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A Time of Transformation?

They were unlikely sparks for a revolution. The bibles that rolled off the newly invented printing press of German goldsmith Johannes Gutenberg in the 1450s were massive, painstakingly crafted works of art, meant to catch the eye of the church leaders and secular rulers who could afford the two-volume tomes.[1] Gutenberg, a chronically indebted businessman with an eye for beauty, may have created masterpieces, but he was primarily out to make a living. If he thought about any broader effects of his invention, he probably assumed that it would help unify Christendom by replacing the many error-filled local variants of hand-copied religious documents with single, authoritative, Church-approved versions. Gutenberg could not have foreseen the Protestant Reformation, the Enlightenment, the emergence of the nation-state as the dominant political form, the spread of mass literacy, or the rise of representative democracy. Yet all were made possible by the printing press.[2]

The Reformation was the most immediate beneficiary. Martin Luther's ninety-five theses railing against the corruption of the Catholic Church—which were mailed in a letter in 1517 to the archbishop of Mainz, not, as legend has it, nailed to the door of the Wittenberg castle church—quickly leaked. By the end of 1517, they were all over Germany, translated into German.[3] And over the next seven years, Luther's works amassed a total print

run of perhaps 300,000 copies—one-third of all the books published in Germany during that time. Previous reform-minded tracts may have been written, but none received so wide an audience as Luther's.

Over time, Gutenberg's invention also changed the geography of language. Authors trying to reach broad audiences had to deal with a bewildering variety of dialects, creating standardized languages that sidelined Latin and provincial vernaculars alike.[4] It is hard to imagine the rise of the nation-state and, eventually, the rise of nineteenth-century nationalism in the absence of such ease of communication within national borders.

Most important of all, print changed the way in which knowledge could be accumulated. Printers could improve works from edition to edition, relying on large networks of readers to point out errors and provide new data on any subject, from mapping to botany. Print also, of course, made it possible to reproduce errors far more widely, but on the whole, error correction outweighed error duplication. Scottish philosopher and historian David Hume wrote to his publisher, "The Power which Printing gives us of continually improving and correcting our Works in successive Editions appears to me the chief advantage of that art."[5]

Part of the knowledge that was accumulated was political. Now everyone could know what laws existed, what agreements rulers had made with the ruled. Censorship became problematic. The Catholic Church tried to cope with the explosion of unwelcome books by regularly issuing the *Index librorum prohibitorum* (Index of prohibited books), which provided invaluable free publicity for the listed authors and, as historian Elizabeth Eisenstein notes, "may have spurred sales."[6] Over time, the explosion of knowledge opened the door to vastly greater individual freedom and to forms of governance that required the ongoing involvement of literate, attentive, and informed populations.

These consequences were not inevitable. Movable type presses were available in China as early as the eleventh century, but they were little used and had essentially no influence.[7] The European invention of the printing press transformed Europe because Europe was ready to be transformed. The Renaissance was already under way, and Europe was in the painful process of recovering from the devastation of the bubonic plague. The growing demand for books and other written materials was outstripping the capacity of scribes to make their copies. Public disgust with the corruption rife in the Catholic Church provided fertile ground for Luther's theses. Thus, the advent of print holds powerful lessons for us today.

We are now, potentially, at a similar turning point. Information technology may once again be poised to transform politics and identity. If the print revolution made possible the nation-state system and eventually national democracy, where might the digital revolution lead us? Can it help us create new, and possibly better, ways of running the world?

As was true in the early days of print, we live in an extraordinarily fluid time, when choices made today will have massive consequences for tomorrow. To see this, imagine living in a wonderful world a few decades from now. The gut-wrenching poverty that left half the world eking out a bare existence at the turn of the millennium has become little more than a distant memory as ever freer and more equitable global markets have ushered in a new era of prosperity for almost everyone. Population has grown far more slowly than predicted, with birthrates dropping dramatically in a "demographic transition" that reflects the world's improved standards of living (the richer people become, the fewer children they have). The population growth that has occurred has created larger markets and bigger labor forces for the growing economies. New environmentally sustainable technologies, from "green" cars to organic farming, are so widely adopted that Mother Nature smiles benignly on her 8 billion or so human children. This extraordinary progress in the human condition has become possible thanks to the information revolution and the related spread of education. People around the world have become capable of demanding, and getting, effective and competent governments, which are closely monitored by a global array of citizens' groups looking out for the public interest.

Now imagine a different scenario for that not-too-distant future. Economic globalization has forced all societies to subordinate concerns about equity and social justice to productivity and competitiveness. With the private sector ever more powerful and the wealthy ever more isolated from the rest of society, governments find themselves unable to compel those with money to help pay for such basic social needs as defense and police functions, economic infrastructure, environmental protection, or a social safety net. Organized crime runs rampant through porous borders. The technologies of the information revolution have spread, but inequitably, leaving the poor well aware that others are living far better than they but unable to participate in the information-based global economy. Growing and aging populations that are increasingly organized into self-interested activist groups put heavy demands on governments to provide services. Environmental

degradation compounds those demands by undermining the ability of the poorest to fashion a living for themselves as supplies of water, firewood, and arable land diminish. The failure of either market or government to meet the demands of both the truly desperate and the merely relatively deprived masses is provoking growing frustration and thus violence. And everyone is suffering the consequences of climate change and ecosystem collapse as weather runs wild, fisheries are devastated, and much of humanity ends up poisoned by the by-products of industrial activities.

There are plenty of people who say we are already well on our way toward one or the other of these outcomes. Panglossian pundits foretell a "long boom" of ever-increasing prosperity: Peter Schwartz, Peter Leyden, and Joel Hyatt, in their book of that name, lay out a vision of a future made glorious by rapid economic growth, technological innovation, and the power of net-working.[8] Others, like the well-traveled writer Robert Kaplan, foresee a world at best divided between the privileged few and the miserable many, headed for conflict and possibly wholesale collapse.[9]

These are not the only views of our likely future, of course. A number of pundits prefer to promulgate paradigms that look more like the recent past, with the world defined primarily by antagonisms between countries. The United States is always one of the antagonists, given the preponderance of U.S. power, and its enemy is posited to be China or a unified transnational Islam (replacing earlier renditions that put Japan or a revitalized Russia in that role).[10] Most well known in the wake of the September 11 attacks on New York and Washington, D.C., is Samuel Huntington's imaginative vari-ant on the Great Enemies idea, contending that whole civilizations, rather than mere countries, will clash.[11]

All these views reflect a palpable hunger for a single theme that will bring coherence to the confusing cacophony that has prevailed since the cold war ended. The hunger is understandable: we need some means of attributing meaning to the myriad events and trends we observe, some basis for decision making. But such simplifications of reality appear to describe inevitabilities rather than possible futures. And some of their arguments have a dangerous propensity to generate self-fulfilling prophecies. If claims about new enemies are taken seriously, peoples who need not become enemies may start treating each other as such. That is clearly what the terrorists behind the September 11 attacks hoped to bring about with their ill-founded claims about hostil-ity between Islam and the West. If assumptions of inevitable prosperity are

accepted, the real threats to that outcome will be ignored until too late. And if fears about possible catastrophes are accepted as descriptions of an unavoidable future, that future will come.

Reality is not as simple, and human destiny is not as fixed. Major stresses are inevitable, given the sheer size of the growing human population and the need to adjust to technological changes. But within those constraints, humanity has enormous freedom. People decide which problems matter most and how, or whether, to try to solve them. Cultures and civilizations need not clash if people decide to work out their differences in nonviolent ways. Climate change need not continue. Humanity can wait and see whether ecological catastrophe will strike, or we can reduce the emission of greenhouse gases. We can wait until the bombs go off, or we can act to constrain the proliferation of conventional weapons and weapons of mass destruction. We can confront the problem of growing income disparities, or we can wait and see whether such divisions really will rip societies apart, as many social scientists predict.

The difference between the rosy and gloomy scenarios boils down to a single word: governance. Governance is something more than the familiar processes of governments. *Governance* refers to all the ways in which groups of people collectively make choices. Just as operating systems set the parameters within which computers function, governance systems set the parameters within which societies function. At the global level, however, the operating software is still in the beta-test stage of an early version—not able to do much, and with plenty of bugs still in the code.

Governments are obviously a big part of global governance—they agree on treaties, constitute international organizations that set international standards, and enact and enforce national laws to implement internationally agreed-on rules. But corporations are also taking an increasingly large part in global governance by lobbying governments, regulating themselves through industry associations, and establishing codes of conduct for their own behavior. And a vast and growing array of nonprofit groups is beginning to participate in global governance, whether by demanding changes from the streets or by sitting down with representatives of governments and corporations to write the rules.

This current system for running the world is based on rules that were set in the middle of the twentieth century, in the wake of World War II. It is based on assumptions that a handful of great powers will make most of the

decisions, with other national governments involved as needed and with intergovernmental efforts at times coordinated through treaties or international organizations such as the United Nations. It was designed for a time when war between countries seemed the greatest threat to international well-being, when national economies engaged in trade but otherwise operated quite separately, and when environmental concerns were scarcely a blip on the radar screen.

The world of the early twenty-first century is obviously quite different. In late 2002, the "war" against terrorism was uppermost in many minds. But humanity faces many threats. True believers in doomsday scenarios have many potential catastrophes to pick from. The cold war may be over, but the world still hosts thousands of nuclear weapons. Dozens of countries (and, increasingly, subnational groups) have or could get chemical weapons, biological weapons, or both, as well as missiles to deliver them. The international treaties and safeguards in place to prevent such proliferation have serious flaws. Although we are unlikely to experience another war like World War II, in part because the United States is so militarily dominant that no conceivable enemy could hope to win a conventional war against it, millions are still dying and suffering from the cumulative murder and maiming made possible by the global trade in small arms. Such violence is particularly hard to control when it comes, as it increasingly does, from rebel groups and criminal organizations (often now one and the same) rather than national governments. The international community, in the form of the United Nations and national leaders, is increasingly recognizing a moral obligation to stop the slaughter of innocents, but those national leaders generally accomplish little beyond hand-wringing and buck-passing until thousands have already died.[12] Much of the violence is fueled by the escalating profits of drug traffickers and other smugglers, whose goods are easily disguised in the surging flows of legitimately traded goods and whose profits are readily laundered through the vast global financial system. Other large-scale threats to human well-being include everything from economic instability to environmental degradation, as later chapters will show.

So far, although people are becoming more aware of the global nature of humanity's most urgent problems and opportunities, the responses, with some notable exceptions, add up to unimaginative muddling through. The thousands of international conferences, treaties, and declarations of pious intent have (again, with some notable exceptions) done more to salve the

conscience than to save the world.

To see the gap between rhetoric and reality, consider an example: the globalization of disease.

Watching a child die of illness or infection used to be a common parental experience. It still is common in the poorer half of the world, where infectious and parasitic diseases remain a leading cause of death.[13] But for the rich, literate, and lucky, the prospect became a remote horror in the last half of the twentieth century, thanks in large part to the miracle of antibiotic drugs. Now, however, the germs are fighting back, and all too often they are winning. That is due to the remarkable stupidity with which humanity has been squandering its pharmaceutical treasure.

Bacteria are not defenseless against antibiotics. Any given infection may contain some bacterial cells that are slightly resistant. If not enough of the drug is taken to overwhelm the slightly resistant bacteria, those will survive—and reproduce, passing on their resistance to their heirs. Thus, over time, use of antibiotics promotes the existence of resistant bacteria.[14]

That may be inevitable, but the stupidity comes in the multiple ways we are drastically, if inadvertently, speeding up the rise of resistance. All over the world, antibiotics have been prescribed lavishly, often for diseases against which they are entirely ineffective, such as viral illnesses. When they are used against bacterial diseases, where they can work quite well, people often stop taking them as soon as they feel better but before all the bacteria have been wiped out. The very poor often cannot afford to take a full course of pills over several days, leaving the most antibiotic-resistant bacteria lurking in their bodies. Even worse, we have been giving vast quantities of the stuff to healthy cattle, pigs, and chickens, to make them grow slightly faster and to compensate for the unsanitary conditions in which they are raised, and we have been spraying antibiotics on fruit trees to control or prevent infections. So we are eating a steady low-level diet of antibiotics.

All this is leading to the resurgence of diseases that once seemed well under control, even in rich countries with well-developed public health systems. New York City is contending with the emergence of strains of tuberculosis resistant to known treatments. Some strains of a bacterium called *Staphylococcus aureus,* which frequently causes postsurgical infections, are becoming resistant to the antibiotic vancomycin, until recently the drug of choice; other strains are already resistant to everything else.[15]

At the same time that diseases thought to be under control have come

back to haunt us, new ones are popping up. As global population increases, humans are encroaching on new environments. That encroachment provides opportunities for microbes to jump from animal hosts to new human ones.

This may be how acquired immunodeficiency syndrome (AIDS) arose. And AIDS, as is well known, is becoming the most serious health threat in recorded history. It has already killed in excess of 20 million people—more than all the soldiers who died in the twentieth century's vast wars and as many as the total death toll from Europe's Black Death in the fourteenth century. AIDS is a peculiarly vicious epidemic, robbing societies of adults in the prime of life. Africa has been worst hit, with as many as one-third of all adults infected in such unfortunate countries as Botswana.[16] But it is hardly just an African problem. Already, more than 10 million people outside Africa have been infected.[17] China alone could have that many cases by 2010.[18]

The third element in the global disease picture comes from the same technological advances that have me sitting 37,000 feet over the Atlantic Ocean as I write this. Unless humanity decides to put a stop to international airplane travel and global shipping, the rise of new and resurgent infectious diseases will be a global problem. Whenever previously isolated human populations begin to interact, disease spreads as viruses and bacteria find new hosts who have not developed immunity to them. Multiple such epidemics struck in ancient Rome. Europe's Black Death of the fourteenth century, probably carried back from Asia by traders, killed nearly 40 percent of the population. The indigenous peoples of the Americas endured devastating waves of disease after European contact. Such outbreaks are the fully predictable consequence of growing contacts among people. Although such epidemics are nothing new, modern transportation technologies intensify the danger of the spread of virulent infectious disease. Because people move so quickly, even fast-acting diseases can spread before killing off their initial victims. Already today, millions travel for business or pleasure, and even in a time when many people are cutting back on travel plans, the number of short-term visits to other countries is growing much faster than total population levels. Tourism now accounts for some 10 percent of the world's annual economic growth, with people taking 6 billion such trips per year. By 2020, experts predict, 1.6 billion people, from what will then be a total population of about 7.8 billion, will travel internationally as tourists.[19]

Put all this together—the lessened effectiveness of antibiotics; the emer-

gence of previously unknown diseases for which treatments are scarce, expensive, or simply unavailable; and modern transportation—and we have a chilling reality. Everyone, literally everyone, is vulnerable to the threat posed by new and resurgent diseases.

So what great global initiative has been launched to save us all from the scourge of pestilence? Several are indeed under way. But efforts seem alarmingly feeble compared with the scale of the problem.

For starters, the World Health Organization (WHO), a United Nations agency, has undertaken several initiatives, often in partnership with private businesses and nongovernmental organizations, from the Roll Back Malaria campaign to the Global Alliance for Vaccines and Immunization. And WHO is not alone. The Bill & Melinda Gates Foundation is pouring tens of millions of dollars into vaccination programs and other health initiatives. At the urging of the United Nations' secretary-general, Kofi Annan, a global fund has been established to address such big killers as AIDS, malaria, and tuberculosis. A group of scientists in the United States has established an electronic mail network called the Program to Monitor Emerging Diseases (ProMED) to facilitate reporting on disease outbreaks, with more than 10,000 participants in 120 countries as of 1999. Some big pharmaceutical corporations are giving some of their products to people too poor to afford them. And the shameful neglect of public health systems around the world is, at least, being noticed now that such systems are seen as the first line of defense against bioterrorism.

But such efforts provide a sparse defense against the bacterial arsenal. Tuberculosis, for example, kills 2 million people per year, and that number is rising, not falling.[20] No serious efforts are under way to stop the vast misuse of antibiotics. And this is nothing compared with what could happen if some demented soul decided to give the bacteria a helping hand in the form of biological weapons more potent and easily distributed than anthrax.

Why is there such an enormous gap between the scale of the problem and the resources being devoted to it? One reason is that, as in most things in life, it is the poor who suffer first, and they lack the resources and power to do much about the problem. Rich countries have been notable tightwads when it comes to providing assistance to poor ones to support their public health systems. There might be a certain poetic justice in the prospect that epidemics that break out in poor countries may come to plague the miserly rich. But presumably most of us would prefer good health and long life, especially for our children, over poetic justice.

The broader problem is that it is not clear *who* should do what. Organizations such as WHO could do more, but only if the governments that control and constitute them provide the necessary resources and marching orders. And it is not clear that a centralized bureaucracy like that of WHO, or of any intergovernmental organization, is the ideal mechanism for dealing with highly decentralized problems such as antibiotic resistance or diseases carried by travelers.

The globalization of disease is just one of the knotty transnational problems whose causes lie and whose effects are felt in more than one country. Because the problems are transnational, their resolution lies beyond the authority of any single national government. Environmental degradation and microbes alike blithely ignore political boundaries—air molecules and fish go where they choose.

Because political authority is held by national governments, there is an increasing disjunction between the (transnational) problems to be solved and the (mostly national) systems and procedures available to solve them. And to the extent that transnational and multinational systems are emerging to address transnational issues, these systems are not directly accountable to the people whose lives they affect. No constituency elects international organizations, multinational corporations, or nongovernmental activists.

Moreover, those new systems are often organized as though the issues on the global agenda could be resolved separately. Reality refuses to stay neatly confined in orderly bureaucratic and analytic boxes. Instead, the problems interact with and exacerbate one another. Trade and environment, for example, are becoming tightly linked, but when the two conflict, the people who decide which takes priority understand only one. Among the protestors at the ministerial conference of the World Trade Organization (WTO) in Seattle, Washington, in November 1999 were environmentalists outraged by the organization's tendency to judge trade–environment disputes solely on the basis of trade laws. The governments that write the rules the WTO enforces fear that allowing environmental standards to influence trade policies could lead to ever more barriers to trade and provide a handy smoke screen behind which protectionists could hide. Environmentalists argue that "our trading system must find ways to operate within environmental limits."[21] Such attempts to solve complexly interacting problems across dramatically different issue areas cause confusion for overburdened states and for the international organizations they create.[22] These outdated rules for running the world seem likely to fall short.

But what are the alternatives? One obvious possibility would be a world government wherein the United Nations and other international institutions are built up to the point that they take on the whole range of functions currently served by modern national governments. This is a truly bad idea. The prospect of world government is as undesirable as it is unrealistic. If the world has learned only one thing from the bloody history of the twentieth century, it is that highly centralized, top-down systems of governance are economic and political nightmares. Although such governments are able to mobilize populations, both the means and the ends are horrendous, making them ultimately unsustainable even on their own terms. A single world government would very likely be worse than anything yet seen. No centralized government on such a scale could be responsive to the highly diverse needs and desires of billions of people. And even if it were desirable, world government is politically impossible. Neither governments nor their citizens will allow any strong centralized supranational authority to collect taxes and regulate behavior across the board in the foreseeable future. No plausible kernel exists around which a world government with coercive powers might develop, paranoid delusions about the United Nations' black helicopters notwithstanding.

A second proposition calls for reducing the need for global governance by returning to the good old days of impermeable national borders. Some, though certainly not all, of the anti-globalization protestors, not to mention various xenophobic anti-immigrant political movements in rich countries and at least some terrorist networks, have exactly such an approach in mind. But that would be throwing the baby out with the bathwater. As later chapters will argue, economic integration (if handled better than it is currently being handled) could dramatically and sustainably improve the lives of vast numbers of people around the globe. And even after throwing out both baby and bathwater, stepping back from globalization would still leave us stuck in a bathtub contaminated with the dirty scum of global environmental degradation.

A third option, much favored in some circles, would have us rely on the "invisible hand" of the market. The invisible hand is indeed a powerful force—but only under certain conditions.[23] Not everything that is desirable has a market, that is, people able and willing to pay. Even when a group of people share a desire for a good or service, such as a well-educated populace or protection from attack, individual members of the group may not find it

rational to pay for that good or service, no matter how much they each want it. To clean up a lake, each local homeowner must stop dumping untreated sewage into the lake, but those who do not stop still benefit from the actions of those who do. To provide for the national defense, citizens must pay taxes, but those who cheat on their taxes do not go undefended. This, in social science jargon, is the collective action problem: when there is no way to exclude people from enjoying a good or service, people are tempted to free ride, that is, to enjoy the benefit while letting someone else pay the cost.[24] This is not mere selfishness. It is often futile to pay up unless enough others will join in. If only a single homeowner treats his sewage, the lake will not become noticeably cleaner. As one leading scholar put it, "a man who tried to hold back a flood with a pail would probably be considered more of a crank than a saint, even by those he was trying to help."[25] Because of the collective action problem, many things that people collectively want are underprovided—the market fails.

In short, world government will not work, a retreat to national borders is impossible, and market forces cannot deal with most collective action problems. Where each of these proposals fails is in its lack of means for carrying out the five basic steps needed to deal with problems of the collective good. The steps are as follows:

1. There must be agreement that the problem is indeed a collective, not an individual, matter.
2. Those concerned must negotiate about how to solve the problem and how to divide the cost.
3. If the group (whether local, regional, national, or global) manages to reach an agreement, it must implement this agreement.
4. The group has to check to make sure everyone is complying with the agreement.
5. Often, the group must have some means for punishing free riding, to deter those who might be tempted to shirk.

At the transnational level, mechanisms for all five steps are poorly developed and often ineffective. Setting the agenda of what constitutes collective problems is always hard, even at the national level. But it is even harder in the global arena. There may be broad agreement on the desirability of peace, prosperity, community, and (increasingly) individual liberty, but translating those ideals into concrete agenda items requiring action on someone's part is

no easy matter.[26] Global problems rarely inspire a sense of crisis, even though their long-term effects may be devastating. Unlike the clear-cut tasks of fighting a war, the world faces a series of gradual erosions of the good (e.g., environmental degradation) and accumulation of the bad (resurgent disease). By the time it becomes readily apparent to all that a significant problem has arisen, solving it may be extremely expensive, especially given the degree to which vested interests will by then have entrenched themselves in implacable opposition to change. And at the global level, no system exists for forcing a ranking of issues or an allocation of resources. Priorities reflect a hodgepodge of the interests of the most powerful states (or their most powerful constituents), the whims of the media spotlight, and blind chance. Citizens can lobby governments to act as their interlocutors, but many governments lack the capacity—and sometimes the motivation—to serve as effective representatives of their citizens' interests in the wide range of transnational issues. And there is often a big problem in deciding whose agenda a problem should be on (the United Nations? the Group of Seven great powers? the TransAtlantic Business Dialogue?). Of course, who it is that benefits from a decision typically depends on who makes it.

Even if the agenda-setting problem is solved, the other steps of global collective action present formidable obstacles. Negotiation too often takes place in cumbersome intergovernmental forums that are unable to keep pace with fast-changing problems and that often fail to represent the interests of large numbers of people. Implementation too often depends on explicit case-by-case reciprocity, which can easily break down, rather than general patterns of diffuse reciprocity that keep cooperation going beyond the inevitable snags.[27] The still-resilient norm of national sovereignty can wreak havoc with efforts at monitoring as governments resist letting outsiders in to check on them. Enforcement across borders remains seriously problematic because the available tools, from diplomatic persuasion to economic sanctions to military force, are blunt, ineffective, or both.

Effective global governance requires ways to carry out the five steps despite all these obstacles. There have been occasions on which the world could rely on a single country to bear the whole cost and let everybody else free ride, although in the realm of international politics such apparent altruism usually has some self-interested explanation lurking beneath it. The United States often played this role in the decades just after World War II as part of its campaign to contain the Soviet Union, serving as a "benevolent

hegemon" for allies and potential allies in the anti-Soviet camp. In this role, the United States showered Europe with aid under the Marshall Plan, brought about the reintegration of Germany and Japan, led in creating international financial institutions such as the International Monetary Fund to stabilize the international economy, led the charge in lowering the barriers to trade, and often opened its own markets to the exports of countries that did not fully reciprocate as a means of fostering economic rebuilding or development.[28]

There is still something of a tendency to look to the United States to solve the world's problems. But relying on the benevolence of hegemons is a risky strategy. Governments, answerable only to domestic electorates, face few incentives to act for the benefit of someone else's constituency. The United States, the obvious candidate for the role as the world's dominant economic and military power, shows few signs of willingness to bear the burden of others' free riding now that it is no longer trying to stave off the threat of Communism. And for many global issues, there is not much even the extraordinarily powerful United States could accomplish by itself. It cannot unilaterally preserve the global environment or stop the global trade in drugs and small arms. Most of the time, global problems will have to be solved globally, not unilaterally.

Another way of providing for the collective good is tried and true: coercion, *making* people contribute to the common good. As chapter 4 will show, national governments can do this. Governments, at least when they are functioning well, can make people pay taxes to support collective goods such as police forces and armies, which in turn make it possible for governments to enforce compliance with laws and regulations (including the ones about paying taxes). But even at the national level, governance that relies primarily on coercion does not work very well. Countries such as North Korea and Iraq are poor for a reason. And coercive power is even less likely to work at the global level. In the absence of black helicopters, the one plausible enforcer of a world order is the one remaining superpower, the United States. Given its reluctance to sign on to international agreements aimed at solving global problems or to come up with its own solutions to such global problems as climate change, the United States seems no more likely to serve as a coercive hegemon than it is to bear the burden of the world's free riding.

In short, providing for the collective good at the global level will require something more imaginative than the extension or replication of national

government power at the global level or a return to the sharply defined borders of the past. Hints are already emerging as to what that something might be. New systems of global decision making are emerging that go beyond cooperation between states to a much messier agglomeration of ad hoc mechanisms for solving the many and varied transnational problems. No one is planning this system. It is evolving, with many disparate actors who are largely unaware of the roles of other sectors and their relationships to other issues. The private sector and the amorphous third sector of nongovernmental organizations that are grouped under the heading of "civil society" are becoming key figures in transnational governance, filling some of the gaps that governments are leaving open. Increasingly, as later chapters will show, agreements are being worked out and implemented directly between the private sector and activist groups on issues ranging from environmental protection to labor standards. And nongovernmental organizations are increasingly taking on the role of monitoring compliance with international accords.

But these groups lack the democratic systems of accountability that have so painfully evolved in the past few centuries. No one elected Amnesty International to serve as the human rights conscience of the world, no one elected Greenpeace to set and enforce environmental standards for multinational corporations, and no one elected the corporations themselves. Of course, until recently no one had elected most national governments, either. But since there is now a clear global consensus on the desirability of democratic rules of governance, in principle if not always in practice, surely we do not want to create unaccountable forms of transnational governance just as we are finally getting some momentum in the spread of democracy at the level of national government.

This is where hard thinking is needed about what constitutes "democracy" in the context of global governance. It is important not to confuse the form with the function. Democracy requires two things: a system for providing people with a voice in the making of decisions that affect them and a mechanism for holding representatives accountable to those whom they represent. At the national level, opportunities for voice are provided by such mechanisms as civil society and political parties. Accountability is provided by elections. But national elections give no say to people outside a country who are nonetheless affected by that country's national decisions. At a meeting in Buenos Aires just before the November 2000 U.S. elections, a senior

Argentine diplomat told me in all seriousness that he would rather have a vote in the U.S. elections than in Argentina because Argentine citizens are at least as affected by what the United States does as by what their own government does. Unfortunately, it is hard to dream up mechanisms that would enable people to vote anywhere in the world where decisions are made that affect them.

The world badly needs to devise institutions and frameworks that can make it possible for people affected by decisions to have a voice in those decisions and to hold the decision makers accountable. The tools are now available to do at a global level what the printing press helped do for national governance—to decentralize the flow of information, enabling democracy to emerge. The speed and scale at which decision making must now take place has outstripped the capacity of purely electoral systems of democracy to cope. If democracy is to survive globalization, it must attend to the free flow of information.

The following chapters explore how to do all this. Chapter 2 introduces the most important concept for global democracy in the twenty-first century: transparency. If voice and accountability are to exist across borders, decision makers must explain their actions and decisions to the broader public whose destiny is thereby affected, and they must allow that public greater say in those decisions. Such transparency will not automatically ensure that good and just decisions are always made, but it is the most effective error correction system humanity has yet devised.[29] It can, must, and increasingly does apply not only to people already explicitly responsible for governance—leaders of national governments and intergovernmental organizations such as the World Trade Organization—but also to corporations and even the civil society groups accustomed to seeing themselves as the watchdogs monitoring everybody else. Changes in both technology and behavioral norms are making such transparency-based governance increasingly feasible.

Chapter 3 examines one reason why collectivities other than nation-states can participate in transparency-based governance—the slow but significant changes in the way people identify themselves. After all, people are more apt to work on behalf of a group goal if they identify themselves as part of that group. People can now identify themselves as members of all sorts of groups, and many types of groups now have the capacity to form cross-border networks that enable them to participate in making (or disrupting) global rules. Although most of what we hear about groups these days is pretty nasty—

ethnic or religious or nationalist groups that define themselves in opposition to some hated "other"—there are grounds for hope that humanity can grow up enough to get beyond these divisive definitions of group identity.

The following three chapters address the knotty questions of who can and should do what in global governance; chapters 4, 5, and 6, respectively, investigate the appropriate roles of national governments (and the intergovernmental organizations they create), private enterprise, and civil society in making and implementing the new rules of global governance.

The next two chapters apply all the foregoing to some of the most pressing issues facing the world. Chapter 7 delves into what most people think of when they think of globalization: economic integration. Partly thanks to new communications and information technologies and partly as a result of deliberate government and corporate decisions, barriers to the flow of goods, services, and money have fallen dramatically. But this facet of globalization is a political as much as a technological process, one desperately in need of revitalized rules and fairer ways of making those rules. Although living standards have risen for many, some of those lifted out of poverty by the forces of economic integration have been plunged right back into it by the various economic crises of recent years. Moreover, more than a billion people have been left out of this globalized system all along, scrabbling for a living in a world that is placing less and less value on their unskilled labor, and their share of the world's population is growing. The massive protests now surrounding virtually every economics-related meeting of international organizations and governments reflect a broad sense that there is something fundamentally unfair at work in the global economy.

Chapter 8 looks at why we need new forms of global governance if we are to take sustainability seriously. Partly because there are so many of us and partly because a significant fraction of us live lives of unprecedented and astonishing wastefulness, there is no part of the planet that remains unaffected by humanity's presence. The effects are generally not good. Although some environmental spillovers are purely local, an increasing number, from climate change to the catastrophic extinction of species, are matters of global concern. And because environmental degradation results directly from economic activity, as economic policy making goes global, considerations of what were once local environmental issues should—but do not—follow suit.

Chapter 9 pulls all the strands of the book together in a scenario that projects how the world might evolve a better system of global governance.

   This book is based on a view of the future that is fundamentally, if nervously, optimistic. The nervousness sets in because the book does call for significant change in the way we think about political and social organization. Such a change in thinking and in doing needs to occur—and is already beginning to occur—not just among politicians and corporate executives but also among ordinary citizens, who are collectively far more able to contribute to solving transnational problems than either they or the elites generally recognize. The optimism comes from the belief that humanity can in fact figure out ethically acceptable ways of governing itself at the global level. Along with the urgent threats to human well-being explored in the coming pages are examples of innovative solutions that might prove to be more effective mechanisms for governance than those currently in use.

   Those innovative solutions often do not look much like the electoral, representative systems that are the usual focus of works on governance. Indeed, there is not much discussion in this book of the formal structures of political decision making. Instead, the focus is on what can be truly new when technology and politics combine to open up the information floodgates, in a time of transformation potentially as great as was the period following Gutenberg's invention more than half a millennium ago.