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Peril or Prosperity? Mapping Worldviews of Global Environmental Change

The sun could well engulf the earth in about seven or eight billion years. "So what," you might shrug. "The extinction of earth, beyond the horizon of human time—ridiculous, not worth imagining." Yet some environmentalists believe that waves of smaller disasters—like climate change, deforestation, toxic pollution, and biodiversity loss—are already destroying the planet. Without doubt, many of the world's poorest people have already collided with their sun, dying from disease, starvation, war, and abuse. The beginning of the end, these environmentalists lament, is already upon us. We, as a species, are now beyond the earth's carrying capacity, a trend accelerating in the era of globalization. Unless we act immediately with resolve and sacrifice, in a mere hundred years or so, humanity itself will engulf the earth. The future is one of peril.

Many environmentalists rebel against such catastrophic visions. Yes, there are undeniable ecological problems—like the changing global climate, the pollution of rivers and lakes, and the collapse of some fish stocks—but some ecological disturbance is inevitable, and much is correctable through goodwill and cooperation. There is no crisis or looming crisis: to think so is to misread the history of human progress. This history shows the value of positive thinking, of relying on human ingenuity to overcome obstacles and create ever-greater freedom and wealth with which we can ensure a better natural environment. Globalization is merely the latest, though perhaps the most potent, engine of human progress. The future is one of prosperity.

Who is correct? Do the pessimists need antidepressants? Do the optimists need a stroll through a toxic waste dump in the developing world? Less flippantly, what is the middle ground between these two extremes? What are the causes and consequences of global environmental change?

Are ecological problems really as severe as some claim? Does the cumulative impact of these problems constitute a crisis? How is the global community handling them? Why are the efforts to resolve some problems more successful than others? Why are environmental problems worse in some parts of the world? And what is the relationship to global political and economic activity? These are tough questions, and we do not pretend to know the answers with absolute certainty. A quick survey of the typical answers to these questions reveals an almost endless stream of contradictory explanations and evidence. Each answer can seem remarkably logical and persuasive. The result for the thoughtful and "objective" observer is often dismay or confusion.

Given this, how does one even begin to understand global environmental change? It helps, we believe, to begin with the big picture, rather than delving immediately into in-depth studies of particular environmental issues. Understanding this big picture is, in our view, necessary *before* we can fully understand the various interpretations of the *specific* causes and consequences of environmental problems. In the quest for knowledge and a role in a world overloaded with information and experts, far too often this larger picture is ignored—or at least poorly understood. For problems as intricate as global environmental ones, this can lead to muddled analysis and poorly formulated recommendations. Without this broad perspective, for example, "solving" one problem can ignore other related problems, or create even greater problems elsewhere.

How polities and societies allocate financial, human, and natural resources directly influences how we manage local, national, and ultimately global environments. The issues that shape the relationship between the global political economy and the environment are, of course, often technical and scientific. But they are frequently also socioeconomic and political. Our hope is that by sketching the arguments and assumptions about socioeconomic and political causes with the broadest possible strokes, we will assist readers in a lifelong journey of understanding the causes and consequences of global environmental change, as well as the controversies that surround it. This is a small yet essential step to eventually solving, or at least slowing, some of these problems.[1] To introduce these topics, we map out a new typology of worldviews on the political economy of global environmental change.[2]

Four Environmental Worldviews

We present four main worldviews on global environmental change and its relationship to the global political economy: those of *market liberals*, *institutionalists*, *bioenvironmentalists*, and *social greens*. These labels are intentionally transdisciplinary. Many books on the global environment confine the analysis to one disciplinary box—by limiting it, say, to political science theories or to economic models. This leaves far too many questions badly answered and far too many questions unasked. But we have had to make some choices. It is, of course, impossible to cover all disciplinary perspectives in one book. In our case, we have chosen to rely mostly on the tools of political science, economics, development studies, environmental studies, political geography, and sociology. This focus, we believe, is narrow enough to do justice to the literature in these disciplines, while still broad enough to provide new insights into the sources of environmental change and the possible options—both theoretical and practical—for managing it.

These are ideal categories, somewhat exaggerated to help differentiate between them, although certainly there are some champions of each of these worldviews in the real world that do adhere to the extreme end of each of these viewpoints. By mapping out these four very different worldviews in their extremes, we aim to help students navigate a seemingly unmanageable avalanche of conflicting information and analysis. Within each category, we have tried to group the ideas of thinkers—not just academics, but equally policy makers and activists—with broadly common assumptions and conclusions. This we hope provides a sense of the debates in the "real" world—that is, within bureaucracies, cabinet meetings, international negotiations, activist campaigns, and corporate boardrooms, as well as in classrooms. Our approach, in a sense, tries to capture the broader societal debates about environment and political economy, rather than just the academic debates over the theories of the political economy of the environment, which often cover a more narrow range of viewpoints.

Naturally, given the breadth of our labels, many disagreements exist among those in each category. We have tried to show the range of views subsumed under each of the four major worldviews, although at the end of this book you may still find that your own beliefs and arguments do

not fit neatly into any of these categories. Or you may feel that you hold a mix of views—even ones that at first seem at opposite poles, such as market liberal and social green. This does not mean that our categories are erroneous, or that you are inconsistent or hypocritical, or that you should force your views into one category. Instead, it just shows the complexity and diversity of individual views on the issues.

Our typology, moreover, does not cover all possible views, although while conscious to avoid creating dozens of labels, we do try to give a reasonable range. We include only thinkers who are *environmentalists*—that is, those who write and speak and work to maintain or improve the environment around us. This includes those highly critical of so-called environmental activists or radical greens. An economist at the World Bank is, in our view, just as much an environmentalist as a volunteer at Greenpeace, as long as the economist believes she or he is working for a better environment (however that is defined). Also, we focus principally on economic and political arguments, and tend to give less attention to philosophical and moral ones. Within the political and economic literature, we stress arguments and theories that try to *explain* global environmental change—that is, the literature that looks at an environmental problem and asks: Why is that happening? What is causing it? And what can be done?

With those introductory remarks, we now turn to our typology.

Market Liberals

The analysis of market liberals is grounded in neoclassical economics and scientific research. Market liberals believe that economic growth and high per capita incomes are essential for human welfare and the maintenance of sustainable development. Sustainable development is generally defined by these thinkers along the lines of the 1987 World Commission on Environment and Development (WCED): "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[3] In terms of improving global environmental conditions, market liberals argue that economic growth (production and consumption) creates higher incomes, which in turn generate the funds and political will to improve environmental conditions. Rapid growth may exacerbate inequalities, as some of the

rich become super rich, but in the long run all will be better off. In other words, all boats will rise. Market liberal analysis along these lines is commonly found, for example, in publications of the World Bank, the World Trade Organization (WTO), and the World Business Council for Sustainable Development (WBCSD), as well as in the media in publications such as *The Economist*.

Market liberals see globalization as a positive force, because it promotes economic growth as well as global integration. They concede that as states pursue economic growth, environmental conditions—such as air and water quality—may deteriorate as governments and citizens give firms more scope to pursue short-term profits, thus stimulating further economic growth. But once a society becomes wealthy, citizens (and in turn governments and business) will raise environmental standards and expectations. *The Economist* magazine explains the global pattern: "Where most of the economic growth has occurred—the rich countries—the environment has become cleaner and healthier. It is in the poor countries, where growth has been generally meagre, that air and water pollution is an increasing hazard to health."[4] The key, market liberals argue, is good policy to ensure that economic growth improves the environment in all countries.

The main drivers of environmental degradation, according to market liberals, are a lack of economic growth, poverty, distortions and failures of the market, and bad policies. Poor people are not viewed as unconcerned or ignorant. Rather, to survive—to eat, to build homes, to earn a living—they must exploit the natural resources around them. They are, according to the World Bank, both "victims and agents of environmental damage."[5] It is unrealistic—perhaps even unjust—to ask poor people to consider the implications of their survival for future generations. The only way out of this vicious cycle is to alleviate poverty, for which economic growth is essential. Restrictive trade and investment policies and a lack of secure property rights all hamper the ability of the market to foster growth and reduce poverty. Market failures—instances where the free market results in an environmentally suboptimal outcome—are viewed as possible causes of some environmental problems, although these are seen as relatively rare in practice. More often, market liberals argue, inappropriate government policies—especially those that distort the market, such as subsidies—are the problem.

Market liberals frequently draw on more moderate estimates of environmental damage and more optimistic scenarios for the future. A few have become famous for declaring that the global environment is nowhere near a state of crisis, such as late economist Julian Simon,[6] columnist Gregg Easterbrook,[7] and political scientist Bjørn Lomborg.[8] But most recognize that many environmental problems are indeed serious, although all reject the image of the world spinning toward a catastrophic ecological crash. Instead, market liberals tend to stress our scientific achievements, our progress, and our ability to reverse and repair environmental problems with ingenuity, technology, cooperation, and adaptation. For these thinkers, population growth and resource scarcity are not major concerns when it comes to environmental quality. A glance at the historical trend of better environmental conditions for all confirms this (especially statistics from the developed world). So do the global data on human well-being, such as medical advances, longer life expectancy, and greater food production. Furthermore, most environmental problems, if not currently responding to efforts to manage them more effectively, at least have the potential to improve in the longer term.

Thinkers from the market liberal tradition place great faith in the ability of modern science and technology to help societies slip out of any environmental binds that may occur (if, e.g., unavoidable market failures occur). Human ingenuity is seen to have no limits. If resources become scarce, or if pollution becomes a problem, humans will discover substitutes and develop new, more environmentally friendly technologies. Market liberals see advances in agricultural biotechnology, for example, as a key answer to providing more food for a growing world population. Their belief in science leaves most market liberals wary of precautionary policies that restrict the use of new technology, unless there is clear scientific evidence to demonstrate that it is harmful.

Market liberals believe open and globally integrated markets promote growth, which in turn helps societies find ways to improve or repair environmental conditions. To achieve these goals, market liberals call for policy reforms to liberalize trade and investment, foster specialization, and reduce government subsidies that distort markets and waste resources. Governments, too, need to strengthen some institutions, such as institutions to secure property rights or institutions to educate and train the poor to protect the environment. Governments are encouraged to use market-

based tools—for example, environmental taxes or tradable pollution permits—to correct situations of genuine market failure. Innovative environmental markets—like a global scheme to trade carbon emissions or niche markets for environmental products such as timber from sustainable sources—and voluntary corporate measures to promote environmental stewardship are also reasonable ways to improve environmental management. But in most cases, they believe, it is best to let the market allocate resources efficiently. Market liberals, such as economist Jagdish Bhagwati[9] and business executive Stephan Schmidheiny,[10] argue that it makes economic sense for firms to improve their environmental performance, and for this reason it makes sense to let the market guide them.

Institutionalists

The ideas of institutionalists are grounded in the fields of political science and international relations. They share many of the broad assumptions and arguments of market liberals—especially the belief in the value of economic growth, globalization, trade, foreign investment, technology, and the notion of sustainable development. Indeed, moderate institutionalists sit close to moderate market liberals. It is a matter of emphasis. Market liberals stress more the benefits and dynamic solutions of free markets and technology; institutionalists emphasize the need for stronger global institutions and norms as well as sufficient state and local capacity to constrain and direct the global political economy. Institutions provide a crucial route to transfer technology and funds to the poorest parts of the planet.[11] Institutionalists also worry far more than market liberals about environmental scarcity, population growth, and the growing inequalities between and within states. But they do not see these problems as beyond hope. To address them, they stress the need for strong institutions and norms to protect the common good. Institutionalist analysis is found in publications by organizations such as the UN Environment Programme (UNEP) and by many academics who focus their analysis on international organizations and "regimes" (international environmental agreements and norms, defined more precisely in chapter 3) in the fields of political science and law.

Institutionalists see a lack of global cooperation as a key source of environmental degradation. The failure of the 2009 Copenhagen climate

summit to reach a bold new international agreement to address climate change, for example, was a deep disappointment to many institutionalists, because without global cooperation, the problem only promises to worsen. Ineffective cooperation as exemplified by the climate case partly arises because of the nature of the sovereign state system, which gives a state supreme authority within its boundaries. In such a system, states tend to act in their own interest, generally leaving aside the interest of the global commons. Yet like market liberals, institutionalists *do not* reject the way we have organized political and economic life on the planet. Instead, they believe we can overcome the problem of sovereignty as the organizing principle of the international system by building and strengthening global and local institutions that promote state adherence to collective goals and norms. This can be most effectively carried out through global-level environmental agreements and organizations.

The process of globalization makes global cooperation increasingly essential (and increasingly inevitable). But institutionalists stress that unfettered globalization can add to the pressures on the global environment. The task for those worried about the state of the global environment, then, is to guide and channel globalization so that it enhances environmental cooperation and better environmental management. This point has been stressed most forcefully by key policy figures such as former Norwegian Prime Minister Gro Harlem Brundtland in her role in the 1980s as head of the WCED, Canadian diplomat Maurice Strong as an organizer of global environmental conferences, and Yvo de Boer as executive secretary of the UN Framework Convention on Climate Change. The aim of this approach is to ensure that global economic policies work to both improve the environment and raise living standards.[12] Controls at all levels of governance, from the local to the national to the global, can help to direct globalization, enhancing the benefits and limiting the drawbacks.[13]

For the global environment, institutionalists believe that institutions need to internalize the principles of sustainable development, including into the decision-making processes of state bureaucracies, corporations, and international organizations. Only then will we be able to manage economies and environments effectively—especially for common resources. For many institutionalist academics, like political scientist Oran Young, the most effective and practical means is to negotiate and

strengthen international environmental regimes.[14] Many within the policy world, such as in the United Nations Environment Programme, add the need to enhance state and local capacity in developing countries.[15] Thus, many institutionalists call for more and better "environmental aid" for the developing world.[16] It should be stressed, however, that institutionalists do not necessarily support all institutions uncritically. Some point to badly constructed institutions as a source of problems. Many point as well to the difficulty of trying to measure the implementation and effectiveness of an international agreement or institution.[17] But a defining characteristic of institutionalists is the assumption that institutions matter—that they are valuable—and that what we need to do is reform, not overthrow, them.[18]

Institutionalists also argue that strong global institutions and cooperative norms can help enhance the capacity of *all* states to manage environmental resources. What is needed, from this perspective, is to embed environmental norms into international cooperative agreements and organizations as well as state policies. Along these lines, many institutionalists support a precautionary approach, in which states agree to collective action in the face of some scientific uncertainty. Institutionalists also advocate the transfer of knowledge, finances, and technology to developing countries. Organizations like the World Bank, the United Nations Environment Programme, and the Global Environment Facility already play a role here. And many institutionalists point to the creation of and changes within these organizations as evidence of progress.

Bioenvironmentalists

Inspired by the laws of physical science, bioenvironmentalists stress the biological limits of the earth to support life. The planet is fragile, an ecosystem like any other. Some even see the earth as behaving like a living being, a self-regulating, complex, and holistic superorganism—the so-called Gaia hypothesis, as articulated by environmental scientist James Lovelock.[19] The earth can support life, but only to a certain limit, often referred to as the earth's "carrying capacity." Many bioenvironmentalists see humans as anthropocentric and selfish (or at least self-interested) animals. Some, like the academic William Rees, even see humans as

having "a genetic predisposition for unsustainability."[20] All bioenvironmentalists agree that humans as a species now consume far too much of the earth's resources, such that we are near, or indeed have already overstepped, the earth's carrying capacity. Such behavior, without drastic changes, will push the planet toward a fate not much different from the ecological calamity of Easter Island of three hundred years ago—where a once-thriving people became over a few centuries "about 2000 wretched individuals . . . eking out a sparse existence from a denuded landscape and cannibalistic raids on each other's camps."[21] These scholars stress the environmental disasters around us, often citing shocking figures on such problems as overfishing, deforestation, species loss, and unstable weather patterns. Publications of the Worldwatch Institute and the WWF Network (WWF, formerly the World Wildlife Fund/World Wide Fund for Nature) are illustrative of this perspective.

For most bioenvironmentalists, population growth is a key source of stress on the earth's limits. The ideas of Thomas Malthus (1766–1834), who in "An Essay on the Principle of Population"[22] predicted that the human population would soon outstrip food supply, were revived in the late 1960s by writers such as biologist Paul Ehrlich.[23] Sometimes known as neo-Malthusians, these writers argue that global environmental problems ultimately stem from too many people on a planet with finite resources. The principle of sovereignty, which divides the world into artificial territories, aggravates the effects of too many humans because it violates the principles of ecology and creates what academic Garrett Hardin famously called a "tragedy of the commons." For him, too many people without overarching rules on how to use the commons creates a situation in which individuals, rationally seeking to maximize their own gain at the expense of others, overuse and ultimately destroy the commons.[24] This point, stressed by many bioenvironmentalists, is also made by many institutionalists, as discussed earlier.

Many bioenvironmentalists stress, too, that the neoclassical economic assumption of infinite economic growth is a key source of today's global environmental crisis. For these thinkers, a relentless drive to produce ever more in the name of economic growth is exhausting our resources and polluting the planet. Many argue that the drive to pursue ever more economic growth is what has taken the earth beyond its carrying capacity. For bioenvironmentalists, increasing human consumption is as great

a problem as population growth, and the two are seen as inextricably linked. Together, they argue, rising populations and consumption are drawing down the earth's limited resources: we must respect the biophysical limits to growth, both for people and economies.[25]

Not all bioenvironmentalists engage directly in discussions on economic globalization, but those that do tend to see globalization as a negative force for the environment. They agree with market liberals that globalization enhances economic growth. But instead of seeing this as positive for the environment, they see it as contributing to further environmental degradation. For them, more growth only means more consumption of natural resources and more stress on waste sinks. Globalization is blamed, too, for spreading Western patterns of consumption into the developing world. With much larger populations and often more fragile ecosystems (especially in the tropics), this spread of consumerism is accelerating the collapse of the global ecosystem.[26] Globalization is also seen to encourage environmentally harmful production processes in poor countries that have lower environmental standards.[27] For these reasons, these bioenvironmentalists argue that we must curtail economic globalization to save the planet.

Solutions proposed by bioenvironmentalists flow logically from their analysis of the causes of environmental damage: we need to curb economic and population growth. Those who focus on the limits to economic growth have been a core group in the field of ecological economics, pioneered by thinkers such as economist Herman Daly[28] and published in journals such as *Ecological Economics*. This group combines ideas from the physical sciences and economics to develop proposals to revamp economic models to include the notion of physical limits, which involves changing our measures of "progress" and the methods we use to promote it. Only then, these thinkers argue, can we reduce the impact of humans on the planet and prod the world toward a more sustainable global economy. Those bioenvironmentalists who focus more on overpopulation call for measures to lower population growth, like expanding family planning programs in poor countries, and for curbs on immigration to rich countries where consumption problems are the worst. At the more extreme end, some see a world government with coercive powers as the best way to control the human lust to fill all ecological space, destroying it, often inadvertently, in the process.[29]

Social Greens

Social greens, drawing primarily on radical social and economic theories, see social and environmental problems as inseparable. Inequality and domination, exacerbated by economic globalization, are seen as leading to unequal access to resources as well as unequal exposure to environmental harms. Although these views have long been important in debates over environment and development, and are themselves a mix of a variety of radical views, scholars in international political economy have only recently recognized them as a distinct perspective.[30]

Many social greens from a more activist stance focus on the destructive effects of the global spread of large-scale industrial life.[31] Accelerated by the process of globalization, large-scale industrialism is seen to encourage inequality characterized by overconsumption by the wealthy, while at the same time contributing to poverty and environmental degradation. While agreeing broadly with this analysis, other, more academic social greens draw on Marxist thought, pointing specifically to capitalism as a primary driver of social and environmental injustice in a globalized world. They argue that capitalism, and its global spread via neocolonial relations between rich and poor countries, not only leads to an unequal distribution of global income, power, and environmental problems, but is also a threat to human survival.[32] Also inspired by Marxist thought, some social greens take a neo-Gramscian or historical materialist perspective, focusing on the way those in power frame and influence ecological problems, primarily hegemonic blocs consisting of large corporations and industrial country governments.[33] Other social greens like Vandana Shiva draw heavily from feminist theory to argue that patriarchal relationships in the global economy are intricately tied to ecological destruction.[34] The key concern of all of these strands of social green thought, then, is inequality and the environmental consequences related to it. Social green analysis can be found in magazines such as *The Ecologist* and in reports of groups such as the International Forum on Globalization (IFG) and the Third World Network (TWN).

Social greens sympathize with bioenvironmentalist arguments that physical limits to economic growth exist. Overconsumption, particularly in rich industrialized countries, is seen by social greens to put a great strain on the global environment. Many, perhaps most prominently

Wolfgang Sachs[35] and Edward Goldsmith,[36] see this problem as accelerating in an era of economic globalization. The arguments of social greens on growth and consumption, and on the role of the global economy in accelerating both, are close to bioenvironmentalist arguments. But few social greens accept bioenvironmentalist arguments regarding population growth, maintaining instead that overconsumption, particularly among the rich in the First World, is a far greater problem.[37] Unlike bioenvironmentalists, most social greens see population-control policies as a threat to the self-determination of women and the poor.[38]

Whether it is viewed as spreading industrialism or capitalism (or both), social greens uniformly oppose economic globalization, arguing that it is a key factor behind much of what is wrong with the global system.[39] In addition to feeding environmentally destructive growth and consumption, globalization is seen to breed injustice in a number of ways. It exacerbates the inequality within and between countries. It reinforces the domination of the global rich and the marginalization of women, indigenous peoples, and the poor. It assists corporate exploitation of the developing world (especially labor and natural resources). It weakens local community autonomy and imposes new forms of domination that are Western and patriarchal (local customs, norms, and knowledge are lost, replaced by new forms unsuited to these new locations). Globalization is also seen to destroy local livelihoods, leaving large numbers of people disconnected from the environment in both rich and poor countries. This globalization is viewed by many social greens as a continuation of earlier waves of domination and control. In the words of the prominent antiglobalization activist Vandana Shiva, "The 'global' of today reflects a modern version of the global reach of the handful of British merchant adventurers who, as the East India Company, later, the British Empire raided and looted large areas of the world."[40]

From this analysis, it is not surprising that social greens reject the current global economy. Reactive crisis management in a globalized world, social greens believe, will not suffice to save the planet: tinkering will just momentarily stall the crash. In many instances, the environmental solutions of market liberals and institutionalists, because they assume globalization brings environmental benefits, are part of the problem. For social greens, major reforms are necessary, well beyond, for example, just strengthening institutions or internalizing environmental and social

costs into the price of traded goods. Thus social greens, as the work of the International Forum on Globalization exemplifies, call for a dismantling of current global economic structures and institutions.[41] To replace this, many social greens advocate a return to local community autonomy to rejuvenate social relations and restore the natural environment. Localization activist Colin Hines has mapped out a model for how this could occur. It entails a retreat from the large-scale industrial and capitalist life and a move toward local, self-reliant, small-scale economies.[42] These thinkers stress the need to, in the words of some, "think globally, act locally." In other words, understand the global context, while at the same time acting in ways suitable to the local context. These thinkers advocate bioregional and small-scale community development because they firmly believe that a stronger sense of community will fulfill basic needs and enhance people's quality of life. Such development would help reduce inequities and levels of consumption that are out of balance with the world's natural limits.[43]

As part of their strategy for promoting community autonomy and localization, social greens also stress the need to empower voices marginalized by the process of economic globalization. They embrace indigenous knowledge systems, for example, arguing that these are equally if not more valid than the Western scientific method. The process of economic "development," these critics argue, foists the latter onto the developing world, thus threatening ecologically sound local systems. Many social greens regard local cultural diversity as essential to maintain biological diversity. The erosion of one is seen to lead to the erosion of the other. In advocating local and indigenous empowerment and input, social greens emphasize that effective solutions to environmental problems will continue to remain elusive unless the voices of women, indigenous peoples, and the poor are integrated into the global dialog on environmental and social justice, as well as into locally specific contexts.[44]

Conclusion

Table 1.1 summarizes the main assumptions and arguments of market liberals, institutionalists, bioenvironmentalists, and social greens. We have tried hard to present these views fairly and accurately based on

our reading of a variety of works by policy makers, activists, academics, and business leaders across a range of perspectives. Yet we should also stress again that these are "ideal" categories, and within each there are a range of views and more subtle debates. Some authors you will read will fit neatly into one of these categories, and others are more difficult to classify. This variance in ease of classification just demonstrates the range of possible views. Moreover, there are alliances between various views on different issues, which makes the terrain difficult to map at times. For example, market liberals and institutionalists agree with one another that economic growth and globalization have positive implications for the environment, and social greens and bioenvironmentalists hold the opposite view. And institutionalists and bioenvironmentalists agree that population growth poses a problem for the world's resources, while market liberals and social greens put far less emphasis on this factor.

We do not want to leave the impression that any one of these is the "correct" view. Each, we believe, contains insights into the sources of today's environmental problems, as well as into potential solutions. Each view has its own logic, which fits with its assumptions. Understanding these views help to explain, too, the often markedly different interpretations of the condition of the global environment. One article, for example, may well declare climate change the most serious threat confronting today's governments. The next article may declare such a statement exaggerated or unnecessarily alarmist, perhaps even a ploy to raise funds or scare world leaders into action. This, we believe, does not mean that there are no facts—or causality—or analysis—or statistics. It also does not mean that some authors lie and deceive. Rather it merely shows how different interpretations and different values—that is, different worldviews—can shape which information an analyst chooses to *emphasize*.

This book does not aim to provide you with one answer as to how we can achieve a "green world." Rather, it seeks to provide you with tools to assess for yourself what the most appropriate path forward might be. As you proceed through the rest of this book, we urge you to keep an open mind regarding the debates and evidence about the consequences of the global political economy for global environmental change. This is certainly not easy. These are emotional issues. And the evidence

Table 1.1
Environmental perspectives

	Market liberals	Institutionalists
Focus	Economies	Institutions
A global environmental crisis?	No. Some inevitable problems, but overall modern science, technology, ingenuity and money are improving the global environment.	Not yet. Potential for crisis unless we act now to enhance state capacity and improve the effectiveness of regimes and global institutions.
Causes of problems	Poverty and weak economic growth. Market failures and poor government policy (i.e., market distortions such as subsidies as well as unclear property rights) are also partly to blame.	Weak institutions and inadequate global cooperation to correct environmental failures, underdevelopment, and perverse effects of state sovereignty.
Impact of globalization	Fostering economic growth, a source of progress that will improve the environment in the long run.	Enhancing opportunities for cooperation. Guided globalization enhances human welfare.
The way forward	Promote growth, alleviate poverty and enhance efficiency, best pursued with globalization. Correct market and policy failures, and use market-based incentives to encourage clean technologies. Promote voluntary corporate greening.	Harness globalization and promote strong global institutions, norms and regimes that manage the global environment and distribute technology and funds more effectively to developing countries. Build state capacity. Employ precautionary principle.

Table 1.1
(continued)

	Bioenvironmentalists	Social greens
Focus	Ecosystems	Justice
A global environmental crisis?	Yes. Near or beyond earth's carrying capacity. Ecological crisis threatens human survival.	Yes. Social injustice at both local and global levels feeds environmental crisis.
Causes of problems	Human instinct to overfill ecological space, as seen by overpopulation, excessive economic growth, and overconsumption.	Large-scale industrial life (some say global capitalism), which feeds exploitation (of labor, women, indigenous peoples, the poor, and the environment) and grossly unequal patterns of consumption.
Impact of globalization	Driving unsustainable growth, trade, investment, and debt. Accelerating depletion of natural resources and filling of sinks.	Accelerating exploitation, inequalities, and ecological injustice while concurrently eroding local community autonomy.
The way forward	Create a new global economy within limits to growth. Limit population growth and reduce consumption. Internalize the value of nonhuman life into institutions and policies. Agree to collective coercion (e.g., some advocate world government) to control greed, exploitation, and reproduction.	Reject industrialism (and/or capitalism) and reverse economic globalization. Restore local community autonomy and empower those whose voices have been marginalized. Promote ecological justice and local and indigenous knowledge systems.

and arguments are often contradictory, almost as if analysts live in different worlds. Our hope, if you do keep an open mind until the end of the book, is not to confuse you, but to leave you with a better understanding of your own assumptions and arguments. Moreover, if you then decide to reject the arguments of others, you will do so with a genuine understanding of the complexity and historical sources of those views. Only then can the debates truly move forward.