Chapter 6
CONCLUSION

THIS BOOK HAS put forward two major arguments. First, the advent of sustainable development thinking ushered in the institutionalization of liberal environmentalism. This form of international governance predicates environmental protection on the promotion and maintenance of a liberal economic order. Under liberal environmentalism, a liberal international economic order, privatization of global commons, and market norms are not only perceived as compatible with environmental protection, but also necessary for successful incorporation of concern for the environment in the practices of relevant state and non-state actors.

The concept of liberal environmentalism owes some intellectual debt to John Ruggie's concept of "embedded liberalism." Ruggie (1983), drawing on the work of Karl Polanyi, uses that concept to argue that the post–World War II multilateral liberal economic order was predicated upon domestic intervention. In other words, the architects of the liberal order explicitly designed institutions that allowed governments to intervene in their

economies to cushion the effects of free trade and financial flows. My position is similar to Ruggie's to the degree that I focus on the social structural basis of a liberal economic order as embodied in legitimating norms. In Ruggie's case, the legitimating norms of international liberalism included, and arguably required, support for domestic intervention. However, I do not argue that liberal environmentalism is a compromise necessary for the legitimation of the liberal economic order promoted since the end of the Cold War, at least not at present. Instead, I take the more modest position that the legitimation of environmental concerns in the international political economy has involved a process of introducing ideas about the environment that, to gain legitimacy, required some compatibility with the kind of economic order dominant at any given time. Environmentalism has not yet become a central pillar of the international political economy; it competes with a variety of social purposes in the construction of the international economic order. Nonetheless, I have also argued that the growing importance and prominence of environmental concerns in global governance owes much to its formulation in norms of liberal environmentalism. These enabling and constraining implications of liberal environmentalism for global responses to environmental problems will be one focus of this concluding chapter.

In at least one respect, however, this book has moved beyond Ruggie's arguments: it introduced a new approach to explaining the processes through which particular forms of governance become institutionalized. Rather than looking mainly to domestic compromises in dominant states to explain the construction of international governance structures, as Ruggie does, I have put forward an explanation that begins with a recognition that international social structure is an evolving set of practices in which new ideas and forms of governance must make headway to gain legitimacy. From this starting point, I developed the second main argument of this book, that the evolution of international environmental governance could be best explained by a socio-evolutionary approach.

This explanation attempts to push forward the literature on the causal role of ideas by showing a way to understand the interaction of ideas (and the norms they support) with the social structure they encounter. The focus on social structure draws attention to the context in which state and other key actors attempt to build governance structures to address global problems. Such structures, I have argued, are not simply responses to material interests. Rather, a theory based on social structure endogenizes an important source of interests in that identities and interests stem, at least in part, from the social structure in which actors participate. Furthermore, the his-

torical or evolutionary aspect of the approach is meant to reveal that social structure is not just a closed system, but evolves in response to new ideas. Social structure is thus historically contingent, and the socio-evolutionary approach attempts to capture the dynamic way in which governance structures evolve in response to new global problems, but always in the context of an existing normative environment.

Below, I discuss the implications and limitations of these findings for the theoretical understanding of global environmental politics, for international relations more broadly, and for the policies and practices to address global environmental concerns.

THEORETICAL IMPLICATIONS

The Normative Basis of Governance

The focus on norms in this study turned attention to the content of governance, rather than to an explanation of whether cooperation on particular environmental problems occurred. It thus acted as a corrective to rational cooperation and neoliberal institutional literature, which, for reasons identified in the introduction, tend either to ignore or to treat as irrelevant the content of policies promoted in cooperative arrangements or the question of why particular norms are selected over others to guide policies and practices. I am not advocating the replacement of rationalist studies of international regimes, which might lead, for example, to useful conclusions on the requirements for stable institutional arrangements. But I do aim to promote a more critical evaluation of what *kind* of environmental governance is actually being achieved, a vitally important question for theory and policy.

Although I did not undertake an independent assessment of the effects of liberal environmentalism, identifying this norm-complex is a first and necessary step to allowing such an exercise. Such assessments might more carefully examine the impact of norms on particular policies and critically examine what criteria of evaluation these norms produce. For example, what does a particular norm-complex mean for issues of equity (between generations, rich and poor states, societal groups, and so on), environmental quality, or cost-effectiveness? The rational cooperation literature truncates debate on these fundamental issues at the heart of designing institutions to address global environmental problems.

Ideas, Social Structure, Change, and Contingency

The ideas literature in international relations developed as one attempt to re-introduce these questions back into the study of international institutions and cooperation. When used in conjunction with the rational cooperation literature, however, such studies too often take it for granted that cooperative solutions reflect progress on the problem being addressed. The epistemic communities literature is particularly susceptible to this problem since authors of these studies almost exclusively examine new ideas that they believe will lead to progress. Such studies tend to look at how new knowledge can alter interests to facilitate cooperation, without questioning why some ideas succeed over others. This problem leads some scholars to an overly sanguine view of the ability of new ideas to alter international relations in a positive direction. Thus an assumption prevails that states can relatively easily "learn" to alter their definitions of interest, and thus create or change international institutions in response to their enlightened views. In recognizing that new ideas do not exist in a social vacuum, my focus on social structure supports a less sanguine view of the ability of new ideas to change international relations. Change does occur in international relations in response to new ideas about legitimate behavior, or to new purposes of action such as responses to global environmental problems. However, social structure is seen to powerfully select certain ideas so that change, especially at deeper levels, generally occurs in a slow and evolutionary fashion.

I have not introduced a general theory about the rate of evolutionary change or the conditions for large transformations. Research that focuses on major change in international politics often concerns massive disruptions or "shocks" such as hegemonic war, revolution, or economic upheavals.[1] By focusing on a particular area of governance, especially one that has arisen relatively recently to prominence, I have shown the slow process of evolutionary change that continues to occur between such major upheavals. But more research might fruitfully be done to better specify the conditions under which quicker or slower change might be expected. As a preliminary observation, however, this case suggests that new issue areas often compete against existing social purposes and gain prominence in governance structures in large part by finding a fitness with those structures, although in so doing they also may highlight contradictions in accepted norms, and create new resources on which actors interested in change might draw. Since ideas are based in meaning and intention, and social structure is based in intersubjective understandings, the

human potential to alter such structures, even if it is highly constrained, is always present.

This conclusion may frustrate anyone who expects a definitive resolution of questions of determinacy and contingency, a topic briefly addressed in the introduction. Some social scientists take the view that even stochastic (chance or unique) events can be studied using scientific methods (King et al. 1994: 11–12), which means that even a process-oriented or historical-based explanation need not rest on a view of the social world as highly contingent. Even if King et al. are correct in their view of stochastic events, however, it does not follow that history can easily be studied this way. The unfolding of history may be "caused" by multiple interacting factors, but it is virtually impossible to predict how those factors will interact, owing to a variety of reasons including high levels of complexity, the role of accidents, learning and other sources of feedback, the fact that the social world is an open system, and a variety of other factors that limit the ability to predict. These limitations are well-known and frequently articulated by philosophers of social science, and apply equally, and sometimes more than in other social sciences, to the study of international relations (Bernstein et al. 2000:43–53). As my colleagues and I have argued elsewhere, a deterministic view of social science rests on a mistaken analogy between physical and social phenomena (Bernstein et al. 2000). A better analogy is to evolutionary biology, which is explanatory but not predictive, and still considered "scientific." My socio-evolutionary approach is not predictive, but process oriented, and explanatory in a historical sense. It does not follow that because particular events can be explained that causes of those events can be discovered that act in a law-like way.

Thus, I am not arguing for complete contingency. As much as one can identify a social or institutional structure at time T, one can identify the environment in which new ideas must make headway. The environment is relatively certain and knowable *at any given historical juncture*. What is less certain is creativity in formulating ideas, accidents including natural or man-made disasters, and so on. Moreover, social structure at T + 1 may be different than at T as a result of acceptance or institutionalization of new ideas, which mostly occurs in an evolutionary way. As explained in the introduction, the part of evolutionary terminology stressed here is on historical contingency and social fitness, not goodness or progress. As Caporaso (1993:80) explains, "The stress on historical contingency and path-dependent behavior suggests that many different institutional worlds are possible. What we observe at any point in time is not necessar-

ily efficient (compared with what might have been chosen had other historical contingencies intervened)."

What, then, were other possible historical branches in the case of global environmental governance? A few possibilities come to mind. First, it might have been that no environmental ideas developed that fit well with prevailing social structures. The result would have been less international action on environmental problems, and a much lower level of institutionalization of environmental norms that did prevail. Environmental governance, to the degree it existed at all, might have appeared much more inconsistently, and only developed when crises so severe erupted that they prompted radical action or, if action came too late or not at all, environmental disasters. Second, alternative ideas might have arisen that fit with other aspects of social structure. Such ideas might have produced different pressures for change or tensions with existing institutions. Third, historical accidents or stochastic events might have altered underlying social structure in other directions. One could imagine that social structure would have been altered significantly from the multilateral and liberal order prevailing today if the Cold War had turned out differently or, going back earlier, Nazi Germany triumphed in World War II (Ruggie 1983). Less dramatically, had neoliberalism failed to take hold or Keynesian economics not declined so precipitously, one could imagine social structure exerting a different set of pressures on environmental norms, and creating an institutional environment in which alternative environmental norms might have more easily succeeded. Following similar reasoning, except looking forward, some alternative futures are explored in the policy implications section below.

The Causal Role of Ideas

Naturally, a focus on the content of governance turned attention to the "ideas" literature in International Relations scholarship. In the absence of the ideas associated with liberal environmentalism, the form of governance institutionalized at the Earth Summit simply could not have arisen, nor was it likely that environmental concerns would have come to play as prominent role as they have in international governance more broadly. The introductory chapter showed that ideas mattered and could not simply be derived from the material interests of dominant actors or from the material structure of the international system. If not for the introduction of ideas about environmental problems and about how the international

community should address those problems, it is unlikely that the environment could have made the headway it has in international discourse and action.

The early attempts at global environmental governance achieved only limited success because ideas had not been developed to bring the North and South together in a way consistent with other trends in international governance. The initial ideas presented at Stockholm by the conference secretariat did attempt to bring disparate interests together, and in some ways provided the basis for environmental governance as it would develop over the next 30 years. But the ideas promoted at Stockholm could not fundamentally alter the basic underlying interests of North and South. Neither did they provide a way to conceive of how environmental governance could avoid a challenge to core aspects of international social structure or the direction of governance that either the North or South viewed as legitimate. The ideas contained in the Brundtland Commission were a breakthrough in that respect. For the first time, a set of ideas successfully reframed environmental concerns in a way that could be compatible with dominant norms in the international social structure. Thus, they were much better able to alter the understandings of interests of major states in the North and South. As international social structure evolved at what I termed "level three"—the level of norms concerned with coordination and collaboration to manage interdependence—to reflect the move away from international Keynesianism and toward the "Washington Consensus" of liberal market norms, the aspects of sustainable development most consistent with such norms gained favor.

In the above story, ideas mattered in that they had to be developed by some group and needed to gain legitimacy in key organizations that could promote them, in this case the OECD and then the Brundtland Commission, which in turn had a basis of legitimacy in the wider community. Ultimately, however, I argued that what made ideas of liberal environmentalism successful was not simply their promotion by legitimate groups, but their fitness with an evolving social structure. It is this interaction of ideas and social structure that the socio-evolutionary approach uncovers.

In my attempt to contribute to the literature on the causal role of ideas in international relations, I differentiated between the rationalist and interpretivist use of ideas and placed my approach in the latter camp. However, I argued that a socio-evolutionary explanation could still identify causal factors that lead to the selection of some ideas over others.

Before turning to that approach, I tested an epistemic communities explanation of how environmental ideas became institutionalized. I chose

this explanation because it contains within it an argument about why some ideas in particular mattered, that is, ideas that had legitimacy rooted in an expert group privileged by its cause-effect knowledge and driven by principled beliefs based on such knowledge claims. Thus, it appears to offer answers to the two questions left unanswered by rationalist approaches: where do ideas come from and why do they get selected? In this case, the hypothesis posited that the ideas came from a group of ecological scientists whose ideas were selected because of the legitimacy of their consensual cause-effect knowledge claims. I also chose this explanation because international environmental governance is a crucial case for the hypothesis, which makes the findings here of more general relevance for evaluating the usefulness of the approach. An epistemic communities explanation should have performed best in explaining the content of governance in an issue area such as the environment, characterized by complexity and uncertainty and that requires technical expertise to both understand the problem and to formulate solutions.

Despite the promising attempt to bridge the rationalist/interpretivist divide, chapter 4 found that the hypothesis failed in key respects to account for the evolution of international environmental governance or even to identify the process of scientific influence on international environmental activities or agreements. This negative finding has implications both for theory, discussed below, and for understanding the actual way in which scientific knowledge did or did not influence environmental governance (discussed in a subsequent section).

First, I took issue with the assumption of the hypothesis that the causal knowledge of the community informs its principled beliefs. In regard to environmental governance specifically, Haas (1996:27–28) uses this assumption to argue that a community of scientific ecologists "sought to develop social laws from their understanding of the laws of nature." The evidence does not support such a position since "social laws" could not be easily derived from the cause-effect research undertaken by the group, nor do most scientists appear willing to support such a linkage. If anything, the history of ecological science shows that strong debates persist about the proper focus and methods for research and the relationship between research and environmental policy. Indeed, I found an uneasy relationship between scientific research and the environmental values attributed to an ideal-type scientific ecology community.

My findings also challenge a related implication of the approach: that policy choices can, and ought, to stem primarily from objective science. This underlying orientation of the epistemic communities approach is revealed in

Haas's argument "that science is essential for the understanding of global environmental problems, thus shifting the determination of the scope of allocative decisions to the international institutions for science" (1996:1). This statement cannot be sustained empirically in the case of environmental governance. The more subtle theoretical point, though, is that the epistemic communities literature is biased toward finding ways to increase the influence of science on policy since the literature makes the assumption that such policies would best reflect the "objective truth" of the situation, to the best understanding of the time. The link between scientific research and policy proposals requires a more critical analysis to unpack that relationship. In addition, while scientists themselves are often concerned about their social responsibility and informing policy to the best of their ability, many of those most active in global change research also appear to recognize the political and social nature of choices. Whether this is true of other issue areas, the relationship between the truth-claims of an expert group and their policy activities ought to be made explicit, not assumed.

Finally, the individuals most directly involved in communicating scientific knowledge to policymakers often do not fit a strict definition of an epistemic community. A number of studies on international environmental issues have shown that primary researchers are not the main source of scientific advice to policymakers. These studies identify "knowledge brokers," "policy researchers," or "science managers" as more often serving as intermediaries between those who produce knowledge and those who make policy (Litfin 1994; Timberlake 1989; Boehmer-Christiansen 1994a). While some of these individuals are scientists, others are not. It may be that some are influenced in their value orientation by scientific endeavors; however, it is equally plausible that their influences include their own institutional or bureaucratic settings or personal histories. Regardless, the epistemic communities literature cannot capture the link between science, this wider group, and their influence on policy.

A rejection of the epistemic communities hypothesis does not mean a rejection of agency, however. While acknowledging the importance of agency in the formulation of new ideas, I have not presented a particular theory of agency that privileges particular groups. Whether the source of ideas stems from epistemic communities, social movements, entrepreneurial individuals, or advocacy coalitions, the argument presented in the previous chapter is only that a social structure of institutionalized norms, as the environment with which new ideas interact, is a major factor in selecting how and whether those ideas become institutionalized. In that sense, the view of agency is relatively open, but refuses to privilege epistemic

communities over other sources of ideas and action. I have also not proposed a theory of why new ideas arise. Discovery, crisis, and policy failure are three of the more likely contenders, but these factors are beyond the scope of this analysis, which only argues that when new ideas do arise, they interact with existing social structures.

The socio-evolutionary approach attempted to move the discussion away from a focus on an expert group alone, and toward the interaction of ideas with their environment. Because international social structure is constantly evolving in response to the institutionalization of new norms and the altering of old ones, the socio-evolutionary approach lends itself naturally to an interpretivist methodology. The content, in terms of meaning, of social structure must be investigated at any given time as the environment in which new ideas compete.

Nonetheless, causality is evident; and that makes the approach something more than a purely interpretivist endeavor. Factors and causal mechanisms can be identified that make some ideas more likely candidates for institutionalization or legitimation than others. Even though these factors, such as social structure or ideas, are based in understandings of meaning and are historically contingent, they can still possess explanatory weight. I found Ruggie's notion of "narrative causality" useful in contrasting the causal weight of ideas, norms, and institutions with the formal causality characteristic of the physicalist world, and also noted that both causal and constitutive modes of explanation were at work in the socio-evolutionary approach.[2] This approach is explanatory not only in the sense of identifying the social structure and positing its causal weight; it also emphasizes that specific factors can be identified that reveal processes through which these meanings evolve.

For example, I argued that the legitimacy of ideas within a privileged expert group, even when group members disseminate those ideas within bureaucracies, is not sufficient, nor even necessary, for the acceptance of new norms or changes to existing norms. The perceived legitimacy of the carriers of new ideas is important, but can be gained also through the legitimacy of key institutions through which they act. In this case, the OECD in Paris was such an institution in the realm of public policy, and especially economic policy, among its member states. Even then, however, the selection process of new ideas also involves fitness with existing social structures and with the social purposes of dominant states. These factors in combination had causal weight.

Admittedly, the interrelationship between these factors, particularly the last two, leaves me open to the criticism that they are not discrete inde-

pendent variables in the positivist sense. Nonetheless, I would argue that social structure is a real structure that regulates and constitutes the identities, interests, and behavior of key actors in the international system. So while this approach is not directly testable against a rational choice approach that takes interests as given, it does identify factors that shape international environmental governance and provides a systematic way to explain the process through which some ideas get selected over others.

The process of institutionalization outlined here also contributes to the constructivist research agenda more broadly and might explain ad hoc findings in existing studies. For example, Finnemore's study of UNESCO's attempts to promote transnational scientific research shows that what started as a project to promote norms of free-flowing transnational ideas ran up against an international social structure that switched from "postwar Kantian transnationalism to Cold War Hobbesian nationalism" (1996a:49–52). As a result, norms changed from the promotion of scientists and research to building state capacity. Although she uses different terminology, these findings are perfectly consistent with a socio-evolutionary explanation contingent on changing norms at level two of social structure following the second world war and prevailing norms of "negative sovereignty." The explanation might also usefully be applied to other issue areas such as human rights. For example, explanations for the limited institutionalization of norms of humanitarian intervention, or their framing, might be usefully analyzed in terms of their interaction with changing social structure over the last 50, or even 100, years.

EMPIRICAL AND POLICY IMPLICATIONS

Scientists, Economists, and Environmental Governance

The findings on scientific ideas and scientists suggest their influence works quite differently than the way suggested by the epistemic communities literature. In support of their influential role, I found that environmental or ecological scientists, and scientific knowledge about the environment in general, clearly did influence the rise of global environmentalism. Individuals and groups of scientists often played significant roles in identifying environmental problems and have been called upon to play a variety of roles in governance, including monitoring, assessment, and technical ad-

vice. Similarly, some ecological ideas have been taken up in formulating various international environmental policies.

However, chapter 4 directly challenged scientists' primacy in governance in terms of formulating its content, allocating resources, or providing the legitimating basis for institutions that enable and constrain the behavior of major actors. Perhaps most significantly, contrary to the potentially most powerful implication asserted in this literature, scientists are largely excluded from allocative decisionmaking and often eschew such roles.[3]

Chapter 4 also challenged the claim that the basis of the influence scientists have exhibited in environmental governance to date has rested on their consensual knowledge and principled beliefs. Indeed, consensus on environmental problems often came after substantial political responses had already occurred, as in the case of ozone depletion. I found little evidence to support the presence of a strong consensus on values within groups of active scientists, apart from perhaps a support for scientific research itself. When communities did arise to address particular problems, and then pushed policymakers for a response, the kind of action proposed tended to be purposely general in scope (for example, reduce greenhouse gas emissions to limit temperature increases to 0.1 degrees C per decade) and rarely engaged questions of value trade-offs and modalities. When specific policy prescriptions were put forward, they did not possess any particular causal weight over and above other, nonscientific, considerations. With the exception of the Precautionary Principle, few norms could be attributed to specific values associated with scientific research on the environment. Support was not found for the argument that the legitimacy of the current forms of environmental governance stemmed from an epistemic community.

If scientific influence did not work in the way epistemic communities' literature suggests, then how? Although I did not attempt to identify a definitive pathway through which scientific knowledge fed into international environmental activities, a few very broad observations can be gleaned from the evidence. First, the pathway of scientific influence is less linear and predictable than the epistemic communities literature presents. Second, initial influence depends on entrepreneurial scientists or knowledge brokers, who either through their own entrepreneurial efforts, media exposure, or, less frequently, through a concerted bottom up organization of scientific research (e.g., the AGGG), manage to raise the profile of an environmental problem sufficiently to get it on the international agenda. Scientific consensus does not appear to play a privileged causal role at this stage. Moreover, once on the agenda, the political environment shapes policy-relevant re-

search as much as vice-versa, a finding reinforced by recent comparative work on the science-politics nexus in international environmental regimes (Andresen et al. 2000). Finally, despite the centrality of science to an understanding of global environmental problems, scientists and scientific organizations played only limited roles in each of the three norm-articulating events on which I focused, for reasons summarized in chapter 4.

A second set of implications for the role of science relates to the relationship between scientific research and governing structures. One concern relates to the way the literature on the science-policy nexus can bias what an analyst might see in examining environmental governance: a narrow focus on a particular scientific community can lead researchers to assume that policy outcomes that do not reflect the goals of the scientific community are part of an erosion of policy rather than simply an outcome that reflects a different definition or understanding of the policy in question. In this case, a narrow focus on a scientific ecology epistemic community—whose existence as a coherent group I found little evidence in any case—leads to the erroneous conclusion that environmental governance now faces a backlash from rules and principles of trade regimes and market challenges at domestic levels (Haas 1996:43–44). That misses the compromise of liberal economic and environmental norms at the heart of liberal environmentalism. It also misses how policies that might be perceived as external challenges in reality fit with this form of governance. Thus, an epistemic communities approach obscures the actual norm-complex at the heart of international environmental governance and the most significant shifts in that norm-complex over the last three decades.

Chapters 4 and 5 demonstrated that these shifts in environmental governance have themselves affected research and advice on how to address global environmental problems and the reciprocal influence of social structure on the generation of new ideas. Transnational research networks increasingly focus on questions that fit within a liberal environmental framework and governments increasingly have taken control of scientific and technical bodies set up under international agreements, or that feed directly into international agreements, to research or monitor specific environmental problems. For example, chapter 5 described the changes made in the composition and focus of Working Group III of the Intergovernmental Panel on Climate Change. For the second assessment report (1995) the working group included more economists and focused on cost-effective policy responses that fit with research programs consistent with liberal environmentalism.

These changes might even affect research at more basic levels. For example, Donald Worster (1993) suggests that ecology has evolved to be more

politically realistic and human centered in line with sustainable development and adaptability to ecosystems. This position might fit better with liberal environmentalism than the ecology of the 1960s and 1970s. However, the ways in which basic research might be affected by these broader social forces requires more in-depth study than has been attempted here and might be better explored within the science policy or history or sociology of science literatures.

Chapter 5 also highlighted the role of economists and economic ideas. While it might be tempting to portray economists as an epistemic community in environmental governance—significant groups of economists active in policy do exhibit a high level of consensus on cause-effect relationships and policy prescriptions[4]—that would be misleading. In general, this group is not a promoter of specific environmental values or an independent force for social change toward a more ecologically based social system.

However, in one respect economists did fit the definition of an epistemic community in that the value system promoted by many economists seems to fit with the basic tenets of the economic theories with which they work. Although I did not survey a wide number of economists, the following comment by Robert Stavins supports the above position. He believes that while many individual economists might be driven to study environmental questions because they find them interesting or care about the environment, the values their work supports likely stem in part from their economic training:

> Economics is obviously value laden. Just the notion of Pareto-efficiency or cost effectiveness or anything else is an expression of values. . . . That you should worry about minimizing costs or maximizing utility for the greatest number, that is obviously a value system. And it's pretty difficult to go to graduate school, do a Ph.D. in economics, and not come out of it with some internalization of that value system. That it makes sense to think of issues as *ceteris paribus*, let's take the goal as given now . . . that inevitably takes one to the notion of market-based instruments for a pragmatic reason. . . . I think it's the attribute of cost-effectiveness and dynamic efficiency . . . that drives economists to do it (author's interview).

Similarly, in a study tracing the strong anti-regulatory stance of American environmental economists, Okke Braadbaart argues that strong, zero-emission, regulatory policies "went against the grain of everything economists stood for. They violated the conviction of many economists that markets offer a superior solution to policy issues than government inter-

vention" (1998:139). Furthermore, the American domestic debate, stemming from academic opposition to the tough regulations of amendments in the early 1970s to the Clean Air and Water Acts, generated much of the academic work that so strongly contrasted regulative- and incentive-based environmental policy.

Despite this underlying set of values, however, I did not find evidence that an identifiable transnational network of economists acted as a community to push environmental governance in a specific direction. Rather, by virtue of their legitimate positions in key institutions and public policymaking generally, governments have called upon economists to formulate policy responses in line with their professional work. For example, Stavins, the lead researcher of Project 88 in the United States, said he had little or no contact with similar research programs in other countries, or in multilateral institutions such as the OECD or the World Bank, until well after his project got underway. Only then did policymakers call on his expertise to help formulate international policy (author's interview). In other words, while these economic ideas existed in the profession, it was not a group of economists driven by a concern with the environment who were the main cause of the shift in international norms.

Only recently, long after many norms of liberal environmentalism have appeared in international environmental agreements and practices, are economists attempting to coordinate their activities to promote political action. Their interaction in policy exercises promoted by governments seems to have brought a number of interested economists together. For example, in 1997 more than 2,000 economists issued a joint statement (and released it at a press briefing in Washington, D.C.) that the United States would be able to reduce its industrial emissions of greenhouse gases to slow global climate change in a way that would not damage the economy (Reuters 1997). The thrust of the statement, written by five leading economists and signed by about 2,000 others, was that well-designed policies relying on market mechanisms "may in fact improve U.S. productivity in the longer run." The statement explicitly endorsed a system of market mechanisms, such as carbon taxes or trading of marketable emissions permits among countries. What is remarkable about this event is not the position taken, which fits very well with widely accepted views of environmental economists, but that three of the five economists who wrote the statement—Kenneth Arrow, Dale Jorgenson, and William Nordhaus—served as authors or advisers to Working Group III of the IPCC at various stages of the process. (Paul Krugman and Robert Solow were the other two main authors. All five are highly respected in the economics community and Arrow

and Solow are Nobel Prize winners.) Again, the reciprocal influence of social structure and research seems to be at work. Just as economic ideas have influenced environmental governance, so too has involvement in activities related to international environmental governance influenced changes within the economics profession and its work.

The success of economic ideas suggests that ideas that do receive attention depend on their ability to make headway in key policymaking institutions. In addition, ideas have to be able to generate coalitions of like-minded actors in decision-making roles. Ecodevelopment, for example, could not achieve what sustainable development did. These last two points are interrelated in that the fit with institutional norms and broader social structure and the legitimacy of institutions that carry ideas made a difference when weighing the impact of ideas generated by the OECD as compared to IUCN and UNEP.

More work might be fruitfully done on the differential power and legitimacy of various international organizations and networks. In the case of environmental governance, I found, for example, that the OECD played an extremely influential role, at least in the late 1970s and 1980s. Few studies have examined specifically the important role the OECD in Paris plays in international governance as a source of policy ideas and influence.[5] While a number of analysts note the power of the IMF and World Bank, for example, which have direct financial levers on governments, the more subtle influence of organizations such as the OECD and Trilateral Commission deserve more attention.

Further research might also usefully examine how international norms are transmitted to the domestic level or across a wide range of actors. Here, I assumed that such influence occurs, but stopped after identifying the norm-complex among international institutions and practices of major actors in their interactions at the international level. Some recent research that stems from comparative politics and transnational relations has begun to take up the question of how norms are then transmitted. For example, Martha Finnemore's works on how international organizations can act to "teach" norms to governments, and Kathryn Sikkink's work on issue networks and advocacy coalitions, propose promising avenues for further research on how ideas and norms might move from the international to the domestic level or across states.[6] Similarly Thomas Risse-Kappen's (1995) work on transnational relations more broadly has attempted specifically to address under what conditions networks of actors can carry ideas across various levels of governance, and his work with Stephen Ropp and Kathryn Sikkink (1999) addresses how international

human rights norms are implemented domestically and affect political transformation processes.

The Compromise of Liberal Environmentalism

This book has made much of the influence of specific sets of ideas on the evolution of environmental governance. It might be objected, though, that the reason liberal environmentalism gained prominence is simply that the policies it promotes perform better in achieving environmental goals. In other words, liberal environmentalism is a rational response to domestic policy failures of the 1960s and 1970s or their inability to generate international action. Some of the comparative environmental policy literature hints at this position. For example, Weale (1992) argues that the poor performance of expensive regulatory policies in a number of Western states led to the search for alternatives.

Such a position is unsatisfactory, however, for two reasons. First, the perceived failure of one set of policies does not then determine what will replace it. The introduction and acceptance of new ideas still requires explanation. This is especially true in terms of the timing of the acceptance of new ideas. As chapter 5 emphasized, ideas associated with liberal environmentalism had been around at least since the late 1960s, yet gained prominence decades later. Their acceptance cannot thus simply stem from their inherent "truth" or come from being "good" ideas.[7]

If one looked only at the range of economic ideas available, a set of ideas associated with a "green" international political economy seemed a more obvious direction toward which international environmental governance might have steered. Recall Eric Helleiner's identification of a distinct and relatively well-developed set of economic ideas that pose an alternative to liberal environmentalism and that have varying levels of support among environmentalists and ecological economists. Some of these ideas fit with liberal environmentalism, while others are radically different. For example, according to Helleiner (1996), a "green" political economy shares with what I call liberal environmentalism a distrust of statist economic planning and encourages small-scale markets. However, unlike liberal environmentalism, a "green" political economy strongly opposes large-scale rational and global economic integration along free market lines (Helleiner 1996:70). In contrast, liberal environmentalism takes a view consistent with Helleiner's description of liberal international political economy theories, that "environmental problems are caused primarily by imperfectly functioning markets

and inadequate regulatory frameworks, problems which [liberals] think it is possible to remedy through alternative pricing mechanisms and institutional reforms."[8] Interestingly, many of the ideas Helleiner identifies fit much more closely with the more radical proposals of ecodevelopment, which in practice have largely been pushed to the margins.

Second, if liberal environmentalism were simply a rational response to earlier policy failures, one would expect clear signs that theories and policies associated with the new approach will outperform the policies they are meant to replace. A hypothetical comparison might then be drawn between the rise of liberal environmentalism and the rise of Keynesian economics. For example, Albert O. Hirschman (1989), citing classic research on how Keynesian economics came to the United States, suggests those ideas provided a response to the protracted Depression of the 1930s. The apparent ability of Keynes's theory to both predict the economic outcomes of the period and to offer policies in response made them highly persuasive in the United States, where they first gained policy prominence (although a number of political and administrative factors have been put forward that subsequently limited their influence) (Hall 1989a). As Hirschman has put it, "Seldom in history were the basic propositions of an economic theory so strikingly confirmed by events as during the 1938–1945 period in the United States. Shortly thereafter, the ability of government spending to energize the economy and to drive it to full employment . . . was taken as another, more positive demonstration of the correctness of Keynesian analysis."[9] This explanation has some similarities to McNamara's explanation for the rise of neoliberal policies in Europe in the 1980s, cited in chapter 5.[10]

This view does not hold up well in the case of liberal environmentalism, however, because little evidence currently exists for the greater policy effectiveness of ideas associated with it, as I show below. Nonetheless, supporters of liberal environmentalism had one advantage Keynesian economists did not: their ideas fit with the prevailing economic orthodoxy and practices promoted by the most powerful states and international institutions. In this way, it became relatively easy to convince the wider economics and environmental policy communities to pursue liberal environmentalism, even though the evidence to date does not support the position that these ideas work better at achieving environmental policy goals. Empirical research is only beginning to study the relative merits of market instruments, for example, and those studies are inconclusive (OECD 1994a).

Even on efficiency grounds—where the arguments for policies dictated by liberal environmentalism should be strongest—the evidence to date is inconclusive. For example, an OECD report (1994a) recognizes that mar-

kets may not always behave as economic theory predicts, implementation of market-friendly environmental policies may be more difficult than assumed, and the politics of environmental policymaking makes the selection of instruments and policy perspectives more complicated than assumed (see also Majone 1989:116–143). Given that the track record of such policies at the domestic level does not demonstrate superior performance over other types of policies, there is little reason to believe results will differ at the international level or that they deserve promotion over other approaches by international institutions. In explaining why such policies might be chosen regardless, Majone argues that because policy instruments are rarely ideologically neutral, their selection often depends on factors other than their effectiveness:

> [W]hether one prefers administrative measures or economic incentives to control pollution seems to depend at least as much on philosophy and ideology as on the technical properties of the two approaches. Those who favor the extension of market principles to previously nonpriced resources like air and water in the name of efficiency naturally prefer market-oriented regulatory instruments, while those who oppose the encroachment of utilitarian principles in social life tend to oppose them (1989:117).

Majone also demonstrates the difficulty in comparing various approaches to combating pollution along any set of consistent criteria, since they are conceptually so different.

Similarly, the OECD study cited above reports that, "Non-economic instruments may work equally well or even better than economic incentives . . . since the efficiency and effectiveness arguments associated with economic instruments are not always applicable, as a review of the history of environmental policy instruments discloses" (1994a:35). It concludes that probably a "cocktail" of economic incentives and regulatory measures is the best option. "Economic incentives appear to operate best in combination with, or in support of, other instruments such as direct regulation. Economic incentives alone will not effectively and/or efficiently deal with environmental problems, whether national or international ones" (OECD 1994a:48). Braadbaart's (1998) survey of research on regulative versus incentive-based instruments, focusing especially on the European experience, reinforces these findings.

The 1996 report of the UN Commission on Sustainable Development echoes these views, stating that, "Far too little evidence is available on the

practical achievements of economic instruments . . . [to know] whether they live up to expectations." Yet the thrust of the report still endorses their use and norms more broadly reflective of the Earth Summit outcomes (UNSCD 1996). Academic studies of implementation at the domestic level have also begun to question the practicality of incentive-based policies, their negative consequences for distribution of costs of environmental protection, whether they can even be separated in practice from regulatory approaches, and the stark difference between theory and practice in the projected effectiveness of such instruments (Braadbaart 1998; Reitan 1998). At the international level, even former supporters of mechanisms such as emission trading for climate change are beginning to question whether the practical application of these tools will prove effective or equitable in combating climate change.[11]

My argument has been that despite these ambiguous findings, liberal environmentalism still pushes for market-based policies over other possible alternatives. For example, internationally, the OECD promotes economic instruments over regulatory instruments in the implementation of international trade agreements and continues to devote environmental research to issues such as cost-benefit analysis and economic instruments. In addition, international organizations such as the World Bank continue to promote such policies in the developing world, focusing on proper pricing and privatization, although there are some signs that this emphasis is changing. For example, senior Bank officials have said the 2002 World Development Report, planned to coincide with the Rio +10 conference, will reflect a shift from the assumption in the 1992 World Development Report that all development policies and programs could be "win-win." The 2002 report will acknowledge that many of the Bank's promises have not materialized, and thus the need for trade-offs as well as synergies.[12] Such a change, if it occurs, may coincide with hints of broader pressures for change in international social structure discussed below. To date, however, the implication of liberal environmentalism has been that the criteria upon which environmental institutions are evaluated has turned more toward economic efficiency and sustaining the liberal economic order than pollution abatement or environmental quality, and alternative options are not being adequately explored.

To take the most prominent current focus of attempts at environmental governance, climate change has been subjected to analysis along liberal environmental lines perhaps more than any other global issue, and, as shown earlier, these analyses have strongly influenced research and action at the international and domestic levels. Leading up to and since Kyoto, OECD

studies, for example, supported this position, and have suggested that deciding on proper policy instruments for the abatement of greenhouse gases should be based primarily on economic efficiency criteria. The main choice one major study presents is between two market mechanisms, a global carbon tax and tradeable emission quotas (OECD 1995:9). Such studies tend to gloss over questions of what criteria are to be used when evaluating costs and benefits. For example, given high levels of uncertainty as to the effects of climate change and a number of external variables related to economic performance in different parts of the world, many assumptions must be made about what the impact of various policies will be. Ultimately, the choice of normative criteria, such as whether and how to weigh costs and benefits to future generations or across regions must be incorporated. Such considerations can change calculations radically (Howarth and Monahan 1996). It still may be possible for economists to incorporate such criteria into cost-benefit analysis, but it may also be that liberal environmentalism limits debate on such issues or leaves such choices to economists who are empowered by the legitimacy given to market principles and neoclassical economic analyses.[13]

A danger also exists under liberal environmentalism that a radical free market position could gain legitimacy, although liberal environmentalism as I have described it does not go to this free market extreme. "Free market" environmentalism eschews any attempts to incorporate social or environmental costs or discount rates for the future as too intrusive and likely to lead to perverse results.[14] In fact, some adherents to the norms I have grouped under liberal environmentalism do support government intervention or international management to correct market imperfections or build environmental markets.

Nonetheless, a related problem arises because the advice of environmental and ecological economists is only being partially heeded. Liberal environmentalism tends to support arguments for creating markets, property rights, deregulation, and an end to subsidies. However, the norm-complex has yet to embrace the more radical proposals that might have the largest payoffs for the environment, such as changing accounting practices, large-scale shifts to environmental taxation, or truly integrating environmental considerations into conceptions of social welfare. Major actors view such proposals as too intrusive to free enterprise and the smooth operation of the international liberal economy, or politically unrealistic.[15] Yet, even leading proponents of market mechanisms and an economistic approach recognize that other goals for environmental policy might be important. Hahn and Stavins, for example, put it this way:

> In the economist's version of public-policy heaven, the objectives for policy will typically be efficiency (maximizing net benefits) or cost-effectiveness (choosing the least costly method for achieving a goal). Efficiency and cost-effectiveness however, are by no means the only possible criteria for judging environmental policies. Other considerations might include overall effectiveness, ease of implementation, equity, information requirements, monitoring and enforcement capability, political feasibility, and clarity to the general public (1992:464).

Deeper critiques of the implications of liberal environmentalism are also present in the literature. For example, Chatterjee and Finger argue that the type of environmentalism promoted at UNCED left unexamined the industrial processes and unsustainable economic models that caused the current environmental crises. They view the outcome of the Earth Summit as follows:

> UNCED has promoted business and industry, rehabilitated nation-states as relevant agents, and eroded the Green movement. We argue that UNCED has boosted precisely the type of industrial development that is destructive for the environment, the planet, and its inhabitants. We see how, as a result of UNCED, the rich will get richer, the poor poorer, while more and more of the planet is destroyed in the process.[16]

While I have not independently assessed the merits of these critiques, the approach to institutions taken here opens up space for the questions they raise, which are obscured by other approaches in the international relations literature.[17] I would argue it is not enough simply to critique the forms of environmentalism of which one does not approve; the way in which they arise and become institutionalized should first be recognized and revealed. Only then can serious debates occur about the possibilities for change, can honest assessments take place about the merits and limitations of various approaches to environmental protection, and can a deeper understanding be achieved of actual social forces at work and their effects.

Implications for the Future of Environmental Governance

The argument and findings presented here have two sets of important implications for the future of environmental governance. First, they suggest the enabling of policies that fit with liberal environmentalism and the facili-

tation of cooperation on problems amenable to solutions within this norm-complex. Conversely, policies that contradict key norms of liberal environmentalism are more likely to face strong contestation or not even be considered owing to the prevailing norm-complex. Second, the theoretical findings point toward an examination of changes in underlying social structures as potential sources of change in environmental governance, and the importance of analyzing the interaction between policy ideas and social structure. As mentioned earlier, alternative futures can be examined similarly to alternative pasts, by putting forward possible scenarios sensitive to a number of contingencies in the future trajectory of social structure.

Following from the first set of implications, international cooperation on some environmental problems will be easier if solutions can be found that fit within the liberal environmentalism compromise. Thus, the compromise enables action, but action of a certain kind within institutions that do arise. If institutions cannot be constructed within these normative constraints, international action will be more difficult and disjointed.

In the most significant example, the compromise behind the 1997 Kyoto Protocol of the Framework Convention on Climate Change, detailed in chapters 3 and 4, linked commitments by developed countries to quantitative limits or reductions in greenhouse gas emissions to three market mechanisms that involve transferring "credits" for emissions to help countries meet their targets. It is still to early to know if the enabling conditions of a liberal environmentalism norm-complex has sufficiently shaped interests or can overcome a variety of competing domestic constraints playing out in the climate change debate. The argument here is only that these normative conditions provided, and continue to provide, an opportunity for agreement that would have been more difficult under another norm-complex. The irony may be that the kind of agreement enabled, as many critics maintain, may be vastly inadequate to significantly forestall, let alone stop or reverse, current trends in greenhouse gas emissions that lead to climate change. No claim has been made that liberal environmentalism is the optimum solution for effective responses to climate change, only that any cooperative solution on the problem is most likely to be accepted if it fits within the set of norms legitimated within this norm-complex.

Following from the same logic, the evolution of possible management regimes for global environmental problems could also be expected to occur within the opportunities and constraints of liberal environmentalism. The combination of "common concern" discourse and institutional arrangements that acknowledge the responsibility of sovereign actors for good stewardship and access to benefits, but do not make authoritative

claims on behalf of a larger community, indicates the possibility of new global institutions that could, for example, take on some functions originally envisaged in the Authority under the original 1982 Law of the Sea (UNCLOS III) agreement. New norms institutionalized since then enable solutions that could avoid the opposition that the Authority initially faced. Indeed, the 1994 implementation agreement for UNCLOS essentially changed the Authority in a direction more compatible with liberal environmentalism (see chap. 5, n. 34).

Looking back at the 1980s and early 1990s, the identification of specific environmental problems that affected the global commons, such as ozone depletion or climate change, and also affected important economic sectors, raised the stakes in contestation over the Common Heritage Principle (CHP). These pressures simultaneously added urgency to the search for alternatives that could be more easily nested within social structure. The difference between any new management scheme and the Authority would be that any new organization's functions would need to demonstrate compatibility with norms of market liberalism and state sovereignty, that is, practices institutionalized at levels two and three of social structure. Thus, an explanation for the ultimate failure of the Authority as an institution vested with authority over sovereign states also highlights opportunities for alternatives.

The climate change case again provides a recent example since it raises the prospect of global management of a commons problem on an unprecedented scale. Although the institutional manifestations of the mechanisms identified earlier to address climate change are still being negotiated, current proposals revolve around norms consistent with PPP, sovereign authority on actions within each state and in decision making in terms of commitments, and freedom of private corporations to choose how to respond to the new markets created. The point is not that such mechanisms are better or worse for the environment, equity, and so on than institutions as envisaged under CHP, but that social structural pressures have shaped environmental governance in this direction.

Conversely, international environmental problems where solutions that fit within liberal environmentalism have evaded negotiators have proven difficult to address cooperatively. As chapter 3 argued, the lack of progress on a global convention on forest protection and use is such a case. As the prospects for a global convention have dimmed, the trend toward certification and labeling of forest products, as a way to internalize environmental costs where regulatory solutions to forest protection have failed, has increased in legitimacy and viability. Such schemes operate in the market-

place, sometimes with government involvement, although usually, as in the case of the most prominent transnational scheme—the Forest Stewardship Council—without.

There are ironies and contradictions within liberal environmentalism as well. Whereas it opens up opportunities for new forms of management, and perhaps for democratic participation as well, it also reinforces the role of the market. Perhaps nowhere is this contradiction greatest than in the Precautionary Principle. On the one hand, as argued in chapter 3, this norm fits easily with the Polluter Pays Principle and the logic of internalizing costs and market norms. However, in practice, the Precautionary Principle politicizes decisions about risk under uncertainty, potentially empowering government regulation over powerful global institutions such as the WTO or some regional trade agreements. Such institutions currently put the onus on governments, under a high burden of scientific proof, to override liberal trade norms. The Precautionary Principle would reverse, or at least modify, the burden of proof from governments who want precaution to guide decisions on allowing products with potentially harmful effects into their markets, to exporters or producers to show their products are safe for human health and the environment.

The agreement in January 2000 on the Cartagena Protocol on Biosafety of the Convention on Biodiversity highlights this tension within the liberal environmentalism norm-complex. The protocol aims to ensure adequate safety in the development, handling, and use of living modified organisms (LMOs) resulting from biotechnology that may have an adverse impact on the environment or human health. Late-hour negotiations to hammer out the final details of the agreement revolved around incorporating the "precautionary approach" or principle to the transfer of modified living organisms, which it eventually did in the preamble and in Article 10.6. (Article 10 contains the operative provisions on decisions of importing countries on LMOs.) Whereas the final document also included language that the protocol and other international agreements (i.e., trade agreements such as the WTO) are to be mutually supportive, it is not to affect the rights and obligations of governments under existing agreements. It also explicitly recognizes core WTO norms such as nondiscrimination. What this means in practice is uncertain. The precautionary approach in the protocol states that a lack of scientific certainty due to insufficient information of the potential adverse effects on biodiversity shall not prevent a Party from taking a decision on LMOs under the Protocol. Meanwhile, the WTO requires "sufficient scientific evidence" to restrict trade for health and safety reasons (under GATT article XX, which arguably also includes exceptions for envi-

ronmental reasons). Under these circumstances, the Precautionary Principle and liberal trade norms will co-exist uneasily in practice and conflicts over specific LMOs are likely (IISD 2000a).

Even prior to the protocol, high-profile disputes such as that between the EU and the United States and Canada over hormone-modified beef demonstrated the difficulty in reconciling these two principles. In that case, WTO Panel and Appellate Body rulings went against the EU ban on beef because the EU did not conduct a risk assessment. Such an assessment had to bear a "rational" and "objective" relationship to the ban under the 1994 WTO Agreement on Sanitary and Phytosanitary Measures (SPS agreement), which applied in this case.[18] Significantly, however, the Appellate Body also ruled that under the SPS, risk assessments need not be based exclusively on laboratory science under controlled conditions, but also on assessments of risks in human societies as they actually exist. Recall from chapter 4 that this latter view of science fits much better with the Precautionary Principle. Thus, the Appellate Body ruling overturned the Panel on two important grounds: first, it clarified that WTO members could impose higher levels of protection to human health than prevailing international standards as long as such standards were scientifically justified, and, more importantly for this discussion, opened the door to a broader view of science more consistent with the Precautionary Principle—opening up the debate on what burden of scientific proof is sufficient to limit trade.

It remains unclear, however, whether the Biosafety Protocol can tip the balance toward precaution. Given the reality that the WTO dispute panel process can impose binding decisions on parties, while a similar process has yet to be put in place under any existing environmental agreement, decisions on trade issues seem more likely to follow the pattern of findings against environmental limits to trade in spite of the precautionary approach in other agreements. Yet, if the Precautionary Principle remains legitimate, and its further institutionalization in the Biosafety Protocol suggests it will, the potential for transformation of trade norms and practice remains. At the least, continued tension in the legitimate criteria for exceptions to liberal norms will prevail, although it remains to be seen how the WTO will address its relationship to environmental agreements and the trade-environment relationship will evolve.

In at least one sense, however, the Biosafety Protocol and its inclusion of the Precautionary Principle further entrenched liberal environmentalism. It did so by framing the debate over LMOs narrowly as a trade issue, in effect closing off the possibility of wider agreements on rules and procedures

governing research, development, and implementation of genetically modified organism technology in isolation from trade concerns.

Whereas a prediction of how these tensions will play out is premature, the institutionalization of liberal environmentalism and unwillingness within organizations such as the WTO to admit of contradictions with norms such as the Precautionary Principle suggests that unilateral government regulation over and above agreed international standards will remain difficult in the short term. Given the difficulty of changing current institutions and structures, nongovernmental groups and entrepreneurial leaders are turning to new institutions such as private regimes or voluntary schemes such as the Global Compact—a UN Secretariat-sponsored scheme that identifies a set of human rights, as well as labor and environmental norms based on existing UN agreements that corporations can sign on to voluntarily (Kell and Ruggie 1999). While this strategy may make some headway within liberal environmentalism, it is also subject to the limits of corporate self-regulation since the UN has no mandate to independently regulate private corporations. At the same time, some civil society groups, frustrated with the limited ability of international institutions to address environmental concerns under the current governing arrangements, have begun to launch more radical forms of opposition to challenge the legitimacy of existing institutions. The WTO protests in 1999 in Seattle and earlier opposition to a proposed Multilateral Agreement on Investment attempted to take advantage of contradictions within current norm-complexes, including liberal environmentalism, that promise the compatibility of liberal markets and goals such as environmental protection. Given that liberal environmentalism and social structure more broadly has legitimated institutions such as the WTO, the argument here suggests that little normative leverage exists to counter the linkage of liberalization and environmental concerns, although to the degree that institutions in practice appear to produce consequences that belie this understanding, new ideas are likely to arise that may yet reveal and take advantage of contradictions in order to push for change.

The second and final set of policy implications for the future concerns where environmental governance is headed. Two sets of forces are at work. First, the internal dialectic in liberal environmentalism, already hinted at, means that contradictions within norm-complexes can be used by actors to push for change. Liberal environmentalism on the one hand empowers states. On the other, its support for market norms means the potential for other actors to gain legitimacy, a tension also reflected in broader social structural changes in the international political economy. Already there is

evidence of a greater role for private or hybrid regimes—the latter referring to regulation by bodies with both government and non-government representation—by organizations such as the ISO or the Global Compact (Clapp 1998; Kell and Ruggie 1999). Transnational market mechanisms such as tradeable permit schemes also create the possibility of private markets among or even within transnational firms.

The second set of forces involves broader changes in the international social structure in which liberal environmentalism is nested. Given the uncertainty of such trends, and the complexity of historical forces at work as one moves to the general level of international social structure, I will simply highlight two possible scenarios of broader change in social structure that could result in an altered environment with which ideas to solve future environmental problems will interact.

First, the spread of broader liberal democratic and human rights norms are reinforcing greater demands for accountability and participation by civil society actors in international institutions. It is conceivable that changes in social structure could occur at level one to reinforce these trends. Some authors, for example, suggest that new criteria for state recognition, based on democracy or human rights, for example, denote a diminution in the scope of sovereign authority recognized as legitimate (Chopra and Weiss 1995; Murphy 1996; Biersteker and Weber 1996; Sikkink 1993). Such a shift is significant because it would mean sovereignty as a legitimating principle that defines the status of territorial states no longer served as its own basis of legitimacy, but rather rested on a foundation that required further legitimacy, such as representation of a population or minimum standards of human rights or welfare.[19] If the legitimate basis of state authority shifts, this could alter constraints and opportunities on governance, further empowering non-state actors who base their legitimacy on such norms. At the same time, to the degree such rights are framed in classical liberal terms, they could reinforce corporate freedom of action from state authority. However, such changes in social structure are far from clear, and sovereignty as the legitimate basis of supreme authority and its coupling with the territorial state as the legitimate form of political organization and mode of allocation for exercising that authority remains well institutionalized (Kratochwil 1995:25; Ruggie 1993). Despite challenges at the margins, sovereignty as status remains firmly entrenched as a legitimating principle in most international institutions and current practice since challenges to it still face strong resistance from major states, even those that most staunchly defend the spread of human rights and democracy.

A less fundamental shift may also be occurring at what I termed level three of social structure. Evidence of this can be seen in the intellectual challenge to the "Washington Consensus" by prominent economists who have put forward a modified set of policy prescriptions dubbed the "Post-Washington Consensus" by former World Bank chief economist Joseph Stiglitz. (He left the Bank before the end of his term after speaking out publicly against Bank policies associated with the Washington Consensus, and especially the Bank's and IMF's handling of economic reform in Russian and Eastern Europe. Various state leaders and prominent economists have also criticized these institutions' handling of the Asian financial crisis beginning in 1997.) While not a radical departure from the Washington Consensus, it includes two important modifications. First, whereas the general instruments and goals of a market economy remain, the new prescriptions recognize the importance of sequencing in reform, and the importance of institutions, rules, education, and so on, in making markets function. The second set of modifications is a more significant departure. They acknowledge that development policy may require trade-offs, including those between economic efficiency and growth and other goals such as sustainable development, increased participation in decision making at a variety of societal levels, and greater equity. In other words, development policy that includes noneconomic goals may not always be "win-win" (Stiglitz 1998, 1999). The proposed shift in the Bank's understanding of the requirements of sustainable development mentioned above suggest that these ideas have influenced at least sections of the Bank bureaucracy that deal with environmental and social development issues. Even Bank President James Wolfensohn began in the late 1990s to distance himself and the Bank from the more orthodox policies of the IMF, and Bank publications started to attack the Washington Consensus on social and environmental grounds (Broad and Cavanagh 1999). If the need for trade-offs becomes more explicitly recognized within dominant international financial institutions, reinforced by demands within global civil society for greater accountability and value trade-offs in institutions such as the WTO or any future global investment regime, this will provide a new set of opportunities for global environmental governance. For example, it may possibly move toward a recognition that environmental goals may sometimes require actions that disrupt markets or that cannot be accommodated within existing institutions built primarily on norms that support and reinforce state sovereignty or the growth of liberal markets as an ultimate goal.[20]

Many of these conclusions are speculative, but suggest that an examination of prevailing norms in a given issue area, and the exercise of spinning

out scenarios for change in broader social structures, may offer a variety of avenues for understanding the constraints and opportunities for the future of global governance.

CONCLUSION

In the introduction, I posed the question of whether ideas associated with global environmentalism really implied a transformation of international relations and society. In some ways, the advent of liberal environmentalism does suggest a transformation has occurred. Environmental concerns now regularly appear on the agendas of international organizations that engage in a wide variety of practices, from agencies directly concerned with the planet's resources and environmental quality to those whose main focus is trade, development, or even security. Many states' foreign policies also regularly include high-level attention to global environmental concerns and a wide range of non-state actors directly address global environmental problems and the human practices that contribute to, or ameliorate, such problems. Arguably, the rise in global environmental consciousness and activity has also had broader political consequences. For example, global environmentalism is one of many factors that contribute to an increased awareness of interdependence and, therefore, the need for cooperative governance arrangements at the international or global level. It has also contributed to changes in the North-South agenda by highlighting issues of common concern. On the one hand, these understandings have provided new potential sources of leverage for the South owing to the interdependence of biosphere resources that sustain life on the planet. On the other hand, the recognition of a variety of areas of common interest has helped to undermine the confrontational style typical of the period following decolonization up to the end of the Cold War. Finally, liberal environmentalism itself, by framing environmental problems as inexorably linked to economic activity and concerned with similar development goals, has enabled environmental concerns to increasingly move to a central place on the agendas of international organizations and global discourse.

Yet liberal environmentalism has not transformed the international system itself in ways that resemble the initial proposals put forward by the internationally focused environmental movement. Global environmental concern and action within a liberal environmentalism norm-complex has not moved us much closer to a cosmopolitan world order that has pushed

nation-states from the center of world politics, as Deudney speculated it could (1993:301). Instead, the nature of global environmentalism has itself been transformed to fit better within the normative structure of international society. New ideas were indeed required to make that transformation possible, and thus to bring environmentalism into the mainstream of international relations, but those ideas interacted with an existing social structure in an evolutionary fashion.

The ultimate legacy of UNCED and liberal environmentalism is uncertain. I have not argued that liberal environmentalism has been a success in solving environmental problems or improving environmental quality. Neither have I argued that environmental policy has in fact been incorporated into economic policies everywhere to the degree promised at Rio. Indeed, as my discussion of the post-Rio assessment in 1997 indicated, progress on many global environmental issues remains limited at best when measured against the goals established in 1992. Rather, this book has made an argument about how the normative basis of international environmental governance has evolved.

In light of the limited achievements since UNCED, this analysis seems especially appropriate given that UNGA member states agreed in 1997 to reaffirm their commitment to Agenda 21 and the principles in the Rio Declaration on Environment and Development. The affirmation of the norms institutionalized at Rio suggests that these norms remain the core of international environmental governance. At the least, understanding the process behind the evolution of these norms and identifying such trends might allow a deeper critical analysis of why specific policies and programs based on that governance structure have not achieved all that was hoped for at Rio. At the most, I have tried to suggest that debates about the most appropriate such norms, and the possibilities of change, ought to be reinvigorated.