive economic zone (Part V) in which they have the sovereign right to make rules relating to exploring, exploiting, conserving and managing the living and non-living resources, subject only to overflight, cable laying and management of straddling stocks. Said to be *sui generis*, EEZs put 36 percent of the oceans under national jurisdiction. But there is more. The delegates reinterpreted continental margins as continental shelves where they extend beyond 200 nautical miles, and put them under national jurisdiction. How much coastal states might gain is unknown, since a 'menu' approach (Article 76) with three alternate criteria may be used to delimit the zone. Coastal states now also control the right to conduct scientific research in their EEZs, subject only to an implied consent provision (Article 252).

Archipelagic states also expanded their jurisdiction, being given special status for archipelagic waters, with sovereign control of the waters, airspace, seabed and subsoil of an archipelago (Article 192), subject only to innocent passage and archipelagic sea-lane provisions (Articles 52-53). Of course, there were obligations as well as rights, particularly to preserve the marine environment and to prevent land-based pollution (Article 207), but as we shall see later, there were few commitments as to what should be done to meet these objectives or how to do it. Again, these measures did not guarantee that the authority to choose who would have access would be used wisely, but without it, we do not have even the most basic tools for dealing with potential overutilisation.

Admittedly, the above is a skewed interpretation of the meaning of a long, complex treaty, particularly since the negotiators tried very hard to have balanced rights and duties for all interested states and their stakeholders – the major coastal states, smaller coastal states, straits states, archipelago states and land-locked states. But there was a particular direction in which the negotiators went, whether they recognised it or not. I would also contend that two other major features of the Convention showed distinct signs of an attempt to control entry, or at least to limit the conditions of entry.

Overlooked in the great drama of North-South conflict over Part XI of the Convention and eventual US rejection of the original treaty, and the re-negotiation and transformation of the International Seabed Authority from a 'command'- to a 'market'-oriented institution, is the fact that all sides had one key element in common right from the beginning – no one wanted open access to deep-ocean

²² The hope of some of them was to take it a step further and use state power to privatise ownership or access rights. See R.D. Eckert, *The Enclosure of Ocean Resources* (Stanford, CA: Hoover Institution Press, 1979).

²³ *The Law of the Sea, United Nations Convention on the Law of the Sea*, UN Pub. Sales No. E.83.V.5, 1983.

minerals and no one wanted a first-come, first-served system which potentially could have caused common pool problems. One can argue that the creation of an International Seabed Authority, under whatever system for managing the 'what' and 'how' of access to manganese nodules, is a form of enclosure.²⁴ Perhaps we could call it central enclosure. But unless some 'rogue state' decides to grant access to a domestic stakeholder under a claim that, as a non-ratifier of the Convention, it has not given up its right to make claims to open ocean resources under freedom of the seas, access to deep seabed minerals in the Area is closed.

Even where access could not be closed, there are many provisions in the Convention and its linked supplemental treaties where one might say that the negotiators successfully limited it. Or at least, if they could not limit access *per se*, they did limit access to those who would obey certain conditions. To be sure, those attempting to salvage as much 'freedom of the seas' as possible would not tolerate a right of another state to exclude them (or, as a matter of defending a consistent doctrine, any user) from access to ocean areas or resources. But they did agree to a non-exclusive conditional entry system. For example, although one can argue that the new transit passage is merely a restatement of the old high seas freedoms in new expanded coastal jurisdictions, those who claim they cannot be excluded from a right to transit through straits used for international navigation, have agreed that such a right is conditioned on obeying a set of rules. These include proceeding without delay, refraining from threats, complying with safety regulations and using designated sea-lanes (Articles 38-42). Vessels of a flag state did not lose a right to sail the oceans relatively near the coasts of other states, but if in so doing one of its flag vessels violates a coastal or port state pollution regulation duly certified by a competent international organisation, its vessel may be detained by a coastal or port state (although the ultimate right of punishment remains in the hands of the flag state) (Part XII, Sections 5-6). This should provide a powerful incentive to use the right of access only under conditions that do no harm.

As described in chapter 3 of this book, the Fish Stocks Agreement includes an even more powerful enclosure measure: Those states who fish an area where there are stocks of fish that straddle one or more EEZ, move in and out of EEZs to the high seas or are highly migratory are prohibited from fishing (excluded!) unless they become a member of a regional or sub-regional fisheries management organisation.²⁵ Moreover, any state fishing a straddling or highly migratory stock that chooses not to become a member of a regional or sub-regional organisation 'is

²⁴ Part XI is the major exception to my claim that there is little in the Convention on what is to be done or on how it is to be done. Part XI, as revised, is replete with access and use rules. These are the detailed devils of the ocean minerals regime. We have many studies to demonstrate that the old Part XI rules might have been inefficient, but fewer assessments as to whether the new rules will lead to equitable, efficient and sustainable practices.

²⁵ Art. 8(4) of the Fish Stocks Agreement

not discharged from the obligation to cooperate'.²⁶ Although no state choosing to cooperate can be excluded from the allocation decisions of an appropriate organisation, if the Fish Stocks Agreement is applied vigorously we will have come a long way toward closing ocean fisheries. We do not have all the details in place to convert the oceans to well managed systems, but we have made some progress toward Hardin's recommendation for how to avoid a tragedy. Now we have to sweat the details.

WHAT NEEDS TO BE DONE

It takes a good deal of hubris to state what should be done to implement the 1982 Law of the Sea Convention in a way that will lead to sustainable use of the world's oceans. It has been done – and very well – in chart form by Douglas Johnston, Phillip Saunders and Peter Payayo.²⁷ The suggestions presented below make up a shorter list and concentrate on a few key concepts and actions to bring to fruition the process started by UNCLOS III.

Before venturing an opinion on what should be done, let me make clear what need not be done: For the foreseeable future, we do not need to amend our ocean constitution. That is, we need no alterations of the basic powers or structures of existing ocean institutions or alterations of the basic division of responsibilities between states and international institutions. The Implementing Agreement for Part XI makes clear that, in case of inconsistency between its provisions and that of the original Part XI, the provisions of the Implementing Agreement will prevail.²⁸ This can be considered an amendment, since its alteration of the original provisions was so drastic.²⁹ I do not see the need for any measure so far-reaching for other parts of the LOS Convention. But we do need to develop many implementing rules based on common norms for managing all aspects of ocean use. In short, as I will try to specify below, the world community (if such exists!) needs to extend, not amend, the Law of the Sea Convention.

²⁶ Ibid., Art. 17.

²⁷ See D.M. Johnston and P.M. Saunders, with the assistance of P. Payayo, 'Part II. Conservation and Management of the Marine Environment: Required Initiatives and Responses under the 1982 United Nations Convention on the Law of the Sea', in IUCN, *The Law of the Sea: Priorities and Responsibilities in Implementing the Convention* (Gland: IUCN, 1995), pp. 121-155.

²⁸ Art. 2 of the Implementing Agreement for Part XI.

²⁹ For a more precise statement of the legal meaning of the Implementing Agreement, see Oxman, chapter 2 in this book.

Finish the Process of Limiting or Closing Entry

We must finish what we started – eliminate open entry if possible, or at least limit it to socially less harmful impositions on our ‘common heritage’ of natural capital. This must be done not only between nations, but within nations. As mentioned previously, clarifying who has the right or duty to make an allocation decision is no guarantee of success, but without such elucidation, the probability of successfully avoiding tragedies of the common are slim. Domestically, governments must not allow their citizens to treat their territorial seas or EEZs as national commons. This means more than domestic governmental regulation; it means a change in norms. We must develop a metanorm that is shared by all, that taking more out of the oceans than can be sustained is a social bad.³⁰ It must be internalised before people will avoid socially destructive practices, and therefore, before laws can be effective. In short, what is in people’s heads must be changed. This is a major and very delicate task for national ocean and environmental policies. One person’s proposed metanorm may be a major source of social dissonance if the claimed norm is not shared. Some proponents may insist that a majority position be imposed on a minority, either for the misguided minority’s own sake or for the benefit of the whole. That was the way Part XI was approached originally. Judge Koroma noted that the original design of the International Seabed Authority was based on a notion of distributive justice and there was no need to apologise for it.³¹ He is correct, there is no need to apologise, but proponents and opponents recognise that the majority did not have the capacity to impose itself on a powerful minority, and it had to be changed. Steinar Andresen shows how a runaway majority in the International Whaling Commission claims that a policy of total preservation of whales is a metanorm, and while it succeeded in blocking the resumption of large-scale commercial whaling, it may unglue the entire IWC system, since a minority does not accept a preservation norm.³² We must develop appropriate metanorms that show our shared goals, but, again, they are fraught with the danger of making a situation worse rather than better.

Hopefully the idea that we should manage all areas of the ocean will prove to be an acceptable metanorm. We have made a good start internationally in fulfilling Hardin’s recommendation that we leave no unmanaged areas of the ocean. Certainly the intent of Part XI is to close entry. In chapter 5 of this book, Secretary-General Nandan described the effort to bring the Authority into full operation. I wish the managers and implementors of the International Seabed Authority’s mandate well and hope the effort is a success. However, I am among the sceptics

³⁰ R. Axelrod, ‘Promoting Norms: An Evolutionary Approach to Norms’, in R. Axelrod (ed.), *The Complexity of Cooperation* (Princeton University Press, 1997), pp. 44-68.

³¹ See Koroma, chapter 4 in this book.

³² See Andresen, chapter 16 in this book.

concerning the possibility that a real mining effort will begin anytime soon under conditions that would return a profit to its investors, despite the submission of work plans by seven pioneer investors.³³ The revelation by Jan Magne Markussen that there may be active investigation of establishing a seabed mining operation under national jurisdiction in the exclusive economic zone of the Cook Islands only muddies the waters further, but leaves me equally sceptical.³⁴ This is despite the claim that a study by the Bechtel Corporation shows that extraction of cobalt alone can make a seabed mining operation successful. I served too long in a national capital that constantly hears claims of technological – and perhaps economic – feasibility not to be sceptical of technology salesmen. Either within, or without the areas under the jurisdiction of ISBA, the proof of the pudding is whether the product can be brought to market at a competitive price. Because markets are driven by price, will the Seabed Authority be administering empty law³⁵ until economic conditions (in recession among some of the pioneer investor states) are such that there is a real need on the world market for the constituent minerals of manganese nodules? Or will ISBA be excluded from the market by the dumping of cobalt by a mining operation under national jurisdiction which gets to market before seabed operations under the ISBA can begin? The curtain still has not been raised on the final act of this long-running drama, and we are still baffled as to the denouement.

Much more needs to be done to close entry on living resources. As noted by Norwegian Minister of Foreign Affairs Knut Vollebæk,³⁶ we must begin domestically. This is reinforced by Edgar Gold's demonstration of how difficult it is to get LOS Convention rules incorporated into domestic legislation.³⁷ The peoples of the world must develop norms that promote stewardship to enhance the increased clarity of responsibility that has come about as a result of enclosure. In particular, we must eliminate the well known overcapitalisation and overutilisation of labour characteristic of fisheries. We must eliminate, or at least sharply reduce, the subsidies or deficit coverage that governments provide to their fishermen (which might be as high as USD 54 billion³⁸). Internationally, we must follow up

³³ United Nations Press Release, SEA/1558, 21 August 1997.

³⁴ Commentary by J.M. Markussen at the Conference 'Order for the Oceans at the Turn of the Century', Oslo, 8 August 1998.

³⁵ D. Victor and J. Salt, *Keeping the Climate Treaty Relevant: An Elaboration* (Laxenburg: International Institute for Applied Systems Analysis, 1995), pp. 3-5.

³⁶ See Opening Address by Norwegian Foreign Minister Vollbæk in this book, p. xxxii.

³⁷ See Gold, chapter 27 in this book.

³⁸ Food and Agriculture Organisation of the UN, *The State of Food and Agriculture 1992* (Rome: FAO, 1992), pp. 29-30; C.D. Stone, 'Too Many Fishing Boats, Too Few Fish: Can Trade Laws Trim Subsidies and Restore the Balance in Global Fisheries', *Environmental Law Quarterly*, Vol. 24, 1997, pp. 523-535. Another recent study puts world fishery subsidies at between 11 and 21 billion USD. 'Too Many Boats Are in Pursuit of Too Few Fish, a Report Says', *The New York Times*, 23 August 1998.

on the mandate found in the Fish Stocks Agreement to establish, where appropriate, regional fisheries organisations that can pressure members and non-members alike to conform to accepted rules. We live in a world that still has strong anarchic elements, so it is not possible to require all states to cooperate, backed by coercion, but the Fish Stocks Agreement is stronger than previous efforts to engender common policies for fish stocks among the major users. We have a mandate to create the right venues for creating the right policies, now we have to get the details right. Again, chapters 3, by Hayashi, and 12, by Schram Stokke, in this book explain how difficult it is get to the details right in terms of changes in national and stakeholder behaviour despite the Fish Stocks, Code of Conduct and FAO Reflagging Agreements, and in terms of available mechanisms for dispute resolution.

We also must do more on transportation. It does not make sense to close entry into important areas used for transportation, but the prospect for greater congestion in the areas that many users share means we must do more to limit access, albeit on a non-discriminatory basis. On transportation issues, the framework created in the 1982 LOS Convention was a 'conditional' access regime. We must begin to think about the conditions that might have to be imposed to allow the vessels of the world – civilian and military alike – to use sensitive ocean areas in a safe and environmentally sound manner. It would help if we began our analytic efforts now, in advance of prospective problems.

Facilitate the Work of Existing Institutions

There is no question that we have made a good beginning in establishing important ocean institutions through the 1982 Law of the Sea Convention. Except for the International Seabed Authority, which has important responsibilities for managing an ocean use (it is responsible for positing 'what' and 'how'), the purpose of the remaining institutions is either to manage the affairs of the treaty parties or to prevent or resolve conflicts between states and their citizens who use the oceans. Let me begin by commenting on the work of the institutions to head off, prevent, or resolve conflict.³⁹ The International Tribunal for the Law of the Sea is now a working court handling its first case concerning the seizure of a St. Vincent and the Grenadines-registered merchant vessel by the Government of Guinea, and the Continental Shelf Commission is getting organised.

Unfortunately, not all is working smoothly, but I hope these are mere teething problems of a set of healthy babies. It is disturbing that there is internal dissonance among those administering judicial settlement, conciliation and arbitration,⁴⁰

³⁹ See especially Koroma, chapter 4, Mensah, chapter 6 and Vukas, chapter 7 in this book.

⁴⁰ See remarks by Platzöder in chapter 8 of this book.

perhaps brought on by a scramble for very limited resources. Granted resources are – and likely will remain – limited, but procedures such as arbitration and conciliation add flexibility to the settlement machinery and should be available, partly because they may be less costly. Indeed, the cost of a case at ITLOS may discourage use of the judicial settlement machinery. Moreover, there have been hints that the Tribunal might get hung up on questions of whether it has the authority to ‘progressively develop’ international law. Finally, some people grumble that the Tribunal is proceeding too slowly in processing its first case and that this may hinder it in establishing a reputation for fair and expeditious justice. For many, justice delayed is justice at least partially denied, but it is much too early to make such a judgement.

Tackle the Tough ‘What’ and ‘How’ of Ocean Management Problems

Diplomats are often accused of focusing their attention on tractable problems. Politics being the art of the possible, it is considered idealistic to take on the impossible. UNCLOS III has been accused of this tendency, perhaps unfairly. The conference concentrated the attention of its delegates on vessel-source pollution and barely touched land-based pollution that, given the law of gravity, will find its way into the oceans. GESAMP data makes clear the extent of the problem: 77 percent of ocean pollution is a result of land-based activities (44 percent from run-off and point-source discharges; 33 percent from air pollution). To be sure, the 23 percent of ocean degradation resulting from direct ocean uses (offshore oil 1 percent; dumping 10 percent; shipping 12 percent)⁴¹ is not insignificant, and the Law of the Sea Convention, London Dumping Convention and International Convention for Prevention of Pollution from Ships are appropriate responses to the aspects of the problem that are inherently oceanic and international. But we must do more – and that will get us deeply into matters that in the past were considered exclusively domestic. Articles 207 and 213 of the LOS Convention locate the responsibility for doing something about land-based pollution, but are merely a first, hesitant step in solving the problem.

Negotiating all important issues can be considered difficult, but ‘what’ and ‘how’ issues are difficult in different ways from ‘who’ issues. The overtly political ‘who’ issues mostly relating to sovereignty and territoriality are difficult because they force governments to re-examine the nature of their being. As mentioned previously, this narrows the set of options because of fears of giving away the

⁴¹ Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), *The State of the Marine Environment*, UNEP Regional Seas Reports and Studies (Nairobi: UNEP, 1990), No. 115, p. 88. Jackson Davis, in a re-analysis of the GESAMP data, concluded ‘open ocean waters are as approximately as contaminated as coastal waters’. See J. Davis, ‘Contamination of Coastal versus Open Ocean Surface Waters’ *Marine Pollution Bulletin* Vol. 26, 1993, p. 128.

national patrimony. The costs are often political and psychological. Solving the 'what and 'how' questions mostly requires states to control the private actions of their citizens, a task that is always burdensome. Moreover, these type of issues are largely economic in their implications. Solving the problem of land-based pollution's contribution to ocean degradation is likely to be very expensive and require major shifts in human practices, especially by those who are industrialised, or aspire to be industrialised. Naturally there is heavy resistance from these domestic forces. But despite resistance from economically powerful forces, the options set for solutions can be wider (there are more opportunities to 'create value') because of potential effects of changing technologies, substitution and the fact that the issues might be tinged with a bit less emotion than sovereignty-based issues. But because the issues are different, the arena in which they are to be negotiated, and the diplomats doing the negotiation, may need to be different.

The action may have moved elsewhere, perhaps appropriately so. By purpose – largely jurisdictional – and by training of its negotiators (lawyers and diplomats), UNCLOS III was ill-equipped to negotiate binding commitments concerning the type and timing of (mostly) private behaviours that states must alter to prevent the world's oceans from being treated as an open sewer. Fortunately, there are many ongoing international efforts to rectify this situation. Using different approaches (percentage cuts in pollutants,⁴² prohibited and restricted lists,⁴³ protection of sinks and reservoirs and emission trading⁴⁴) a number of treaties attempt to reduce the pollution finding its way into the oceans on a global or regional scale.

Several chapters in this book link UNCLOS III with other major international environmental efforts, especially those related to the Rio Conference.⁴⁵ Recently a number of governments have agreed to negotiate a universally binding convention to control or eliminate so-called POPs (persistent organic pollutants) that get into the ocean food chain.⁴⁶ A series of meetings to block out a treaty have been held, but as far as I know, no treaty has yet emerged.⁴⁷ If we are looking to the future, we might have to consider developing some form of legal protection for marine biodiversity, especially deep seabed organisms.⁴⁸

⁴² Art. 2, Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emission of Volatile Organic Compounds or Their Transboundary Fluxes (1991). Reprinted in *ILM*, Vol. 31, 1992, pp. 573ff.

⁴³ Art. 4, Convention for the Prevention of Marine Pollution From Land-Based Sources, Paris, 1974. Text reprinted in *ILM*, Vol. 13, 1974, pp. 352ff.

⁴⁴ Art. 6, Conference of the Parties, Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto, December 1997 (FCCC/CP/1997/L.7/Add.1). Reprinted in *ILM*, Vol. 37, 1998, pp. 22ff.

⁴⁵ See especially Falk and Elver, chapter 11, Chircop, chapter 13 and Scheiber, chapter 14 in this book.

⁴⁶ See VanderZwaag, chapter 17 in this book.

⁴⁷ Greenpeace, 'Global ban on persistent toxic chemicals', *Greenpeace Report*, September 1995.

⁴⁸ See Scheiber, chapter 14 in this book.

It appears that the United Nations Environmental Program has the responsibility of coordinating many of these efforts and that is good, but I sense that we have followed a shotgun approach and that the many efforts are not well coordinated. Is there a role for the ocean community here to try to define appropriate standards for restoring the world's oceans to health? For years, some members of our community have called for an 'integrated' approach to ocean management. How can we do that if some of the most critical decisions relating to the ocean's future are made elsewhere, often based upon other criteria and other goals? Should the ocean community stand on the sidelines and applaud? Or get involved? Unfortunately, it seems there may still be a role under the 1982 Law of the Sea Convention for further efforts.

There also may be a role for further efforts on fisheries. Robert Costanza and associates have noted that one percent of the marine environment is covered by protected area arrangements, while recent assessments suggest that 20 percent would be the appropriate coverage.⁴⁹ Data suggest that Marine Protected Areas, setting aside areas that cannot be fished (such as spawning areas, sanctuaries, etc.), is an effective tool for promoting sustainable use. While these will almost always be managed locally, we still need to define what they are, especially if they are developed in areas beyond national jurisdiction, or deal with straddling stocks. As Lee Kimball has noted,⁵⁰ NGOs have done most of the work on marine protected areas, but they can do little more. Defining rights and responsibilities of states and international organisations to establish and respect the rules relating to protected areas is a task appropriate for an agreement among sovereign states. It is early, but we should think about the concept.

Create Incentives for Developing States to Develop their Ocean Resources Sustainably

The claim that developing states need the help of developed states to sustainably manage their ocean resources and territory is a cliché repeated endlessly and, unfortunately, largely fruitlessly. But it should be repeated until someone listens! A flow of assistance must be forthcoming from North to South in the amounts sufficient to help developing states develop without eating their natural capital. States on the path to development will go through the inverted U-shaped curve, but it can be flattened out and the damage reduced. They need help so that they have incentives to reduce decisions that promise short-run development gains at the

⁴⁹ R. Costanza, F. Andrade, P. Antunes, M. van den Belt, D. Boersma, D.F. Boesch, F. Catarino, S. Hanna, K. Limburg, B. Low, M. Molitor, J.G. Pereira, S. Rayner, R. Santos, J. Wilson and M. Young, 'Principles for Sustainable Governance of the Oceans', *Science*, Vol. 281, 1998, p. 199.

⁵⁰ See Kimball, chapter 28 in this book.

expense of their and our longer-run interests. We do have a common interests. The developed must recognise that the developing can do substantial social 'bad' that will effect the welfare of all if they sit on their hands and develop in the least-cost manner. It may be their natural capital they use, but it is all of our pollution they produce.

The record is not good. During UNCLOS I and II, the numbers of participating developing states were small, and their influence weak.⁵¹ Now they are numerous, and influential in multilateral diplomacy, but still weak in real-world assets. Every major environmental negotiation since UNCLOS I and II has had at its core a major North-South quarrel. The South can win diplomatic battles, but rarely can win the war. The amount of money needed is enormous, and it has not been forthcoming. The authors of Agenda 21 estimated that it would take USD 600 billion per year to implement their plan, of which 125 billion a year would need to come from the developing countries.⁵² Only USD 6-7 billion had been promised as of a few years ago. The ocean portion of Agenda 21 alone would require an investment of USD 6 billion annually, of which 50 million would have to come from the developed countries.⁵³ The situation is probably not better today. We can discuss a new agenda for the oceans in a new century until well into that century, but it will be hot air and empty law unless the assets are forthcoming to make paper treaties and plans a reality.

Ask If Our Principles and Assumptions Need to Be Modified, and How

We are more beholden to theorists and philosophers than we are normally willing to admit.⁵⁴ We hope good theory leads to good practice. But theory – good or bad – has a powerful hold on the way people think and behave. Some, for example, question why the United States Navy has persisted in defending its right to conduct submarine operations in the Arctic after the end of the Cold War. While indeed the Cold War is over, the values and attitudes of US Navy officers were set long before the Cold War, having been influenced by Alfred Thayer Mahan in the late 19th

⁵¹ R.L. Friedheim, 'The "Satisfied" and "Dissatisfied" States Negotiate International Law: A Case Study', *World Politics*, Vol. 18, 1965, pp. 20-41.

⁵² P. Haas, M.A. Levy, and E.A. Parson, 'Earth Summit: Judging Its Success', *Environment*, Vol. 34, 1992, pp. 26-28.

⁵³ *UN Conference on Environment and Development, Agenda 21: Rio Declaration; Statement of Forest Principles* (New York: United Nations, 1992), p. 149.

⁵⁴ John Maynard Keynes stated: 'The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist'. In *The General Theory of Employment, Interest & Money*, reprinted in *Webster New Biographical Dictionary*, on Infopedia 2.0 CD-Rom.

century.⁵⁵ They see no reason to change their assumptions, whether they have actually read Mahan, or just accepted him as received truth.

While we must be cautious about the content of our theories, we must recognise their power and develop appropriate ones. We need to develop and extend our theories about what might work to induce states to cooperate, what measures are needed to improve our norms regarding stewardship, what incentives we can offer to induce ocean users to stay within the bounds of sustainability. It is all very well for Hardin to say the devil is in the details. Now we have to test the details, develop new ideas on how to complete the task the 1982 LOS Convention began. For example, How can we link the parts of an ecosystem and get it functioning properly when the world is divided on territorial lines (admittedly more porous each year) and decision makers think they must manage by species, and top-end species at that. Does it make sense managing by catch quota or gear restrictions but do not link these measures to efforts to preserve prey species?⁵⁶ How can we convince decision makers we need a new approach without a well developed concept of what that approach might be? Similarly, should we decide that coastal seas are most valuable as sewers, on the basis of a simple cost-benefit analysis, as Mark Sagoff has suggested?⁵⁷ We will, unless we learn how to price ocean as a resource. It is all very well to say that now that the coastal resources are under the effective control of 'owners' (nation states) that they can extract an economic rent 'the amount of which would be set by the cost (financial and environmental) of alternative disposal methods'.⁵⁸ But how can we do that? Further, we must convert this insight into programs and plans that fit the circumstances of states in a world differing in geography, political and social values and stages of development.

We have a general guide on some of the what and how that would allow us to create the necessary programs and plans – the Lisbon Principles of Sustainable Governance. They include: 1) responsibility; 2) scale-matching; 3) precaution; 4) adaptive management; 5) full-cost allocation; and 6) participation.⁵⁹ While each of these notions makes sense, anyone can explain why they are difficult to apply collectively or individually. This is the challenge for the next generation of ocean analysts; to 'sweat the details' and develop practices and institutions that are consistent with principles we recognise as right, but whose implementation is difficult.

⁵⁵ A.T. Mahan, *The Influence of Seapower upon History, 1660-1783*, twelfth edition (Boston: Little, Brown, 1942).

⁵⁶ P. Molyneux, 'Protecting Swordfish and Fishers', *The New York Times*, 19 July 1998, p. 27.

⁵⁷ P. Sagoff, 'Why Save The Seas?', in L. Anathia Brooks and S.D. VanDeveer (eds.), *Saving the Seas, Values, Scientists, and International Governance* (College Park, MD: Maryland Sea Grant College, 1997), p.23.

⁵⁸ C.S. Pearson, *International Marine Environmental Policy: the Economic Dimension* (Baltimore: Johns Hopkins University Press, 1975), p. 99.

⁵⁹ Constanza et al., 'Principles for Sustainable Governance of the Oceans' pp. 198-199

One newer notion is very attractive, especially to those already convinced by the holistic arguments of environmental scientists – that of integrated ocean and coastal management. But how do we integrate in a world structured as ours? Gunnar Kullenberg, has reminded us, based on his own experience, that governments are not eager to allow science-based international organisations to accept more responsibilities for implementing the LOS Convention.⁶⁰ But perhaps with a better conceptual framework, they might be more amenable. Biliiana Cicin-Sain and Robert Knecht recently published a major analysis of integrated ocean and coastal management showing the need for a management framework that will help us reduce multiple-use conflicts.⁶¹ But they note that there are two literatures. The first focuses on the land-sea interface and is managed by local political entities. The second examines the use and management of ocean areas under national jurisdiction, managed by national governments. Coordination between them is often difficult, partly because their focus and mandates are so different. There is also a problem of integrating internationally on problems where joint supply is present, as it is on so many ocean-use problems. While Cicin-Sain and Knecht's new book is a major advance in our understanding, we still have many Hardinesque details to work out to determine what works – and what does not. In short, we need to determine whether we need new ocean institutions at the universal and regional level and how we should design them.

Create a Process to Extend Ocean Management through Negotiation

One of the key lacunae in the 1982 Law of the Sea Convention is that it created no machinery to close gaps in its original rules, extend rules into newly identified problem areas of ocean management, or have any provisions for correcting failures. Presumably, it would take an UNCLOS IV to update the convention, a prospect that many regard with trepidation. In the felicitous phrase of Christopher Stone, the Convention is a 'constitution without an institution'.⁶² Actually, there is an institution, the Meeting of the States Parties, but it seems to concentrate on reviewing the budget for the Convention's existing institutions. While this is important, it is not a substitute for a full-fledged Conference of the Parties with a mandate of keeping the Convention up to date. This is the most serious flaw in the design of the LOS Convention; while an UNCLOS IV is not needed, an institution that can renew it is. It is ironic that the more 'skeletal' ozone and global climate

⁶⁰ See Kullenberg, chapter 24 in this book.

⁶¹ B. Cicin-Sain and R.W. Knecht, *Integrated Coastal and Ocean Management: Concepts and Practices* (Washington, DC: Island Press, 1998), p. 37.

⁶² C.D. Stone, 'A Global Framework for the Responsible Management of the Oceans', paper presented at WWF Workshop on Environmental Science, Comprehensiveness and Consistency in Global Decisions on Ocean Issues, 29 November - 1 December 1995, p. 15.

change conventions have a Committee of the Parties that can act like a legislature and develop incrementally the kind of implementation plans needed to deal adequately with anthropogenic alterations of the air we breathe.⁶³ We do have follow-on 'legislation' that is derived from the basic rules posited by the LOS Convention, but it has to be farmed out to others.⁶⁴ Is this good enough?

One of the important recommendations in the Lisbon Principles of Sustainable Governance is that we should practice adaptive management, make adaptive improvements as our data and technologies change.⁶⁵ But the 1982 Law of the Sea Convention, based on 20- to 30-year old judgements on the nature of the problems, may not be adequate for a globalised world economy that will inevitably create greater congestion in the oceans as we use new technology (some of which can help reduce the impact of congestion, some of which will increase congestion), extract more food, minerals and fuel from the ocean and send more vessels to sea to carry larger and often more toxic cargoes. It is very difficult to adapt without an institution designed to accommodate adaptive needs and promulgate new solutions.

Having said that we need some sort of universal ocean institution that can help bring ocean law continuously up to date, a note of caution should be added. Multilateral negotiations have not gotten easier over the last half-century, and designing a new institution can be fraught with peril. There were fewer states represented at UNCLOS I and II; it was treated more as a technical law-creating problem; there was a Cold War on and the political line-ups were obvious⁶⁶; and there were fewer private interests directly participating in negotiations as part of delegations, as observers and as members of NGOs. This is a different day, as many contributors to this book point out. Falk and Elver note that we would not frame UNCLOS III today given our present state of knowledge in the same manner as we did in the 1970s.⁶⁷ Lee Kimball reminds us that any future ocean negotiations must take account of the proliferation of other individuals and institutions that now play a role in multilateral negotiations.⁶⁸ This means more transparency, often better data and analysis, and at times, more stridency, more difficulties in arranging

⁶³ See chapter 11, 'The Protocol in Evolution', in R.E. Benedick, *Ozone Diplomacy* (Cambridge, MA: Harvard University Press, 1998), pp. 129-147.

⁶⁴ For example, through the FAO, states parties tried to establish state responsibility for fishing vessels flying their flags, especially those that had recently been reflagged to avoid the effectiveness of conservation agreements. See *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas* (Rome: FAO, 1995).

⁶⁵ Costanza, et. al., 'Principles for Sustainable Governance of the Oceans', p. 198.

⁶⁶ R.L. Friedheim, 'Factor Analysis as a Tool in Studying the Law of the Sea', in L.M. Alexander (ed.), *The Law of the Sea: Offshore Boundaries and Zones* (Columbus: Ohio State University Press, 1967), pp. 47-70.

⁶⁷ See Falk and Elver, chapter 11 in this book.

⁶⁸ See Kimball, chapter 28 in this book.

compromises. On the whole, this is a good development, but it does create a real challenge to institutional design and, especially, decision rules.

Should we end this discussion by proposing a world ocean legislature? I think not. It is wildly impractical. But I do think we will come to it sooner rather than later as we discover more errors, more solutions that need updating, more gaps that need to be filled and more new technologies to bring under control. Rather than wait to call an UNCLOS IV in the far distant future to thoroughly overhaul the basic constitution of the oceans, would it make more sense to create a body that could deal incrementally with outstanding issues? In the meantime, it would help to compile a catalogue of the problems, lacunae, update needs, etc. Is this a task that the Fridtjof Nansen Institute might be interested in undertaking?

CAN IT BE DONE WITH – OR WITHOUT – THE HELP OF A HEGEMON?

There has been much debate among academic international relations specialists as to whether the world political system can achieve stability unless there is one or more hegemonies who become the guarantors of the integrity of the system.⁶⁹ In a world of nation states, either all members of the system must act as one and protect the collective security, or security must be provided by a hegemon. This might be merely an arcane academic debate, but the role of the United States – the remaining hegemon – does have an important impact on the ocean, both in terms of its ocean uses, its willingness to accept collective rules, and its role as guarantor or enforcer of collective rules and norms. The ocean community has already experienced the inconsistency of leadership efforts of the United States, its unwillingness to accept implementation of portions of the LOS Convention, its acceptance of the modified Convention but its failure (thus far) of ratifying the Convention and its efforts as guarantor of ocean regimes against those who would undermine their 'integrity', e.g., the whaling regime which Steinar Andresen ably describes.⁷⁰

Obviously most states in 1982 thought they could or would have to do without the participation of the United States by promulgating the treaty despite the US negative vote. The real-world economic and political power of the US made it clear that implementation of Part XI without its participation would be very difficult, and

⁶⁹ R.O. Keohane, *After Hegemony: Cooperation and Discord in the World Economy* (Princeton University Press, 1984); R.O. Keohane, *The Theory of Hegemonic Stability and Changes in International Economic Regimes, 1967-1977* (Los Angeles: Center for International and Strategic Affairs, University of California, Los Angeles, 1980). For an analysis of hegemony and its impact on the problem of institutional choice for international commons problems, see L.L. Martin, 'Heterogeneity, Linkage, and Commons Problems', in Keohane and Ostrom, *Local Commons*, pp. 74-76; and S. Haggard and B.A. Simmons, 'Theories of International Regimes', *International Organization*, Vol. 41, 1987, pp. 500-504.

⁷⁰ See Andresen, chapter 16 in this book.

so the world community changed Part XI. So far, that has not been enough, and we will have to see if the International Seabed Authority can be a viable organisation that makes effective decisions if the United States chooses to remain outside. The US record in recent years of willingness to be part of collective solutions is not good; witness the Land Mine Convention⁷¹ and the World Criminal Court.⁷² Whether the world community can function on 'soft power' and do away with the necessity of compromising with 'hard power' remains an open question.

⁷¹ For the text of the Convention on Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (18 September 1997) and links to related sites, see <http://www.un.org/Depts/Landmine/>.

⁷² *Los Angeles Times*, 2 July 1998, p. A2; 14 July 1998, p. A17; 16 July 1998, p. A6; and 18 July 1998, p. A1.

