

Series Foreword

The key focus of the Praeger Politics and Environment series is to explore the interstices between environment, political, and security impacts in the twenty-first century. To those intimately involved with these issues, their immediacy and importance are obvious. What is not obvious to many, nonetheless—including those involved in making decisions that affect our collective future—is how these three critical issues are in constant conflict and frequently clash. Today, more so than at any other time in human history, intersecting environment, political, and security issues profoundly impact our lives and the lives of those who are to come.

In examining the complex interdependence of these three impact effects, the study of environmental and security issues should recognize several distinct and pragmatic truths. One, international organizations today are established for and focus best on security issues. Thus, while it remains difficult to address environmental threats, challenges, and vulnerabilities for these organizations, it makes imminently better sense to reform what we have rather than constantly invent the “new” organization that may be no better equipped to handle current and future challenges. Secondly, the introduction of new protocols must continue to be created, worked into signature, and managed under the leadership of states through international organizations and cooperative regimes. Finally, and incorporating the reality of these previous two truths, we should honestly recognize that environmental challenges can best be presented in terms that relate to security issues. To that

end, it is sensible to depict environmental challenges in language that is understandable to decision makers most familiar with security impacts and issues.

There is benefit and danger in this approach, of course. Not all security issues involve direct threats; some security issues, as with some political processes, are far more nuanced, more subtle, and less clearly evident. I would argue further—as I have been arguing for several decades now—that it remains a tragic mistake to couch all security issues in terms of threat. To the contrary, what I term “creeping vulnerabilities”—climate change, population growth, disease, climate change, scarcity of water and other natural resources, decline in food production, access, and availability, soil erosion and desertification, urbanization and pollution, and the lack of effective warning systems—can come to have a far more devastating impact effect if such issues are ignored and left unchecked over time. In the worst possible outcomes, vulnerabilities left unchecked over time *will* manifest themselves as threats.

In its most direct, effective, and encompassing assessment, environmental security centers on a focus that seeks the best response to changing environmental conditions that have the potential to reduce stability and affect peaceful relationships, and—if left unchecked—could lead to the outbreak of conflict. This working definition, therefore, represents the vital core of the Praeger Politics and the Environment series.

Environmental security emphasizes the sustained viability of the ecosystem, while recognizing that the ecosystem itself is perhaps the ultimate weapon of mass destruction. In 1556 in Shensi province, for example, tectonic plates shifted and by the time they settled back into place, 800,000 Chinese were dead. Roughly 73,500 years ago, a volcanic eruption in what is today Sumatra was so violent that ash circled the earth for several years, photosynthesis essentially stopped, and the precursors to what is today the human race amounted to only several thousand survivors worldwide. The earth itself, there can be little doubt, is the ultimate weapon of mass destruction. Yet from an alternate point of view, mankind itself is the ultimate threat to the earth and the earth's ecosystem.

Three decades ago, the environmentalist Norman Myers wrote that national security is about far more than fighting forces and weaponry. National security must also include issues of environment and environmental impact—from watersheds to climate impact—and these factors must figure in the minds of military exerts and political leaders. Myers' words today remain as prophetic, and deadly accurate, as ever.

In this latest volume of the Politics and Environment series, professor emeritus of medicine David Shearman and philosopher and ecologist Joseph

Wayne Smith show a complete willingness to challenge organizational identities. They forcefully argue that our system of overall political, economic, and social governance is an obstacle to confronting effectively the looming environmental crises that global climate change poses.

Shearman and Smith challenge us to reexamine how states, corporations, and consumers are driving us, literally, to the brink of disaster. In engaging considerations of the limits to growth, the separation of corporatism and governance, financial reform, legal reform, and the reclaiming of the “commons” for human society, they ask us to consider what is often considered unthinkable in our cosmopolitan, ideologically centered mindset. In short, Shearman and Smith argue that liberal democracy—considered sacrosanct in modern societies—is an impediment to finding ecologically sustainable solutions for the planet.

Many, of course, will find this argument untenable. But I would urge readers to listen closely to Shearman and Smith’s entertaining and always thoughtful arguments. In an era of ever widening, ever deepening globalization, liberal democracies have proven unable, or unwilling, to check the explosive growth of corporatism’s power, influence, and reach. In terms that mirror Marx’s thoughts on the aggregation of capital into the hands of the fewer and fewer, Shearman and Smith are nonetheless, not neo-Marxists in their argument. In some ways, their notions that liberal democracy must give way to “a form of authoritarian government by experts” reminds us as well of Plato’s *Republic*.

Environmentalists often predict an Apocalypse is coming: The earth will heat up like a greenhouse. We will run out of energy. Overpopulation will lead to starvation and war. Nuclear winter will devastate all organic life. We have, of course, grown desensitized to many such prophecies of doom. Although some may find Shearman and Smith’s conclusions utopian, their warnings bear close attention. As they methodically and pragmatically remind us throughout this book, the time for strategic reconsideration of how we run our lives—and how our lives are being run—is more pressing than ever.

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Preface

This book documents the near certainty of climate change, its serious consequences, and the failure of democratic societies to respond adequately. A new planet is about to be created, one that is inhospitable, producing less food and water and without the necessary ecological services to support the world's population. In February of 2007, the first part of the 4th "Report of the Intergovernmental Panel on Climate Change" was published. A consensus of 2,300 climate scientists, many of them American, reported more severe changes than in the previous report in 2001 and stressed an urgency to act.

We have known about these impending problems for several decades. Each year the certainty of the science has increased, yet we have failed to act appropriately to the threat. We have analyzed the reasons for this indolence. This understanding will lead you to ask yourself if Western civilization can survive in its present state of prosperity, health, and well-being, or will it soon suffer the fate of all previous civilizations—to become a mere page in history?

We will demand from you the reader, far more than your comprehension of the consequences of climate change and the workings of democracy. You will need to examine the limits of your introspection and the motivation bestowed upon you by biology and culture. The questions to be asked are difficult. You have a commitment to your children, but are you committed to the well-being of future generations and those you may never see, such

as your great-grandchildren? If so are you prepared to change your lifestyle now? Are you prepared to see society and its governance change if this is a necessary solution?

It is salutatory to think where this issue sits in your priority list. Examine how much of your time each day is spent considering matters of importance to you. If we exclude time spent in work and sleep, what proportion of your thinking time is devoted to your career, reputation, colleagues, finances, car, future possessions, prowess, and—not least—sex, desire, and food? Of course you love your partner and children, but how much time does your brain spend on them? If your gender is female, chances are that your priorities have a different emphasis with much more time thinking of relationships and family. We may make ourselves comfortable by saying the future of humanity is a concern to us, but estimate truthfully to yourself how many seconds per day you think about it. How much time compared to your indulgencies of entertainment, television, and the delights and addictions of consumerism?

Human nature being as it is, we do not consider that these world issues threaten us until they impinge directly upon us. The crushing drought in Australia has coincided with a surge of interest in climate change. Hurricane Katrina had a similar though smaller impact on climate change discussion in the United States, but has the issue permeated the people or press of New York or the citizens of Delhi or Toronto? Has it superseded the Grammys or Oscars in public interest? The increase in wild fires in California, British Columbia, Australia, and Iberia has concentrated the minds of inhabitants because the threat is recurrent and has increased visibly. However when it happens to someone else, even though we have played a part in its genesis, it scarcely impinges on our thoughts, unlike those poor souls already subject to the inundation of a South Sea island due to rising sealevels, or the melting of the Inuit land and loss of their livelihood.

In simple terms we have a conflict of interest between our personal needs and desires and the recognition of what we must do personally to alleviate this threat. We are like many patients informed of a diagnosis of cancer. We understand the diagnosis but engage in denial. In the same way death is dismissed when it crosses our minds. Admittedly, denial has been overcome in some countries with the development of alternative fuels, but even those nations with good intent have failed to stem the rising flow of greenhouse emissions.

If conflict of interest presents a problem to all of us, this conflict is an even greater problem to those in government. This conflict explains why government rhetoric is followed by catatonia. Not only does the politician have to contend with the personal conflicts of interest that we all experience,

but he or she has a career conflict over reelection, the consuming motive of most. Reelection depends upon economic growth and a booming economy, the root cause of climate change and the rapid depletion of resources available to us. The fundamental political dilemma is illustrated by the view of British Prime Minister Blair, expressed at the Economic Forum in Davos in February 2005 to the effect that if we were to put forward a solution to climate change, something that would involve drastic cuts in economic growth or standards of living, it would not matter how justified it was, it would simply not be agreed to.¹ In other words, democracy itself has a big problem. This negative response is seen to be much more vigorous when we consider the words and actions of U.S. President George Bush or Australian Prime Minister John Howard. Nothing can be done that will harm industry or jobs. Comprehension does not extend to the possibility that there may be fewer future jobs unless action is taken. In this book we provide an analysis of this situation.

This political attitude also explains the obsession with technological development. It offers a fix without having to make difficult and unpopular decisions. Climate change, like all other problems that humanity has encountered, will be solved by technology—pump the carbon dioxide underground and launch space ships with mirrors to reflect sunlight. This solution fits the paradigm of development and progress and more importantly absolves us from any sacrifice of our profligacy. But it won't work this time because there are so many interlocking problems that cannot respond to a technological fix. These problems depend upon population expansion and consumption of natural resources.

Perhaps the most important conflict of interest occurs within the corporate empires, the boiler rooms of our productive society. You will learn from our analysis that profits and responsibility to shareholders rank above all other responsibilities whatever the public face of corporate responsibility. To date, evidence suggests that the gulf cannot be bridged.

Ultimately we are enclosed in an autonomous market economy; no one can flourish outside it and the consequences of its never-ending growth are obvious to all who are prepared to think about it. This intricate form of human organization has become like the ant hill, where the brain ruling the paradigm is the collective neural tissue of all ants, working in concert and eating the world. Fortunately there are predators for ants. The autonomous human brain is “the market.”

In the early chapters we introduce the reader to the scientific evidence of overwhelming environmental damage. We are now living on capital as well as interest. Climate change is not the only symptom of the stress we are putting on the earth. In fact there are many interdependent factors causing

symptoms, for example the loss of productive land, decreasing fresh water, and loss of food and biological resources. Our analysis indicates common threads in the functioning of democracy in all these problems. We then define the principles of democracy in chapter 5 and explain the concept of “the commons” and the consequences of democracy failing to recognize its importance. Chapters 6 and 7 demonstrate that the inherent failures of democracy that have led to the environmental crisis also operate in many other spheres of society. They are inherent to the operation of democracy. Furthermore, we come to share Plato’s conclusion that democracy is inherently contradictory and leads naturally to authoritarianism.

In chapters 8 and 9 we argue that authoritarianism is the natural state of humanity, and it may be better to choose our elites rather than have them imposed. Indeed Plato, on seeing the sequelae of democracy’s birth, observed that it is better that the just and wise should rule unwillingly, rather than those who actually want power should have it. We analyze authoritarian structures and their operation ranging from the medical intensive care unit and the Roman Catholic Church to corporatism with the conclusion that the crisis is best countered by developing authoritarian government using some of the fabric of these existing structures. The education and values of the new “elite warrior leadership” who will battle for the future of the earth is described. In chapter 10 we provide some solutions to the illnesses of democracy, and we leave you, the reader, to decide how humanity should proceed.

A PERSONAL MESSAGE FROM DAVID SHEARMAN

Every author will use an analogy to describe the hundreds of tortured hours spent writing each book. It is the excision of a painful tooth, for pain will continue until the surgery, or book, is accomplished. As a physician, scientist, and academic, I have had a happy, fulfilling life. Easing the sufferings of patients shows to me the courage, fortitude, and warmth of the individual that contrasts with the selfish abandon that humanity can display collectively. My needs are satisfied by family relationships and the fascinations of the natural world. From my daily interaction with patients, I encounter what the research studies tell us—that above a very modest income there is no relationship between happiness and income. There is no more than transient gratification in a consumerism driven by envy and wealth accumulation. These issues are well documented in our text. So my message is that all of us in wealthy democratic societies consuming resources that would require more than three planet earths to assuage, could live a simpler, fulfilling life and thereby allow our offspring to live in a sustainable world.

I have been part of the generations that created this selfish mess, and I need to spend part of my time in restitution. For all of us knowledge of this crisis demands an ethical response.

Finally, why is this book written by Australians for publication in the United States? Indeed some readers may feel that the United States is criticized unfairly. If this is so, please remember that the comments are those that have to be said to a friend. Remember also that your constitution and your publishers support freedom of speech, for which we are grateful.

Part of my medical practice was at a wonderful medical center, Yale University Medical School. I was infected by the quest for intellectual adventure and service, and by the vitality and enterprise. America epitomized the future. Today, my feeling for America, though not its citizens, is one of loss and grief. After half a century of death and brutality, the U.S. inherited untold power to shape a better world, and, when the Berlin Wall collapsed, it became a sole responsibility. Each act of human history, each civilization is a page with the same mistakes, disasters, and conclusions born of human foible and greed. History teaches us to expect no more or no less. The dream was that this empire would be different from those before. American leadership had to succeed in changing a world bent on certain ecological and possible nuclear destruction. It has failed to put self-interest aside.

The emissions of carbon dioxide in the past six years cannot be retrieved; they will continue to harm the world for many decades. As a result in the eyes of many who looked to the United States for leadership, there is bitter disappointment. The U.S. democracy that offered freedom with diminishing collective responsibility is not a model that can sustain the world. It brings recognition that democracy must be reformed. This is the motivation for this book. And the United States is indispensable for change.

NOTE

1. David Shearman, "Kyoto: One Tiny Step for Humanity," Online Opinion, March 4, 2005, at <<http://www.onlineopinion.com.au/view.asp?article=3085>>.

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Has Democracy Failed?

A democracy is a government in the hands of men of low birth, no property, and vulgar employments.

—*Aristotle*

DEMOCRACY AND THE MODERN WORLD

Democracy has become the Holy Grail of Western culture. It is preached in almost biblical terms. President George W. Bush hands out his favorite book, *The Case for Democracy* by Natan Sharansky,¹ to fellow statesmen and reminds us that “democracy means freedom and prosperity.” It is easy to see why President Bush is inspired by Sharansky, the first political prisoner to be released by Gorbachev in 1986. Sharansky spent nine years in prison for fighting for the rights of Soviet Jews and rightly enough appreciates the value of personal freedom. He was courageous. He has valuable insights into the Middle East peace process, but his celebration of the value of Western democracy is, we believe, naïve, and he has yet to reach the insightful disillusionment of Aleksandr Solzhenitsyn. In his argument for democracy, Sharansky is concerned only with issues of personal liberty. He doesn’t move beyond this individualist perspective to consider the major threats to the continuation of human life and civilization. He epitomizes the failure of supporters of liberal democracy to grasp the significance of the global environmental crisis.

We will confront the reader with problems of such magnitude that issues of personal liberty pale into insignificance. We present the case against democracy, showing how freedom and liberalism have the potential to propagate environmental tyranny far greater than any threat posed by the former Soviet Union. The future fruits of liberal democracy may prove to be more bitter than even the gulags of the Soviet system, as horrible as the gulags were.

Let us be clear about one point from the very beginning of this text. The authors are not living fossil Marxists attempting to rehabilitate the Soviet regime. We agree that existing authoritarian societies, largely based upon Marxist doctrines, have had an appalling environmental record. We accept that there is no example of an existing authoritarian government that does not have a record of environmental abuse. We also accept that all existing authoritarian governments have a worse environmental record than all liberal democratic societies. Being “least worst” of a bad bunch is not a logically good argument for the acceptability of the “least worst” option. As a matter of rational argument, defenders of liberal democracy must be forced to do better than merely ignore the long existing problems of democracy, first noted by Plato (427–347 B.C.). We contend that there are other forms of authoritarian government beyond the failed Marxist version. We discuss a Platonic form of authoritarianism based upon the rule of scientific experts, and, as we detail in chapter 8, this hypothetical system is not based upon Marxist principles. We are critics, on ecological grounds, of the capitalist economic system and existing authoritarian systems. We argue that even the allegedly more environmentally preferable liberal democratic societies fail to provide humanity with ecologically sustainable structures. We accept that mention of authoritarian government will horrify the reader with visions of dictators who have strutted during the past century, but we remind that many have been elected under democratic systems.

Attributes of democracy are recognized as questionable even by democracy’s defenders. George Monbiot has said, “It is the unhappy lot of humankind that an attempt to develop a least-worst system (of governance) emerges as the highest ideal for which we can strive.”² There are two positives identified by Monbiot. Democracy is the only system with potential for its own improvement without internal violence, and democracy has the potential to be politically engaging for citizens. Of course, democracy confers the freedom to choose; political systems other than liberalism and authoritarian systems of governance may be selected. We will accept that democratic systems may have advantages, such as self-correctability. However the existence of some merits and some virtues does not show that the system as a whole is satisfactory or sustainable in the long term. There are other independent reasons and arguments for the rejection of democracy, and, as we will argue, liberalism as well.

From altruistic beginnings, however, liberal democracy and its institutions have become a mechanism for powerful nations to control the world by commercial invasion, and sometimes crusading wars are launched to deliver it to the nonbelievers. Like communism, it can be evil. Those living in a liberal democracy are cushioned from these happenings and their consequences. Our freedom of body and mind, and the abundance of materialism, offer a pleasant life that can be rejected only with difficulty, for what is the alternative? Thus democracy has to be defended and those not with us are against us in our quest to maintain our lifestyle. Those attacking or even criticizing democracy will be seen as enemies, for the benefits of materialism are at stake. These material considerations have usurped the theoretical attributes of democracy.

Not only are the democratic citizens cushioned by the comfort of consumerism, but they are manipulated by the psychological apparatus of government, a politics of fear that confers unlimited power to enact legislation and wars never put to democratic test. In his Nobel Prize for Literature acceptance speech, Harold Pinter referred to “a clinical manipulation of power while masquerading as a force for good. It’s a brilliant, even witty, act of hypnosis.”³ Pinter was referring to the United States, but his words are applicable to most of the Western democracies. Referring to truth, Pinter warns that the search for truth must never stop and it cannot be adjourned or postponed, and objectivity is essential:

Political language, as used by politicians, does not venture into any of this territory, since the majority of politicians, on the evidence available to us are interested not in truth but in power and in the maintenance of that power. To maintain that power it is essential that people remain in ignorance, that they live in ignorance of the truth, even the truth of their own lives. What surrounds us therefore is a vast tapestry of lies, upon which we feed.⁴

This edifice of deceit is surrounded by a shell of spin and bureaucracies and scientists chosen for their compliance. Thinking citizens accept their impotence to influence events, and the professional image of politicians ranks at the lowest along with used car salesmen.

However putting these subjective assessments aside, our analysis of the performance of democracy is diagnostic, using science and philosophy to define the ills. Society can then move forward to discuss the remedies. We will ask, what is the true record of democracy in addressing and preventing the major issues besetting humanity today, such as war, equity, and especially environmental damage? The most important question of our time is whether the democratic system is able to grasp and remedy the emerging ecological crisis facing the entire human race. What is the precise role of liberal

democracy in causing this crisis? What is its performance in remediation during the past two or three decades of increasing scientific evidence of the crisis? To further this task, several critical environmental issues will be analyzed. Many failures are diagnosed and in each instance causation is identified as the modus operandi of liberal democracy. We therefore question whether democracy can be modified or reformed to address these problems before they have become irreversible. And if not, how can humanity be governed? We argue that humanity will have to trade its liberty to live as it wishes in favor of a system where survival is paramount. Perhaps this choice should not be put for democratic approval, or humanity will elect to live as it wishes.

There is also another important point that will recur in our argument, but which requires emphasis now to avoid unnecessary confusion. In a book about democracy it is *prima facie* reasonable to expect a definition of “democracy”: “democracy is X.” Defenders of democracy have a problem in saying what “X” actually is. There are a multitude of definitions of democracy and to attempt to taxonomize now would be distracting from this overview. Further, we contend that democracy is conceptually incoherent, in some of its versions at least. Thus one of the problems of democracy is that there is no universally accepted definition that can be worked into an introductory chapter without immediately raising philosophical issues of contention. As we wish to develop an ecological critique of democracy in all its forms and a philosophical rejection of democracy *per se*, we are not disturbed by not being able to offer the reader an initial, simple definition. There are in our opinion no such satisfactory definitions, for all such definitions (e.g., government of the people, by the people, for the people) are even vaguer and less informative than the concept of democracy, as we show in chapter 5. For the moment we invite the reader to operate with her or his own intuitive understanding of democracy, and in chapter 5 we will criticize the standard accounts. In chapter 7 we will also reject liberalism as a philosophical position.

For the purposes of developing an ecological critique of democracy it is first necessary to understand the basis of the environmental crisis facing humanity. Almost all environmental writers blame the crisis on liberal capitalism. We argue that even if liberal capitalism ceased to exist there would still be the potential for an environmental crisis because of the destructive tendencies within the heart of democracy itself.

CRISIS? WHAT CRISIS?

This impending crisis is caused by the accelerating damage to the natural environment on which humans depend for their survival. This is not to

deny that there are other means that may bring catastrophe upon the earth. John Gray for example⁵ argues that destructive war is inevitable as nations become locked into the struggle for diminishing resources. Indeed, Gray believes that war is caused by the same instinctual behavior that we discuss in relation to environmental destruction. Gray regards population increases, environmental degradation, and misuse of technology as part of the inevitability of war. War may be inevitable but it is unpredictable in time and place, whereas environmental degradation is relentless and has progressively received increasing scientific evidence. Humanity has a record of doomsayers, most invariably wrong, which has brought a justifiable immunity to their utterances. Warnings were present in *The Tales of Ovid* and in the Old and New Testaments of the Bible, and in more recent times some of the predictions from Thomas Malthus and from the Club of Rome in 1972, together with the “population bomb” of Paul Ehrlich, have not eventuated. The frequent apocalyptic predictions from the environmental movement are unpopular and have been vigorously attacked.

So it must be asked, what is different about the present warnings? As one example, when Sir David King, chief scientist of the UK government, states that “in my view, climate change is the most severe problem that we are facing today, more serious than the threat of terrorism,”⁶ how is this and other recent statements different from previous discredited prognostications? Firstly, they are based on the most detailed and compelling science produced with the same scientific rigor that has seen humans travel to the moon and create worldwide communication systems. Secondly, this science embraces a range of disciplines of ecology, epidemiology, climatology, marine and fresh water science, agricultural science, and many more, all of which agree on the nature and severity of the problems. Thirdly, there is virtual unanimity of thousands of scientists on the grave nature of these problems. Only a handful of skeptics remain.

During the past decade many distinguished scientists, including numerous Nobel Laureates, have warned that humanity has perhaps one or two generations to act to avoid global ecological catastrophe. As but one example of this multidimensional problem, the Intergovernmental Panel on Climate Change (IPCC) has warned that global warming caused by fossil fuel consumption may be accelerating.⁷ Yet climate change is but one of a host of interrelated environmental problems that threaten humanity. The authors have seen the veils fall from the eyes of many scientists when they examine all the scientific literature. They become advocates for a fundamental change in society. The frequent proud statements on economic growth by treasurers and chancellors of the exchequer instill in many scientists an immediate sense of danger, for humanity has moved one step closer to doom.

Science underpins the success of our technological and comfortable society. Who are the thousands of scientists who issue the warnings we choose to ignore? In 1992 the Royal Society of London and the U.S. National Academy of Sciences issued a joint statement, *Population Growth, Resource Consumption and a Sustainable World*,⁸ pointing out that the environmental changes affecting the planet may irreversibly damage the earth's capacity to maintain life and that humanity's own efforts to achieve satisfactory living conditions were threatened by environmental deterioration. Since 1992 many more statements by world scientific organizations have been issued.⁹ These substantiated that most environmental systems are suffering from critical stress and that the developed countries are the main culprits. It was necessary to make a transition to economies that provide increased human welfare and less consumption of energy and materials. It seems inconceivable that the consensus view of all these scientists could be wrong. There have been numerous international conferences of governments, industry groups, and environmental groups to discuss the problems and develop strategy, yet widespread deterioration of the environment accelerates. What is the evidence?

*The Guide to World Resources, 2000–2001: People and Ecosystems, The Fraying Web of Life*¹⁰ was a joint report of the United Nations Development Program, the United Nations Environment Program, the World Bank, and the World Resources Institute. The state of the world's agricultural, coastal forest, freshwater, and grassland ecosystems were analyzed using 23 criteria such as food production, water quantity, and biodiversity. Eighteen of the criteria were decreasing, and one had increased (fiber production, because of the destruction of forests). The report card on the remaining four criteria was mixed or there was insufficient data to make a judgment.

In 2005, *The Millennium Ecosystem Assessment Synthesis Report* by 1,360 scientific experts from 95 countries was released.¹¹ It stated that approximately 60 percent of the ecosystem services that support life on earth—such as fresh water, fisheries, and the regulation of air, water, and climate—are being degraded or used unsustainably. As a result the Millennium Goals agreed to by the UN in 2000 for addressing poverty and hunger will not be met and human well-being will be seriously affected.

THE ENVIRONMENT IN INTENSIVE CARE

The responsibilities and performance of the liberal democracies in these scenarios will be analyzed using our training in medicine, science, the law, philosophy, and social science. There are so many variables perpetrating today's problems that reductionism cannot hope to offer analysis and

solutions. Knowledge and understanding has to be global and multidisciplinary. Each human life depends upon the integrated function of heart, lungs, brain, liver, kidneys, nerves, and muscles to constitute as an integrated ecological system that forms one human body. It is useful to regard the living earth in this way, as a complex integration of interdependent systems to form one planet.¹² Just as we document and recognize environmental damage, we can assess the living earth like a patient as healthy or ill. The documentation of environmental damage indicates that the earth is ill. But worse, there is evidence that this patient is already in the intensive care unit, for several of its organs are failing. “Multiorgan failure” is written in the patient’s records. In such situations the outcome cannot be predicted. Unfortunately ecological and medical science cannot tell us whether the human body or the ecological system has reached the point of irretrievable collapse. In a paper published in the *Journal Nature*,¹³ studies on deforestation, endangered species, and eutrophication (when water is choked by the presence of too many nutrients) of lakes all showed resistance of these systems to gradual environmental damage, and then sudden collapse took place without warning. Collapse means demise of an ecological system that is of service to humanity.

Can we draw lessons from the human patient in the intensive care unit? The patient’s resuscitation is in the hands of a leader, the expert doctor in intensive care, and a team of nurses and scientists, which combines leadership with expert knowledge, decision making, speed, dedication, and compassion. The leader does not explore the public opinion polls to see what can be tolerated or is popular. He or she does not act to preserve their position at the next election and is not influenced by corporatism or the perceived state of the economy. There is one collective, unsullied goal, to recognize the emergency, to make a skilled diagnosis based upon scientific assessment and to restore health before the situation becomes irreversible. This physician uses the precautionary principle by taking action to support each organ to the full in case collapse is impending. Experience suggests that a human health crisis is best dealt with in this way. When the patient is the living earth, we will ask whether the institutions of liberal democracy and liberal capitalism measure up to the task. Viewed in the light of intensive care medical metaphor, we can also ask whether decision-making structures per se are the appropriate mechanisms when it is the biosphere itself that is in intensive care.

Is there a crisis? To answer this question we have analyzed several key indicators necessary for the survival of human civilization. In assessing the adequacy and sustainability of these indicators we have been mindful of the expected increase in the world’s population of 6 billion to at least 9 billion by 2050, a figure that has wide acceptance as a likely outcome. We have

chosen to study supplies of fresh water for there is a finite volume of water that falls on the earth. Fresh water supplies are already inadequate for the basic needs of many sections of the world's population. We have examined the sustainability of fish stocks as a measure of food supply, though we could have chosen cereals or other foods. The harvesting of fish is probably at its peak and many species of fish will not recover from overfishing. Recognizing that civilization cannot exist in its present form without ecological services, we have studied biodiversity. Large extinctions of species are already occurring, and this trend will accelerate with global warming. We have analyzed the data on climate change. Here there is evidence from many scientific sources that warming is occurring, and, unless greenhouse emissions are controlled, the future of living things that support our own survival is dim.

We have also examined the consumption of fossil fuels because their reckless use is the inherent cause of climate change and also because it is predicted that the depletion of oil sometime in the next few decades will severely reduce the number of people who can be fed. This is because oil has been the fundamental resource for fertilizers, mechanized farming, and transport that has supported the world's burgeoning population. There are carefully researched predictions that a world without oil can support only 2 billion people.¹⁴

It is fair to say that whichever environmental parameter is being assessed, there is a remorseless deterioration. Degradation is the express train, remediation is the slow train, stopping and starting and never catching up. For each of these examples of environmental deterioration, the role of liberal democracies in causation will be analyzed. Everyday decisions are made to delay the slow train even further and, although the thinking behind these decisions often has a simple explanation, in reality it is a complex decision based on values and cultural, political, and corporate influence. In December 2004, the European Community made a decision on fishing quotas for member states. Scientific data indicates that the depletion of cod stocks in northern waters was at the point of collapse, and there is serious doubt that they will recover. There was strong scientific advice that exclusion zones must be established in the hope of recovery. The political representatives of these wealthy, well-fed, liberal democracies exercised what they saw as their democratic mandate and severely curtailed this proposal in the interest of "jobs now."¹⁵ Every day in liberal democracies, countless decisions like this one remorselessly eat away at the environment.

In the same month, the UK assessed its performance in reducing greenhouse emissions. Of all the leaders in the world, Tony Blair has grasped the implications of global warming caused by greenhouse emissions.

He recognized that the Kyoto proposal for the industrialized world to reduce emissions to 5 percent below 1990 levels by 2012 was tokenism compared to the 60 to 80 percent advised by the scientific community. The UK set a target of reducing emissions to 20 percent below 1990 levels by 2010. This target will be missed, though the Kyoto target will be achieved mainly because of the UK's reduction in the use of coal, due to the previous closure of mines. If the world's leading advocate for reducing emissions, one who has the maximum parliamentary power that democracy can bestow, cannot deliver environmental outcomes, what hope is there for other countries to reduce emissions? Mr. Blair has not been able to speed up the slow train but more importantly his fast train is increasing its speed. The nameplate proudly displayed on the engine is "The Growth Economy." Admittedly the reasons for failure are more complex than this and include human factors of psychology and denial and the self-interest of the major influences on liberal democracy. These are discussed in chapter 6.

"THE COMMONS": A STATE OF DENIAL

Our innate responses must be understood, for they have a profound influence on our ability to respond to the ecological crisis. Humans are born with psychological mechanisms that significantly influence behavior. Richard Dawkins points out that "if you wish to build a society in which individuals co-operate generously and unselfishly towards a common good you can expect little help from biological nature."¹⁶ Thus, self-preservation and the need to procreate determine our quest for goods, status, and power. Humanity's inability to think long term is related to the brain having hard wiring from our "paleolithic heritage."¹⁷ Over hundreds of millennia we had to adapt to the conditions of a local environment. We had to think short term with an emotional commitment to the limited space around us and to a limited band of kinsmen. This is the Darwinian priority of short-term gain that bestowed longevity and more offspring upon a cooperative group of relatives and friends. As a result, we ignore any distant possibility not yet requiring examination. Global warming and loss of ecological services are seen only as distant possibilities. Families cannot comprehend responsibility beyond their grandchildren, and in Western societies the increasing number of couples without children tends to limit responsibility to their own lifetime. Indeed, Western society has moved increasingly to the delivery of short-term needs, solutions, and profit and a disregard of anything that is not self-centered. One of the authors, on asking medical colleagues how they feel about the effect of climate change on the future lives of their children, has found that a common response is "that's their problem."

The state of denial is relevant to the present discussion. When we are faced with a problem that extends beyond our local environment, or when it involves distant individuals and races, then it is not of relevance to our needs. The defensive mechanism of denial is activated. The psychology of denial has been studied in relation to human rights and to poverty and famine.¹⁸ Denial often relates to the enormity of the problem because one individual can do little about it. An individual can accept the scientific evidence of, say, climate change, but deny responsibility or blame others for creating the problem. The provision of more information may increase denial and lead to antagonism to the cause. Images of starving children are suppressed and requests for donations ignored. Denial is the basis of the language used to describe the unpalatable problems. In war, mass murder becomes “cleansing,” and with global warming the expected inundation and drowning of Pacific islanders by tidal surges are described by politicians and governments as a “human impact.”¹⁹

There is a further human factor that requires discussion: religion. Whilst it is possible that the environmental nihilism of President Bush may be due to denial, there is a much more worrying possibility, that his religious beliefs may be responsible. There are more than 200 Republican legislators in the U.S. government who are Christian fundamentalists, many of whom belong to sects that believe the future of the planet is irrelevant because it has no future.²⁰ They are living in the “end times,” after which the son of God will return. Environmental destruction is to be welcomed, even hastened for it is a sign of the coming Apocalypse when they will enter heaven and the sinners will suffer eternal hellfire. One of these fundamentalists, Senator James Inhofe, chairs the powerful Senate Environment and Public Works Committee, and as a member of the Bush regime he has helped curtail many important environmental controls such as laws on clean air, clean water, endangered species, pollution limits for ozone, car emissions, coal-fired power stations, mercury, and many more. An analysis of these actions, in conjunction with the President’s unguarded statements such as his use of the word “crusade” for his actions in Muslim countries, suggests that decisions are not made on the basis of rational thought or science, but on the tenets of religious fundamentalism. Our discussion of the problems of democracy in a warming world will therefore include the positive and negative role of religions.

In an important scientific paper published in 1968 entitled “The Tragedy of the Commons,”²¹ Garrett Hardin discussed a number of problems for which he believed there was no technical solution. The problems in question required a change of values for their solution. He hypothesized that the population problem was such a “no-technical solution” problem. In the course of his argument he introduced the idea of the tragedy of

the commons. The individual pursuit of self-interest will lead rational neoclassical economic agents to exploit a resource to extinction: as all such agents act in this way, a commons such as the ocean or the atmosphere will become degraded. Individual self-interest can lead to collective environmental disaster. We argue that liberal democracy is ecologically flawed as a social system because it leads to the tragedy of the commons. Fifty one percent of the people can vote to destroy a resource (or simply act to maintain unsustainable lifestyles), which 49 percent of the people wish to preserve. There is thus the potential for ecological destruction existing in the heart of democratic institutions. We will return to this point with specific examples. The fundamentals of our critique of liberal democracy and democracy itself are now discussed.²²

LIBERAL DEMOCRACY

Liberal democracy is clothed in a long overcoat, but what is underneath is revealing, as we will see. “Liberal democracy” has become a sweet sounding word of the advertiser; it caresses the mind like the name of a perfume or a succulent chocolate. It is perhaps surprising that (to use George Orwell’s terminology) this Old-speak name,²³ liberal democracy, has not been replaced by a brand name, perhaps “imagine,” for it conjures freedom, success, and prosperity, or at least the prospect of these goals for the poor and oppressed. Once “imagine” is the “Newspeak,” then the populace can be united even more fervently for more. The slick advertisers and spinners are the tools of powerful governments of the West who implement the creed of liberal democracy, usually with missionary zeal and financial power, but occasionally with covert or overt force. A messianic United States is the leader of this cultural movement that prescribes the primacy of the market, human rights, and personal ownership as principles that must not be transgressed. How did this eventuate?

Modern democracy was born over two centuries ago, a child of the rapidly developing industrialization, commerce, and trade of North America and Europe. Indeed it grew up in symbiosis with capitalism and is now inseparable. Democracy provides the freedom of action, the liberalism, for each individual not only to fulfill all material needs but to accumulate unlimited wealth and the commercial power it confers—at least in principle. This power and influence stems from the dependence of all democracies on the mantra of economic growth so necessary to provide the employment and consumer goods to satisfy and placate the peoples.

Liberalism is the belief system that holds that the freedom of the individual, especially in economic matters such as trade and labor relationships,

is of principal importance. The liberal sees society made up of individuals like a house is made up of bricks to create an inanimate structure. Margaret Thatcher said it all in her statement that “there is no such thing as society,” that is, only individuals exist.²⁴ Thus society is not a complex system, or whole, like the human body. Christianity had, in some respects, anticipated this idea that all humans were raceless, placeless (but not sexless) individuals who had souls and stood equally before a judging God. Christianity carried this seed in its womb to give birth to Protestant American democracy. Liberalism had borrowed this individualism and replaced it with a secular version that gave the individual laborer and consumer a new place before the new God—the market.

It was necessary for the rising class of capitalists and merchants who slowly began to challenge the feudal order and power of the Roman Catholic Church to have a set of beliefs that legitimized their new world order. The traditional feudal Church saw people as having a God-given fixed station in life. The Church also opposed usury—the lending of money at a rate of interest. It was a sin to earn money whilst you were asleep. These were beliefs that placed limits upon trade and commerce—that is, money making. For the emerging capitalist class, these restraining beliefs had to be undermined. And indeed, in time, these beliefs were challenged and replaced by a new philosophy, liberalism. Individuals were now said to be *free* in the sense of no longer being bound to a feudal master. Instead, they were free to sell their labor on the market—or free to starve. In this book we expose the mythical legitimizing role that liberal democracy gives to the capitalist social order. We reject the myth that feudalism was a dark oppressive system, whereas liberal democracy was and is a force of light, salvation, and emancipation. On the contrary, there is much evidence to suggest that liberal democracy—the meshing of liberalism and democracy—is the core ideology responsible for the environmental crisis. Liberal democracy, it should be noted, although in principle as a matter of logic is conceptually distinguishable from capitalism, has become a matter of real politics intrinsically enmeshed with capitalism, and it is virtually impossible to separate the effects of each.

Modern democracy, the idea that government should be by the “will of the people” (whatever that means) is conceptually linked to the notion of liberalism. It is inconceivable that there could arise, historically, a system that gave primacy to an *individual's* vote that did not justify or base this belief system on a philosophy that saw the individual, rather than society, as an “organic whole” as being of primary value.²⁵ Liberalism thus supplied the philosophical justification for democracy (and capitalism), just as Christianity had earlier supplied the religious justification for the rule of

kings and queens through the doctrine of divine right. The secular version of this divine right has become market forces that in many ways now rule our lives more oppressively and totally than any king or dictator in the premodern world.

An evolutionary and therefore genetic mechanism relevant to our analysis is the need and acceptance of authoritarian social structures conferred upon us by our primate ancestors. These forces can even be seen to operate within a liberal democracy in which leaders and democratic institutions themselves gradually evolve to become more authoritarian. Freedom and individuality expressed through the market economy result in elites widening the gap between rich and poor and enriching themselves by acquisitions in developing countries under the guise of freedom and democracy. Maladaptations of society as defined by Stephen Boyden²⁶ become more common, for example the economic view that retail spending is good for society or the accumulation of vast assets by the rich that they cannot possibly use or spend in their lifetimes. The number of billionaires in the world is increasing rapidly and the majority are in the liberal democracies. As we will see in the discussion to follow, many liberal democracies are moving visibly toward authoritarianism. Governments see this as an option to protect their power, and many of their rich supporters favor it to protect their assets.

It will be argued in chapter 6 that liberal democracies are inherently unstable and move slowly but surely to authoritarianism. Theorists who have seen liberal democracy as representing humanity's final political system have adopted a too narrow historical perspective, which can be corrected by adopting a biohistorical or sociobiological view of the human species. We should not be blind to the possibility that an authoritarian meritocracy might have advantages in world crisis management compared to the present democratic mediocracy. Our patient in the intensive care unit could not be managed successfully under liberal democracy. Recognizing that totalitarian states have caused as much, if not more, environmental damage as the liberal democracies, we will nevertheless argue in chapter 4 that some historical totalitarian regimes have averted some catastrophic environmental damage by dictate.

We will document the personal and democratic failures that render the environmental crisis difficult to address. An altruistic, able, authoritarian leader, versed in science and personal skills, might be able to overcome them. But liberal democracy predisposes the election of the slick wielders of the political knife and then encumbers them with the burdens of economic chains and powerful self-interested corporates who cannot be denied. They fuel the growth economy that preserves their power and that of government. It is instructive to ask our democratically elected leaders: What

do you see as the endpoint of this liberalized growth economy? Surely to maintain this growth to infinity is unsustainable? Yet this growth is necessary for the present economic system to survive and satisfy the perceived material needs of humanity. Our leaders cannot provide an answer to this question. To some it falls beyond their elected period, and they do not have to address it. To others there is the hope that science and technology will capture the carbon dioxide of climate change, create hydrogen fuel from water, and feed the millions with genetically modified foods. But in general it is not an issue that democratic societies are addressing in a way that will encourage solutions.

DEMOCRACY AND THE POWER BROKERS

It is possible to see the control of society firmly grasped by a brotherhood that resembles a biological ecological system. Like the soil, the forest, or the coral reef, its strength lies in mutual support and interdependence of all organisms and components. The web of power and profit embraces the market, the banks and financial institutions, regulators (national and international), the liberal democracies, the press, the media and advertising industries, and the military industrial complex. The governments espousing liberal democracy are but the compliant arms and hands of the system. They provide the human fodder from their universities. They retain power by servitude. As we will show in chapters 6 and 10, those at the top of the food chain are the corporations. They operate for profit alone, protected by law that absolves them from other responsibility. Their leaders, who live a double life of family care and principle at home, but plunder the world for gain, are the conquistadors of today. Like the Spanish noblemen, the Chief Executive Officers have become the pillars of society. The spoil is no longer gold, but black gold (oil), plantations, and water industries. They would not recognize themselves as the ecology of evil, but for the future of the world's environment that's what history may judge them as. For some, such as Clive Hamilton in *The Disappointment of Liberalism and the Quest for Inner Freedom*,²⁷ the source of our difficulties lies not in democracy itself but in its undermining by lobbyists who act for corporatism and the market. Liberal capitalism, not liberal democracy, is the real culprit. These thoughts are echoed by George Monbiot:

Meaningful action on climate change has been prohibited by totalitarian capitalism. When I use this term I don't mean that the people who challenge it are rounded up and sent to break rocks in Siberia. I mean that it intrudes into every corner of our lives, governs every social relation, becomes the lens through which every issue must be seen. It is the total system which leaves no molecule of earth or air uncosted and unsold.²⁸

Surely Hamilton and Monbiot fail to understand the strength and complexity of this ecological system of evil into which democracy has descended. Democracy is but a cog in this juggernaut causing environmental degradation. Liberal capitalism and democracy have fused together. Liberal capitalism, the retrovirus, has become part of the genetic material of democracy and is directing the enterprise. It is not just an imperfection that can be corrected without dismantling this relationship. As we will demonstrate, these colossal environmental problems, both existing and impending, have been accelerated by the freedoms and corruption of democracy and are unlikely to be solved by this system of governance. Thus we agree with the well-known critique from left-environmental writers that the primary cause of the environmental crisis is the existence of an ecologically unsustainable economic system, capitalism. However we go further than these critics in implicating liberal democracy and democracy in general in causing this environmental crisis and specifically preventing its solution. For a variety of reasons, detailed by us, democratic institutions are not suited to deal with crisis care situations. If you needed to have major heart surgery you would not wish your operation coordinated by a democratically elected team of surgeons. With respect to liberal capitalism, in chapter 10 we come to the same conclusions as John Perkins in *Confessions of an Economic Hit Man*.²⁹ Perkins worked for the covert U.S. National Security Agency. He has said, “We build a global empire. We are an elite group of men and women who utilize international financial organizations to foment conditions that make other nations subservient to the ‘corporatocracy’ running our biggest corporations, our government and our banks. The subservience is financial and the government is that of the USA.”³⁰ Liberal capitalism, we will argue, is a force acting to produce an authoritarian rule by corporate elites. Although enmeshed with liberal democracy its ultimate goals are antagonistic to it, and in the long term act to undermine it.

We predict that democracy, like communism, will be but a moment in human history. Its transformation into authoritarian rule is likely to be catalyzed by its failure to deliver solutions to the environmental crisis. We can speculate on the preferred form of authoritarianism and in chapter 9, “Plato’s Revenge,” we define the essential ingredients. We can wish for the intensive care model, but we are unlikely to be so fortunate. However, a consideration of the form of social cohesion necessary to maintain civilization in a no-growth economy is vital, for this is where we must go for survival. A new religion or perhaps spirituality to replace the market and consumerism will necessarily embrace the earth and all its sacred life.

To ask where liberal democracy is leading us is not a welcome question, as the liberalism conferred by democracy is the linchpin of our culture.

Therefore simply asking the question leads to a response: What other system of governance and economics can we turn to? Are we to return to living in caves? Are we to return to the inefficiencies of socialism, the iniquities of communism, or the cruelties of fascism? But the question must be asked because our present culture is instrumental in directing us to environmental change that is likely to devastate our civilization during this century. There are those such as Jonathon Porritt who contend that capitalism, which has brought humanity to this parlous condition, can nevertheless deliver the solutions.³¹ We disagree and will explain our reasons.

When we review the alarming data about accelerating climate change, it is our duty to place in the mind of the reader the magnitude of the response required from humanity. To ancient Egypt, it might be the equivalent of the building of the pyramids, a task that seems superhuman even today. To civilization today we need to think of resolve for a technological revolution as vast as the Manhattan project and NASA's space endeavors, proceeding not just in the United States but in all developed countries and delivered with the vision and acceptance of a Marshall Plan. But even more vital, a revolution in lifestyle, a new paradigm delivered to the populace with the flair of Marshall and with the authoritarian brilliance of Napoleon, who revised the chaotic French legal system overnight and imposed it in the morning. Today, it is debatable whether we can wait for democratic reform, bit by bit, election by election, and decade by decade. It is our task in this book to provide the evidence.

NOTES

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3. Harold Pinter Nobel Lecture, "Art Truth and Politics," 2005, at <<http://nobelprize.org/literature/laureates/2005/pinter-lecture-e.html>>.

4. Ibid.

5. John Gray, *Al Qaeda and What It Means To Be Modern* (Faber and Faber, London, 2003).

6. David A. King, "Climate Change Science: Adapt, Migrate or Ignore?" *Science*, vol. 303, no. 5655, January 9, 2004, pp. 176–177.

7. Intergovernmental Panel on Climate Change, *Climate Change 2007: Fourth Assessment Report*, at <<http://www.ipcc.ch/>>.

8. Joint Statement of the Royal Society of London and U.S. National Academy of Sciences, *Population Growth, Resource Management, and a Sustainable World*, 1992, at <<http://www.dieoff.com/page7.htm>>. According to this statement, "the future of our planet is in the balance. Sustainable development can be achieved but only if irreversible degradation of the environment can be halted in time."

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of Sciences and Royal Society of London, *Towards Sustainable Consumption*, 1997, at <<http://www.royalsoc.ac.uk/document.asp?tip = O&ID = 1907>>; World Scientists' Call for Action, Union of Concerned Scientists, December 1997, at <<http://go.ucusa.org/ucs/about/page.cfm?pageID = 1007>>; Inter-Academy Panel, May 2000, *Transition to Sustainability in the 21st Century: The Contribution of Science and Technology*, at <<http://www.interacademies.net/cms/about/3143/3552.aspx>>; World Resources Institute, *Guide to World Resources, 2000–2001: People and Ecosystems; The Fraying Web of Life*, April 2000, at <http://pubs.wri.org/pubs_description.cfm?PubID = 3027>.

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14. Russell Hopfenberg and David Pimentel, “Human Population Numbers as a Function of Food Supply,” *Environment, Development and Sustainability*, vol. 3, no. 1, 2001, pp. 1–15.

15. Andrew Osborn, “Fishing Grounds Escape Closure Threat,” *The Guardian*, December 22, 2004, at <<http://www.guardian.co.uk/print/0,,5091026–106710,00.html>>.

16. Richard Dawkins, *The Selfish Gene* (Oxford University Press, Oxford and New York, 1989).

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18. S. Cohen, *States of Denial: Knowledge About Atrocities and Suffering* (Polity Press, Cambridge, 2001).

19. David Shearman, “Time and Tide Wait for No Man,” *British Medical Journal*, vol. 325, 2002, pp. 1466–1468.

20. Glenn Scherer, “The Godly Must be Crazy,” *The Grist Magazine*, October 2, 2004.

21. Garrett Hardin, “The Tragedy of the Commons,” *Science*, vol. 162, 1968, pp. 1243–1248.

22. Democracy is a term derived from the Greek, *demos*, the “people.” In 593 B.C. a Council of Four Hundred was elected in Athens from the parishes (*demes*) of each tribe. The aristocracy, based on the ownership of land, had changed to embrace the commercial interests of trade and commerce and the influx of artisans and workers attracted by these activities. Tribal structures were weakened and civilization’s first rudimentary democracy evolved. Greek democracy was but a moment in Greek history; it passed as we believe modern democracy will also pass. Democracy is not a stable long-term state for the human species, or so we will argue in this book.

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24. Interview for *Women’s Own*, Thatcher Archive: COI Transcript, October 31 1987, at <<http://www.margarethatcher.org/speeches/displaydocument.asp?docid=106689>>.

25. Today of course there are illiberal democracies such as Singapore, which do not have a free society based upon individualism, but that still have democratic elections. Such societies have had a democratic electoral system artificially grafted onto an authoritarian society through British colonialism. Illiberal democracies are only possible because of the prior historical emergence of liberal democracies.

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