1

Dysfunction in Climate Governance

The term "climate change" has become shorthand for the large-scale, unnatural, human-caused (anthropogenic) environmental changes brought about primarily by the emissions of greenhouse gases (GHGs) from human activities. Efforts to combat climate change have been on the world agenda for decades, but these efforts have barely slowed the increasing pollution of Earth's atmosphere. Despite international agreements brokered by the United Nations (UN), national policies to encourage the use of renewable energy and climatefriendly pledges by governments, countless nongovernmental organizations (NGOs) advocating action and increasing awareness of environmental sustainability among industries and publics, global emissions of carbon dioxide (CO₂) and other greenhouse gases continue to rise (Hausfather, 2019). This rise in climate-changing pollution is occurring even as scientists warn that emissions must be all but eliminated very soon if international objectives are to be realized (IPCC, 2018). That is, globally the causes of climate change are not yet being diminished; they are growing. Adding insult to injury, the financial and other resources being made available for adaptation to the inevitable impacts of climate change are a tiny fraction of what is required, especially in the poorest communities least responsible for causing the problem. At every level of governance – from the global to the local – policies and practices to mitigate climate-changing pollution and to deal with its impacts are increasing in number, yet simultaneously they are grossly inadequate to the task. In a word, they have been too little, too late.

If governing climate change is about reducing its causes and impacts, then climate governance has failed. This failure must be addressed because many millions of human lives, not to mention the vitality of societies and ecosystems, depend on finding ways to govern climate change far more effectively. If climate governance is to be effective in the future, it will require an honest

accounting of climate governance in the past and present. A prerequisite for doing this is to identify the most important reasons for failure up to now.

Considering the Governance of Climate Change

Governance can be conceived of as "a social function centered on efforts to steer societies or human groups away from collectively undesirable outcomes (e.g., the tragedy of the commons) and toward socially desirable outcomes (e.g., the maintenance of a benign climate system)" (Young, 2009: 12). Fundamentally, climate governance involves changing many prevailing policies, practices and human behaviors so that humanity collectively addresses climate change effectively. These changes may come in the form of actions or inactions: doing things that we do now differently – for example, using carbonneutral public transport instead of private cars to get about – or doing what we do now much less often, or not at all - for example, reducing or eliminating environmentally unsustainable travel, not least holiday travel via airlines. Many changes will have to be structural – for example, through potentially dramatic changes in economic systems. Others will require transformation in energy systems - for example, through the replacement of centralized fossilfuel energy infrastructure with localized carbon-free energy sources (e.g., from coal- or gas-fired power stations to regional wind-energy farms and rooftop solar arrays), thereby enabling people to more or less continue doing much of what they are doing now without in the process exacerbating climate change. Our actions may be inherently collective, as when government regulations induce changes across societies, or they can be individual steps that contribute to collective outcomes that are environmentally sustainable. They will be performed by all kinds of actors - international organizations, national and local governments, corporations, individuals and so forth. Particular acts of climate governance will involve mitigation or adaptation or some combination of both. If climate governance is to be effective, it will involve an end to the status quo.

It is important to note that much is already being done to govern climate change more effectively. There is no shortage of activity around the world to limit the causes of climate change and to address its impacts. In some places, GHG pollution is declining, and in others the rate of increase is being reduced. But to focus on this progress, great as it is, would be to ignore that even substantial global cuts in climate-changing pollution, which one might optimistically assume (despite historical precedent) will materialize in coming decades, will not stop the problem from growing worse. Past and present

failures of climate governance, and specifically the painfully slow manner in which the world is responding to climate change, mean that further global warming and other manifestations of climate change are inevitable (IPCC, 2014b). What is more, multiplying even tenfold all funding and resources currently being generated from all sources, public and private, for adaptation to climate change will not prevent monumental human suffering around the world. Regardless of how one looks at the problem, climate change has outpaced – and is continuing to outpace – all of the policies and practical solutions meant to address it.

Climate change is a problem generated by humans that has, so far, defied human-generated solutions. Almost everything about the way that the world is governed today has contributed, in one way or another, to creating this problem. The climate regime – the collection of formal and informal agreements, rules, precedents and norms that foster and guide governance and action on climate change – suffers from a pathological inability to catch up with accelerating trends of climate change and to reverse the associated environmental and human impacts (cf. Dryzek and Pickering, 2019). There has been a chronic and *pathological* failure to govern climate change effectively – an inability that is akin to an incessant disease that permeates governance institutions and individual actors, compelling them toward long-term self-harm.

Why have governments, communities, industries, individuals and other actors failed to govern climate change effectively? In other words, what are the fundamental pathologies that have undermined climate governance? Answering these types of questions is the primary objective of this book. Bearing in mind the explanations for the pathological failure of climate governance, what might be done to realize more effective responses to the problem? Put another way, what are some of the most important therapies and prescriptions for improving climate governance, and how might those be applied among nation-states, within them and indeed among and by their citizens? Answering these types of questions is the secondary objective of this book. In the process of answering these questions, other important issues will be addressed, such as whether global politics as currently practiced might eventually govern climate change effectively - the answer is, in general, a negative one – and whether human well-being needs to be sacrificed to govern climate change effectively (as critics of robust action might argue) - the answer is that it does not.

The book is divided into three parts. Part I (which includes this chapter) introduces the dysfunction in climate governance and describes the worsening climate crisis – the problem that has arisen largely due to the governance

pathologies. Chapter 2 shows how the momentum of climate change is going from bad to worse: the pollution that causes climate change continues to increase even as governments and other actors are beginning to take major steps to address the problem. Some of the science of climate change is described, showing that expert knowledge about the problem has grown and become more precise, thereby doing more over time to expertly inform international and national governance. As the science has improved, however, it has also been politicized by actors that view action on climate change as a threat to their economic or other interests. This process of politicization has undermined the ability of science to inform national and international climate governance to the extent that is required. Cultivated uncertainty has itself cultivated inadequate policy responses to climate change.

Part II of the book illustrates how climate change has been such a difficult governance problem by dissecting the pathologies of climate governance. It identifies *fundamental* pathologies underlying the failure of governments and other major actors to respond more effectively to climate change. It looks at the international and national politics of climate change to reveal the processes that have delayed more effective policy responses, and it examines the role of human nature in accelerating the pace of climate change.

Part III of the book describes proposals for overcoming the pathologies of climate governance and moving toward more effective policies and responses. Potential prescriptions for improving climate governance internationally and nationally are outlined. Some methods for individuals to beneficially align their own interests with those of the global environment are suggested.

In doing all of this, it is important to be honest about something: it is easier to see where climate governance has failed (and is failing) than to identify practical pathways for ending that failure, especially if one wants to do so relatively quickly (which is what is required). If readers are disappointed with the prescriptions for climate governance here, one defense is to humbly admit that the climate crisis has become so complex, so widespread, so all-encompassing and so controversial – in no small measure because those actors that want to maintain the status quo have tried to make it so – that it may be impossible to propose solutions that will satisfy many people. But that is all the more reason to take the approach of this book – to identify what is *most fundamentally pathological* about climate governance and to identify therapies that are appropriate for that pathology. Doing so will not quickly end the worsening crisis of climate change, but it may be the best way to mitigate it, and perhaps one day even to end it, sooner rather than later.

Pathologies of Climate Governance: A Preview

The chapters in Part II explore three major groups of pathologies of climate governance that have largely caused the climate crisis and greatly determine the world's responses to it. The first group of pathologies, examined in Chapter 3, are found in the prevailing international system of sovereign nation-states, each of which is individually focused on protecting and promoting its perceived national interests. (For literary license, throughout the book nation-states are variously referred to as states, particularly when referring specifically to the legally sovereign entities; countries, especially when referring to whole nation-states and their governments; and *nations*, specifically when using the adjective "national.") The international system in which we live today originated before the Industrial Revolution and the enormous growth in global pollution from human activities that has culminated in the climate crisis. The international system has certainly changed and adapted over the centuries, and there is no doubt that recent developments in international cooperation have contributed to action on climate change. Without that cooperation, climate change might be even worse. However, because the archaic international system is premised on promoting the relatively shortterm perceived interests of its members, in its current form – at least under the current norms by which it operates - it is not up to the task of fostering effective governance of climate change. The system itself is a major source of the problem and an impediment to effective action.

The second group of pathologies of climate governance are found in countries' national politics. These pathologies are described in Chapters 4-6, which can be read together, with introductory remarks in Chapter 4 and concluding observations in Chapter 6. China and the United States, which together are the focus of Chapter 4, have been vitally important to global climate governance. The pathologies of national politics in these two countries are described in greater detail than are pathologies in other countries because China and the United States are the world's first- and second-largest sources of GHG emissions and together they produce two-fifths of the global pollution causing climate change (Environment and Climate Change Canada, 2019: 5). Neither of them is proposing, let alone implementing, national policies that are likely to trim their GHG emissions anywhere near as much as is necessary to prevent dangerous climate change. The United States is a case study in how the institutions of democracy can be exploited to the benefit of actors and forces interested in preventing effective climate governance. China is a case study in how authoritarian governments can similarly be "captured" to foster policies that severely exacerbate climate change.

Elsewhere, whether in Europe, Russia or other industrialized countries of the Global North, which are the focus of Chapter 5, or in the developing countries of the Global South, which are the focus of Chapter 6, different forms of governance have been ineffective in addressing climate change. While several member countries of the European Union (EU) are starting to address their large contributions to climate change, and as such the EU is the closest thing to a global leader on climate action, they are doing so too slowly. Russia's government is betting on further development and export of fossil fuels. Many developing countries face a choice of whether to bet their economic development on fossil fuels, with some of them, such as India, being large importers of energy, while others, such as Saudi Arabia, are large exporters. Meanwhile, numerous other developing countries, not least many small-island developing states, are on the frontlines of climatic impacts, with little responsibility for causing them and insufficient means to cope.

The third group of pathologies of climate governance, described in Chapter 7, are found in human nature. The material consumption of the world's expanding global middle class (not to mention the growing class of very wealthy people around the world) now largely characterizes modern life and increasingly serves as a substitute for traditional sources of well-being. As the population of global consumers grows, so too does GHG pollution. To be sure, human population is a driver of climate change: more people result in more consumption of natural resources, which directly and indirectly contributes to climate change. But what is more important than the numbers of people are the ways that increasing numbers of people live. More people are adopting modern lifestyles that are measured in terms of material growth. Consumerism is colonizing the world. People who can afford to consume do so; those who cannot yet afford to consume aspire to do so. The consequence is that GHG pollution is still increasing globally even as it stabilizes, or even falls, in some communities and countries.

Broadly speaking, these pathologies are respectively structural, arising from the structure and nature of the international system; political, arising from national politics, particularly its domestic aspects but also its external influences; and psychosocial, arising from human traits that are shaped and stimulated by social, economic and other forces. All of the groups of pathologies, and the individual pathologies within them, undergo myriad interactions, reinforcing one another across time and space (see Figure 1.1). The pathologies spread and mutate at an accelerating pace, resulting in new strains of pathologies that challenge climate governance in new and sometimes unexpected ways.



Figure 1.1 Interactions among the pathologies of climate governance

Prescriptions for Climate Governance: A Preview

Governing climate change more effectively requires, among other things, recognizing and confronting the international, national and human pathologies that have undermined most efforts up to now. Addressing these pathologies will not solve this monumental problem completely, but not addressing them all but guarantees catastrophe. With the urgency of the problem in mind, Part III of the book identifies and outlines prescriptions for the pathologies identified in Part II, points to a number of associated policies and briefly considers what the prospects for climate governance might be in the future.

Chapter 8 reconsiders climate governance in some detail as a way to identify potential therapies for its pathologies. Starting with the pathologies of international relations, the chapter considers alternatives for climate governance that aim to temper narrowly defined national interests with the wider interests of citizens and the global community. States presumably seek to promote their national interests, but in the context of climate change it is often unclear precisely what is considered to be worth securing, and how it might be secured. Chapter 8 points to a different kind of diplomacy that is focused less on states and their supposed interests per se and more on people's interests, in essence taking national governments at their word that they exist to protect the interests and rights of their citizens. The chapter also briefly considers potential therapies for the pathologies of national politics. It affirms the identities of those actors that are responsible for climate change: not just countries, but also other actors operating and residing within them, including individuals. The chapter

proposes merging the common but differentiated responsibilities of individuals – responsibilities that are not widely acknowledged and accepted in the context of climate governance by most countries or indeed by most individuals, if their behavior is any indication – with the common but differentiated responsibilities of countries, which have been officially accepted internationally for decades, albeit practiced mostly in the breech (Harris, 2016c: 172–6). Therapies for the pathologies of national politics are found in recognizing and acting upon global responsibilities while facilitating the environmental citizenship that will make doing so politically palatable. Finally, Chapter 8 looks at some of remedies for the pathologies of human nature. It advocates a campaign to enhance human well-being and address climate change more effectively by recalculating the value and meaning of modern-day economic life in general and material consumption in particular. To secure human well-being it will be necessary to transition rapidly from the current focus on growing personal consumption toward sufficiency and long-term happiness.

Building on the remedial diagnoses in Chapter 8, Chapter 9 lists some specific international, national and human prescriptions that could be administered to alleviate the pathologies of climate governance that are described in Chapters 3–7. These prescriptions are formulated as indicative solutions to the persistent and pervasive pathologies of climate governance. Ultimately, to address those pathologies involves bringing all of the resources of the international community, national governments, individuals and other actors together to achieve what they can unanimously support for themselves and others: a good life for everyone (not to mention a healthy environment). Chapter 10 describes a number of climate-related policies that are implied by the prescriptions. It also starts to paint a picture of what the world might look like if those polices were to be implemented, considers the prospects for climate governance and briefly contemplates whether the future is more likely to be one of prospering amidst climate change or merely coping with it.

Theory and the Analysis of Climate Governance

The ebb and flow of climate governance is nigh impossible for anyone to measure comprehensively. Innumerable, often unknowable, national, international, global, economic, ecologic, even geologic (e.g., the influence of an earthquake on Japan's climate-related energy policies; see Chapter 4) and other forces influence it. Complex, nationally unique, political and policy institutions and processes shape it. Variable human, cultural and social characteristics affect it in countless ways. As should become clear in the next

chapter, climate change is the most complex political problem in history. However, complex problems are not unique; there are ways of getting our heads around them, at least partially, through the utilization of theories. Theories are, in effect, ways of simplifying the world and explaining the relationship among actors and other variables. Theories of international relations and foreign policy can often help to explain the behavior of states. Theories of domestic politics may help to explain national affairs. Social and psychological theories often help to explain the behaviors of people.

Theory has been deployed to explain every facet of life, and analysts interested in climate governance (also known as climate politics, climate policy, the international politics of climate change, etc.) have been among those to do so. However, there is no single theory of climate governance; there are almost as many theories as there are scholarly disciplines - political science, sociology, geography, law, economics and so forth – trying to explain it. The study of climate governance owes much to scholars of international relations, a subfield of political science (Backstrand and Lovbrand, 2015: xix), and most particularly to the international relations subfield of global environmental politics (Stevenson, 2016; Vogler, 2016). Theories of international relations germane to climate governance include, but are certainly not limited to, classical theories of realism and idealism; more recent liberal institutionalist and regime theories; critical cognitive and constructivist theories; theories of transnationalism, the world system and global governance; and increasingly prevalent, and arguably increasingly important, "radical" theories, sometimes variants of neo-Marxist theory (see Vogler, 2018).

It would be wrong to overstate the ability of theories to capture fully, or even adequately, the climate problematique (Dyer, 2017). Indeed, there is a danger that by adopting particular theories (least of all a single one), attempts at explaining, understanding and improving climate governance may be inadequate. Consequently, this book does not adopt a particular theory. It attempts to comprehend major aspects of the climate problematique and to draw conclusions from them about the way forward. While it is far from a theory, one overarching issue does emerge – which, not coincidentally, is consistent with a number of theoretical approaches to international relations, domestic politics and citizen behavior – namely, that perceived self-interest (not to be confused with selfishness as often conceived) is a vitally important force in climate governance. States seek to promote their perceived self-interests – their perceived national interests - when negotiating pathways for climate governance with other states, consistent with major "realist" theories of international relations and foreign policy (see, e.g., Vogler, 2015; Purdon, 2017). Within countries, governments and domestic actors seek to promote their own interests – to resist policy action on climate change that might harm their perceived interests and to garner benefit, insofar as they can, from the climate-related policies that are implemented – consistent with some theories of domestic politics (see, e.g., Michaelowa, 1998; Harrison and Sundstrom, 2010). Intentionally or not, and seldom to cause harm to others, individuals, families and other groups act to promote their perceived (often unknowingly misconceived) interests, and thereby exacerbate the climate crisis, through billions of tiny steps taken every day, in ways that are more often than not invisible to those taking them – consistent with some theories of human and social behavior (see, e.g., Shove, 2010; Swim, Clayton and Howard, 2011).

Another way of simplifying the world, notably the political world, is to use different levels of analysis. While there is debate among scholars as to how many levels of analysis there ought to be (e.g., whether bureaucracy and class constitute levels in their own right), there seems to be substantial agreement on the particular importance of three of them: the international, the national and the individual (cf. Waltz, 2001). These three levels of analysis help to focus our attention on, among other things, the attributes of the international system and the effect that they have on the behaviors of states and other actors; the characteristics of states, such as their political and economic systems, bureaucracies and the like, and whether these characteristics influence how states behave; and individuals, not least those individuals who play a role in formulating and implementing policy, and the psychological and other factors that motivate them to think and act in the ways that they do. As will be apparent, the three pathologies of climate governance examined in this book fall rather neatly into these levels of analysis. That said, it is always important to bear in mind that reality is never so neatly stratified. The levels that are being analyzed, and in this case the pathologies being described, overlap and interact in the real world. They do so in countless and complicated ways. Thus, the real world is seldom as neat or as simple as levels of analysis and theories might tempt one to assume. This is especially true with respect to climate change.

Triage in Climate Governance

There is now an enormous amount of literature on almost every aspect of climate change, including thousands of books. Most readers of this book will have immediate access, via Internet websites and myriad news and media platforms, to most details of climate science, politics, policy, diplomacy, economics and the like. If anything, there is too much information for any normal person to digest. Because the climate change *problematique* is so

complex, one important aim of this book is to help readers sift through all of the available information – to help them see the forest for the trees, and thereby to understand better the fundamental forces shaping climate change and associated governance. The goal is to cut through much of the (admittedly important) chaff to get at the (most important) wheat, so to speak. This is done by identifying and explaining the most important and powerful pathologies that have permeated and shaped climate governance up to now – and will likely continue do so well into the future if they are not confronted squarely very soon. The focus is then on remedying those particular pathologies.

This book is for readers who are frustrated with – or perplexed by – the chronically slow action by governments and other actors to stem climatechanging pollution and to deal effectively with its manifestations and future consequences. And it is for those who are looking for ways to address this incredibly vexing problem more quickly, more efficiently and more justly. An analogy for what is done in this book is that of an extremely sick person in triage. Much as a physician trying to diagnose a patient with multiple diseases would aim to treat the most life-threatening pathologies before moving on to lesser problems, the focus here is on the *most important* pathologies of climate governance – those that are vital to understanding and identifying palliative therapies. (As we will see, much of climate governance up to now has focused on many significant but lesser pathologies, thereby allowing the most pressing ones to fester.) A few of the prescriptions for climate governance that are proposed here may at first appear to border on the idealistic. However, they are practicable because they are premised on promoting the interests of the actors involved. They will not harm the interests of states or their citizens; to the contrary, they will promote their long-term security and well-being. To be sure, promotion of self-interest is not the only thing that motivates governments, corporations or individuals to do the right thing. But it helps.

It will not be easy to address climate change effectively; that has been patently demonstrated by the tortuous process of climate diplomacy and policymaking over the past several decades. Addressing climate change fairly and equitably will be that much more challenging. Much as one cannot bring a chronically sick body to health by taking a single pill, and much as a healthy lifestyle requires many individual actions over a lifetime, reviving the health of Earth's climate system – or at least permanently arresting its decline – will take a variety of new actions, or ending current actions, right away, and then sustaining them far into the future. Some of those actions are more important, more urgent and will have more lasting effects than others. This book aims to focus on the more urgent ones, to describe why they are important and to suggest the ways in which they can actually promote the interests of almost

every actor that has so far resisted doing enough up to now. Because the focus is on the most important pathologies, by definition there is much that is left unsaid here. But that is true of any book on climate change. The problem is just too big.

Before exploring the pathologies of climate governance, it is first important to highlight what we know about the dastardly problem of climate change. What have scientists told us about it? How have their findings affected climate-related policies? Why have those findings not had a much bigger impact? These are some of the questions addressed in the next chapter.