

# 2

## Strings Attached

Imagine for a moment that you are taking a leisurely walk on a favorite beach. As the calming sound of the waves and the wide horizon clear your mind and heighten your senses, you begin to notice the things around you. A group of birds floating on the wind. The play of light through scattered clouds. The remarkable process whereby stones too strong to break by hand have been transformed by time and ocean currents into countless sand particles crunching under your feet.

These and other aspects of the natural world capture our attention and inspire natural scientists to discover their secrets. But there are other realities here that go unseen by the untrained eye, and have yet to enter into the colorful documentaries provided by scientists, journalists, and other chroniclers of the natural world. These are the social rules that pattern this physical reality. Sometimes these rules take the form of laws. In other instances they appear as building codes or product design standards. Voting rules, property rights, and constitutional guarantees count among our most powerful social rules, which also include unwritten but widely recognized principles of right and wrong that guide our actions. Our task in this chapter is to make these social rules more visible—to help you “see” the rules shaping your everyday activities, to understand something of their political origins, and to

appreciate why these rules matter for the future of our planet. To begin, let us return to our stroll on the beach and see what traces of politics and power we find amid the shells and stones.

## INVISIBLE WORLDS

First consider what is missing from the beach. Why are there no fences? Why can we walk on this beach at all? If our social rules specified that the surf and sand were available to the highest bidder, or belonged to the first party to stake a claim, we would have no more right to swim in the ocean than we would to plunge uninvited into a neighbor's pool. In fact public access to the shoreline differs markedly from one country to the next, depending on the rules in place. In Scotland, the Land Reform Act of 2003 ensures that the beaches are widely available to all who wish to enjoy them.<sup>1</sup> You can watch the seals at Tentsmuir Sands on the east coast, or dip a toe in the chilly waters of Clashnessie Bay far in the north, unimpeded. In Ireland, in contrast, coastal access is a stingy affair. There public access is purely at the discretion of those who own property adjacent to the shore. As a result of this rule, much of the coastline is off-limits to Ireland's children, birdwatchers, joggers, and other devotees of what Rachel Carson called "that great mother of life, the sea."<sup>2</sup>

In the United States, the ability to enjoy a day at the beach is ensured by our embrace of an ancient legal principle known as the public trust doctrine. First spelled out by the Roman Emperor Justinian, and later passed down through Spanish, British, and American colonial law, the public trust doctrine holds that any waterways suitable for travel by boat, and the land underneath them, cannot be owned privately, but are instead held in trust by the government for public use.<sup>3</sup> The weight of this rule in the American legal system was confirmed in a famous Supreme Court case in 1892. The case concerned a jaw-dropping decision made by the state of Illinois, where legislators voted to sell Lake Michigan to a private corporation. The legislature granted the Illinois Central Railroad Company much of the state's portion of the great lake, including exclusive access to a huge swath of the Chicago harbor—over 1,000 acres in all. Fortunately, the US Supreme Court ruled that the state of Illinois was in violation of the public trust doctrine. The Court's decision quoted Andrew Kirkpatrick, a New Jersey Supreme Court judge who argued in 1821 that to grant a private party

exclusive control over state waters would be “divesting all the citizens of their common right. It would be a grievance which never could be long borne by a free people.”<sup>4</sup> A century and a half after Kirkpatrick penned these words, coastal access was enshrined in the US Coastal Zone Management Act of 1972, a landmark law that enabled comprehensive coastal protection and planning throughout the country.<sup>5</sup>

If the story of public access to beaches, and of social rules generally, were simply one of fair-minded rules fairly applied, there would be little reason for us to take interest in where these rules come from. But this story raises a larger point. The fact is that many of the simple pleasures we take for granted today, such as a walk on the beach, are possible only because others before us scrutinized the existing order of things, found it wanting, and changed the rules. The sight of a toddler wobbling toward the shore with a bucket of sand in tow seems far removed from the clash and clang of politics. Yet it is political engagement that made this innocent scene possible. The Coastal Zone Management Act did not come about as the inevitable result of a society coming to terms with the side effects of economic growth. It was the product of public protests stretching from Oregon to New Jersey, where citizens voiced concerns about the rapid development of coastal areas and declining public access.<sup>6</sup> Fences were bulldozed, city land use plans were modified, access paths were opened, and the beach was made available to all (with some notable holdouts, the focus of continuing public advocacy today).<sup>7</sup>

Public access to American beaches also required overturning rules inherited from a previous era that were deliberately designed to keep people out. Most notoriously, as recently as the 1960s, hundreds of state and local ordinances made it illegal for African Americans and other people of color to enjoy a day at the beach. During the Civil Rights era, organizers challenged the old rules using techniques such as “wade-ins” at whites-only beaches stretching from St. Augustine, Florida, to Biloxi, Mississippi (Figure 2.1). They often met with hostility and brutal violence. At a wade-in event in Chicago on August 28, 1960—along the same stretch of coastline that was almost sold off to a railroad company a century earlier—protesters were attacked by a mob of 1,000 stone-throwing segregationists. In the southern states, several wade-in activists were murdered. The remarkable sacrifices of these young Americans were ultimately successful in changing the rules and making a day at the beach a right available to all.<sup>8</sup>



FIGURE 2.1 Protesters are attacked during a “wade-in” at a segregated beach in St. Augustine, Florida, 1964

*Russell Yoder/UPI.*

## TIES THAT BIND

As we continue our political excavation of the shoreline, we soon discover that the rules governing public access are only the beginning. The chemical composition of the ocean itself has been shaped by social rules—notably an international treaty that banned the practice of tankers intentionally dumping excess oil at sea, which by the 1970s had led to the discharge of a million tons of oil every year.<sup>9</sup> As you take a deep breath of the ocean breeze, the physical quality of the air filling your lungs is very much a function of social rules, specifically clean air regulations that have dramatically reduced pollution levels since the 1970s.<sup>10</sup> (Those readers wearing nail polish may be pleased to know that it contains fewer smog-producing chemicals now as a result of those rules.) The abundance and diversity of fish and other sea creatures are shaped by government policies and by private agreements among fishermen. In Maine, the lobster fishing community has designed its own sustainable harvesting agreements, enforced by local patrols of “harbor gangs” who

ensure compliance with the rules.<sup>11</sup> Up the coast in Newfoundland, in contrast, ineffective rules governing offshore fishing practices led to the complete collapse of Canada's famous northern cod fishery by the early 1990s.<sup>12</sup>

Even the rays of the sun warming your face are affected by social rules, as implausible as this might seem. The level of ultraviolet radiation reaching your skin is more dangerous now than it used to be, due to the presence of man-made chemicals in the atmosphere that have thinned the earth's protective ozone layer. But it is safer now than it would have been (and over time will grow safer still) due to the Montreal Protocol, a set of international rules that successfully phased out the use of these substances.<sup>13</sup> The sunscreen you carry in your bag was available for purchase on the store shelf only because the company producing it can protect its invention through patents—rules of use that are enforceable in a court of law. As a consumer, in turn, your assurance that the product provides the level of protection advertised on the bottle is a function of rules issued by national regulatory authorities. (As I write, the US Food and Drug Administration is releasing a long-awaited revision to its sunscreen bottle regulations amid a flurry of public comments.)

As you walk past a “Do Not Litter” sign, you notice a large freight ship in the distance. The vessel spews a stream of toxic pollutants into the air, the result of low-grade bunker fuel that these ships use to power their massive diesel engines. The American Chemical Society estimates that air pollution from marine transport results in the premature deaths of 60,000 people every year in port cities around the world.<sup>14</sup> How can such a shocking situation endure with the full knowledge of our scientists and lawmakers? The answer is that the ship is exempt from domestic air quality rules because of its status as an international carrier. You might decide then and there to create a citizens' group to demand that your elected officials address the situation with an international treaty—but only if you happen to live in a country where constitutional rules protect the right of citizens to speak out and organize.

Of course, you don't need to visit a beach for examples of how social rules shape our planet and our lives. Chances are none of your clothes are from Cuba, due to international rules enforcing a trade embargo. But many of your accessories are from China, following a change of rules by the Communist regime that promoted market growth and facilitated China's entry into the rulemaking body known as the World Trade Organization. Your blood contains less of the pesticide DDT than was the case for someone reading a book about the environment forty years ago, before DDT was

banned in industrialized countries. If you are in a public building with a restroom stall large enough to accommodate a wheelchair, this is not the result of goodwill on the part of the building owners. It is the end product of a protracted political struggle led by people with disabilities, whose efforts over two decades culminated in new rules such as the Americans with Disabilities Act of 1990. Whether we choose to notice them or not, social rules pervade every aspect of our lives (Figure 2.2).

## RULES AND FREEDOM

All this talk of rules hiding in every crack and crevice of our existence may strike some readers as a little, well, creepy. Are these not a threat to individual liberty? Doesn't each rule, with its parade of dos and don'ts, erode a bit more of our freedom of action? Perhaps after reading this chapter you decide to liberate yourself from the shackles of social rules. If you happen to live in the United States, you might jump in your car (which you can drive because you meet age and competency requirements), start the engine (likely assembled in Mexico as a result of the North American Free Trade Agreement), and dart down the highway (thanks to the Federal-Aid Highway Act of 1956), driving, one would hope, on the required side of the road. Shaking these thoughts from your mind, you leave the city and head up a forested road, your car insurance contract rattling around in the glove compartment. Weary of these reminders of social rules, upon reaching the summit you dash out of your car and jettison all of your material belongings, until finally you come to rest on a precipice, poised in a state of pure nature, surveying the undisturbed wilderness around you. This meditative moment would be an opportune time to reflect on the US Wilderness Act of 1964, which made this peaceful respite possible by protecting the remnants of wild landscapes untrammelled by shopping malls. That is, the very absence of human intervention requires social rules. The same is true of freedom, including the freedom to travel up a mountain road, as the founders of the United States were acutely aware when they put in place social rules designed to constrain the exercise of government power.

Social rules are an indispensable and inescapable part of our existence. Just as individuals can't survive for long without societies, civilizations (and the school systems, airports, pizza joints, and soccer leagues that comprise them) cannot function without rules to guide the interactions

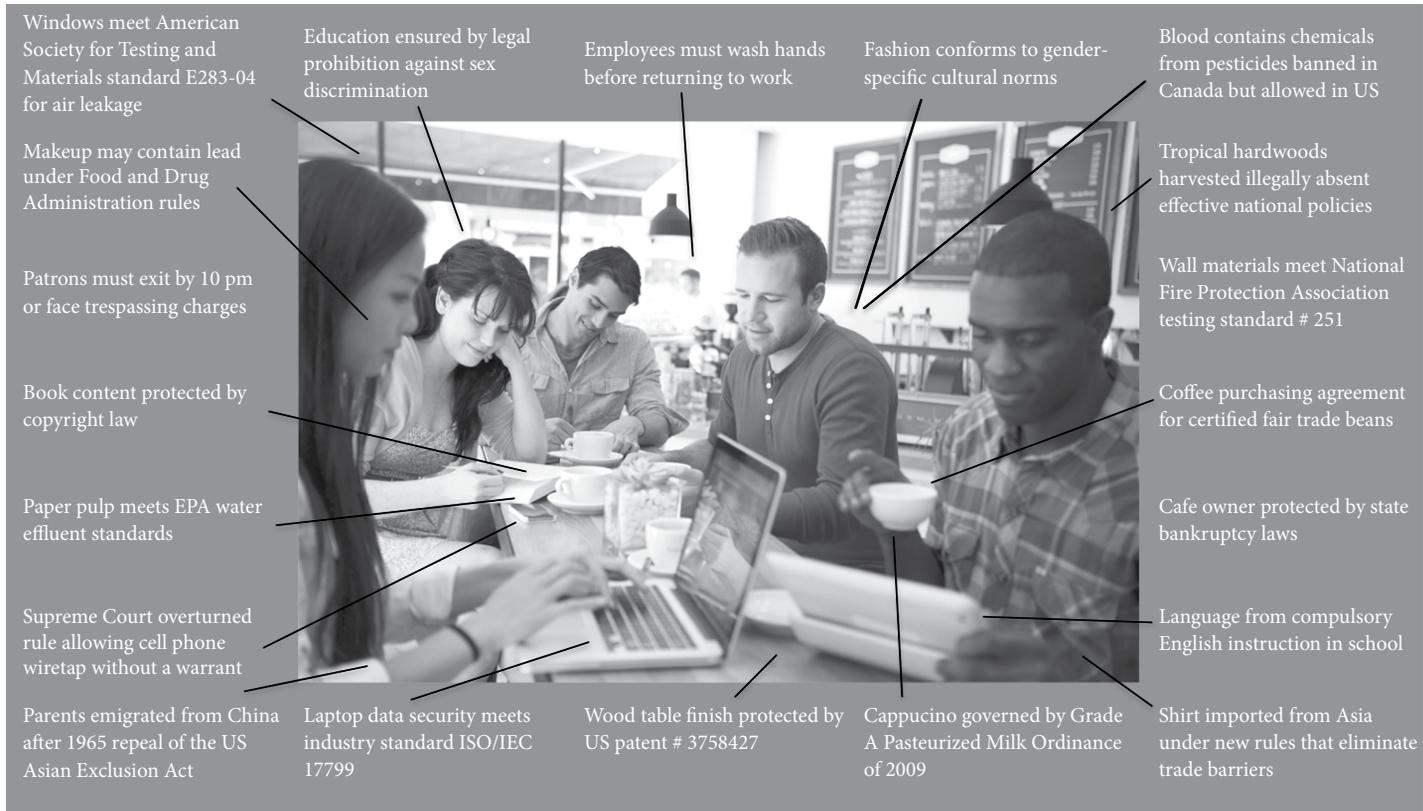


FIGURE 2.2 Social rules shape our world

among participants. The rules we live by shape our rivers, our skies, and the type and amount of energy we use. They determine whether our forests are clearcut until they resemble desolate moonscapes, or instead include intact ecosystems in which wildlife can flourish. At their best, social rules protect human rights and promote long-term prosperity. At their worst, social rules comprise elaborate systems for the subjugation of entire peoples and promote the pursuit of the quick buck regardless of the cost to our economy and our ecology.

Most important, the rules we live by can be changed. This may appear to be a daunting task. Every day we hear news stories about political gridlock, a polarized electorate, and the influence of money and power deployed in faraway places. Little wonder that so many of us assume we are powerless to change our world for the better. Yet it is often the case that the more we understand about a thing, the less fixed and immutable it appears. This is true of our rivers and grasslands, which despite their seemingly timeless character have changed dramatically over the centuries. And it is equally true of our political structures, which may appear permanent and unyielding on a daily basis, but are in fact prone to major shifts within a single human lifetime, punctuating long periods of stability with moments of sweeping social change. The election of an African American president, gay couples' right to marry, the collapse of the Soviet Union, and China's rocket-fueled economic growth are among the more visible examples of situations that in the span of a few years turned from unthinkable to unstoppable. But far away from the headlines that capture history's most dramatic changes in course, efforts are underway by reformers working behind the scenes, in rich and poor countries alike, to reconcile economic growth with environmental quality. Often these efforts are successful, as we will see in the next chapter. For now, we need to take a look under the hood to understand exactly how social rules work.

## THE WORLD'S LARGEST MACHINE

What are the distinguishing characteristics of social rules? They are *social* in the sense that they shape interactions among people. Like DNA guiding the blizzard of chemical activity in a human cell, these social blueprints serve an essential coordinating function, preventing cars from crashing at intersections and promoting complex forms of joint activity like staging a

rock concert, forming a corporation, or deploying an army. We are most interested here in rules that operate at scales larger than that of a family. If the Garcia family has a rule that TV is not allowed during dinner, this is not a “social” rule in the sense used in this book. If they attend church on Sunday mornings, their actions are guided by a social rule in the sense that it affects the activities of many families in predictable ways.

To have any meaning, a rule must be understood and followed, even if imperfectly, by those bound by it. A national law that no one knows about carries little relevance for this discussion, no matter how much fanfare may have surrounded its passage. Consider the rainforests. In tropical countries, if you flip through the musty old volumes weighing down the shelves of law libraries, you will find that most of these countries have had clear prohibitions against the destruction of forests since the colonial era. But it is only recently that reformers have begun to turn these ceremonial gestures into enforceable rules guiding the decisions of landowners and timber companies. It’s not just what is written on paper that matters, but what we carry around in our heads. This is why social taboos, such as cutting in line at an airport, or speaking disrespectfully to a village elder, carry the force of social rules even if they are nowhere written down.

Every social rule assumes a common form. First, it clearly specifies a number of distinct roles. Next, it spells out the rights and responsibilities attached to anyone who occupies these roles. Thus a rental contract defines the roles of landlord and tenant and describes the obligations and expected benefits for each. British parliamentary rules specify that the person occupying the role of Speaker of the House has the right to choose which lawmakers speak in debates and in what order. The Speaker also carries the obligation to act with impartiality, resigning from his or her political party and no longer socializing with fellow legislators. Whether we are dealing with international treaties or department store return policies, all social rules can be understood in terms of these three R’s: roles (“As a customer, ...”), rights (“you can return this item ...”), and responsibilities (“in good condition within 30 days with proof of purchase”). The world’s nations are now haggling over the three R’s with respect to climate change, debating which countries have an obligation to control emissions of carbon dioxide and how this responsibility is weighed against rights to economic development and national sovereignty.

This same basic structure can be found within the unwritten rules guiding our actions. Consider the case of an elderly woman boarding a city bus.

In many cultures, those occupying a certain role—seated passengers who are young and/or male and are in close proximity to the elderly passenger—have associated with their role the duty to promptly offer their seat. Rules that lay quietly under the surface of things may become glaringly visible when broken. A teenager who neglects to offer his seat will learn this lesson quickly when confronted with a sea of scornful stares and a sharp comment from the bus driver. Often these unwritten rules eventually become codified in the law. The process resembles a well-trodden footpath cutting across a college lawn that campus authorities eventually acknowledge and turn into a paved walkway. The most effective rules combine formal written regulations with unwritten but widely shared understandings that give them legitimacy and force.

When rules catch our attention, they do so in a one-off manner. Sign here. Silence your cell phone during the performance. Hold the door for others. Entries will be judged based on originality and technique. Employees must greet customers as they enter the store. You have the right to an attorney. Place your recyclables in the blue bin.

To appreciate the true power of social rules, however, we need to take in the whole picture. As these rules build on one another, they interlock and intertwine, forming formidable structures—agglomerations of corporate contracts, traffic regulations, cultural norms, and dos and don'ts enforced by opinion leaders, judges, priests, neighbors, referees, bosses, voters, and friends. Huge networks of rules underlie and perpetuate these things we call Korean culture, the Interstate Highway System, Chevron, or Boston, Massachusetts. When social scientists use the language of “institutions,” we are trying to draw attention to these large interconnected systems as well as the individual rules that comprise them. Sometimes in harmony, at other times in conflict, rapidly changing or stubbornly steadfast, our social rules privilege certain agendas over others, direct resources this way instead of that, and set the ground rules for economic growth and political change. They are what enable civilizations to flourish or implode. We reproduce our kind through biology, but our ways through institutions. In their totality, social rules make up the world's largest machine.

## THE GHOST OF POLITICS

If there was ever a man who aspired to rule the earth, it was surely Napoleon Bonaparte. Napoleon knew a thing or two about power. At the height

of his reign, the diminutive emperor ruled over 44 million subjects in 130 departments encompassing most of Western Europe. When the British and Prussians finally defeated Napoleon's Grande Armée at the Battle of Waterloo in 1815, they were so wary of his influence that they forced him into exile on the remote island of St. Helena, a speck of land in the South Atlantic located 1,200 miles from the nearest continent. During the final years of his life, Napoleon could be found reflecting on the nature of his power. His thoughts were recorded in a remarkable document, the *Mémorial de Sainte Hélène*, in which his attendant, the Count Emmanuel de Las Cases, kept a careful record of the emperor's words and deeds over a period of eighteen months. Napoleon was especially preoccupied with the question of whether his influence would last. Surveying the lonely expanse of ocean from his room, it was not his historic achievements on the battlefield that gave Napoleon hope. It was the new rules he left behind. "My true glory is not to have won forty battles," he said. "Waterloo will erase the memory of these victories. What nothing can erase, what will live forever, is my Civil Code."<sup>15</sup> Napoleon was referring to the legal code that his jurists drafted and which the emperor imposed throughout France and the conquered territories. The Code gathered together a disparate collection of feudal laws, fused them with the Roman legal order, and created a transparent and systematic body of law. Today the Napoleonic Code underpins the legal systems of dozens of countries, from Romania to Egypt to Chile. The great emperor realized that the ultimate power lies not in the flash of today's achievements, but in shaping the very rules that societies live by.

Thus another defining characteristic of social rules is they are designed to last. We create rules to project a desired pattern of social interaction into the future, whether that means receiving regular shipments of bread on Thursday mornings, or banning the use of ozone-depleting solvents in the dry cleaning industry. They *institutionalize* new practices. This is one reason why social rules are so important for sustainability. Stewardship of the earth requires looking not only beyond quarterly profit statements and election cycles, but beyond the life spans of individuals. Social rules are the devices we use to achieve this. These rules may assume the form of religious doctrine, such as the Catholic Church's Catechism 2415 that specifies "Man's dominion over inanimate and other living beings granted by the Creator is not absolute; it is limited by concern for the quality of life of his neighbor, including generations to come." In other instances this future orientation can be achieved through a legal tool like a conservation easement, a relatively

recent invention in which a landowner agrees, in exchange for tax benefits, to place an irrevocable condition on a property to ensure sustainable use of its resources by all future owners.

The durable quality of social rules is important because we cannot count on eternal goodwill or the unwavering vigilance of volunteers to sustain a worthy cause. Human attention wanders, as does that of the media and the political establishment. Occasionally moments of great political enthusiasm well up and puncture the otherwise placid stillness of a society. But after the revolution is over, and the ticker tape has been swept from the streets, people return to everyday concerns, tending their gardens and stock portfolios. It is then that the rules left behind determine the true legacy of a movement for change.

This phenomenon was most famously observed by political scientist Anthony Downs in his essay “Up and Down with Ecology: The Issue-Attention Cycle.” Writing in 1972, at the dawn of the modern environmental movement, he tried to predict whether the dramatic growth in environmental concern in the United States would have a real impact. Anthony Downs asked the same question that vexed Napoleon: Will this last? He observed that public attention to social problems tends to move in cycles, with a quick burst of enthusiasm gradually giving way to disinterest as citizens turn their attention elsewhere. Downs also argued, however, that during the “up” phase of popular interest, if the public’s concerns are institutionalized—if they are embedded in laws, regulations, and associated implementing agencies—then it is possible to address these large-scale, long-term problems in a sustained fashion. Downs was largely proven right on both counts. There was a general decline in public interest in environmental issues in the United States in the early 1980s; this corresponded with an economic recession and shows up clearly in the public opinion data. But the new rules laid down in the 1970s, such as the Clean Water Act and the Endangered Species Act, ensured sustained progress on these issues despite the inevitable swings in the public mood.

If stability is the mechanism through which rules generate benefits for society, it is also the source of their most pernicious effects. We have all encountered situations in which decision makers cling stubbornly to rules even when these stand in the way of doing the right thing. Generals can be found fighting the last war. Businesses resist change because “we’ve always done it this way.” And government bureaucracies are famous for showing greater fidelity to following the rules than to getting things done. Permanence

has its pitfalls. Yet perils can be found at either end of the spectrum between stability and change. We will see in chapter 6 that crafting smarter rules to promote sustainability is an incredibly challenging task in countries plagued by political instability—which is to say, in most of the world. In the end, institutionalizing new practices requires a balancing act. Social rules must be sufficiently sticky to prevent whimsical reversals, but they must not foreclose the possibility of future revisions in response to new ideas and changing needs.

To answer this book's title, then, let us begin with the observation that many of those who rule the earth are dead and gone. They built structures—laws, policies, codes and contracts—that cast a shadow on the future. Some of these structures, such as the Bill of Rights, were inspired by profound insight into the public good. Others, like rules restricting beach access, were put in place to benefit one group at the expense of another. Some rules—such as US crop subsidies, or Brazilian policies granting land to those who “improve” it by removing the trees—once served a noble purpose but have outlived their usefulness; yet they cast a shadow still, shaping what we plant and how we treat the land. Social rules are the ghosts of political battles past and are the legacy of social structures that we pass on to the future.

## THE ROAD AHEAD

In the rest of this book we will peer into the machinery that runs society, its thousands of invisible levers patterning our actions in ways that are sometimes noticeable (Wednesday is trash day), but often taken for granted—like the assumption that trash disposal is the sole responsibility of consumers and municipalities, rather than the companies that design products with excessive packaging. Our wide-ranging tour will encompass the nature of laws, the fate of kings, and the rule of the McDonald's french fry. Along the way we will see that social rules are not limited to governmental laws and regulations. These are important examples of social rules, and I will refer to many such examples throughout this book. But the reach of rules, and the scope of this book, extend far beyond the activities of park rangers and politicians, encompassing also the rules created by paper manufacturers, neighborhood associations, and sports arenas.

The task before us is to build a platform, piece by piece, that will offer a new vantage point for seeing the world differently. Our viewing platform

will have the following pieces. We begin and end with social change. In the next chapter (3), and in the final three chapters of the book (9–11), we will consider how social change actually works, and the role that you can play in that process if you so choose. Standing between these are five chapters (4–8) that reveal the invisible architecture of social rules that pattern our behaviors in so many ways. I will draw on examples from many dozens of countries, reflecting my own research specialty, comparative politics, which explores and compares the inner workings of diverse societies around the globe. At the same time, my assumption is that many readers are from my home country, the United States. I hope that the non-US reader will forgive the occasional bias toward examples and debates of particular interest to American readers.

Allow me to provide a bit more detail of what's to come. Out of the gate, chapter 3 ("Feasible Worlds") tackles one of the most important and humbling questions we can ask ourselves: Can we really change the world for the better? It turns out that social scientists have quite a lot to say about the possibilities for change. We will consider research findings that explain why we do not live in the best of all *feasible* worlds and why there are so many opportunities to make people and our planet better off. In chapter 4 ("A Perilous Journey"), we begin our study of the earth's rulebook by taking a closer look at one of the most powerful social rules of all: property. To understand who rules the earth, we need to appreciate who owns it, and how the rules surrounding ownership are made. To accomplish this, we will follow the cerulean warbler, a highly endangered migratory bird, as it traverses the Western Hemisphere searching for suitable forest habitat in which to rest. At each stop along the cerulean's journey, we will see how property rules affect its prospects for survival. In chapter 5 ("The Big Trade"), we consider the deeper, and often counterintuitive, relationship between rules and property, with a clear-eyed look at debates surrounding the use of market forces to combat pollution. My goal is to empower readers to participate in these debates without the ideological baggage that weighs down so much of the public discourse. In chapter 6 ("A Planet of Nations"), we will head into the corridors of government power, witnessing how different countries around the globe are grappling with environmental problems through rule-making systems that help or hinder sustainability.

Environmental problems move effortlessly across borders, thumbing their nose at our attempts to organize political life into cities, states, and nations. In chapter 7 ("Scaling Up") and 8 ("Scaling Down"), we will see

how the distribution of rulemaking power across different levels of governance is shifting due to two major trends: the formation of the European Union and the unprecedented move by dozens of countries to decentralize environmental rulemaking power to local levels. After this wide-ranging tour around the globe, we return to the question of what it takes to bring about meaningful change. In chapter 9 (“Keep the Change”), we will see that the challenge is to not only break the patterns that cause us to get stuck in ruts (such as oil dependency), but also to establish “good” ruts, putting into motion self-reinforcing trends and new assumptions of normality. In chapter 10 (“Super Rules”), we will consider a special category of rules that decide how other rules are made, dealing with questions like who participates and which principles guide the creation of policy. Anyone hoping to make a lasting impact on the planet would do well to pay careful attention to super rules; the polluters certainly are. The final chapter (“Paper, Plastic, or Politics?”) offers practical suggestions for those interested in taking part in rewriting the rules that govern the earth. I offer general principles of action that distill lessons from the research covered in the book, which action-oriented readers can pair with their own research into local political contexts.