

REVIEW ESSAY

The Engine of Eco *Collapse*

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Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed* (New York: Viking, 2005).

There is a compelling moment in Joel Bakan's film *The Corporation* in which Ray Anderson, CEO of Interface, Inc. (the world's largest producer of commercial floor coverings) and born-again environmentalist, likens his sense of our growing environmental crisis to skydiving: When one first jumps out of the airplane at 5,000 feet or so, the ground seems so far away, and for long minutes as you plunge earthward, it still seems far away. But then very soon the ground is rushing up at you at terrific speed, and you have to put on the brakes, release the parachute—or die. The global environmental crisis, says Anderson, is “coming at us” like that.

Forty years ago Rachel Carson launched the environmental movement with her eloquent pleas against pesticide pollution, lost songbirds, and the emerging cancer epidemic. Yet Carson's warnings pale before the staggering scope of the global environmental crisis we face today as entire planetary ecosystems teeter on the verge of collapse: Ocean fisheries, temperate and tropical forests, arctic ecologies, coral reefs, fresh clean rivers and lakes, a breathable atmosphere, a tolerable climate—ecosystems that were built up over eons and eons of time are now being plundered and consumed, polluted and developed to death in a bio-historical blink of an eye.

For decades, environmentalists who warned of these impending disasters were dismissed as extremists and alarmists. No more. Today, all the mainstream of scientific organizations, notable corporate CEOs, British Prime Minister Tony Blair, the Archbishop of Canterbury, and even the U.S. Pentagon are all calling for *something* to be done to avert the onrushing threat of global warming, among other dire threats.¹

Now Jared Diamond, Pulitzer Prize winning author of the 1997 best-seller *Guns, Germs and Steel* has given us a provocative and fascinating history lesson in what could happen, even to our technologically advanced society, should we fail to learn from and apply the lessons of past failed societies. In *Collapse: How Societies Choose or Fail to Succeed*, Diamond takes us on a sobering reality tour

¹ Intergovernmental Panel on Climate Change (IPCC), “Climate Change 2001: Working Group I: The Scientific Basis (Summary for Policymakers), www.grida.no/climate/ipcc_tar/wg1/005.htm accessed 3/6/2005. Lord May, President of the Royal Society (as conservative a scientific institution as you can find), recently lashed out at the Bush administration for living in denial and castigated some British newspapers for “misrepresenting the facts,” underestimating the danger and “giv[ing] undue prominence and support to the views of an extreme fringe [of climate crisis deniers],” reported in Steve Conner, “Bush Accused of ‘Fiddling While World Burns’ by Ignoring Climate Change,” *The Independent*, March 7, 2005. See also Ray C. Anderson, *Mid-Course Correction: Toward a Sustainable Enterprise* (Peregrinzilla Press: Atlanta, 1998); “Blair ‘Shocked’ by Climate Change,” *BBCNews* online September 14, 2004; Robert Verkaik, “Archbishop Tells Church to Help Save the Planet with Green Policies,” *The Independent* online, February 3, 2005; U.S. Pentagon, “An Abrupt Climate Change Scenario and Its Implications for United States National Security,” October 2003. The report was leaked to the press in February 2004 and then posted on a government web site: www.ems.org/climate/pentagon-climate-change.pdf.

of six societies that committed ecological suicide in the hopes that we can learn from their failures in time to save ourselves. Diamond's thesis is that societies such as the Easter Islanders, the Greenland Norse, the Anasazi of the American southwest, the Lowland Mayans and others collapsed largely because they either exhausted the natural resources on which they depended and failed to realize the need to change, or, inexplicably, refused to change and instead pursued "grim trajectories" toward social and economic disintegration and collapse.

In contrast, Diamond points to other societies facing comparable circumstances, such as the Tikopians and Tongans of the south Pacific, the Highland tribes of New Guinea, and the Japanese under the Tokugawa, that survived because they broke with previously tightly held social "core values." They made the "correct" decisions about reversing long-term negative environmental trends and/or adapted to difficult or changed environmental conditions. So, they replanted depleted forests, conserved eroding soils, changed their diet, and adopted such other reforms as were necessary to save themselves from collapse and maintain a sustainable environmental base for future generations. In Diamond's view, we moderns now stand on such a precipice with human survival as a species at risk because of our unsustainable consumption of resources. Overdriving the environment is already plunging some societies like Somalia, Haiti, Rwanda, and Congo toward collapse. But we in the advanced industrial societies are, if anything, in even greater danger because of our huge impact on the planet's ecology: "For the first time in history, we face the risk of global decline. But we also are the first to enjoy the opportunity of learning quickly from developments in societies anywhere else in the world today, and from what has unfolded in societies at any time in the past"(p. 23).

Diamond's *Guns, Germs and Steel* sought to explain the environmental bases of the rise of the West. *Collapse* goes beyond an academic study in comparative history in that it seeks to bring additional intellectual ammunition to the side of environmental activists by popularizing the history of past societal collapses as a huge warning to those who control our future. But when Diamond addresses our current crisis and proposes recommendations for how we moderns might stave off collapse, *Collapse* is severely handicapped by his reluctance to break with his own outmoded cultural "core values." In particular, Diamond's faith in the free market and the potential for reforming the market system before it destroys us is naïve and unfounded. Furthermore, his assumption that societies are "free to choose" to succeed or fail is fallacious, since most modern societies are massively constrained by capitalist property relations, capitalist requirements for reproduction, and the lack of popular democratic control over the economy.

"Grim Trajectories" vs. Success Stories

Diamond's tour begins in Montana, where his family has vacationed for many years. Although Montana is renowned for its natural beauty, Diamond sees the state as a microcosm of environmental problems facing the whole country: deforestation, deteriorating water quality, seasonally poor air quality, extensive toxic wastes, degraded soils, loss of biodiversity, and various deleterious impacts from climate change (pp. 31-32). Most of these problems stem from mining, logging and other industries that have scarred and polluted the landscape and often left poverty and unemployment in their wake.

Yet Diamond finds a curious political paradox there: Montanans take pride in the beauty of their rural, mostly undeveloped state. Most would benefit from legislation and government enforcement compelling the mining industry and other polluters to clean up their collective mess. Most

would also benefit from the introduction of governmental zoning and planning to protect the quality of life they like from unplanned, chaotic development. Yet the dominant political consciousness throughout the state is strongly “pro-individual rights” and anti-government regulation—attitudes born of Montanans’ independent and self-sufficient pioneer history. This hostility to government regulation was itself largely responsible for letting mining and other industries get away with so much pollution in the first place. Despite the need for change that would benefit them directly, Montanans still cling to the outmoded “core values” of “individual freedom” and “self-sufficiency.” This theme of societal resistance to changing core values—even to the point of collective social suicide—is one Diamond returns to repeatedly.

Easter Island was, Diamond suggests, perhaps the most purely ecological instance of societal collapse. From their first settlements c. A.D. 900, the Easter Island Polynesian colonists proceeded to eat, chop and burn their way through what was initially a bountiful flora and fauna. By the 17th Century they completely denuded the island, consumed nearly all wild food sources, and descended into internecine warfare and cannibalism. By comparing early and late prehistoric cultural remains, archeologists have been able to parse the history of this predatory mode of consumption. In the beginning, the abundance of tall trees permitted the settlers to build big seaworthy canoes to hunt dolphins and large ocean fish like tuna. The first settlers also benefited from an abundance of six species of native land birds, at least 25 nesting seabirds, seals, inshore fish and shellfish, sea turtles and, possibly, large lizards. The Easter Island human population thrived and grew as they ate their way through these extensive wild food sources and supplemented these with farming.

But over time, steady deforestation exhausted the big trees they used for building seagoing canoes and erecting their iconic stone statues, the famous carved stone *moai*. From the 1400s, all of Easter’s palms, paper mulberry (used for tapa cloth), hardwood, fruitwood and other species disappeared as well. Forest clearance and human population peaked between the early 1400s and the 1600s: Deforestation had a devastating impact on the human population resulting in losses of raw materials, wild food sources, and crop yields: “Raw materials lost or else available only in greatly diminished amounts consisted of everything made from native plants and birds, including wood, rope, [and] bark to manufacture bark cloth . . . (p. 107).

After 1650, Easter’s inhabitants were reduced to burning herbs and grasses for fuel. Without seagoing canoes, fishing was restricted to small inshore species. Overharvesting wiped out all the land birds, while the seabirds were reduced to remnant populations on outer islets. Shellfish declined in number and size. Palm nuts, Malay apples and all other wild fruit dropped from the diet. By the 17th Century, rats were the only wild food source left. In the end, deforestation and overexploitation of the environment resulted in starvation, a population crash and turn to cannibalism, civil war and revolt. When Captain Cook arrived in 1774, he found only “small, lean, timid, and miserable” survivors (p. 109) and wondered what could have befallen this obviously once fairly developed island society.

At about the same time the Polynesians were migrating across the eastern Pacific, the medieval Norse Vikings set out to trade and raid northern Europe. They ventured westward into the north Atlantic and settled the Orkney, Faeroe and Shetland islands, Iceland, Greenland and Vinland (Newfoundland). Of the six Viking colonies established from the A.D. 800s, Vinland, the furthest, was abandoned c. A.D. 1000 after only a decade because the Vikings ran into resistance from native American Indians who far outnumbered them. The settlements on the islands closest to Europe—the Orkneys, Faeroes and Shetland islands—had varying ecological endowments but enjoyed a mild

climate, reasonably productive soils, and regular trade with the mainland, enabling them to survive right up to the present without much difficulty.

Iceland was settled around 870, and for many years the settlers pursued unsustainable economic policies. They steadily cut down what forest there was, and they overfarmed and overgrazed the fragile and erosion-prone soils of this volcanic island. Eventually the settlers realized the error of their ways, took corrective action, killed off their ecologically destructive pigs and goats, abandoned the fragile highland pastures, and forged cooperative decision-making bodies and rules to protect their remaining communal pastures. They also benefited enormously from the rise of the stockfish (dried cod) export industry beginning in the late Middle Ages. Thanks to the abundance of fish and, in the last century, the means to tap the volcanic island's geothermal power and hydropower, Iceland has become one of the world's richest countries on a per capita basis. Diamond sees its history as "a great success story to balance the stories of societal collapse" he describes elsewhere.

The tale of the Greenland Norse founding, flourishing and eventual collapse is Diamond's favorite example because of substantial evidence that they could have escaped their grim fate and forged an alternative history but for *cultural*—not environmental—factors. For nearly 500 years between A.D. 984 and the 1400s, the two Greenland colonies supported Europe's most remote outpost. There, up to 5,000 Scandinavians living 1,500 miles from Norway built a cathedral and churches, established hundreds of farms, raised most of the livestock their brethren raised at home, hunted caribou and seals, schooled themselves in Latin and Old Norse, followed the latest European fashions in clothing—and finally vanished. Like the Easter Islanders and so many others, the Vikings pursued unsustainable environmental policies that eventually undermined their economy.

When they first came to their protected fjords, they found a virgin landscape that had never been logged or grazed. They arrived at a time of relatively mild climate when hay production was sufficient in most years to support their livestock, the sea lanes were free of ice, there was European demand for their exports of walrus ivory and bear skins, and no external threat from Native Americans. But from their first days, the Greenland Norse began damaging their environment and undermining their future by burning their meager woodlands to establish pastures, overgrazing and eroding their fragile pastures, and cutting up irreplaceable turf for building projects. Even in the "normal"—i.e. warm—times, the colonies' existence was difficult, though their problems were not necessarily a fatal threat.

But the climate of southern Greenland was highly variable. In the 1300s, it began to cool before plunging in the 1400s into the cold period climate historians call the Little Ice Age. The cooling reduced hay production so that raising livestock became impossible. Adding to their difficulties, ice-clogged shipping lanes resulted in decreased trade with Europe. Trade eventually stopped altogether, partly for commercial and political reasons, which effectively cut Greenland off from access to iron, wood and other necessities.

Isolated, hungry and freezing, the Greenland Norse gradually collapsed over the course of a century or so. The northernmost settlement was abandoned first as the settlers retreated southward. The last inhabitants of the northern colony apparently starved and froze to death one spring around 1350. Over the preceding winter, those farmers had been reduced to killing their last cows, eating even the hoofs, killing and eating their precious hunting dogs, and scrounging for birds and rabbits. Some Norse also probably died at the hands of the local Inuit with whom the Norse had clashed.

The last inhabitants of the southern colony perished around 1435, though the exact circumstances are unknown (pp. 266-67, 269).

For Diamond, the real mystery of the Norse collapse is not why they starved and died but why they didn't adapt and survive. After all, the Norse in Iceland adapted and survived. And while the Greenland Norse perished, their nearest neighbors, the Inuit, survived and carried on more or less unchanged right into the 20th Century. Diamond says this can only be understood as a virtually self-willed, collective suicide.

After grinding through six cases of societal collapse in seven chapters, Diamond devotes a chapter to three notable success stories: the Pacific Island societies of the New Guinea highlanders (who have carried on for 40,000 years), the Tikopians (who occupy a small island of just 1.8 square miles and still survive after 3,000 years), and Tokugawa Japan. Each of these societies faced environmental difficulties, many of their own doing, but they changed course and averted disaster.

Tokugawa Japan is Diamond's only large-scale example: The Tokugawa shogun conquered the daimyos and centralized political military power in 1615. The shogun pursued investments to boost agricultural productivity by introducing new crops, reclaiming marshland and increasing production of irrigated rice. This brought prosperity, a population boom, and extensive construction projects. These projects—mainly castle, temple and housebuilding, as well as construction of entire cities—consumed enormous quantities of wood. Wood was also used for fuel, heating, and industrial applications, especially to make charcoal for smelting iron. Peasant farmers also used “green” fertilizer—leaves, bark, twigs—and they fed their oxen with forest brush for fodder. By the mid-17th Century, deforestation reached crisis proportions.

“That might have led,” Diamond notes, “to an Easter Island-like catastrophe. Instead, over the course of the next two centuries Japan gradually achieved a stable population and much more nearly sustainable resource consumption rates” (p. 599). Successive shoguns promulgated policies that restricted consumption of resources and promoted accumulating reserves. The population was also encouraged to shift from a dependence on farm-raised produce to increased reliance on seafood. Fishing was promoted. Fish meal was also developed for farm fertilizer, which relieved pressure on the forests. Trade with the Ainu on Hokkaido Island was expanded to bring in smoked salmon, dried sea cucumber, abalone and other products. By the late 17th Century, government policies promoted the use of coal instead of wood for fuel. Instead of heating the whole house, as was common practice, fuel-efficient cooking stoves were used. Lighter construction methods were encouraged to replace heavily timbered houses. Erosion control measures were also enacted. By 1700, the government had developed a nationwide system of woodland management and began systematically developing plantation forestry (silviculture), which Japan invented independently of other countries. This reforestation program was initiated from the top down by the Tokugawa shoguns. Although Japan today is the second industrial power in the world, it remains, astonishingly, 70 percent forested.

“Free to Choose?”

In Chapter 14 Diamond turns to the question of why some societies succeeded and others collapsed. He relates how his students at UCLA reacted to the collapse of Easter Island society when he taught the draft of this book as a course. They were puzzled by the apparently simple question: “How could a society make such an obviously disastrous decision as to cut down all the trees

on which it depended?” The students asked the same question again and again about other cases and “wondered whether—if there are still people left alive a hundred years from now—those people of the next century will be astonished about our blindness today as we are about the blindness of the Easter Islanders” (p. 420).

Diamond proposes a five-factor schema to explain societal success or failure: environmental damage (deforestation, etc.), climate change (cooling, drought, etc.), opportunities or not for trade, hostile or friendly neighbors, and most critically, “society’s responses to its environmental problems” (p. 11). Some or all of these factors contributed to the collapse of the various societies. But with respect to the last factor, Diamond is struck by the seeming perversity of so many societal collapses and by their often tenacious hold on established “core values—even to the point of dooming themselves when salvation lay right at hand.

The Greenland Norse, for example, thought of themselves as dairy farmers, Christians, and Norse Europeans, and they scorned the pagan Inuit, even though the Inuit were superior colonizers of that harsh landscape. When it became too cold for cattle and the growing seasons began to shorten, they could have emulated Inuit ways and hunted the ringed seals, fish, and whales, adopted different Inuit technologies, different consumption habits, and made other lifestyle changes. But the medieval Greenland Norse *would* not adapt. Instead, “[t]he Norse starved in the presence of abundant unutilized food resources,” Diamond says. “In trying to carry on as Christian farmers, the Greenland Norse in effect were deciding that they were prepared to die as Christian farmers rather than live as Inuit.” (p. 433).

Diamond assigns responsibility for a society’s success or failure to the conscious decisions of its members—especially their willingness to examine their “core values” and choose which to discard and which to hold onto (p. 341). In particular, “[r]eligious values tend to be especially deeply held and hence frequent causes of disastrous behavior.” (p. 432). Yet in his own historical narratives, Diamond shows that in most cases, “society” was in no position to freely “choose to fail or succeed.”

In analyzing societal responses to environmental crises, Diamond often brings in a neo-Marxist class conflict model to partially account for collapse (even though he never uses the term “class”). Easter’s systematic deforestation was, he explains, significantly driven by inter-ruling class “competition between clans and chiefs driving the erection of bigger statues requiring more wood, rope, and food” (p. 119). “Easter Island chiefs . . . *were trapped in a competitive spiral* such that any chief . . . who put up smaller statues or monuments to spare the forests would have been scorned and lost his job” (p. 431, my emphasis). For all we know, Easter Islanders understood the suicidal logic of their systematic deforestation of the island. But Easter Island “society”—that is, *ordinary* Easter Islanders—were in no position to change policies dictated by their ruling chiefs.

Similarly, the Mayans faced various environmental difficulties, though none that were insurmountable. “Their [the kings and nobles] attention was evidently focused on their short-term concerns of enriching themselves, waging wars, erecting monuments, competing with each other, and extracting enough food from the peasants to support all those activities. Like most leaders throughout human history, the Mayan kings and nobles did not heed long-term problems, insofar as they perceived them” (p. 177). Again, given the brutal class divisions of Mayan society, it is safe to assume its peasant class had little or no say in ruling-class decisions about the future of the forest.

Greenland Norse society, which was hardly as class divided as the Mayans, collapsed through much the same (class) conflict-driven abuse of the environment:

[P]ower in Norse Greenland was concentrated at the top, in the hands of the chiefs and clergy. They owned most of the land (including all the best farms), owned the boats, and controlled the trade with Europe. They chose to devote much of that trade to importing goods that brought prestige to them: luxury goods for the wealthiest households, vestments and jewelry for the clergy, and bells and stained glass for the churches. Among the uses to which they allocated their few boats were the Nordrseta hunt, in order to acquire the luxury exports (such as ivory and polar bear hides) with which to pay for those imports. Chiefs had two motives for running large sheep herds that could damage the land by overgrazing: wool was Greenland's other principal export with which to pay for imports; and the independent farmers on overgrazed land were more likely to be forced into tenancy, and thereby to become the chief's followers in his competition with other chiefs. (pp. 275-76).

Diamond says "key decisions of Viking society were made by the chiefs, who were motivated to increase their own prestige, even in cases where that might conflict with the good of the current society as a whole and of the next generation" (p. 190, 239).

There were many inventions that might have improved the material conditions of the Norse, such as importing more iron and fewer luxuries, allocating more boat time to Markland journeys for obtaining iron and timber, and copying (from the Inuit) or inventing different boats and different hunting techniques. . . From our perspective today, we can't help thinking of seemingly more important uses that the Greenlanders could have made of those boats and man-time (p. 242).

But those innovations, Diamond argues, "could have threatened the power, prestige, and narrow interests of the chiefs. In the tightly controlled, interdependent society of Norse Greenland, the chiefs were in a position to prevent others from trying out such inventions" (p. 246).

In sum, Diamond's own telling of history shows that society's fate was not "in society's hands" but in the hands of a small elite of kings, chiefs and priests—the ruling classes of those societies—who shut the rest of society out of decision-making and systematically made the "wrong," "shortsighted" decisions that doomed their societies. Furthermore, Diamond's narratives reveal that very often even society's rulers were not really free to choose, because these ruling classes were often "locked in a competitive spiral," one that compelled them to make environmental decisions that benefited their immediate needs but were irrational from the standpoint of society's long-term survival.

In drawing attention to the important role of social (class) structure and elite-mass (class) conflict, Diamond has opened a fruitful approach to understanding the dynamics of eco-social collapse. Indeed, it's the most important history lesson in his book. But the problem is that when he turns to our modern predicament, he completely forgets his own lesson.

Capitalism and Collapse

In last part of the book, Diamond turns to our current crisis and lists a dozen critical environmental problems that, he says, will doom our own society unless we solve them. We all know what these problems are: global warming, fossil fuel consumption, natural habitat destruction, species extinction, fresh water consumption, industrial pollution, etc. And we also all know, at least in broad terms, what we must do to solve these problems: urgently wean ourselves off fossil fuels, stop deforestation, find alternative energy sources, stop overfishing and hunting species to

extinction, stop dumping toxics in the environment, and so on. So if we all know what needs to be done, and have the advantage of hindsight, why aren't we doing it? Why aren't *we* "choosing to succeed?"

The short answer is that under capitalism, the choices we need to make are not up to "society," while the ruling classes are incapable of making sustainable choices. In Chapter 9, Diamond relates some success stories—mostly those of small Pacific Island societies—where economic and environmental decisions *were* up to "society." Unlike Easter Island or Mayan society, these were small tribal village democracies where there were no distinctions of rank or class and no elite/mass conflict.

Diamond's favorite example is the highland society of New Guinea. Over thousands of years they built a mini-Switzerland of interrelated villages, terraced farms and tree plantations. The society was, and still is today, chiefless. Within each village there are just individuals and so-called "big-men" with no special privileges, who by force of personality, intelligence and experience were more influential than other individuals but still lived in a hut and tilled a garden like everyone else's. "Decisions were (and often still are today) reached by means of everybody in the village sitting down together and talking, and talking, and talking. The big-men couldn't give orders, and they might or might not succeed in persuading others to adopt their proposals." Diamond remarks that "To outsiders today (including not just me but often New Guinea government officials themselves), that bottom-up approach to decision-making can be frustrating, because you can't get a quick answer to your request; you have to have the patience to endure talk-talk-talk for hours or days with every villager who has some opinion to offer." (pp. 284-85). But it works. By getting everyone's input and approval, New Guinea societies successfully ensured consensus, rationally managed their economy, society, and environment—and survived sustainably for more than 40,000 years.

But ours is not a "bottom-up" democratic society. In our capitalist society, ownership and control of the economy is largely in the hands of private corporations who pursue their own ends and don't answer to society. And that's the problem. So it seems curious, even perverse, that when Diamond turns to address our contemporary environmental crisis, he inexplicably forgets his own lesson and presents no comparable exploration of contradictory (class) interests and (class) conflict in modern capitalist society. This is unfortunate because Diamond's reluctance to discard his own pro-market "core values" prevents him from applying the same critical analysis to our own society that he so effectively deploys to analyze ancient societies.

The fact that he fails to do so makes his book weakest in its concluding "What-do-we-do-now?" chapters on big business and the environment. For after stressing the need for urgent *radical* change to avert collapse, Diamond then ignores the systemic problems of capitalism that stand in the way of that needed radical change and instead, falls back on the standard tried-and-failed strategy of lobbying, consumer boycotts, eco labeling, green marketing, asking corporations to adopt benign "best practices," and so on—the stock-in-trade strategy of the environmental lobbying industry that has proven so impotent to date against the global capitalist juggernaut of eco-destruction.

Of course this is not at all to demean reforms. Lots of problems can be and have been significantly ameliorated and even solved without overturning the economic system. But despite significant victories here and there, the big problems—global warming, deforestation, overfishing, pollution, resource exhaustion, species extinction, and environmentally caused human health

problems—are not getting better. They are getting worse. And they are getting worse because environmental reforms are always and everywhere *subordinated to profit and growth*.

Corporate “Best Practices” Fuel Global Warming

Energy is a case in point. One of Diamond’s favorite examples of corporate “best practices” that he holds up as the sort of “solution” we need is Chevron’s Kutubu oil field in the Kitori River watershed of New Guinea. Diamond went there in 1993 as a consultant to World Wildlife Fund to evaluate Chevron’s practices. What Diamond—birdwatcher since he was seven—found was that unlike so many other oil operations that typically trampled down and despoiled environments all over the world:

I discovered to my astonishment that [New Guinea’s indigenous bird] species are much more numerous inside the Chevron area than anywhere else that I have visited on the island of New Guinea except for a few remote uninhabited areas. ... That’s because there is an absolute prohibition against Chevron employees and contractors hunting any animal or fishing by any means in the project area, and because the forest is intact. The birds and animals sense that and become tame. In effect, the Kutubu oil field functions as by far the largest and most rigorously controlled national park in Papua New Guinea. (pp. 445-46).

Great. But the larger truth of this example of corporate “best practices” is an illustration of the *limits of corporate reform*. For the whole point of Chevron’s “clean practices” demonstration in New Guinea, as Diamond himself points out, was to deflect criticism and better position itself to win new markets to drill and pump and burn more oil: “Clean environmental practices help them make money and gain long-term access to new oil and gas fields” and “give it a competitive advantage in obtaining contracts.” The tactic won Chevron access to Norway’s North Sea fields and elsewhere (p. 449). By opening doors to new sources in the North Sea and other places, Chevron’s “clean practices” in New Guinea actually helped to *accelerate* global oil production, global climate destabilization, and the pollution that is killing the birds and us. Furthermore, in 1998 Chevron’s “good behavior” helped it secure leases to drill in the Alaskan National Wildlife Refuge, should ANWR ever be opened by the U.S. Congress.

The trends belie the propaganda: while the Kyoto Treaty required that industrialized countries reduce CO₂ emissions 5 percent below 1990 levels by 2010, emissions of E.U. countries are on course to climb 10 percent *above* 1990 levels by 2010. U.S. emissions are already at least 30 percent above 1990 levels. And China’s emissions are soaring off the charts. World oil production is at an all-time high and growing. The U.S., Britain and China all say that they will be happy to do anything to reduce emissions *so long as* these cuts do not “harm the economy,” “undermine our American way of life” (G.W. Bush) or slow growth. So Britain’s born-again environmentalist, Prime Minister Tony Blair, told Parliament in September 2004, “the world’s richest nations have a responsibility to lead the way” in the fight against

our greatest environmental challenge—global warming. There is no doubt that the time to act is now. ... It is now that timely action can avert disaster. It is now that with foresight and will such action can be taken *without disturbing the essence of our way of life*, by adjusting behavior, not altering it entirely.²

² “Prime Minister Gives Dire Warning on Climate Change,” *BBCNews* Online, September 14, 2004, 6:52GMT (my italics).

Supersize Me!

Well what is “the essence of our way of life” under modern capitalism? It is not democracy or free speech but, rather, the unbridled pursuit of ever-more consumption and ever-higher “standards of living” as defined by ever-more possessions and services—new electronic toys, bigger SUVs, larger and more luxurious homes, etc.—a trend that has reached epidemic proportions.³ Half a century ago, retailing analyst Victor Lebow penned the credo—the “core value”—of the then ascendant American “affluent consumer society.” Lebow wrote:

Our enormously productive economy . . . demands that we make consumption our way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption . . . We need things consumed, burned up, worn out, replaced, and discarded at an ever-increasing rate.⁴

And that’s exactly what we’re doing. In March 2005 the UN Millennium Ecosystem Assessment compiled by 1360 scientists from 95 countries concluded that humanity is now consuming and degrading almost two-thirds of the natural resources that support life on earth. The authors call this “a stark warning” for the entire world. The wetlands, forests, savannahs, estuaries, coastal fisheries and other habitats that recycle air, water and nutrients for all living creatures are being irretrievably damaged.

In effect, one species is now a hazard to the other 10 million or so on the planet, and to itself. . . Human activity is putting such a strain on the natural functions of Earth that the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted.⁵

And Americans lead the way in hogging this one-time blowout sale of the world’s natural resources. With just 4 percent of the world’s population and 2 percent of the world’s oil, we consume 25 percent of the world’s oil and produce more than 25 percent of all CO₂ emissions. We use 50 million tons of paper annually—consuming 850 million trees (just for paper). The average American produces 864 kilograms of municipal waste per year, nearly three times the average produced by an Italian. And on and on.⁶

Given these trends, how can humanity survive unless we very quickly and very drastically “disturb the essence of our way of life”—by massively *cutting* our consumption of forests, fossil fuels, water, minerals, etc., and halting the production of thousands of toxic chemicals, petrochemicals, pesticides, and other synthetic substances that are poisoning us. Such a shift would mean society would have to find new employment for redundant workers, restructure production and consumption dramatically—close down some industries, expand others, cut waste, and conserve resources instead of squandering them. We will have to find life’s meaning in ways beyond endless consumption of goods and services. We will have to ask entirely new questions like: Do city dwellers

³ John de Graaf, et al. *Affluenza: The All-Consuming Epidemic* (San Francisco: Berrett-Koehler Publishers, Inc., 2001).

⁴ Lebow in *Journal of Retailing*, quoted in Vance Packard, *The Wastemakers* (New York: David McKay, 1960) and reproduced in Alan Durning, *How Much is Enough?: The Consumer Society and the Future of the Earth* (New York: Worldwatch Institute/W.W. Norton, 1992), pp. 21-22.

⁵ United Nations, Millenium Assessment Findings (draft), March 30, 2005, online at: www.milleniunassessment.org.

⁶ “Global Warming: the U.S. Contribution in Figures,” *The Independent*, June 13, 2005. Also see, Durning, *op. cit.*

need to privately own cars and similar consumer durables, or could they share them?⁷ Do we need industries producing an endless stream of new, nearly all unneeded gizmos that we soon tire of, simply to seduce us into spending to maximize corporate profits? Do we need dozens and hundreds of duplicate manufacturers all churning out virtually identical cars or TVs? Do we need designed-in obsolescence or annual model changes with all the waste that entails? Do we really need everything to be “consumed, burned, worn out, replaced, and discarded at an ever-increasing rate?” In short, if we want to survive, we are going to have to slow down the global economy, *make less stuff*, and re-engineer manufacturing to produce products to be durable and last, to make what we make differently, with different goals—for *social need*, not profit. Unless we make such drastic changes, we are, indeed, heading for collapse.

Systemic Barriers to Limiting Growth

But how can we slow down the economy under capitalism? For the problem is that the logic of insatiable growth is built into the nature of the system, the requirements of capitalist reproduction. For under capitalism, everyone finds it in his/her interest to maximize growth: Investor-owned corporations produce for the market in competition with other corporations producing for the same market. So they have no choice but to constantly seek ways to drive down costs, to innovate, to expand their markets, to find or invent new markets. They are obliged, in the capitalist maxim, to “grow or die”—increase profits or see their stock values fall as investors sell off their stock for higher returns elsewhere. Just look at General Motors: unable to grow in a glutted market, GM’s bonds have been reduced to junk status, and its stock has plummeted as investors flee. Likewise, workers, facing the threat of competition and unemployment can only favor growth—the faster the better. Those with pension funds invested in the market have even more reason to support growth. Governments are similarly compelled to maximize growth to enlarge the tax base to meet the demands of rising populations to provide the employment that is key to maintaining social stability.

But capitalist governments don’t own the economy, even if some own a sizable state sector. Consequently, governments fall over themselves in competition to bribe corporations with tax breaks and subsidies, drive down the wages of their own workers, gut whatever environmental protection they still have, and so on in a disastrous planetary “race to the bottom.” Taken together, capitalists, workers, and governments are all—just like those Easter Islanders—“trapped in a competitive spiral” of growth without end that is beyond our control. No corporate board of directors or capitalist government on the planet aims to slow down growth. Even the most self-styled leftist, pro-labor, pro-environmental national president in the capitalist world, Brazil’s Lula Ignacio de Silva, is fiercely pushing growth and accelerating the plunder of the Amazon at the expense of the environment.⁸ The maximand to grow also explains why the entire patchwork of government regulation—all the pollution “costing” and “trading” schemes to reduce emissions of various pollutants that are promoted by business and governments as “win-win” responses to the environmental crisis—are designed, above all, to *keep the economy growing*.

⁷ Steps are already being taken in this direction. See for example, Elizabeth Rosenthal, “Slowly, the Shared Car is Making Inroads in Europe,” *New York Times*, July 14, 2005.

⁸ Eg. Steve Kingstone, “Amazon Destruction Accelerating,” *BBCNews Online*, May 15, 2005. Deforestation is wiping out peoples as well as plants and animals as well. See “Amazon Tribe Faces ‘Annihilation,’” *BBCNewsOnline*, May 17, 2005.

Given these built-in requirements of capitalist reproduction, can we expect the lumber and paper industries to reinvent their business plans and explain to their stockholders that, “sorry but due to the threat of global warming, we need to save the forests, cut down *fewer* trees, decrease output, and therefore profit?” How long would such an environmentally responsible lumber company stay in business? Or, given the immediate threat of fossil fuel combustion-driven global warming, what the world needs now is not just cleaner cars but *fewer* cars. Surely Ford and Toyota can make smaller and even more fuel-efficient hybrid cars. But can we really expect Ford or Toyota to strive to produce and sell *fewer* cars? They’re in business to make and sell as many cars as possible. So to ask the question is to answer it.

Systemic Barriers to Restructuring

Secondly, maintaining a habitable planet will also require massive global industrial restructuring to redirect investment from some industries, like fossil fuels, into others, especially renewable energy sources. Yet again, it is all but impossible to imagine how such large-scale phase-outs and investment reallocations could be made when these sectors of the economy are in the hands of privately owned corporations. Diamond argues that the costs of environmental cleanup ought to be socialized and passed onto consumers (pp. 484-85). Well perhaps—if profits were also socialized and passed onto consumers.

Aside from the issue of who should pay, the scope of the problem we face is far beyond the capacity of any single corporation, or even whole industries. We don’t have a national, much less global energy company that could decide to phase out investments in fossil fuels, aggressively increase investments in renewable energies, and spread those huge but necessary costs over the whole society. Instead, what we have are many individual, privately owned energy corporations that are responsible to their shareholders and burdened with sunk capital in existing technology they can’t afford to scrap, human capital with expertise in fossil fuels, a global infrastructure to distribute fossil fuels, and so on.

In the 18th Century world of Adam Smith, individual producers—farmers, sheep husbandmen, weavers, artisans and small industrialists—didn’t have the scale of production and technological capacity to do much harm to the natural world. But today, when a single, self-interested producer like Pacific Lumber has the technical capacity to wipe out the last remaining stands of 4,000 year old redwood forests in a few weeks; when self-interested fleets of giant satellite-guided industrial fishing trawlers strip-mine the world’s oceans till fish species after species is driven to the brink of extinction; when a few self-interested chemical giants pump and dump so many billions of tons of toxic chemicals into the world’s waters that every major fresh water source on the planet is at risk, and even human mothers’ breast milk, if packaged for sale, in many countries would have to be labeled as hazardous waste;⁹ and when a few self-interested auto-petroleum giants have

⁹ “If, as Cicero said, your face tells the story of your mind, your breast milk tells the decades-old story of your diet, your neighborhood and, increasingly, your household decor. Your old shag-carpet padding? It’s there. That cool blue paint in your pantry? There. The chemical cloud your landlord used to kill cockroaches? There. Ditto, the mercury in last week’s sushi, the benzene from your gas station, the preservative parabens from your face cream, the chromium from your neighborhood smokestack. One property of breast milk is that its high-fat and -protein content attracts heavy metals and other contaminants. Most of these chemicals are found in microscopic amounts, but if human milk were sold at the local Piggly Wiggly, some stock would exceed federal food-safety levels for DDT residues and PCB’s.” Florence Williams, “Toxic Breast Milk?” *New York Times Magazine*, January 9, 2005. Also: Environmental Working Group, “Study Finds

the collective power to melt the polar ice-caps and dramatically alter the climate of the planet, *it's time to check your theory.*

The problem is the inherent logic of the system: Each corporation, acting rationally from the standpoint of its owners and employees seeking to maximize their own self-interest, makes individually rational capitalist decisions. But the result is that in the aggregate, these individually rational decisions are massively irrational, indeed ultimately catastrophic, and they are driving us down the road to collective suicide.

Plan or Die: We're All in this Together

If capitalism can't be reformed to subordinate profit to human survival, what alternative is there but to move to some sort of nationally and globally planned economy? Problems like climate change require the "visible hand" of direct planning. We need a globally enforced freeze on CO₂ and other emissions, enforced reductions in energy usage, an enforced halt to forest destruction, enforced limits on auto production, chemical production, etc. Problems like climate change do not end at the factory smokestack or national borders, so they cannot be solved by individual corporations or individual nations. Such problems are by their nature interconnected and international and require concerted, united international action—international economic planning and international governance by a global citizenry. Call it socialism, economic democracy, or whatever.¹⁰

We need to be having a national conversation—indeed a global "bottom-up" conversation—about rationing resources and limiting production and consumption. We need a national and planetary vote on whether the lumber companies should have the "right" to mow down the forests till they're gone, on whether the fishing industry can fish the seas to extinction, on whether the auto oil industrial complex can burn the world's fossil until the ice caps melt, among other pressing issues. We in the economically advanced countries need to be need to be talking about imposing limits on consumption, about "how much is enough" given how much we already overconsume.

People in rapidly developing countries like China need to be asking themselves whether it's such a great idea to emulate American consumerism by, among other things, scrapping bicycles and adopting "modern" automobiles as their primary means of urban transportation. "Getting rich is glorious," but it won't be much use when Shanghai is under water.¹¹ As for the underdeveloped

Record High Levels of Toxic Fire Retardants in Breast Milk from American Mothers," www.ewg.org/reports/mothersmilk/es.php, accessed June 1, 2005.

Associated Press, "Rocket Fuel Chemical Found in Mothers' Milk," February 24, 2005, www.msnbc.msn.com/id/7025323/, accessed June 1, 2005.

¹⁰ Of course one could imagine an entirely different outcome—namely, that eco-collapse could just as likely result in a statist or even globalized fascist Orwellian capitalist dystopia whose rulers could "manage" capitalist competition, direct production, distribute profits as the Nazis did. Not the outcome readers of this journal would like to see, but we cannot doubt that there are powerful forces out there, and not only bizarre Christian fascists, who are hoping if not planning for just such a denouement.

¹¹ Eg. Jonathan Watts, "Toxic Smog Shrouds Beijing," *The Guardian*, October 11, 2004, online at: <http://www.guardian.co.uk>. On China's capitalist catastrophe-in-the-making, see Richard Smith, "Creative Destruction: Capitalist Development and China's Environment," *New Left Review*, 222, March/April 1997, pp. 3-42, and Richard Smith, "New Problems for Old: The Institution of Capitalist Economic and Environmental Irrationality in China," *Democracy and Nature*, Vol. 5, 2, 1999, pp. 249-274.

countries, we all need to be thinking of ways to help those peoples develop their economies in a way that present generations can achieve a life of sufficient material satisfaction without undermining the future for their children. Such profound transformations in the organization of production, distribution, and conservation of resources cannot be realized in an anarchic, unplanned market economy; they can only be realized in a democratically planned, or at least mostly planned economy.

I can already hear the objections about the perils of central planning, “state” this and “bureaucratic” that, and the threat to our freedom—especially the freedom to exploit, privatize, profit, and insatiably consume. The global community is going to have to sit down and talk and struggle collectively and vote on these issues and every other decision important to our collective survival.

It is far beyond the scope of this article to attempt to sketch out what a model of national and global democratic economic planning might look like. But there are plenty of pre-figurative examples in the spontaneous “from below” anti-privatization, anti-globalization democratic struggles that have burst out around the world from Bolivia, Ecuador, Venezuela and Brazil to South Africa, India and beyond, as well as in the huge meetings of the World Social Forum, which try to confront just such issues (though of course, unlike the un-elected WTO, the World Social Forum lacks any power whatsoever to enforce any policies).¹²

The unifying slogan of these movements, “another world is possible,” is still fairly inchoate. Yet the instinctive drive of these struggles toward democratization from below is unmistakable, and hopeful. Implementing “bottom-up environmental management” (to borrow Diamond’s phrase) will take time, produce frustration and be “inefficient” by some measures. But the lessons of the Viking, Mayan, and Easter Island chiefs of old that Diamond so compellingly writes about apply directly to our modern corporate chiefs. And like the Viking, Mayan and Easter Island chiefs, our capitalist corporate leaders can’t help themselves, *have no choice* but to systematically make wrong, irrational and ultimately—given the technology they command—globally suicidal decisions about the economy and the environment. So then, what other choice do we have than to consider a true ecosocialist alternative? If the capitalist economists have a better plan to save the humans, where is it?

¹² There is also a large and growing literature on the subject of popular and global democratic governance: e.g., George Monbiot, *The Age of Consent: A Manifesto for a New World Order* (London: Flamingo 2003); William Fisher and Thomas Ponniah, *Another World is Possible* (London: Zed Books, 2003); Greg Palast, et al., *Democracy and Regulation: How the Public Can Govern Essential Services* (London: Pluto, 2003); Adolf G. Gundersen, *The Environmental Promise of Democratic Deliberation* (Madison: University of Wisconsin Press, 1995); Thomas C. Beierle and J. Cayford, *Democracy in Practice: Public Participation in Environmental Decisions* (Washington D.C.: Resources for the Future, 2002); A. Anton, M. Fisk, and N. Holmstrom (eds.), *Not For Sale: In Defense of Public Goods* (Boulder, Colorado: Westview, 2000); Al Gedicks, *Resource Rebels: Native Challenges to Mining and Oil Corporations* (Cambridge: South End Press, 2001); and Raymond L. Goldstein and John K. Schorr, *Demanding Democracy After Three Mile Island* (Gainesville: University of Florida Press, 1991).