

## *Chapter 4*

# **The Impossible Revolution**

So far I have been arguing that climate change is real and that its irreversible form is virtually upon us. The moral imperative to act is overwhelming. Yet we do not. Why are we in the United States incapable of acting even under this immense imperative? If we are to understand this crossroads in time, we must grapple with whatever in our collective habits makes it so difficult for us to face this moment with genuine foresight and sanity. At first glance, it is not all that clear why we are so stuck, why we seem incapable of addressing a threat that has such enormous consequences for us all. What features of this crisis have led us to such an impasse? What attributes of our political culture might explain our hesitation? And what does our inability suggest about our overall dilemma and its consequences?

The practical steps we could take to address our crisis seem rather simple. We just need to raise the price of fossil fuels—as well as the cost of generating greenhouse gases through the poor management of farmland and forest—so that the market reflects the physical realities in which we live. If we do so, we will all have a practical incentive to shift to new and less destructive practices. If we increase these prices in further steps over the ensuing years, we would change our practices even further, eventually reaching the point where we would not be contributing to the planet's warming at all. We should also fund research into developing and implementing new technologies so that solar, wind, tide, wave, and geothermal energy can become readily available; the mechanisms for capturing and storing carbon dioxide can be installed on a large scale; and our agricultural and forestry practices can become ecologically sustainable. These ideas of raising the cost of unsustainable practices and funding new research are fairly straightforward and by now thoroughly familiar to

climate change scientists, technicians, policy experts, and legislators; we just need to carry them out and do so soon.

To make these changes, however, is not so simple. Imagining a course of action is much easier than actually pursuing it. For those of us living in the United States, taking these key steps will require a fundamental reorientation of our attitudes and practices all across the nation. That change will have to operate on many levels if it is to work at all. It will require a shift in our understanding of our place in the world, a willingness to endorse unprecedented public policies, a revision of our industrial and agricultural practices, and a change in our individual daily habits. It will have to be ideological and legislative, technical and financial, large-scale and individual, all at once. To ward off the prospect of severe climate change requires us not only to change our thinking but also to participate in an everyday, detailed endeavor that will often seem utterly tedious and banal; at every turn, we will have to overcome our comfort with things as they are, our resistance to inconvenient interruptions, our preference for cheap living, and our ignorance of alternatives.

How best might this transformation come about? Only something very powerful, systemic, and persuasive could possibly succeed—something like climate change itself, except within the political domain. The challenge is to translate the reality of climate change into terms our culture can understand and accept. But doing so is no simple matter. Most policy experts take for granted that introducing any radical new principle is bound to fail, at least at first. Doing so, they argue, forces one to advocate for positions that are not politically viable. In their view, we must be more strategic, more circumspect; we must find means of subtle encouragement that nudge people toward more responsible behavior. An outright intervention would simply provoke a repudiation of the entire effort. After all, as Aristotle said, politics is the art of the possible; if you demand too much, you won't get a thing. One version of this attitude is voiced by Mike Hulme, who reviews the various reasons why people disagree about climate change and suggests that we will make headway only when we can reconcile our divergent beliefs.<sup>85</sup>

But climate change does not compromise. For us to ward off severe disturbances to our ecosystems, we cannot compromise either. But without compromise it is virtually impossible to change democratic societies.

It takes several generations for social movements in the United States to achieve their primary goals; activists in this nation have always been forced to accept small gains over many years until the prize is won. So far the debate over climate change is following this pattern. Activists point out what must be done, “skeptics” refuse to act, and the nation edges forward, slowly and cautiously, toward the goal.

This time around, however, the slow and steady approach will not do. We do not have the luxury of awaiting the reconciliation of beliefs that Hulme envisions. Because climate change proceeds apace, we must act as soon as we possibly can. Hesitating to act in *this* case seems foolish. Although all of us by now have a healthy respect for the ponderous rate at which political change comes in modern democracies, we also know that in this particular case, the problem gets worse with each passing year.

Is it possible that something is wrong with the best solutions proposed to this point? Are they simply too much to take? If so, what about them seems to go too far? As I have suggested, the basic approach is straightforward enough: raising the price of emitting greenhouse gases would do the trick, especially through the mechanism of a greenhouse tax or untax. (As I mentioned in chapter two, following the usage of Steven Stoft, an untax is a tax whose entire proceeds are distributed equally to all taxpaying citizens.) But to be fair, even this relatively simple approach would require an important transformation in our political culture.

In the United States, we tend to place great faith in the rationality and efficiency of the market. We interfere, if at all, by making certain transactions illegal, imposing regulations on business practices, and encouraging various endeavors with tax breaks. But for the most part, we allow the market to set its own priorities. We regard any widespread attempt to shape market forces with suspicion, having decided many decades ago, at least by the time of the Cold War, that any collective control over the market constituted socialism and therefore (in a major leap) totalitarianism. For us, it seems, the liberty of the market is as sacred as any other freedom, no matter what the consequences. But as a result, we tend to let many abuses fester for generations; even though we can see that the market creates a wide array of social problems, we refuse to consider many ways to fix them out of the fear that intervening would look like socialism. Ironically, of course, through our government we have subsidized

the extraction of fossil fuels, interfering into the market to *lower* their cost, creating as we so often do a kind of warped socialism, stretching out a helping hand to the staggeringly wealthy. The first thing we need to do, then, is to eliminate these subsidies entirely. But that step in itself would simply restore the market to its own equilibrium and would fail to address the problem at its core.

A greenhouse gas untax cuts through this impasse. Ordinarily, the low cost of fossil fuels makes them the default source of energy; as long as these sources remain cheap, the market will forever reinforce our current fossil-fuel habits. By raising the price of sources of energy that contribute to climate change, an untax modifies this dynamic entirely. Because it incorporates the collective good into the pricing mechanism, it enables us to bring about a massive shift in our practices simply by following the laws of the market. Once fossil fuels become more expensive than renewable alternatives, we'll all have the incentive to power our industries, heat our homes, and fuel our cars with sustainable sources of energy.

The result will be an explosion of technological innovations to create a new energy economy. When this untax raises the cost of agricultural and forestry practices that produce greenhouse gases, it will also drive widespread innovations in managing the land. No doubt public investment in technology research will also be needed. But rather than transforming public behavior exclusively through law or regulation, this measure uses the market to counteract the harm it previously reinforced. Furthermore, if it truly is an untax, rather than a tax—if the federal government distributes all of the proceeds equally among the nation's taxpayers—then it innovates in a further way: it makes protecting the future into collective property, giving each taxpayer a stake in social change. The more citizens get attached to their share of the money, the more they will identify their self-interest with the good of the whole.<sup>86</sup>

This proposal thus represents an important innovation in the American understanding of the market. On one level, the untax apparently accepts without question the market's dominion over the Earth, creating that strange beast, the notion of profit-driven ecological change. But in fact, by using the terms of the market, this solution subordinates the market's workings to a common goal. It suggests that even if the market is a set of mechanisms that usually create cheapness and efficiency,

the public can appropriate it for a collective purpose, turning it into a straightforward, low-maintenance, and effective means to create a greenhouse-free economy. In effect, this strategy makes market society into a transformative machine that would generate incredible momentum toward undoing the causes of climate change. When that common goal finds expression within the terms of the market, individual choice can do the rest. The result would be neither capitalism nor socialism, strictly speaking, for it would rely on an alternative to both, using an aspect of capitalism to achieve a socially designated purpose.

This strategy accords well with other aspects of an innovative solution. The shift to sustainable energy technologies, as well as ecologically sound management of farmlands and forests, will rely heavily on scientific research, experimentation, and know-how. This approach thus hopes to use science to reconfigure the fossil-fuel-driven world it has created over the past two centuries. Here again the proposed measures would make possible a fusion of apparently opposed political traditions; it would blend technological innovation with environmental responsibility, making good use of engineering skills to ecological ends. Just as we can use the market to transform itself, we can rely on science to do the same—to find ways of sustaining our lives that are far less destructive than those it has provided so far.

In effect, this measure ultimately proposes a Grand Compromise between free-market ideology and an inescapable environmental imperative. It accepts the bedrock American love of economic freedom and uses it for a cause in which the vast majority of Americans also believe. The nation has used a roughly similar approach on previous occasions, as Social Security and Medicare demonstrate. Those measures blended economic individualism and public protection in ways that were initially attacked as socialist but that eventually received nearly unanimous public support, suggesting that hybrid solutions of this kind are possible in America.

Nevertheless, this proposal has not yet been adopted by our legislative bodies. (In 2010, the Senate rejected a bill without a vote, perhaps because the cap-and-trade mechanism in the bill was riddled with flaws, but more likely because it would have indirectly raised the price of fossil fuel.)<sup>87</sup> It does not seem likely that any legislation increasing the cost of

fossil fuel, whether through a cap-and-trade mechanism, a tax, an untax, or a rationing system, will ever receive Congressional blessing—at least not in the foreseeable future. Those opposed to action insist either that climate change does not exist or that the government should not intrude into the market in this way. The first objection is tacitly a stand-in for the second; it signals the fear that if climate change happens to be true, it will give the government an excuse to take too much control over our lives.

The ultimate basis for these objections is the belief that each person has the right to do whatever he or she pleases—as long as such action does not harm the interest of another. This belief is the core of “liberal” philosophy, that is, the strand of political philosophy that places its highest priority on safeguarding individual liberty. (Here our terminology has it exactly backwards; those who place liberty above our future are “liberals,” strictly speaking, while those who wish to sustain the biosphere into the future are in a key sense “conservatives.”)

The problem with this objection is that it falls flat, right on its face. When we decide to use fossil fuels, we *are* harming each other, as well as the biosphere and all future generations. If there were ever a public imperative that passed this test *better*, I'd like to know what it is. All governments have the right to protect the viability of the biosphere for future generations; otherwise, it's not clear why we bother to let such governments exist. Our Constitution recognizes this right in its Preamble, which states that the purpose of government is to “promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity.” Take note: its purpose is to secure liberty for us *and posterity, too*. Since emitting greenhouse gases today will lead to more severe climate change, which will in turn seriously hamper the liberties of our descendants, the only way to safeguard the rights of posterity is to change our own practices today. The liberal tradition is absolutely on the side of changing our society, and doing so *now*. The trick is to find a solution to the problem that also respects the liberal tradition, that draws on individual decision-making, foresight, and creativity. The greenhouse gas untax fits the bill, for it creates the market incentives for all of us to bring about the changes we need.

The obstacle, then, is not present in any feature of the proposed solution, which accords well with our Constitution and our respect for the

free market. We can only conclude that the opposition stems from an objection that has no legitimacy and cannot even be spoken: the belief that *no possible public good* can justify an intrusion of this kind into individual liberty, that in protecting freedom we should not take the interest even of posterity into account. Such a belief objects to the very idea of a greater good or a collective purpose. Ever since the “Reagan revolution,” many Republicans have strongly resisted the notion that the government is capable of solving *any* social problem, for by definition government itself is the greatest problem of all. In consequence, since that “revolution,” these Republicans—by no means all—tend to vilify progressive uses of government as socialist, communist, or fascist, and on occasion, as all three. In the new version of the free-market ideology, it seems, *nothing can ever be more important than the market itself*.

In practical terms, then, the nation's response to climate change must now be debated on entirely different grounds, that of “energy independence”—the goal of weaning America from dependency on “foreign oil.” But any legislation adopted on these premises will not be enough. Funding research into new energy technologies is essential, but this step will not in itself make those technologies attractive to individual consumers. Giving tax breaks to help people convert to renewable energy is good, too, but it will be insufficient, since the vast majority of the public will have little incentive to give up cheap fossil fuel. Perhaps the only event that will truly change individual habits is a dramatic hike in the price of oil. In that case, the free market might do what the government cannot, inspiring us all to use new sources of energy as soon as we can. One possible scenario is that the government will pass legislation to generate a new round of technological innovation, and a global economic recovery will push the price of oil so high that we'll all begin shifting to a new energy economy on our own. But such developments will still leave too many gaps: they will leave in place the hope that oil prices will decline again, preventing businesses from making the necessary long-term investments; they will keep alive the popular bias for cheap energy, as well as an immense transfer of funds to oil-producing nations; and they won't cover the management of farmland or forest, create a smart grid, or help reduce the cost of electrical cars. Moreover, they will make it very difficult for the United States to accept a binding target for lowering emissions in

international negotiations, hindering truly effective worldwide action. In short, this “solution” simply will not do.

The doctrinaire opposition to effective action has more than purely practical consequences. It will force us to adopt half-measures, to be sure. But it's worth contemplating why we must resort to them at all. It's about time we faced the consequences of the “Reagan revolution”—the notion that protecting the free market is more important than any other consideration. If that dogma is true, then creating a business-friendly environment trumps preserving the Earth. Capitalism matters more than the biosphere. No doubt capitalism might have difficulty flourishing if the biosphere begins to suffer; any sane businessperson should be able to admit to that fact. But free-market dogmatists will not do so, because they will not concede that the biosphere is in danger in the first place. Their resistance to action is more subtle: in their view, capitalism is more *real* than the biosphere. The conditions for business are real, as are taxes and government funding, but in their view scientific assessments of climate change are still so speculative and so dependent on unproven models that they do not yet describe reality. Assessments of the business environment, of course, *also* depend on models and estimates, but at least they refer to modes of behavior that we understand. In this view, climate change, if it exists, arises from physical processes we still don't fully comprehend. Adam Smith is good as gold, but the IPCC is still a bit fishy. There is no need to change until the science is more solid—but even then, how could it ever be as solid as the myth of Adam Smith?<sup>88</sup>

This description of market fundamentalism might sound a bit extreme. But in fact the entire public sphere accepts the principle that no political measure can be justified unless it is consistent with the laws of the market. (The only exceptions allowed these days are national security, a handful of moral norms—such as those that forbid selling people, body parts, or sex—and a few government programs too popular to touch.) We've long since gotten used to obeying this principle: it seems we can't truly face any significant public problem (from elevated high-school dropout rates, drug abuse, and worker safety to disaster relief and the protection of endangered species) without considering its impact on the economy and whether it would be cost-efficient to address it. Our ultimate reality is the economy; any other factor that matters to us must



make its peace with that principle or be eliminated altogether. In the United States, at least, human beings must abide by the rules of the market, not vice versa. Here, we all live within the free-market bubble; nothing makes it inside that doesn't submit to the logic of the market.

The consequences of living in this bubble are stark. Quickly now, answer this. What's harder for you to imagine: the end of free-market capitalism, or the end of nature? By now, imagining a devastated biosphere comes fairly easily to us all. Imagining life after the end of the market? That's almost impossible. For *all* of us in this society, *the market is more real than nature*.<sup>89</sup>

But is this the core problem? After all, the greenhouse untax translates a shared priority into monetary terms, working with the rules of the market to achieve a common purpose. It respects the rule that no public good in this nation can be accepted until it speaks in the language of cost incentives. But evidently, this gesture is not enough. The untax relies on the principle that the market *must serve something outside itself*, must ultimately not endanger the biosphere and thus our future. In doing so, it says that *nature is more real than the market*. It declares its loyalty to the Earth, not to economic growth. In attempting to dislodge our dependence on cheap energy, it tries to bring about systemic, radical change to our entire frame of mind. In doing so, it violates a basic taboo; it bursts the bubble.

In practical terms, the greenhouse untax (or its alternative versions) is a fairly innocuous proposal. It would raise the cost of energy, leading to a host of further changes, but it otherwise respects our traditions and habits in every way. Nevertheless, it represents an immense *symbolic* shift. If the "Reagan revolution" sought to limit the government's right to intervene into the market, *this* shift constitutes an *ecological revolution*, one that limits the market's right to intervene into nature. Addressing climate change, it seems, requires nothing less than a radical transformation—one akin to the industrial revolution, the sexual revolution, the Reagan revolution, or all three, for it calls for a transformation in specific aspects of our understanding of government, our physical infrastructure, and our daily life all at once. Its effects are so widespread, in fact, that it may be the most consequential revolution of them all.

Why does such a simple measure have such big consequences? In the past, American movements for social change have taken two paths:

at times they have inspired Constitutional amendments, Supreme Court decisions, new legal protections, and other revisions in our basic understanding of individual rights, and at other moments they have led to the creation of public agencies to oversee and enforce protections for workers, previous targets of discrimination, or aspects of the environment. Although passing Social Security and Medicare required fighting back against charges of socialism, even those battles pale in comparison to what is required today. Seldom have we attempted to change our society by intervening so directly into the market itself, by changing the price of goods necessary to all categories of economic activity for the sake of a collective purpose. The last time we did anything on this order of magnitude, we removed an entire category of goods from the market—namely, human beings—and it took a Civil War to do so. In this country, whenever injustice is woven into the fabric of our economy, change is very difficult indeed, and the current case is no different.

One sign of how much this revolution will require of us may be found in what it shares with “deep ecology,” which argued around three decades ago that because the Earth is not here to serve human purposes, we need to repudiate modest protections for the environment and change our societies far more radically.<sup>90</sup> Deep ecology has never become a mainstream movement; it has been regarded, and has regarded itself, as a marginal if fierce presence. But today, climate change is making its central point more clearly than ever: by now, it's crystal clear that we cannot use the Earth in whatever way we see fit, for if we do so, we endanger our own future. We are a part of the Earth, rather than the other way around.

But this insight in itself is not enough. Deep ecology uses misleading terms; by using the term “deep,” it implies that depth of awareness on these matters is its own reward, that seeing past gradualist measures is sufficient. That view distracts us from a much more crucial contrast, embedded in nineteenth-century radical traditions, between reform and revolution. At its heart, by opposing reformist measures, deep ecology is *revolutionary* ecology. In that case, merely thinking through a critique of modern society is only the first step. Much more crucial is the task of figuring out how to *change* modern society so that it will no longer destroy the biosphere. Climate change forces us to convert this particular strand

of ecological thinking into a political force that can advocate for actual legislation and practical, real-world solutions.

And how, exactly, might we do so? So far, the major activist strategies have not worked. Popularizing climate change science only goes so far, since a good share of the public is dogmatically committed to a “skeptical” stance. A more overt attempt to educate the public would only be perceived as condescending or worse. Direct political action on climate change has tended to follow the two tracks familiar within American activist traditions: either it uses the tactics of reformist pressure politics, which ultimately relies on fundraising and lobbying Congress, or of decentralized, community-centered activism. But both of these efforts have failed and will continue to fail. Lobbying Congress has gradually built support for action, but not enough to get a strong bill through a Democratic House, much less a Democratic Senate. Many activists, having given up on federal leadership, have put their energy into organizing local efforts; such efforts have led to good results, especially in city, state, and regional compacts to reduce emissions. But ultimately none of these local efforts is enough; without concerted, tough federal action, we will simply not reduce our emissions as greatly as we must.

What political strategy is available to us that we have not tried? Perhaps it is worth mentioning in passing that the moral case for violent intervention is strong. If we can justify a nationalist revolt for liberty, as our ancestors did, or a war to defeat fascism, we can easily defend an intervention to save the life of the entire biosphere, whose decline represents a threat on a far greater scale than any crisis in the past. The murder of tens of millions of people during World War II pales in comparison to the potential harm to more than seven *billion* people on the planet in the coming decades.<sup>91</sup>

Yet even discussing the possibility of resorting to violence seems to go too far; by now, in developed countries the mere hint of violent revolution is enough to delegitimize any movement for change. As a result, in the postwar era, the United States has evolved a gentler alternative to violent social change, one that fits the gradualist pace of American politics: the massive, nonviolent rally in Washington to make specific demands for action. Perhaps the key event in this regard is the civil rights march in August, 1963, when Martin Luther King, Jr., gave his famous “I have

a dream” speech. That rally has served as the template for virtually every later rally in the nation’s capital, each of which has implicitly invoked the civil rights movement as the model of its own seriousness.

But because such rallies are symbolic—because they express certain demands without forcing immediate action—they hit their mark only if the government is willing to listen, only if pressure reaches an official audience that accepts the legitimacy of popular demands. When officials believe that they have already responded to those demands or that the new moral claims are illegitimate, the mass rally does not make a great deal of difference; the crowd will assemble and disband, the press will give it passing attention, and the life of the nation will go on, relatively undisturbed. In that case, the rally ultimately constitutes a feel-good occasion, a day for collective self-expression that has no real consequence. This much, at least, is true of rallies concerning ecology and climate change; the various rallies, protest marches, and other events in recent years have not budged Congressional sentiment a single inch.

What about the strategies tried by the Occupy Wall Street demonstrations beginning in the autumn of 2011? Would the more aggressive attempt not just to demonstrate but to *occupy* public space have a greater impact? For better or worse, however, that protest movement, while addressing real concerns, did not provide a list of demands to which those in power might respond. The movement succeeded in putting certain ideas into the overall political debate and changing the dynamic in the nation’s capital and elsewhere, but it did not have a powerful, immediate impact.

Would it be possible for activism to pursue a more courageous, creative tactic to break out of this impasse? Many nations have undergone nonviolent revolutions over the past several decades when vast numbers of ordinary citizens took over public space, demanded a change in government, and succeeded. The actions of immense, persistent, disciplined crowds in the Philippines and Indonesia, Berlin and the Ukraine, Tunisia and Egypt—and elsewhere in the Arab Spring—are excellent cases in point, even if the transformations they helped bring about have not necessarily endured. Could such an event take place in the United States, though for a different purpose? Could an immense rally in the public spaces of the nation’s capital—a rally that begins on the premise

that it *will not cease until its specific demands regarding climate change are met*—transform our political idiom, crack open our encrusted collective discourse, and force a decision of *some* kind on climate change, whatever it might be?

The answer, I think, is no. Activists have not attempted to organize a protest on this basis, or even considered it, for several reasons. For one thing, doing so does not respect the principle that political demands in this country must be moderate, respectful, and measured—that even if voices for change may not be heard at first, they will be listened to eventually. A massive crowd that demands change *before it disbands* implies that the duly elected government is so neglectful of the collective interest that *it cannot be trusted to act on that interest in its own good time*. That crowd, in short, would attempt to usurp the popular legitimacy of the government itself. Such a tactic cuts deeply against the American grain; at least over the past century, we have accepted the notion that a constitutionally legitimate government is legitimate in other ways as well, that in the end it will serve the common good. To suggest otherwise would come across as the height of arrogance, for it would seem to attack democracy itself. As a result, no one who believes in the urgency of action contemplates a tough, uncompromising rally of this kind; we all in practice accept the authority of this government, come what may—even if its policies endorse market activities that are destroying the Earth.

But the consequences of that loyalty are stark. In effect, we put the viability of our political system above the viability of the biosphere; *our political systems are more real to us than the Earth itself*. In effect, we live in a political, as well as an economic, bubble. If climate change increasingly reveals that our policies do not make sense, we *still* accept the authority of this government and continue to pursue a moderate kind of activism, as if the biosphere can wait while our officials dither.

As a nation, then, we have two overpowering reasons why we have not acted. First, we do not wish to burst the free-market bubble, our belief that the Earth is here to sustain economic growth. Giving up this belief is very difficult for a good portion of the American public. But even those who give it up accept the habits of moderate protest because they do not wish to burst the political bubble, the nearly unanimous belief that this government will in time represent the best interests of us all. Even if the

climate transforms before our very eyes, we will hesitate to act, because for virtually all of us, our ultimate homeland, the domain that counts as real for us, is not the Earth, but the political and social traditions in which we live. No natural events are strong enough by themselves to dislodge our unthinking loyalties.

Why can climate change not get us to budge out of these fidelities? What about the ecological revolution of our time simply does not compute? The answer can only be that it goes against the nation's traditions so directly that it can hardly be understood in familiar terms. As a truly *ecological* revolution, it creates a number of unprecedented challenges.

For one thing, every previous revolution in the classic sense (such as the Puritan Revolution, the American Revolution, or the French Revolution) has promised some degree of liberation—from a monarchy or aristocracy, a foreign government, or a system of exploitation or enslavement. In all these cases, people fought hoping that victory would give them much greater liberty and happiness. An ecological revolution promises no such reward. It seeks the liberation of the Earth's ecosystems, and ultimately of human beings as well, from climate change. But it undoubtedly goes against the stream of modern culture. It requires us to *renounce* what we thought we had gained from those previous successes. It tells us that we do *not* have certain rights—that we live within an intricate web of mutual relations that are not subject to our control. Rather than promising us a wonderful expansion of our lives, it offers us something altogether more subtle: it tells us that if we give up a certain kind of abundance, or a certain way of securing it, we will safeguard what we thought we could take for granted, our opportunity to have a livable future.

Similar reflections apply to a social change that, unlike violent revolution, follows the rules of American political culture—a change that takes place through compromise, over many generations. For most of the history of this nation, the great movements for emancipation have taken place within the context of economic growth, industrialization, increasing population, and a greatly expanding use of natural resources. Expanding individual rights is difficult—it has taken generations and is still ongoing—yet it is somewhat easier when economic growth holds out the promise that if relatively privileged groups recognize the rights

of others, their own future happiness will not be harmed. Furthermore, this expansion of rights is only one element within the wider effect of industrialization itself, which liberated people from the endless drudgery of preindustrial labor. Released in this way, people had time for education and leisure activities, money for a vast range of consumer items, and an opportunity to extend to their fellow citizens a chance for happiness like their own.

An ecological movement does not follow these rules: it forces us to consider whether economic growth, which inevitably involves a greater use of natural resources, is even viable in the long term, and if so, what it might look like;<sup>92</sup> it demands that we reconstruct our entire industrial infrastructure and potentially deindustrialize many of our practices; it forces us to give up our assumption that we can continue to “develop” previously undisturbed natural spaces; and as a result, it asks us to relinquish, or at least consider relinquishing, the idea that our collective abundance will forever increase. To demand change without the promise of greater plenty would require making an appeal on pure principle. Few previous attempts of this kind have succeeded; as I mentioned in the introduction, the movement to abolish slavery was fought on the same basis, came up against the realities of an entire economic system, and did not succeed until the nation endured a Civil War. Needless to say, that is not a good precedent. Even worse, such an appeal would go further than merely doing *without* the help of the trends in production, population, and settlement that, broadly speaking, enabled previous movements to gain general acceptance; it would potentially argue *against* them. An ecological movement worth its salt asks for more, and seems to offer less, than any previous social cause—even if its ultimate purpose is to safeguard the happiness of human beings. Here again, the demands of the Earth and of our own better selves conflict with our traditions.

The revolution of our time cuts against the grain in these ways in part because it does not have what most people would recognize as an immediate human constituency. Every previous revolution had a discernible protagonist, a group of people who would truly benefit from social change. This time, the immediate constituency is the Earth itself, all its ecosystems, and the human race as a whole. But it turns out that getting the concerns of *that* constituency recognized within our political system

is no easy task. Those parties have no direct political representatives; no one speaks for them other than those who volunteer to do so. But the public treats those volunteers with suspicion: who are *they* to represent the natural world or to speak for the human race? Is their knowledge of climate change thorough and sound? Is their demand to put the viability of the biosphere above immediate human satisfaction acceptable? Yet without such representation, we would hardly be able to take the environmental consequences of our actions into account. No one gives ecosystems the vote, nor can the dying coral reefs or melting permafrost make political demands. Of course, inhabitants of islands that are about to be submerged can raise their voices. But they are so few, and their lands so distant, that people in the developed world act as if they do not exist.

The result is an impasse that marks out as clearly as possible the limitations of our political institutions. They take for granted that all matters that pertain to human affairs must arise from within the human community and can be resolved within that domain. But it turns out that *some* matters, at least, are relevant to all American citizens, even if none of us is seeking relief from an oppression that immediately afflicts us. Taking action to prevent severe climate change is indeed in the interest of us all. But to make the natural world feature in our calculation of our own interest is unusual, and on this scale unprecedented: our institutions simply do not know how to respond.

This impasse may also stem from the fact that this potential revolution necessarily sustains an unusual relation to the future. Social movements have typically fought to create a better future; the revolution of our time, however, fights to prevent the arrival of a devastating one. Previous revolutions could attempt to shatter tradition, cut off the relationship to the past, and invent an entirely new world; the French Revolution even created a new calendar, attempting to start time over again. Since the Enlightenment, modern societies have taken this link between revolution and radicalism for granted. But our time is different. The quintessential aim of radicalism—the utopian hope for a transformed future—now requires that we first attempt to conserve as much of the Earth's environment as possible before trying to reconstruct our societies in any other way. *Today, radicalism must first be conservative*: even if its ultimate aim is to open up an entirely new era, it must first make possible a sustainable,



ecologically responsible continuity over many generations, a continuity without which it could not even fight for further social and political transformation. This conservatism, of course, also requires radical change to our energy economies, but in the name of making it possible for the biosphere, and thus our societies themselves, to survive.

Because the focus of this movement is to sustain the biosphere, it differs sharply from prior revolutions in yet another way. Climate change waits for no one: if we do not transform our practices *today*, we will feel the heat in years to come. Never before has there been a *deadline* for revolution, a claim on us to bring about social change before it's too late. No doubt previous revolutionaries seized opportunities that would never again arise, certain that it was impossible to endure oppression for another moment. In that sense, they too felt a supreme urgency. But that urgency arose from within the historical situation itself, from the interplay of social and political forces. Now the imperative emerges from the purely physical consequences of actions that a short time ago we may not have considered politically significant. Suddenly, material reality obtrudes into our history, making felt an absolutely urgent demand that we cannot ignore.

There is no mistake about it: we must act, and we must act now. Some might argue that the urgency of the challenge will at last motivate us all to participate in a movement that will transform the world in which we live. But any sense that acknowledging the potentially catastrophic dimensions of what we face will in itself help create an ecological revolution is almost certain to fail.<sup>93</sup> The contrary possibility is much more likely to come true. The revolution we must bring about goes against our traditions again and again. It is endlessly inconvenient: it has no constituency, promises no liberation for us, and imposes its own timeline. It intrudes into our history implacably, utterly indifferent to the normal political calculations. It demands that we change our material practices immediately, whatever our apparent interests at the moment might be.

Because the obstacles to action are formidable, indeed overwhelming, the odds are very strong that we as a nation will not act in time. As I suggested in the previous chapter, the current political realities in Washington make it almost impossible for our government to take the necessary steps in the coming few years—during the crucial interval

when we *must* act. In this situation, what should sane and responsible citizens do?

Should we simply give up and go with the flow? Should we accept an intolerable reality because it is so difficult to fight against it, and more strangely, because even a victory would come too late? Not at all. Looking back at the era of slavery, how tolerant are we of a hypothetical slaveholder who argued that because liberating his slaves wouldn't change the system overall, there would be no point in doing so? Or looking back at Nazi Germany, would we accept the plea of a citizen who claimed she cooperated with the policy of extermination because it was not in her power to buck the system? Do we accept excuses like this? No, we don't. The American refusal of the Nuremberg defense during the war trials shortly after World War II says it all: evil action, even when committed under orders, is not acceptable.

Our thoughts in this regard say a lot about what we value. We affirm the necessity to act justly even if doing so requires us to risk our lives. We also affirm that we must do so even if there are no guarantees that our action will lead to the results we desire. The same is especially true in a situation of dire extremity, when the future of civilization seems to be at stake, when nobody knows whether the future for which we sacrifice ourselves will even come to pass. Judging by our response in these examples, it's clear that for us, just action is never about calculating the consequences, but about doing the right thing, *just because it is right*.

If that is the case, we don't really follow Aristotle at all. For us, politics is really the art of the *impossible*. If we do not wish to use the equivalent of the Nuremberg defense, we have to admit that *even if a revolution against the current system seems to be impossible, we must fight for it anyway. We must act, and we must act now*. We owe the Earth and future generations far too much to pursue only reasonable actions, only strategies that have a high probability of success. Instead of complying with conventional wisdom, we must transform it, reconceiving as well of familiar understandings of self-interest. *The crisis of our time is unprecedented; our response must be so too*. We must have the courage to break our society's taboos, to crack open the conventions of our political life, to expose the fundamental illegitimacy of any government that belittles the future of the biosphere. If this demand requires us to gather in vast crowds to hold

our nations hostage, thereby defying the complacent assumptions of modern democracies, so be it: only through this or any similarly forceful gesture will we at last place the biosphere above our belief in familiar political traditions. Even if we fail miserably, even if the conventions of public debate are too rigid to accept our intervention, we should not hold back. We will never again face a crisis in which more is at stake; we have no excuse but to salvage at least the possibility of future action. We have no choice but to redefine what is politically feasible—even if it is too late.<sup>94</sup> For us, *only the impossible is worthwhile.*

### Notes

85. Mike Hulme, *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity* (Cambridge, England: Cambridge University Press, 2009), especially 173–176. Hulme's argument runs aground on another key fact: social change never takes place through reconciliation, only through the gradual adoption of a new concept of justice that eventually wins out in the face of persistent opposition. The overall acceptance of that change comes about only a generation or two after the change itself has taken place. It follows that disagreement over climate change is inevitable over the period when actions matter most.
86. See Steven Stoft, *Carbonomics: How to Fix the Climate and Charge It to OPEC* (Nantucket, Massachusetts: Diamond Press, 2008). Stoft focuses on an untax on the supply of fossil fuels; I've added the suggestion that there be a similar untax on the greenhouse-gas producing management of farmland and forest, and thus have substituted my own term, "greenhouse untax," for his, "carbon untax."
87. See John M. Broder, "White House Energy Session Changes No Minds," *New York Times*, June 29, 2010, <http://www.nytimes.com/2010/06/30/science/earth/30energy.html>; Peter Baker and David M. Herszenhorn, "Senate Democrats to Pursue a Smaller Energy Bill," *New York Times*, July 15, 2010, <http://www.nytimes.com/2010/07/15/us/politics/15energy.html>; and Carl Hulse and Herszenhorn, "Democrats Call Off Climate Bill Effort," *New York Times*, July 22, 2010, <http://www.nytimes.com/2010/07/23/us/politics/23cong.html>.
88. Despite the claims of free-market fundamentalists, Adam Smith was by no means an advocate for an unfettered market, as many scholars have long since argued. For representative statements in this regard, see Salim Rashid, *The Myth of Adam Smith* (Northampton, Massachusetts: Edward Elgar, 1998); Athol Fitzgibbons, *Adam Smith's System of Liberty, Wealth and Virtue: The Moral*

and *Political Foundations of The Wealth of Nations* (Oxford: Clarendon Press, 1995), especially chapter 10; and Heinz Lubasz, "Adam Smith and the 'Free Market,'" in *Adam Smith's Wealth of Nations: New Interdisciplinary Essays*, edited by Stephen Copley and Kathryn Sutherland (New York: Manchester University Press, 1995), 45–69.

89. Compare a statement often attributed to Fredric Jameson: "It's easier to imagine the end of the world than the end of capitalism." But he did not make this remark himself; he attributes it to an anonymous other in his essay, "Future City," *New Left Review*, volume 21 (2003), 65–79; see page 76. Many commentators on our current political dilemmas have invoked this insight; for a book-length discussion see Joel Kovel, *The Enemy of Nature: The End of Capitalism or the End of the World?* (New York, Zed Books, 2002).
90. See Bill Devall and George Sessions, *Deep Ecology: Living as if Nature Mattered* (Salt Lake City: G. M. Smith, 1985), and George Sessions, editor, *Deep Ecology for the 21st Century: Readings on the Philosophy and Practice of the New Environmentalism* (Boston: Shambhala, 1995).
91. On the moral case for the use of violence in response to ecological crisis, see Derrick Jensen, *Endgame: Volume I, The Problem of Civilization*, and *Volume II, Resistance* (New York: Seven Stories Press, 2006).
92. For discussions of capitalism without growth, see Tim Jackson, *Prosperity Without Growth: Economics for a Finite Planet* (Sterling, Virginia: Earthscan, 2009), and Bill McKibben, *Deep Economy: The Wealth of Communities and the Durable Future* (New York: Henry Holt, 2007). For related discussions of transforming capitalism, see Vandana Shiva, *Earth Democracy: Justice, Sustainability, and Peace* (Cambridge, Massachusetts: South End Press, 2005), and William Greider, *The Soul of Capitalism: Opening Paths to a Moral Economy* (New York: Simon & Schuster, 2003).
93. See Sasha Lilley and others, *Catastrophism: The Apocalyptic Politics of Collapse and Rebirth* (Oakland: PM Press, 2012).
94. On politics as the art of the impossible, see Slavoj Žižek, *The Ticklish Subject: The Absent Centre of Political Ontology* (New York: Verso, 1999), 199. In a related vein, Žižek has often commented on the apparently impossible act that reframes the entire political context; for a recent, representative discussion, see *In Defense of Lost Causes* (New York: Verso, 2008), 304–316.