"Fearing the state of being 'lost in the world we have made,' Williston roams far and wide for reference points in a time of bewildering climatic upheaval. With grand, Harari-like sweeps, this insightful romp through philosophy, literature, ecology, and technology displays the creative boldness the times demand."

—Christopher J. Preston, University of Montana, Missoula. Author of *The Synthetic Age: Outdesigning Evolution, Resurrecting Species and Reengineering our World* 

"An accessible and engaging analysis of the ways in which the climate crisis is analogous to other, historically significant 'traumas.' This is a vitally important topic, and I applaud Williston for his creative approach to bringing its philosophical aspects to a broad readership."

—Steven Nadler, William H. Hay II Professor of Philosophy, University of Wisconsin-Madison. Author of *Think Least of Death: Spinoza on How to Live and How to Die* 

"This lucid analysis of the crisis in Western thinking generated by climate change shows how previous historical disruptions have led to the kind of innovations in thought that we now urgently need. It should be read carefully by anyone wondering how to think and act in our new Anthropocene circumstances."

—Simon Dalby, Balsillie School of International Affairs. Author of *Anthropocene Geopolitics: Globalization, Security, Sustainability* 

"A timely, accessible, smart, and informed discussion of the climate crisis, and our disorienting exit from the Holocene. Williston shows why philosophy matters in these times, how it can be done with passion and rigour, and what wisdom looks like for all of us worried about the future of life."

—**Todd Dufresne**, Lakehead University. Author of *The Democracy of Suffering:*Life on the Edge of Catastrophe, Philosophy in the Anthropocene

### **CONTENTS**

#### Acknowledgments

#### Introduction

# PART 1 Disorientation

- 1 In praise of bewilderment
- 2 Foundations: God and Nature
- 3 The shape of our crisis

#### PART 2

Five intellectual innovations

- 4 Plato: epistocracy
- 5 Augustine: love
- 6 Descartes: the technosphere
- 7 Spinoza: diversity in unity
- 8 Hegel: rights

#### PART 3

Reorientation

9 Anthropocene monism

Index

### **ACKNOWLEDGMENTS**

This book is the product of years of philosophical discussions with colleagues and students on the topics of both climate change and the history of modern philosophy. In particular I want to thank, in no particular order, Simon Dalby, Gary Foster, Christopher Preston, Steven Nadler, Todd Dufresne, Jennifer Welchman, Allen Habib, C. Tyler DesRoches, Matthias Fritsch, Frank Jankunis and Rocky Jacobsen. Audiences in numerous locations have also given me copious food for thought on these themes, and I thank all of those folks for coming out to hear me speak. A special thanks is due to my Routledge editors, Annabelle Harris and Matthew Shobrook, for seeing the value in the project and shepherding it so professionally through the publication process. Later stages of work on this book were completed while in virtual lockdown because of COVID-19. My family therefore deserves a special shout-out for allowing me to retreat to the upstairs office for whole days, and for maintaining relative household peace all the while. Work on the manuscript was facilitated by a Social Sciences and Humanities Research Council of Canada Insight Development Grant for which I am very grateful.

### INTRODUCTION

#### The issue

In early 2020, COVID-19 burst upon the world, killing huge numbers of people and sending the global economy into a tailspin. This is, indisputably, a crisis for humanity, almost a textbook definition of what we mean when we use that word. Even as many countries began to 'flatten the curve' of infections and deaths heading into the summer, worries emerged that we would experience not a single peakand-decline but a sine wave extending perhaps for two years (or until a vaccine is discovered). We should reflect on that image of a sine wave, a continuous series of disasters, because it captures perfectly the more significant emergency behind the headlines about the virus: climate change. In the case of climate change the wave is going to roll along for decades and centuries. While in no way diminishing the unique horrors and challenges of the novel corona virus, we should also see its arrival and spread as an adumbration of this bigger event. Adopting this perspective might allow us to prepare—socially, politically, emotionally, existentially-for a long future of similar crises. This book is meant to help with that preparation.

In both popular and academic discourse, 'crisis' often travels with two other weighty C-words: civilization and collapse. Where the crisis is perceived to be big enough, these other two C's are never far behind. We are regularly informed that if the climate crisis deepens collapse looms, and that *this* represents a threat to everything we hold dear, i.e., to civilization. It's pretty easy to see how this kind of talk can lead to dangerous hyperbole. Nothing seems to get people as worked up as what they take to be a threat to civilization. It conjures

up images of once taken for granted truths and values being cast aside, often entering the picture via the hordes outside (or frankly, inside) our borders who do not share our values and are therefore the enemies of civilization.

And yet, notwithstanding the potential for hyperbole, we clearly *are* in the midst of a self-imposed ecological crisis, one so dire it challenges us to reconceive just about everything we think we know about the career of our species on this planet. Climate change is in the process of reconfiguring everything. Not just material things like our energy infrastructure but also less tangible things like our geopolitics and our values. Because its effects are going to increase in intensity in the coming decades, this transformation is going to be felt with increasing urgency everywhere in the world. None of us will escape the challenges it presents, even though some of us—the global South in particular—will bear the brunt of them more squarely than others.

How should we orient ourselves to this new reality? Are there examples from the past of humans engaging in the comprehensive reorganizations of their worlds that I think we are facing now? And just what good is a *philosopher* in helping us to sort all of this out? Good questions, all of them. In the 10 years or so that I've been writing, talking and teaching about climate change I have encountered such questions, or permutations of them, repeatedly.

The audiences I have spoken to and with over the years have been very diverse, from church groups to members of NGOs, seniors groups, indigenous peoples, young people and business people. Above all, I've been struck by just how *worried* people are about the climate crisis. It's the same sense of frustration and foreboding we saw playing out all over the world in September, 2019, when more than 6 million people in 185 countries took to the streets demanding that our political elites take the climate crisis more seriously.

The anecdotal evidence of widespread anxiety is borne out by recent polling results. 2019 was a watershed year in global awareness of climate change. The Yale Program on Climate Change Communication (2020) released a poll measuring attitudes towards this threat in the cradle of climate change denial, the United States. It asked subjects to rank their concern about climate change by reference

to six criteria: dismissive, doubtful, disengaged, cautious, concerned and alarmed. Between 2014 and 2019, the first five categories saw a downward slide of 3-7 points. The number of those alarmed by climate change, however, rose *by 21 points*.

Beyond the US, we encounter similar numbers. According to a Pew Research poll conducted in 26 countries and published in 2019, climate change is perceived as the biggest threat to humanity. It places ahead of ISIS, cyberattacks from foreign countries, North Korea's nuclear program, the condition of the global economy, the power and influence of the US, and Russia's power and influence (Poushter and Huang, 2019).

Climate change has been at or near the top of lists like this for some time now. It will likely be overtaken by worries about COVID-19 in the months and possibly years to come. But the climate crisis is here to stay and will therefore never fall far from the top spot. So it's worth reflecting on this fact by comparing climate change with the other threats identified in the Pew survey. They are all very significant worries, of course. However, there are two important differences between all of them and climate change.

The first is that unlike climate change they are relatively ephemeral. However tricky, they are problems that we can imagine resolving in our lifetimes. This is because they are mostly confined to geopolitics. As challenging as they may be they do not force us to ask questions that transcend this relatively circumscribed sphere. The climate crisis is different. It is the diametric opposite of an ephemeral crisis. Some of the carbon we are putting into the atmosphere now will remain up there, altering the global climate, for thousands of years. Many scientists now suggest that we have effectively *cancelled the next ice age*, which had been scheduled to roll over the planet in about 50,000 years (Stager, 2011).

Climate change connects our activities not just to distant stretches of future time, but also spatially outward into the whole Earth system. In the process, it *encompasses* our geopolitics, the focal point of all those other threats. More than that, it swallows them whole. Many security experts are convinced that climate change will re-order the

geopolitical map over the course of this century. Obviously, the causal arrow does not go the other way. That is, the problems of cyberattacks, North Korea and so on will not, all by themselves, affect what happens to the global climate. We can safely conclude that climate change is both the biggest crisis we face and the one that is, by far, the most comprehensive in potential scope.

The second—and related—point of difference is that, among all these threats, only the climate crisis demands big picture thinking from us and about us. None of the other threats compels us to ask where we are going *as a species*, and what it is about us that has brought us to the current impasse. I'm going to demonstrate that the climate crisis *does* demand this kind of thinking. Even better: I'm going to provide it.

What exactly is everyone so worried about? It's simple really: they are worried about whether or not the societies in which they live are well-organized enough to deal adequately with persistent catastrophe. The speed with which COVID-19 spread in any country was a reflection of how rationally that country was governed. Taiwan, New Zealand and Singapore did a pretty good job containing it, while Iran, Russia, Brazil and the US responded with varying degrees of incompetence. In the case of the US the mismanagement can be traced directly to President Trump's early efforts to soothe Americans with what became known as 'happy talk' about the threat they faced. This happened most significantly during the crucial month of February, 2020, when the disease could have been contained had robust social distancing as well as testing and contact-tracing measures been put in place.

As I have said, climate change will bring waves of crises like this. We're facing decades of compounding and cascading disasters, from wildfires and floods to uncontrolled migrations, droughts and the spread of more deadly diseases. One mega-crisis is difficult enough, but serial crises on this scale will challenge the coping abilities of even the wealthiest and most resilient societies (Dufresne, 2019). Serial crises will therefore produce severe material deprivation and resource scarcity, including scarcity of health care resources. Once that phenomenon kicks in, ever-widening cracks in the edifice of civilization will appear. I sincerely hope that COVID-19 is causing

people to wake up to this new reality.

People are therefore right to be worried. I want to emphasize that. Crisis is here to stay for the foreseeable future. This is not a book about what life will look like on the other side of crisis. It is not a 'beyond crisis' narrative. It indulges no utopian dreams about a future in which humanity has cast aside the yoke of angst-ridden adaptation to disaster. Let others write those books. In their day, Marx and Engels were fierce critics of what they called utopian socialism, something of a trend among 18th–19th-century social thinkers like Charles Fourier, Robert Owen and Henri de Saint-Simon. The following analysis is not Marxist in any meaningful sense, but I do take this anti-utopian animus to heart. We must act as though crisis is here to stay and focus on *saving* what is truly valuable in our world. Hence this book's title.

It's nothing short of amazing that a 200,000-year-old species has rushed into an existential crisis of this magnitude over the course of just 150 years of industrialization. From the standpoint of any period in our history, the pace of development over this period has been entirely off the scales. Because the unforeseen negative consequences of this development are so far-reaching-temporally and spatially, politically and ethically-piecemeal analyses of our predicament are no longer going to teach us very much about what we have done and what is at stake. Our crisis, I'm going to suggest, is fundamentally about the loss of an existential home—the Earth as we have known it over the long course of the Holocene epoch-and the cosmic disorientation this anthropogenic expulsion has brought in its train. Though we have various more or less clever ways of covering over the fact, we are, in short, a species in free-fall: directionless, panicky and reeling. To grasp this predicament we need the big picture. We need philosophy.

### The apology

Given the peculiar focus just outlined, this book is likely quite a bit

different than anything else you have read about the climate crisis. As a philosopher I take to heart the Socratic notion that wisdom requires self-knowledge. So this is not a book about green policy or what steps you can take to reduce your carbon footprint. Those are important issues, and I hope that what I have to say here inspires you to take them more seriously than you might have so far, but those would be secondary benefits of my analysis. My main aim is to enhance your knowledge of who and what we are at this perilous moment in our history.

As I see it, arriving at such collective self-understanding is an inherently *metaphysical* task, and that's the bit that almost everybody writing and talking about the climate crisis has overlooked. What is metaphysics? It is the study of reality's fundamental structure. Metaphysics asks questions about God, the nature of mind, the number of basic elements, or 'substances,' in the world, the relation between the human and the non-human parts of reality, and more. A metaphysical *system* is an account of how all these phenomena—Nature, God, mind, matter, time and history, politics and even technology—fit together. American philosopher Wilfrid Sellars (1912–1989) once said that metaphysics (or philosophy more generally) is concerned with "how things in the broadest possible sense of the term hang together in the broadest possible sense of the term." Metaphysics is world-constitution in thought.

I'm going to show that this constructive task was rarely perceived by its most significant practitioners as an end in itself, a mere intellectual game. Rather, it almost invariably happened as a response to perceived crisis. Moreover, the shape taken by the crisis is in some sense less important than the perception by a certain collective that it threatens a way of life, a concrete way of being in the world, the values that structure collective existence.

The philosophers apprehend a world, their world, in deep crisis of one form or another and diagnosis it as a flaw in how reality's fundamental structure has been understood so far. Their job as they see it is thus to reconstitute the world at this level. I will spend most of the book showing how certain canonical philosophers have done just this in the face of the crises that shook their worlds, and that these

examples can help us understand our own impasse. The enterprise might strike you as hopelessly quixotic. How could a discipline as unapologetically abstract and persistently technical as philosophy be applicable to something as concrete as the climate crisis?

To buy into the program I'm about to present, you need to believe that ideas matter. By that I mean that if you think that ideas, including those of philosophers, are historically impotent gas-clouds floating around in the cultural ether, then this book is not for you. I don't think many people are like this, so the ones that are don't worry me too much. But I *do* worry about peoples' perception that philosophical ideas are beyond their grasp. I heard a radio program recently about a philosopher who had set up a little booth in the New York subway, with a banner reading "Ask a Philosopher." Anybody could walk up to the guy and ask him a question, like "how can we know that we are real?" This led to some charming and insightful exchanges.

I applaud that philosopher for making the discipline accessible in this fashion. But I was dismayed by the journalist's first words to him: "Most of us find philosophers incredibly *daunting*!" Trust me, I get it. Too much professional philosophy *is* narrowly focused, over-technical and thoroughly jargon-saturated. But philosophy need not be presented this way, and for most of its history it was not.

Almost every professional philosopher you are likely to meet got into the discipline by being roused, usually at some point in their late teens or early 20s, by meaning-of-life questions. And then they were compelled to make their stolid way through a system of professional training whose chief aim seems to be to smother every vestige of this original enthusiasm. The problem shows up even in areas of philosophy that you'd think might be immune to it. In a nuanced study of postwar liberal political philosophy the Harvard Professor of Government Katrina Forrester laments that only philosophers could, for example, have turned the vital issue of ecological survival that emerged in the 1970s into "an anodyne puzzle" (2019, 174).

But batter them as the experts will, the questions themselves never go away. Have you ever wondered whether or not you are truly free? Whether or not there is a God? If the human mind is just a hunk of matter or, perhaps, is something non-material? If there's a heaven, or some other 'place' we might go after this life? Where the distinction between right and wrong comes from? Whether you might, right now, be in the matrix or if robots deserve rights? If you have pondered any of these questions explicitly, you have been doing philosophy.

For that matter, if your imagination has been sparked about questions *like* this by watching, say, *The Good Place*, *The Matrix* or certain episodes of *Black Mirror*, then you have also been doing philosophy. Philosophical questions arise all the time, entirely spontaneously. They are natural and irrepressible. Considered as a *discipline*, Philosophy simply insists that we think about such problems systematically, with as much logical rigor and clarity as we can muster. There's no special technique to learn beyond this rigor and clarity.

So this is not a book primarily for professional philosophers. I do not attempt to survey and synthesize the vast amount of philosophical literature that has accreted around, say, Descartes or Hegel over the ages. Specialists on these and other philosophers—or on the philosophical *problems* I talk about here, like theories of freedom, the nature of moral value, the metaphysical status of sensations and feelings, and more—will no doubt wince at the breeziness with which I sometimes treat them. Most of my own work has been in technical philosophy, so I appreciate the complaint. But in this case, it is misplaced.

At the most general level, that 2,500-year-old body of literature we refer to as The History of Western Philosophy is best characterized as a tangled skein of brilliant insight and unbelievable tedium. One way to understand what I'm up to in this book is that I'm ignoring the tedious bits and focusing on (some of) those parts of the brilliant stuff that we might use to help us grasp our current impasse more deeply and effectively.

My warrant for passing over so many argumentative details, or being so selective about the ones I do present, then, is that I'm not engaging in technical philosophy here. Rather, I am attempting to cast the climate crisis in a particular light, one inspired by the sort of big philosophical questions that have been posed by the most important thinkers in the history of the discipline. And I'm doing this explicitly *for* intelligent members of the public who happen to have minimal formal training in philosophy, or even none at all.

### The argument

With that apology out of the way, here's a summary of the book's key claims. Part I lays the groundwork for the rest of the analysis by defining the form and content of the climate crisis. The main aim is to give substance to the concept of climate crisis understood as existential disorientation and homelessness. I begin (Chapter 1) by arguing that the age's most distinctive mood is, and should be, a sense of bewilderment at the mess we have made of our ecological home. This mood, I suggest, can be a source of moral clarity. Next (Chapter 2), I show that the metaphysical source of our current malaise consists primarily in being stripped of any possible foundations for our values. The only possible candidates for such foundations are God and Nature, so I spend most of the chapter showing why appeals to them don't work now.

Bringing the insights of Chapters 1 and 2 to bear, the final chapter of Part I (Chapter 3) explains exactly why climate change is a crisis. Here, I examine the way our core values are threatened by the various forms of material scarcity that climate catastrophe is likely to induce. This is where I stake the main clam of Part I: that ongoing crisis is now effectively a part of the human condition. It is going to redefine who and what we are. If I've done my job properly in this part of the book, you will come away from it with an enhanced understanding of the profound crisis-induced disorientation of our time, and hopefully also *feel* that disorientation in your bones.

That brings us to Part II, the book's core. The five past crises I have isolated challenged a group's self-understanding root and branch. Each involved a unique form of collective trauma and drew forth a response from a famous philosopher: the Peloponnesian war in ancient Greece,

as experienced by Plato (Chapter 4); invasion and occupation in the late Roman Empire, as experienced by St. Augustine (Chapter 5); the modern scientific revolution, as experienced by Descartes (Chapter 6); the persecution and exile of the Sephardic Jews in the 16th–17th-centuries, as experienced by Spinoza (Chapter 7); and the French Revolution, as experienced by Hegel (Chapter 8). In the hands of the philosophers the traumas result in a metaphysics, from each of which I extract an intellectual innovation that can help reorient us in the midst of our crisis.

Those five innovations are: that political power must be constrained by the knowledge of climate scientists, that is, that our democracy must also be a rule of the knowers, an 'epistocracy' (Plato); that such power must also be constrained by care or love of the ecological whole of which we are inevitable parts (St. Augustine); that we must not shrink from the job of enhancing the design of the 'technosphere' (Descartes); that we must learn to see the whole Earth as a system and act to preserve its internal complexity (Spinoza); and that we must grant *rights* to anyone or anything—ultimately the Earth system itself —whose vital interests are threatened by the effects of climate change (Hegel).

In drawing connections between past collective traumas, the construction of metaphysical systems and the uses we can make of all this for our own purposes, I have tried to avoid two interpretive pitfalls. First, I am decidedly *not* claiming, for any of these philosophers, that there is a deterministic relation between the collective trauma and the philosophy. None of these philosophers were compelled by some mysterious force to produce any philosophical response to the crisis at all; and all of them could have come up with a different metaphysics, one that had little or nothing to do with the collective trauma specific to their times.

Second, I don't claim there's no value whatsoever in studying metaphysics apart from the uses we can make of it to confront our own historically specific social and political challenges. Commentary on the great thinkers in the Western canon has often uncovered fascinating insights into the mind, God, history, etc. with no attempt to make these problems and puzzles particularly relevant to the

commentators' own social world. I have no problem with this interpretive approach, having engaged in plenty of it myself over the years. But not here.

Resolving to avoid these two errors makes it easier to say something more positive about my methodology. It is this. In my view, metaphysical systems can become far more interesting once we connect them up with social reality the way I do here. Establishing this connection allows us to appreciate aspects of a philosopher's worldview that may have looked insignificant or implausible absent the connection. And then again, discovering that previous thinkers have tried to reorient their worlds in the face of crisis can make those thinkers, and those worlds, seem a little less strange to us than they might otherwise have seemed. This can give us courage in the face of our own crises by building bonds of imagination among humans across the centuries.

Part II provides essential content to the metaphysics we need now. But it is not sufficient. We must also craft a distinctive metaphysics for the age of climate crisis, which I do in the book's final Part (Chapter 9). As I argue, our world is now fully technologized. There is no longer a discernable or meaningful gap between our technologies and the rest of the world, from the atmosphere to the non-human biosphere to our cities and our own bodies. It's all one thing. I call this 'Anthropocene monism' and lay out two broad features of it: a new philosophy of history and a reinvigorated understanding of the political control we must exert over the technologies pervading our lives. If we manage to internalize the paradoxical demands of this metaphysics—supplemented by the lessons from Part II—it can aid us in reorienting ourselves in the tumultuous world we have made. This, in turn, might help re-energize the human enterprise.

At its best, philosophy is a universally accessible discipline. It is a portal to the deepest questions of human existence. It begins in wonder and culminates in a form of enhanced self-understanding that no other mode of thinking can match. It probably would never have arisen in the first place but for the many adversities to which we humans have always been exposed. Asked to define philosophy, the American philosopher Rebecca Goldstein—echoing Sellars—answered

that "it is the attempt to get our bearings, as broadly and systematically as possible; people should study it because everybody's trying, as best they can, to get their bearings" (Goldstein, 2019). I have written this book in the belief that philosophy can help all of us get our bearings in the midst of the peculiar form of dis-orientation set in motion by the climate crisis.

#### References

- Dufresne, T. (2019). *The Democracy of Suffering: Life on the Edge of Catastrophe, Philosophy in the Anthropocene*. Montréal: McGill-Queens University Press.
- Forrester, K. (2019). In the Shadow of Justice: Postwar Liberalism and the Remaking of Political Philosophy. Oxford: Oxford University Press.
- Goldstein, R. (October 10, 2019). *What Is It Like to Be a Philosopher?* Retrieved from: www.whatisitliketobeaphilosopher.com/rebeccagoldstein?rq=Rebecca%20goldstein. Accessed October 18, 2019.
- Poushter, J., and Huang, C. (February 10, 2019). "Climate Change Still Seen as the Top Global Threat, But Cyberattacks a Rising Concern." *Pew Research Center*. Retrieved from: www.pewglobal.org/2019/02/10/climate-change-still-seen-as-the-top-global-threat-but-cyberattacks-a-rising-concern/. Accessed April 10, 2019.
- Stager, C. (2011). *Deep Future: The Next 100,000 Years of Life on Earth.* New York: Harper-Collins.
- Yale Program on Climate Change Communication. (2020). *Climate Change in the American Mind*. Retrieved from: https://climatecommunication.yale.edu/publications/climatechange-in-the-american-mind-november-2019/. Accessed January 16, 2020.

# PART 1

## Disorientation

### IN PRAISE OF BEWILDERMENT

Richard III, King of England and Ireland for two tumultuous years (1483–1485), is said to have murdered his nephews because he considered them his political rivals. He died in the battle of Bosworth Field fighting Henry of Tudor, later King Henry VII. In 2012, archaeologists dug up Richard's bones in a parking lot in Leicester. CT scans of the skull revealed multiple piercings and blunt-force wounds, indicating that he had likely been hacked and stabbed to death on the battlefield by multiple attackers. Whether or not he really was a child murderer, this tyrant had a surfeit of foes and they clearly had a score to settle with him.

Elizabeth I, by contrast, ruled the realm for 45 years (1558–1603), overseeing an unprecedented flowering of British culture in these years. Her death (by cancer or blood poisoning) was evidently not pretty, but at least she did not have an entire royal House baying for her blood. All political leaders believe they act for the good of the whole order they rule. But some of them have a more justified claim to this belief than others. Though there is of course much gray area in these matters it's sometimes pretty easy to distinguish between benevolent and tyrannical monarchs.

The Book of Genesis asserts explicitly that humans were set on Earth to rule over the rest of Creation and this is exactly how we have behaved ever since that book was written: as presumed monarchs of the biosphere. Assuming we are now in a position to evaluate it critically, what should we say about our long reign? Have we behaved more like Richard or Elizabeth? Or are we a confusing and disturbing mixture of the two models of planetary governance? The answer does

not point in a particularly encouraging or flattering direction.

Recently, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) issued a report demonstrating that we are in the process of wiping 1 million species off the planet, and that the rate at which we are eviscerating the non-human world is accelerating rapidly. The group's Chair, Sir Robert Watson, summarizes its findings this way:

The overwhelming evidence of the IPBES Global Assessment, from a wide range of different fields of knowledge, presents an ominous picture. The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide.

(United Nations, 2019)

This is certainly not how we had imagined things working out. The ancient Greek poet and playwright Sophocles (497–405 BCE) wrote a paean to the extraordinary capacity of humans to alter nature for the benefit of all its members. The poem praises our technological transformation of the "holy and inexhaustible" Earth, exulting in our wise and beneficent sway over everything from "lightboned birds" to the "sultry mountain bull" (Sophocles, 2007, 909). This sort of talk is fairly typical of our early self-conception as nature's benevolent monarchs, but it endures even today.

Between the paean and the report lies some 2,500 years of continuous economic development, which towards the end morphed into breakneck hyper-industrial expansion powered by fossil fuels. Both documents express a form of shock, but shock can come in at least two varieties. The first is what we call wonder. It's a mostly positive reaction to something strange or unexpected. The second is bewilderment, something scarier or at least less sure of its footing. Sophocles is expressing wonder, while the IPBES, in my view, is expressing bewilderment. Taken together, then, Sophocles (as well as the Book of Genesis) and the IPBES describe the historical arc of our relation to the non-human world over the last few millennia, an arc travelling from excitement to fear, wonder to bewilderment.

This book begins with a reflection on the bewilderment so many of us are experiencing because of climate change. Sophocles' poem rings out with confidence in the human enterprise. Although it shows up relatively late in the Holocene, this is the cocksure self-assessment of humanity typical of that geological epoch. Since that time, an interglacial period beginning roughly 12,000 years ago, we humans have made a secure home for ourselves in an otherwise indifferent world, and we have done this by subduing the rest of the biosphere. In the process, we have made the world a familiar place.

By contrast, the IPBES report is a lament for a lost home. And not just any home, but our only home, the very same home identified in the poem. We have fouled our own nest so thoroughly that only what Watson calls "fundamental, structural change" can now save it. This is how I'm going to talk about bewilderment in this chapter. It is the feeling of unfamiliarity where we expect familiarity, the sense of homelessness where there should be a home, the idea that our own cleverness and plastic adaptability have set us adrift or banished us from our primal place of origin and belonging.

Put otherwise, we have made the world *uncanny*. To call a phenomenon uncanny is to identify it as creepy or weird, but in the specific sense that it represents a strange meeting of the familiar and the unfamiliar. This creepiness usually comes with a sense of threat. Think, for instance, of humanoid robots, which inspire this feeling in many people. They are a lot like us, but there's something in their movements or speech patterns that is not *quite* right. We feel vaguely that they might turn on us at any moment, that their familiarity is really just a ruse to mask the threat coiled in them. We have the inchoate sense that they are fundamentally unpredictable and thus untrustworthy.

My task in this chapter is to convince you that this can be a fruitful way to think about life in the age of climate change, a transformative event set in the larger context of our brand new epoch, the Anthropocene. We are emerging from a period in which a stable climate has given us a very familiar world, one whose patterns and rhythms we have been allowed to take more or less for granted. What we are passing into is less clear, but it feels both weird and

threatening.

There's a much wider context of instability that must be explained as well. I'm talking about the instability of our values that comes with being denizens of the modern age. The mark of the modern, as we'll see, is to be deprived of traditional sources of moral meaning without having any obvious substitutes for them. The result of this layered instability—modernity *plus* the climate crisis—is a world that is quintessentially uncanny. It is bound to bewilder us but, as I will argue, we should embrace this bewilderment as a form of existential therapy and a path to moral clarity.

### Pierre and the pundits

In this part of the book I'm going to describe what it means to say that we have entered a new historical epoch or time, one marked essentially by crisis. But for the moment I'm mostly interested in how this *feels* to us. I want to investigate a particular, highly complex collective *mood*: bewilderment. To get a sense of what an analysis of this sort involves I'll begin by contrasting my approach with others who are operating in the same conceptual field.

Yuval Noah Harari's massively popular books, *Sapiens: A Brief History of Humankind* (2016) and *Homo Deus: A Brief History of Tomorrow* (2017), take us on whirlwind tours of the history of our species, all with a view to illuminating the contours of our tech-shaped world as well as the future that likely awaits us. Though he's also not a trained historian, Stephen Pinker's *Enlightenment Now: The Case for Reason, Science, Humanism and Progress* (2018) is in the same vein. The genre is proliferating (e.g., Shapiro, 2019; Cohen and Zenko, 2019). Let's label these thinkers the *pundits* of the new age. They are remarkably sanguine about our times.

Because I think it is now essential for us to see the big-picture of our species' relatively brief reign on this planet, the pundits perform an invaluable function. They are trying to enhance our historical self-

understanding, and they get the story at least partly right. But it's that 'partly' that nags at me. I came away from the books just mentioned feeling enlightened but also with the sense that something important was missing from them. One review of Pinker's book notes that the view of our post-Enlightenment history Pinker gives us is from 30,000 feet (Potter, 2018).

It's a relentless compilation of data, all designed to show that with respect to key markers of well-being—education levels, health, wealth, the spread of democratic institutions, etc.—we're demonstrably better off now than at any point in the past history of our species. Pinker thinks he needs to say this because Enlightenment values of progress and reason have come under sustained attack of late, much of it taking the form of a pouty Left dystopianism.

I have no quarrel with Pinker's basic claim, and in what follows I promise not to pout. Still, something *is* clearly missing here, something connected to the head-spinning *elevation* of Pinker's analysis. Though it's a slight over-simplification, reactions to Pinker's book tend to fall into one of three camps. The first—think of Bill Gates, who *loves* Pinker's books—says, 'Yes, exactly, the Enlightenment project is sound, and we merely need to push fearlessly ahead with it to ensure an even brighter future.' The second group contains the pouters I have just mentioned, those who think the Enlightenment project is a disaster, and has been from the start, mostly because it got entangled almost from the beginning with a heartless and overreaching capitalist economic system.

But there's a third group, and this is the one that interests me the most. To get a sense of what this group is thinking, come back to that Pew survey cited in the Introduction. In all 26 countries surveyed a majority think that climate change poses the biggest threat to global stability. The average number responding this way is 69%. Perhaps most surprisingly, climate change tops the list even in places where you'd think other perceived threats would beat it. In France, which has a recent history of domestic terrorism, 83% believe that climate change is the most significant threat. In South Korea, whose citizens live with the very real threat of *nuclear annihilation* from the regime to the