# **New Earth Politics**

**Essays from the Anthropocene** 



Simon Nicholsor Sikina Jinnah

## **Contents**

Series Foreword xi Acknowledgments xiii

Introduction

**Living on a New Earth** 1
Simon Nicholson and Sikina Jinnah

Section 1: Causes of the New Earth 17

- 1 The Changing Shape of Global Environmental Politics 21Ken Conca
- **2** Green Earth: The Emergence of Planetary Civilization 43 Daniel Deudney and Elizabeth Mendenhall

Section 2: Scholarship as Engagement 73

- The Co-production of Knowledge about International Governance:
   Living on the Science/Policy Interface 75
   Oran R. Young
- **4 Scholarship as Citizenship 97** Richard Falk

Section 3: Pedagogies of Hope 113

5 Person/Planet Politics: Contemplative Pedagogies for aNew Earth 115Karen T. Litfin

viii Contents

6 Make Way for Hope: A Contrarian View 135 Michael F. Maniates
Section 4: New Earth Institutions 155
7 Institutional Politics and Reform 157 Kate O'Neill
8 An Engaged Scholarship Narrative 183 Maria Ivanova
Section 5: Social Movements and Civil Society 219
9 Autonomy and Activism in Civil Society 221 Peter J. Jacques
<ul><li>10 Converting the Environmental Movement into a Missionary</li><li>Religious Force 247</li><li>Erik Assadourian</li></ul>
Section 6: New Earth Geopolitics 269
11 Toward Sharing Our Ecospace 271 Joyeeta Gupta
<b>12 China on the World Stage 293</b> Judith Shapiro
Section 7: Climate Change: The New Earth's Defining Problem 313
<ul><li>13 Climate Change through the Lens of Energy Transformation 315</li><li>Navroz K. Dubash</li></ul>
<ul><li>14 Governing Climate Engineering 343</li><li>Wil Burns and Simon Nicholson</li></ul>
Section 8: Narrative Frames for Living on a New Earth 367
15 Living at the Margins 369 Paul Wapner
16 The Sustainability Story: Exposing Truths, Half-Truths, and Illusions 387 Peter Dauvergne

Contents ix

# Epilogue

**Politics for a New Earth: Governing in the "Anthropocene"** 405 Frank Biermann

Contributors 421 Index 425

# Section 3 Pedagogies of Hope

Global environmental politics can be a difficult subject to teach and a difficult subject about which to learn. This is not just because of conceptual and empirical intricacies. It is also because learning about the global environmental condition can be a dark and depressing undertaking. One of our colleagues often quips that his undergraduate course on global environmental politics should be retitled Introduction to Doom for the difficult themes with which he requires his students to grapple.

In this section, Karen Litfin and Michael Maniates consider what it means to teach and learn about the New Earth, and how best to do it. They offer insights born of deep reflection and expert classroom practice.

The section opens with chapter 5, a meditation on what Karen Litfin calls "contemplative pedagogies." She argues that wrestling with the vast challenges of global environmental harm and loss requires that professors and students help one another focus on their inner lives. Her journey in this direction in her own teaching has led Litfin to become a pioneer in a burgeoning contemplative pedagogy movement. Here, Litfin outlines the utility of contemplative approaches to teaching and learning, argues for working with (rather than seeking to dismiss) deeply felt emotions, and guides us into consideration of "somatic responses"—the responses of our whole body and individual senses to the world around us. Along the way, she offers a string of extraordinary exercises that have enlivened her own teaching, from "taking the classroom pulse," whereby students simply offer, one after another, a single-word response to the material being tackled in class, to "who am I in a changing climate," a meditation on the nature and meaning of life on the New Earth. These exercises are not any kind of paint-by-numbers to mindfulness; they won't be a good fit for all professors or all students. The exercises, though, and Litfin's chapter, provide clues for the fostering of authentic engagement with the environmental condition.

114 Section 3

Michael Maniates follows with a chapter on hope. Many of us enter our learning and teaching about the environmental condition with a desire to find or instill hopefulness. Yet as Maniates argues, an urge to "teach hope," as though there is a step-by-step guide to a hopeful orientation, can be counterproductive. Instead of reaching for trite, rote responses when students ask, "How can I find hope?" Maniates urges his fellow educators to adopt a new pedagogical orientation, focused on exploding what he calls "hope-diverting myths." Maniates' identification and unpacking of a range of myths and misconceptions about the environmental condition, effective social action, human nature, and the possibilities for large-scale change will provide much grist for classroom discussion, in addition to serving as a challenge to all of us to give deep consideration to the assumptions we make about life on the New Earth.

Studying and teaching global environmental politics is, by its nature, a difficult undertaking. *Difficult*, though, does not mean "bad." Litfin and Maniates help us understand that hope ultimately comes not from averting one's gaze from the severity of the challenges that lie ahead, but rather from fully embracing them and working out how to respond in meaningful, effective, and deeply humane ways.

## Framing Questions Posed to the Authors in Section 3

- What are our obligations as educators concerned with environmental matters?
- With what intellectual and other tools should our students be equipped?
- What is the current state of environmental education? Is it appropriately oriented to the contemporary environmental condition, or is some course correction called for?

# 5 Person/Planet Politics: Contemplative Pedagogies for a New Earth

Karen T. Litfin

Stand still. The trees ahead and the bushes beside you
Are not lost. Wherever you are is called Here,
And you must treat it as a powerful stranger,
Must ask permission to know it and be known.
—From David Waggoner, "Lost"

In recent years, those of us who teach Global Environmental Politics have watched enrollment in our courses skyrocket. When I brought this course to the University of Washington in 1991, I was lucky to have 15 students. Enrollment in the same course today is capped at 150, a tenfold increase that is fairly representative of our subfield. While we global environmental politics scholars might feel gratified by the growing popularity of our courses, we must concede that this trend is driven more by the urgency of the issues than our talent and charisma. Given this mounting urgency, it behooves us to consider what we are actually teaching. Any student who completes our courses—and most other environmental studies courses, for that matter can recite a litany of crises that together comprise an unfolding planetary megacrisis: deforestation, collapsing fisheries, freshwater scarcity, the mass extinction of species, climate change, and more. But what deeper messages—the ones they will remember long after the final exam is over—are they internalizing about how to live on a "new Earth"? As Michael Maniates so cogently prompts us to ask in the next chapter, does the knowledge we convey "make way for hope," or does it elicit fatalism and paralysis?

Over the years, I have come to the conclusion that a purely cognitive approach to global environmental politics tends to engender the latter. Observing my students' faces go blank or glum during my lectures, I realized that I needed to somehow bring the material home for them. Otherwise global problems and international treaties run the risk of

seeming too abstract and remote, rendering effective responses seemingly impossible. I also saw that "bringing the material home" required making my 100 to 300 student lectures feel more intimate. At one point in the late 1990s, I learned that a group of my best students was meeting on Thursday nights to get drunk together. According to the student who informed me, "It's just so crushing that we need to put our minds in a different space. We do it together because it's better than being with this stuff alone." I felt simultaneously chastened and intrigued by this extracurricular exercise in emotional catharsis and community building. I soon vowed to teach global environmental politics not only as something happening "out there" but as something happening "in here."

Witnessing my students struggle with fear, anger, grief, despair, and guilt (and, I should add, wrestling with the same dark emotions internally), my first step was to acknowledge their inner lives. In a lecture hall, this might mean simply asking each student to offer a one-word response to the day's material. "Taking the classroom pulse" came to mean a cascade of heartfelt words switchbacking their way down from the top corner to the bottom corner of the room. In three minutes, we could hear two hundred words running the gamut from *overwhelmed* and *hopeless* to *amazed* and *grateful*. Invariably this torrent of words would end with a pregnant pause, a moment of focus far more potent than anything my PowerPoint slides could evoke.

These initial forays into contemplative practice led me to develop a plethora of pedagogical approaches oriented toward the student as a whole person, not simply a disembodied mind. The core question of these inclass exercises is, "Who am I in relation to this?" In some cases, this means having students keep a journal; in others, it means offering guided meditations about course material; in yet others, it means articulating emotional responses to lectures or readings. Some of these experiments were spectacular successes and some awkward failures, but over time I saw the value of this approach and began calling it "person/planet politics." I have even come to suspect that a significant cause of the unfolding planetary megacrisis is the human mind disconnected from the full-hearted and full-bodied life.

Both my confidence and my competence got a big boost in 2009 when faculty from colleges and universities around the Puget Sound came together under the auspices of Curriculum for the Bioregion to study contemplative approaches to sustainability education. Although we hailed from disciplines ranging from poetry to the information sciences, we were united in our commitment to holistic education. This meant engaging our whole selves—mind, heart, body, and soul—not just in our teaching but in

our daily lives. From our first meeting at the Whidbey Institute, a conference center working "for Earth and Spirit," we shared our classroom experiences along with good food, poetry, and music. We found common ground in our sense of the profound value of this work alongside experiencing ourselves as iconoclasts in our fields and at our institutions. That core group of about twenty scholars grew into a dynamic learning community that has shared its collaborative work in an online collection of classroom practices (http://serc.carleton.edu/bioregion/index.html), two conferences (2012 and 2014), and a forthcoming book of essays. I have benefited tremendously from the originality and collegiality of our work together.

This chapter draws on my nearly twenty years of teaching person/planet politics as well as what I have learned from my colleagues in the Curriculum for the Bioregion initiative. The first section offers a rationale for contemplative pedagogical approaches to higher education in general and global environmental politics in particular, highlighting the profound and underappreciated value of "the pause" in our harried and distracted culture. The second section, which explores the affective dimension of contemplative pedagogical approaches, makes the case for working consciously with the dark emotions—fear, anger, grief, despair, and guilt—elicited by the subject matter of global environmental politics. The third section focuses on somatic experience as a gateway to a genuinely creative response to living on a new Earth. As literally being of the Earth, our bodies offer a window into the self-awareness, creativity, and sense of sufficiency that may well be the cornerstone of a sustainability culture. In this context, the intersubjective space of the classroom serves as an important counterbalance to the inwardness of contemplative inquiry, which otherwise runs the risk of fostering a tendency toward self-absorption. I conclude by framing each of these domains of contemplative pedagogy—"the pause," the emotions, and the body—in light of the question of personal resilience and how we might assist our students in sustaining themselves for the long haul. The developmental challenge for young people coming of age at the dawn of the Anthropocene is beyond what most of their instructors have had to face. As a consequence, those of us who teach global environmental politics are now called on to step beyond our traditional role as instructors into a more profound quality of mentorship. For this, we must come to see that sustainability is, as much as anything else, an inside job.

## "Don't Just Do Something, Sit There"

The mounting socioecological multicrisis looms as the problem of all problems. Consequently our global environmental politics courses tend to focus

on the many tentacles of the crisis, lightly seasoned with a few success stories like the ozone treaties. The overarching message of our courses is often one of urgency and alarm, although this message is increasingly tempered by solutions-oriented research and hands-on learning experiences. This makes sense: we certainly want our students to be good problem solvers and, given what they are learning, they are hungry for solutions. Yet, reflecting the larger culture, they gravitate toward individualized solutions. The "solutions" abound: Go vegan! Shorter showers! And for the technophiles: Electric vehicles! Algae biofuels! Geoengineering! For the few with a stronger political bent: Cap and trade! Carbon tax! Reform the World Trade Organization! The strong propensity of the human mind when faced with a problem is to generate solutions—all the more so under great urgency. Yet the problem with acting on a fix-it impulse to the wicked problems that characterize global environmental politics is that many offered solutions are too partial or end up generating more problems. Inadequate solutions follow inexorably when we fail to truly understand the deeper nature of a problem or the unintended consequences of our actions.

Nonetheless, every good teacher wants to help students learn to approach problems in general, including global environmental problems, with self-awareness, focus, patience, discernment, empathy, integrative thinking, and imagination—none of which is likely to be enhanced by a fix-it mentality. Indeed, the rush to solve a problem may well be a defense against the discomfort of not knowing inherent in taking the time to see deeply its genesis and character. Problem solving generally begins with a period of openended receptivity in which one simply takes stock of the problem. Seen from this light, contemplation takes on a more practical hue: the more complex the problem, the greater the need for stepping back and taking stock.

In many ways, the Anthropocene presents us with the problem of all problems for the following reasons:

- It was a colossal accident.
- It is a consequence of the everyday life choices of over 7 billion people.
- These choices are strongly driven by an amalgamation of psychological and institutional forces with deep historical and even biological roots.
- The everyday actions of a few of us are far greater drivers than those of most us, but our lower-impact members are quickly adopting the habits of the affluent.

Taken alone, each of these factors presents a conundrum; taken together, they cry out for deep inquiry into the peculiar place of the *anthros* in the

scheme of things. The dawning of the Anthropocene seems to compel us to ask ourselves not only, "What on Earth are we doing?" but even more fundamentally, "What on Earth are we?" If nothing else, the new geological era highlights our species' paradoxical relationship to the rest of creation. While these questions can be illuminated by the social sciences and humanities, so too can we investigate them through personal and interpersonal introspection. Our complicity in the Anthropocene implies that each of us must answer the question, "Who am I in relation to this?" Whether we as college instructors are sensitive to this implication, we can be sure that if our students are not asking this question of themselves, then they are, along with much of the culture, engaging in some fancy footwork to evade it. The very magnitude of the problem and its undeniable biophysical dimensions tend to transfix our gaze outwardly, yet coming to understand the anthros must surely also entail looking within.

Many environmental studies courses, including those focusing on global environmental politics, introduce students to a big-picture formulation of "the problem" by means of "I = PAT," where environmental impact (I) is measured as human population (P), their level of affluence (A), and the kinds of technology deployed (T) (see Ken Conca's problematizing of this approach in chapter 1). When students come to see that the average American consumes as much as fifty sub-Saharan Africans and that the acquisition of more energy-efficient technologies typically leads to higher levels of consumption, they soon recognize that the A factor is the crucial variable in the equation. This is not to say that curtailing our numbers and using more environmentally friendly technologies are unimportant; it is only to say that any gains from these measures are likely to be, and currently are being, swamped by the apparently insatiable A factor. If globalized, a process that is well under way, the American (Canadian or Australian) lifestyle would require six Earths.

We might therefore conclude that consumption is the primary problem, but this begs the larger questions of consumption's deeper political, social, economic, and psychological roots. Many global environmental politics courses no doubt delve into these larger questions, but they tend to approach I = PAT as if the variables and their product were occurring solely "out there" in the material world or in abstract intersubjective cultural or institutional arenas. As important as these arenas are, they leave out the inner dimension of the myriad everyday choices that permeate consumer society. Most crucial from a pedagogical perspective, they leave out the vitality and intimacy of the lived experiences of our students, who are on the cusp of becoming full-fledged members of consumer society. Indeed, a

primary function of a college degree is to improve their prospects on the job market. Our global environmental politics courses therefore place our students in a highly awkward relationship with their own lives. In the context of the New Earth, the not-so-subtle message is that our students themselves, along with the rest of us in the affluent world, are the problem. The natural response is guilt or, for those with a low tolerance for guilt, evasion. This dead-end of a conclusion—that we are the problem—is certainly one way of bringing the material home but not one that most of us would actively choose. Yet if we are not sensitive to our students' lived experience, this is exactly where our courses will land.

There is a powerful truth to the recognition that we are the problem, one that need not end with guilt and evasion, for this recognition is simply an awareness that our soft-skinned brainy species has unwittingly begun to unravel its own life-support systems. For those of us in the affluent world, this comes with an awareness of being most privileged, most culpable, and most reliant on the ceaseless work of unseen others. Seen from this vantage point, we can view ourselves not so much as a cancerous scourge but as an intriguing puzzle, a riddle whose solution must emerge from a place beyond business as usual. Surely a puzzle of this depth is antithetical to a quick fix; surely it is worthy of earnest contemplation. And surely, since we are (despite our varying levels of privilege and culpability) in the same boat, our reflections should have an intersubjective dimension—all the more so because the truly effective responses will be matters of collective action. As Michael Maniates argues in the next chapter, the challenges of living on a New Earth must be addressed politically and structurally. Contemplative inquiry is therefore the yin to the yang of collective action.

Given these parameters, our global environmental politics classes offer an ideal field of practice. If we have the courage to enter into the space of not knowing and the patience to accompany our students as they take stock of the problems, which includes facing the riddle of ourselves, then their solutions will be far less likely to be the veiled evasions that spring from a fix-it mind-set. As our students grapple with "Who am I in relation to this?" (see box 5.1) they need not lose their capacities for objectivity, analytical thinking, or pragmatic action; they simply add to these an enlivened capacity for introspection and integrative thinking. In so doing, they learn to bring their whole selves to the world's pressing problems.

How do students respond to such an unconventional use of class time? Because most of my teaching is in large lectures, I have little opportunity to interact with students on a one-to-one basis. I therefore do anonymous electronic polling to get their feedback. The following responses are typical:

#### Box 5.1

### Who Am I in a Changing Climate?

This exercise aims to develop students' capacities for self-awareness and integrative learning. I generally offer this fifteen-minute exercise at the end of an eighty-minute class period. This gives students who do not wish to participate the opportunity to leave. Over the years, I have found that a few leave but nearly all choose to participate. If there is time at the end, I bring the exercise into the intersubjective space either by "taking the collective pulse" or inviting students to share something they learned with a neighbor.

Sit in a comfortable yet alert position. You may wish to close your eyes. If you leave them open, please have them downcast so as not to make others feel uncomfortable. Feel yourself in your chair and take a couple of deep breaths as you settle.

We have spent the last two weeks studying climate change and learned that there is a strong scientific consensus that our Earth's climate system is being destabilized by human activity. Take a moment to let this information sink in. Notice what happens in your body as you sit with this information. Simply observe.

We also learned that people in developing countries, people who are already living on the edge but whose greenhouse gas emissions are minimal, will bear the brunt of the impacts. Again, notice your sensations and emotions as you sit with this information. Just notice. If your mind wants to run in another direction, just notice and breathe.

We've also learned that some people's lifestyles are responsible for emitting far more greenhouse gases than others. As Americans, we emit (on average) about four times the global average. Again, sit and watch whatever arises.

Now breathe into your belly and simply relax. There's nothing you need to do, nowhere to go. This is your time to simply be. [Pause] Into this empty space, allow yourself to return to these big issues around climate change, and introduce this question very gently but with a clear focus: Who am I in relation to all of this? Introduce this question into the silence: Who am I in relation to global climate change? And simply observe what arises, and take note. [Repeat this a few times]

Consider that the world you are entering as a young adult is very different from the world of any previous generation. Our species has embarked on a planetary experiment, and you will be living in the results of that experiment. Who are you as you enter this world? [Pause] Just welcome whatever comes as a guest: images, emotions, ideas, sensations. Simply be an open field of perception, asking yourself who you are in a changing climate. [Silence]

As you prepare to bring your focus back to the classroom, take note of what has transpired. [Pause] Now take a breath and open your eyes slowly. Take a few minutes to gather the harvest by writing some notes to yourself.

- 1. This exercise was not a good use of my time. 4 percent
- 2. I feel neutral about the exercise. 2 percent
- 3. I was grateful for the respite from my harried life. 60 percent
- 4. I gained significant insights into myself in a changing climate. 34 percent

Even more gratifying are the personal responses. One student who had never spoken in class told me after "Who Am I in a Changing Climate?" that he now knew that his calling was to teach environmental science to children in the primary grades. Another told me that he recalled early childhood memories of living in a Mexican village before his family moved to the United States and that he now knew that something in him knows how to live sustainably. Perhaps the most predictable result of these practices is that I am always surprised.

### **Human Dimensions of Global Change**

A good communicator must take into account the context of her audience, a requirement no less necessary for university instructors than other public speakers. We might therefore consider that our students have grown up during the warmest two decades in recorded history, a time that represents the hinge-point when our home planet left behind the 10,000year sweet spot in which human civilization emerged and eventually became a geophysical force. For our students, who literally inhabit a different planet from the one on which their elders came of age, the question of who they are in a changing climate is a vital one-even if the dominant culture would have them ignore it. Yet when teaching about topics like climate disruption or species extinction, our scholarly proclivity is to present abstract data about these ominous trends without acknowledging the existential challenges they present. Indeed most graduate training prepares us for little else, potentially rendering us technically competent in the classroom but emotionally inept. If we fail to accompany our students as they walk through the anguish that arises in the face of an honest assessment of the facts, we do our students and ourselves a disservice. As global environmental politics instructors, we are called on to balance cognitive learning with more spacious and open-ended modes of inquiry that foster emotional intelligence and more reflective forms of self-awareness. In my experience, the personal rewards of responding to this call are tremendous, not least of which is a sense of coming home to our own basic humanity.

Having watched my students struggle with fear, anger, grief, guilt, and despair—and having personally grappled with them for decades—I have learned to value these dark emotions as potentially powerful catalysts. Without turning the classroom into a group therapy session, I like to end my lectures with a few minutes of personal reflection and sharing. The overwhelmingly positive response from the students confirms what most of us already know: in the absence of emotional engagement, cognition alone can be a dry and disempowering exercise. According to public opinion polls, most people know that the climate is changing, but do we allow ourselves to truly feel it? Or do we tend to distract ourselves, much as we avert our attention from our own mortality? If we truly felt the magnitude of the facts, would we continue with business as usual? Even putting aside our responsibility to the external world, what of our inner life? What does our psychic numbing desecrate within ourselves? In repressing our anguish, which, after all, is rooted in our care for the world, we simultaneously undermine our capacity for effective action and deaden our own hearts. While apathy is typically taken to mean a failure to act, the term actually denotes a failure to feel. Given that a crucial role of emotions is to generate motion, a failure to act may follow as a natural consequence the failure to feel.

As we all know, though, action impelled solely by emotion tends to be reactive and counterproductive, and our cognitive capacities alone do not necessarily supply the missing ingredients. Appropriate action does not follow from simply adding a dollop—or even a generous helping—of reasoning, critique, and analysis to feeling. Rather, effective action in the face of thorny problems requires a willingness to just sit there with uncomfortable facts and emotions rather than cogitating on a solution or rushing into action. In our extroverted and action-addicted culture, this pause may seem like a waste of valuable class time. As instructors, our information-laden minds may have to fight the impulse to fill up the space. Yet our willingness to allow the students to "just sit there" and observe their emotional reactions to the course material sends a host of subtle but powerful messages.

First, by acknowledging our students' subjective reactions to our course material, we convey a sense of empathy and an attitude of respect for their wholeness, thereby fostering these qualities within and among themselves. Since we cannot base their grades on their emotional authenticity or capacity for inner silence, we send a discreet message that we value something about our students beyond their academic performance. In my experience, as students tend to engage more wholeheartedly with the material, they

release their obsession with grades. Without ever saying as much, we are communicating in a visceral way that something far more important than their GPA is at stake. For those of us whose training was solely cognitive, bringing our empathic and intuitive qualities more directly into our teaching can also contribute to our own sense of wholeness.

Second, as our students learn to acknowledge and bear their own anxiety, sadness, fear, and confusion, they operate with greater ease and confidence in the world. Paradoxically, sitting with uncomfortable facts and emotions tends to generate insight, resolve, and empowerment. Or perhaps this outcome is not so paradoxical, for any psychologist worth his or her salt will tell us that the dark emotions are most harmful when they are ignored.<sup>2</sup> Is it any wonder, then, that in a culture dedicated to "the pursuit of happiness" (very often through consumption) we have an epidemic of depression? Most of us are—and quite literally so in a car culture—driven to distraction. Yet if we peel away the veneer of so many of our pursuits of happiness and observe ourselves carefully, we see that most of us are perpetually running from the present moment. Turning a blind eye to the existential questions that arise in response to global environmental problems is just one strand in this vast machinery of evasion and complicity. The denial of our feelings about our perilous entry into the Anthropocene may be just as problematic as the climate-denial movement. Is not the majority who passively accepts the reality of climate change and goes about its business as disconcerting as the minority who actively denies it? Or perhaps these two seemingly antithetical positions are rooted in a common aversion to painful emotions—in one case through denying their factual basis and in the other through approaching the facts through cognition alone. In this context, to "just sit there" and steep in self-awareness in the face of world awareness becomes a radical act. When we reconnect with life by willingly enduring our pain for it, the mind regains its clarity and generates new possibilities for relational living and creative action. As Michael Maniates argues in the following chapter, exiting the place of hopelessness is not difficult once we know we are in it. I would add that when we encourage our students to not only know that they are in a state of despair, fear, anger, or guilt but to actually experience and name these emotions in the classroom, we erode some of the psychological and cultural structures that foster hopelessness.

Third, we send a subtle but powerful message by having the courage to set aside our expert personas and enter into the empty space of the pause. In essence, we are modeling a willingness to not know. From the standpoint of our professional training and our students' grades, this state of not

knowing might appear as dangerous or absurd. Yet if we are honest with ourselves, we must acknowledge that this state is likely to become increasingly relevant—for better or for worse—as we move more deeply into the terra incognito of the Anthropocene. As valuable as our climate models, UN forecasts, and other predictive tools are, the stark reality is that we live in a mind-bogglingly complex world that defies prediction. We know the climate is changing, but the specifics (which are, after all, where life is lived) are unknowable. We know that climate surprises are inevitable, but surprises are by definition unpredictable. We know that many creatures that constitute the web of life will be extinct in a few decades, but we don't what this will mean for ourselves individually or collectively. Nor do we know what it means to live in the Anthropocene: Will humans take charge of the planet, or is this a hubristic fantasy? In the face of all of this, one of our primary jobs as global environmental politics faculty is to model not knowing not merely as a vacuous respite from the hard facts but as an earnest dive into self-awareness and focus. As Aldo Leopold observed decades ago (and as Simon Nicholson and Sikina Jinnah repeat in this book's Introduction), "One of the penalties of an ecological education is that one lives alone in a world of wounds," and the wounds have only deepened since. The future is dark—in both the sense of unknown and most likely undesirable. We cannot retrieve what has been lost, but we can bring our whole selves to what is here.

## **Coming to Our Senses**

The human animal is a splendid oddity: the species with the capacity of separating itself from whole—at least in our own minds. The very term *environment* assumes that separation. In just a blink of geological time, industrialized societies have enacted a story of separation, altered the face of the Earth, and brought the Cenozoic age (from the Greek, the age of "new life") to an abrupt close. Barring a drastic change, of course, the Anthropocene looms as an age of the impoverishment of life. Ironically, however, the story of separation carries within itself the seeds of its own demise, for the message of collapsing ice shelves and the unraveling web of life is that we are decidedly not separate. Oddly enough, this is also the message of modern science: that we are the astonishing result of nearly 15 billion years of cosmological evolution and 5 billion years of terrestrial evolution. The so-called autonomous individual is inextricably reliant on a vast web of external ecosystems and internal microbial networks. Yet as much as we might know this, for most of us, our everyday lives are radically

out of harmony with the community of life. If our lives are out of sync with reality, then practices that allow us to step outside our habitual grooves become all the more important.

Fortunately, we have available at every moment a window into presentmoment awareness: our own sensory perception. Mindfulness practices like observing the breath enable us to shift from doing mode to being mode and, in the process, potentially witness our mind's compulsive activity rather than being swept up in it.3 When my students walk mindfully through a shopping mall, for instance, their sensory awareness serves as an anchor that enables them to become aware of their impulses without acting on them (see box 5.2). Their internal experience often becomes more compelling than the consumer goods. As they walk through the mall, the students frequently report a surprising sense of calm. This confirms psychologists' finding that "mindful attention prevents mindless impulses."4 Physiologically, mindfulness practices elevate the responsiveness of the parasympathetic and sympathetic nervous systems, thereby generating a simultaneous sense of calm and heightened attention. This state is proving to be of great value in reducing stress and healing a range of psychological problems, including addiction, trauma, and depression.<sup>5</sup> This state of relaxed attentiveness also turns out to facilitate learning, including in college classrooms. The Association for the Contemplative Mind in Higher Education has assembled a rich collection of practices in disciplines from architecture to astrophysics-including global environmental politics. Paul Wapner's webinar, "Contemplative Environmental Studies: Pedagogy for Self and Planet," offers a straightforward rationale for integrating contemplative practices into the global environmental politics classroom.6

Sustainability education is particularly amenable to contemplative inquiry. Its implicit critique of the growth imperative invites both a stepping back from impulsive consumption and a deep inquiry into the *anthros*. The special role of somatic experience in contemplative inquiry points to another connection: as organs of perception, our bodies are our intermediaries between Earth and mind, just as they are literally of the Earth. While science tells us this, few of us deeply consider it, much less translate it into lived experience.

The breath, for instance, can be a gateway to a profound experience of interdependence. At the end of a three-week study of global atmospheric politics, for instance, I lead a guided meditation called Living in Eairth. As David Abram notes, we do not so much live on Earth as within its atmospheric membrane. With each breath, we inhale molecules that have been

#### Box 5.2

#### Mindful Mall Walking

Given consumer culture's deep reach into our psyches, a ready channel for person/planet politics involves working with the impulse toward acquisition. In this out-of-class exercise, I ask students to take a solitary thirty-minute stroll through a shopping mall while attending to their emotional and somatic experience, followed by twenty minutes of journaling. Below is a rough sketch of the assignment.

Please block out an hour (not including travel time) for this exercise. Go to a shopping mall alone with no intention of buying anything. Bring a timekeeping device and set it for thirty minutes. Then simply walk slowly enough to be able to attend to whatever draws your attention and your own reactions. If you find yourself walking slowly and aimlessly, you're probably getting it right; the point is to have no agenda beyond observation. The following prompts can serve as anchor points:

- Notice not only what you see but also smells and sounds.
- Notice what you like and what you don't like, including your perceptions and judgments about the people around you.
- Notice which shops draw you in, which items attract your attention, and whether it is difficult to shift your attention elsewhere. What happens in your body?
- Notice your breath. Is it shallow or deep? Notice your body. Are you comfortable or uncomfortable?
- Notice when your mind wanders to outside your immediate experience.
   Where does it go?

At the end of thirty minutes, find a place to sit down and write about your experience. Write spontaneously about your immediate experience and any insights about yourself or the world, or both. This writing will not be graded; it is for yourself.

The students later share their experiences in small-group discussions and, depending on the course, draw on those experiences in a short paper on the politics of consumption. Students report a range of reactions to this combination of acute visceral experience and the sharing of these experiences in peer groups: insight, embarrassment, empathy, frustration, guilt, gratitude, and so on. All of them report learning something important about themselves or the world, or both. From the intensity of their papers and conversations, I see that the exercise helps them to come alive.

breathed by countless creatures, and with each exhalation, we emit a minute quantity of carbon dioxide to taken up by plants and minerals. The simple act of conscious breathing invites each of us into a visceral experience of living in the circle of life. As important as it is to understand the logic of sufficiency, having the flesh-and-blood experience of sufficiency is of a different order.

Food offers another such opportunity. Integrative thinking is a key learning objective in my upper-level lecture course, Political Ecology of the World Food System. Much of the course is designed to reveal the hidden in the world food system: hidden costs, hidden ecological impacts, hidden relations of power and authority, and hidden surprises. Contemplative practices help the students step back from the facts and analysis into a more spacious and connective approach to the material, and the visceral experience of food facilitates this experience. Students are far less likely to forget the commodity chain of cocoa or corn, for instance, if they are holding a piece of chocolate or popcorn in their hands as they learn. Equally important, the experience of eating food mindfully is inherently valuable. Students have told me that they had never really tasted a raisin or a strawberry before (see box 5.3).

Time spent in contemplative inquiry makes for shorter lectures, which means there are important trade-offs to consider. Were the twelve minutes exploring the hidden life of a strawberry an effective use of classroom time? Were I primarily interested in conveying information, probably not. From a conventional pedagogical perspective, jumping from farmworker justice to soil fungus to the stratosphere is a confusing and scattered approach to world food politics. But I was more concerned with my students' capacities to think systemically and sit with uncomfortable emotions—not the least of which was the temptation to eat the strawberry—than their ability to memorize facts and concepts. I was betting that the visceral experience of the strawberry along with sharing one well-chosen word would enhance these capacities.

#### Make a Creative Response

When asked how to meet the mounting global environmental crisis without succumbing to despair, cultural historian Thomas Berry reputedly replied, "Make a creative response." A truly creative response to the Anthropocene would be one that moves beyond our habitual patterns of thought and action—beyond clichés, short-term remedies, and technological fixes. Neuroscientists and cognitive psychologists increasingly point to "the

#### Box 5.3

### The Hidden Life of a Strawberry

This exercise illustrates some key concepts from my world food politics course—food justice, food webs, complexity, and unintended consequences. I ask the students to refrain from eating the freshly picked organic strawberries my teaching assistants distribute as I show a few photographs. *El cortito*, the infamous short-handled hoe now outlawed in California, highlights food justice. A gray, fuzzy strawberry shows the fruit's vulnerability to fungus. A graph of the global use of methyl bromide, a powerful ozone-depleting antifumigant used by the strawberry industry, reveals a huge unintended consequence of conventional strawberry production. If soil fungus is the problem, then perhaps farmers should put plastic bubble-wrap over their soil and install powerful electric fans to circulate air between the plants. It sounds farfetched but a photo of a high-tech wind tunnel demonstrates the practice. It is an ingenious technological fix, I note, but what about the hidden energy costs? One last photo: the local organic farm where I purchased the berries that morning.

By now, the students are primed for a contemplative experience. I invite them to perceive the color, shape, texture of the strawberry—to get curious about their berry, to wonder how it was grown, by whom, with what consequences. I then invite them to eat the berry, noticing whatever arises. After a couple of very quiet minutes, I raise the lights and take the collective pulse. The single-word responses come flowing down the room: *overwhelmed, delicious, guilty, amazed, confused, connected, disconnected, grateful*.

In one class that met just before the lunch hour, the final one-word response, *hungry*, made the room erupt in laughter. In such a moment, I had to make a quick choice: to let the energy dissipate or bring it back into focus. I opted for the latter by asking who heard their own experience in someone else's words. As always, nearly every hand went up. I then invited them to take two deep breaths to help digest the experience, restoring the sense of calm focus before the end of class.

pause" as an essential ingredient in the creative, imaginative process. Perhaps the most obvious example from everyday life is the regenerative value of sleep, a prerequisite to our sanity and our survival. In a sense, contemplative practices offer a form of conscious rest. By disengaging the mind from its habitual grooves through attending closely to the present, contemplative inquiry reorients the mind to the freshness of the moment, thereby opening the imagination to that which has not yet been imagined. By fostering personally relevant understandings of how everyday experience is

rooted in global ecological and human systems, instructors can literally bring the curriculum home and open up new possibilities for introspection and moral responsibility.

The inwardness of contemplative inquiry, however, is most likely to generate a truly creative response when it is carefully balanced with a return to the intersubjective space of dialogue with others. Otherwise the subjective pedagogical turn runs the risk of reinforcing a highly problematic tendency toward the individualization of environmental responsibility.9 In the example above, the strawberry in hand helps to turn the students' attention back to their own experience. Yet the challenges raised (How are most berries grown for market? What about the use of methyl bromide and bubble-wrap wind tunnels?) cannot be resolved at the level of individual action and lifestyle choices. Each of these systemic questions must ultimately be answered in the polis, the interhuman arena of collective action, and not merely at the checkout counter or in the household. It is therefore crucial that classroom practices transcend individual subjective experience; otherwise, they run the risk of reinforcing the solipsistic proclivity of an individualistic culture. Meeting the challenges of the New Earth will likely require new modalities of both individual and collective wisdom.

A first step in making a creative response, for the individual and the collective, is to envision new possibilities. If we cannot imagine a viable future, then we are unlikely to create one. As the economist Kenneth Boulding said:

The image of the future ... is the key to all choice-oriented behavior. The general character and quality of the images of the future which prevail in a society is therefore the most important clue to its overall dynamics. The individual's image of the future is likewise the most significant determinant of ... personal behavior. <sup>10</sup>

Contemplative inquiry opens up the space for envisioning new possibilities—not by rushing to fix the problem or projecting one's conditioned thinking into the future, but rather by being fully present to the fecundity of not knowing and thereby opening oneself to fresh perceptions and insights.

The Self as Seed exercise is designed to help students in my food politics course develop the sustained attention and basic confidence that make for a genuinely creative response. This inquiry serves much the same function that Who Am I in a Changing Climate? serves in my global environmental politics course: to encourage my students to contemplate their entry into full adulthood in a complex world. Although I never say so explicitly,

#### Box 5.4

#### Self as Seed

Toward the end of my world food politics course, I guide the students through a number of contemplative exercises around food as metaphor. At the end of my lecture on the global politics of seeds, I guide them through a somatic experience of themselves as seeds.

I first point out that in some languages, the word for "seed" is the same as the word for "intention." This being an upper-level course at the end of spring quarter, I then ask who will graduate either this year or next. Nearly every hand goes up. I ask them to keep their hands up if what they will do after graduation is on their minds. Nearly every hand stays up. I offer them Frederick Buechner's words to the effect that one's calling is the place where one's deep joy meets the world's great hunger, a place we might consider as our core intention that we plant in the world's soil. I then darken the room and ask the students to stand with their eyes closed or downcast in order to attend to their inner experience.

"Consciously plant your feet on the ground. Feeling your weight evenly distributed across the balls of your feet and heels, observe the effect of gravity on your body. Feel the weight of your tailbone and your center of gravity somewhere in your lower abdomen. Notice what happens if you imagine yourself as sending your roots downward. Standing with relaxed yet alert attention, notice the sensations.

"Now imagine the top of your head lifting subtly towards the sun. Relax your breath. Notice the simultaneous downward pull of gravity and the upward attraction to light, much like a germinating seed. Enjoy the simplicity of consciously planting yourself on the Earth.

"Without losing your focus, take your seat. As you plant your butt on the seat, notice the sense of relaxation downward. Again, imagine your roots reaching down from your feet and tailbone. Consider that the Earth's gravitational field determines your roots' directionality. Astronauts report that a seed germinated in outer space sends its roots out in all directions. So from the moment of your birth until the moment of your death, gravity orients you. And by telling you which way is down, gravity also tells you which way is up. With relaxed yet alert attention, notice the feelings in your body.

"Once again imagine the top of your head lifting subtly towards the sun. Relax the breath. Notice the downward pull of gravity and upward attraction to light. Enjoy the simplicity of the sensations. Into the silence, ask the questions: 'What is my intention? What am I seeding? Where am I planting myself?' Observe what arises without judgment and without getting lost in any stories that might come up: simply listen and feel.

"Now slowly open your eyes and take a few minutes to gather the harvest by reflecting quietly or writing." A natural way of reestablishing the cohesiveness of the group is to "take the classroom pulse."

because I want them to trust their own experience over my interpretations, this particular somatic exercise can also elicit a visceral sense of being "of the Earth" and therefore being capable of accessing one's innate earthly intelligence.

#### Conclusion

According to developmental leadership researcher Sharon Parks, <sup>11</sup> the threshold of emerging adulthood is marked by the cultivation of critical thought and a corresponding recasting of one's relationships, including one's relationship to authority. This entails an intellectual and emotional journey from dependence on assumed sources of authority, which in turn entails relentless inquiry and discernment: What is true and worthy of trust? Who am I really? What matters? In what and with whom can I invest my life? By what narratives do we live and die? In taking responsibility for her own thinking, an emerging adult ripens to the task of composing "a worthy dream" for her life. For Parks, emerging adulthood is a "stem-cell moment in human becoming." At this critical juncture between conventional knowing and critical-connective thought, a strong mentor can serve as a "developmental lure."

But what does it mean to come of age when it is increasingly evident that prevailing institutions, practices, and values are unraveling the tapestry of life? And what does it mean to serve as a mentor under these conditions? No doubt, we as global environmental politics instructors have a responsibility to teach the relevant facts, concepts, and theories, but in our capacity as mentors, we are also called on to attend to their larger experience at the threshold of adulthood. In the arena of contemplative inquiry, the point is not so much to have the right answers but to have the courage to not know, the skillfulness to help guide our students into the depths of their own experience, and the compassion to abide with them there as their native wisdom unfolds.

#### Notes

- 1. Eaton, Hughes, and MacGregor, eds., Contemplative Inquiry for Sustainability Education.
- 2. Greenspan, Healing through the Dark Emotions.
- 3. Sega, Williams, and Teasdale, Mindfulness-Based Cognitive Therapy for Depression.

- 4. Barsalou, "Mindful Attention Prevents Mindless Impulses."
- 5. Sega, Williams, and Teasdale, Mindfulness-Based Cognitive Therapy for Depression.
- 6. Wapner, "Contemplative Environmental Studies."
- 7. Abram, Becoming Animal.
- 8. Princen, The Logic of Sufficiency.
- 9. Maniates, "Individualization,"
- 10. Boulding, Foreword.
- 11. Parks, "Human Development and the Power of Pause."

## **Bibliography**

Abram, David. Becoming Animal: An Earthly Cosmology. New York: Vintage, 2011.

Barsalou, Lawrence. "Mindful Attention Prevents Mindless Impulses." In *Proceedings of the International Symposia for Contemplative Studies*. 2012. http://contemplativeresearch.org/proposals/presentation-abstracts.

Boulding, K. Foreword. In *The Image of the Future*, edited by Fred Polak and Elise Boulding. Amsterdam: Elsevier, 1973.

Eaton, Marie, Kate Davies, Sarah Williams, and Jean MacGregor. "Why Sustainability Education Needs Pedagogies of Reflection and Contemplation." In *Contemplative Inquiry for Sustainability Education: Teaching the World Whole*, edited by Marie Eaton, Holly Hughes, and Jean MacGregor. Forthcoming.

Eaton, Marie, Holly Hughes, and Jean MacGregor, eds. *Contemplative Inquiry for Sustainability Education: Teaching the World Whole* . London: Routledge, forthcoming.

Greenspan, Miriam. *Healing through the Dark Emotions: The Wisdom of Grief, Fear, and Despair*. Boston: Shambhala, 2004.

Kabat-Zinn, Jon. Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness. New York: Delta, 2009.

Maniates, Michael. "Individualization: Plant a Tree, Buy a Bike, Save the World?" *Global Environmental Politics* 1, no. 3 (2001): 31–52.

Parks, Sharon. "Human Development and the Power of Pause." In *Contemplative Inquiry for Sustainability Education: Teaching the World Whole* edited by Marie Eaton, Holly Hughes, and Jean MacGregor. Forthcoming . (forthcoming).

Princen, Thomas. The Logic of Sufficiency. Cambridge, MA: MIT Press, 2005.

Schmidt, S., and H. Walach, eds. *Meditation: Neuroscientific Approaches and Philosophical Implications*. New York: Springer, 2013.

Sega, Zindel V. J., Mark G. Williams, and John D. Teasdale. Mindfulness-Based Cognitive Therapy for Depression, 2nd ed. New York: Guilford Press, 2012.

Wapner, Paul. "Contemplative Environmental Studies: Pedagogy for Self and Planet." Retrieved June 28, 2015, from http://www.contemplativemind.org/archives/313.

# Make Way for Hope: A Contrarian View

Michael F. Maniates

Most people are eagerly groping for some medium, some way in which they can bridge the gap between their morals and their practices.

—Saul Alinsky (1969)

Hope. This one small word weighs heavy, like an important obligation unfulfilled, in conversations about teaching and learning on the New Earth—at least it does for me, and I'm surely not alone. For thirty years I've struggled to balance an honest recitation of what ecological economist Herman Daly and theologian John Cobb call the "wild facts" of environmental disaster with a sensitivity to my students' need for hope. It's a mental disaster with a sensitivity to my students' new vexing Goldilocks problem. Too much classroom focus inevitably produces emotional responses that Karen Li chapter 5: feelings of being overwhelmed, cynicism, dhopelessness. But anything less than straight talk about the collective predicament feels cowardly and paternalistic enormity of the environmental challenges looming on some attempt to keep hope alive violates the obligation and teacher alike, to look reality squarely in the eye of Before being booted out by the Bear family, Goldilocks of chair, and bed that was "just right," but it's a tougher see in the global environmental politics classroom—and for cymakers too. As students, professors, and practitioner and act with a loose faith that knowledge equals power a will spawn hope. But we are also aware of the more like work, captured some time back by comedian Paula Pout asked, "What moron said that knowledge is power? K only if it doesn't depress you so much that it leaves you heap at the end of your bed."

BBSCO Publishing: BBSCO BBSCO Publishing: BBSCO vexing Goldilocks problem. Too much classroom focus on these wild facts inevitably produces emotional responses that Karen Litfin documents in chapter 5: feelings of being overwhelmed, cynicism, despair, apathy, and hopelessness. But anything less than straight talk about the enormity of our collective predicament feels cowardly and paternalistic. Soft-pedalling the enormity of the environmental challenges looming on the horizon out of some attempt to keep hope alive violates the obligation, shared by student and teacher alike, to look reality squarely in the eye no matter the cost. Before being booted out by the Bear family, Goldilocks found the porridge, chair, and bed that was "just right," but it's a tougher search for those of us in the global environmental politics classroom—and for activists and policymakers too. As students, professors, and practitioners, we teach, learn, and act with a loose faith that knowledge equals power and that this power will spawn hope. But we are also aware of the more likely outcome of our work, captured some time back by comedian Paula Poundstone when she asked, "What moron said that knowledge is power? Knowledge is power only if it doesn't depress you so much that it leaves you in an immobile

No one likes the Paula Poundstone scenario, where knowing more about mounting ecological injury produces disempowered or broken students. No doubt that is why a great deal of ink has been spilled on hope in the classroom of the Anthropocene. For example, writers like Oberlin College professor David Orr argue that hope, as opposed to optimism (the latter is what we feel when the odds are with us, while the former is what we marshal when they're not), is essential to a more just and sustainable world.<sup>3</sup> Without hope, all is lost. Others, including environmental activist Derrick Jensen, bristle over all this "hope talk." Looking to others for hope blinds us to our own strengths, says Jensen, and waiting for hope delays the difficult and sometimes dismal work of building a just and sustainable world. Less hoping and more doing, please. Orr and Jensen are but two examples of widening conversation about this thing we call "hope," a conversation critical to education in the Anthropocene.

In light of these contradictory impulses (hope is necessary, but waiting and hoping for hope is disempowering), how should educators of global environmental politics best respond? By engaging in "contemplative education" that Litfin so wonderfully describes in chapter 5? Through realworld projects that expose students to the joys of collective action? By revisiting anew the limits of ecological literacy? By reframing environmental problems as products of domination and injustice and highlighting the many ways in which the oppressed are already fighting back? Or maybe by acknowledging and accepting the coming collapse, and exploring skills and institutions best matched to the hard times ahead?

The answer, it seems, is "it depends"—on the nature of the course, the strengths and temperament of the teacher, the culture of the institution, the intellectual traditions of the field, the expectations of the students, and the vulnerabilities of the faculty member. Some faculty will opt for experiential education to teach hope; others may invoke narratives of "ecowarriors" to inspire. It is all terribly idiosyncratic and personal, but in ways that are utterly expected. After all, as Parker Palmer reminds us in *The Courage to Teach*, teaching is an intensely personal affair. And the best teaching—including teaching that nurtures hope—doesn't flow from some snappy collection of teaching techniques or classroom exercises, but rather from self-knowledge about one's identity and integrity in the classroom—what Palmer calls the inner landscape of teaching. Imagining that this must sound odd to some readers, Palmer offers the following:

My concern for the inner landscape of teaching may seem indulgent, even irrelevant, at a time when many teachers are struggling simply to survive. Wouldn't it be

more practical, I am sometimes asked, to offer tips, tricks, and techniques for staying alive in the classroom, things that ordinary teachers can use in everyday life? The question puzzles me, because for twenty years I have ... worked with countless teachers, and many of them have confirmed my own experience: as important as methods may be, the most practical thing we can achieve in any kind of work is insight into what is happening inside us as we do it. The more familiar we are with our inner terrain, the more surefooted our teaching—and living—becomes.<sup>10</sup>

Palmer isn't alone in his claim that powerful teaching flows from introspective educators comfortable in their own skin. There is a rich and engaging literature on the subject to which Litfin's chapter now belongs. 11 At a time when professors like me are packing more material into their classes (not, I promise, out of some perverse hatred of students but rather from a misguided desire to do full justice to the complexities of the Anthropocene), Litfin reminds us that surefootedness comes from self-knowledge and that self-knowledge demands contemplative practice.

Indeed, we all need to slow down in the classroom. Quantity does not equal quality, as Litfin's inspiring students so vividly demonstrate. Their easy embrace of her curricular innovations affirms an understanding of human nature advanced by scholars ranging from biologist E. O. Wilson<sup>12</sup> to psychologist Tari Sharot<sup>13</sup> to mathematician Peter Dodds,<sup>14</sup> and employed by political organizers inspired by Saul Alinsky (quoted at the start of this chapter), Miles Horton, or Paulo Freire<sup>15</sup>: we are naturally and inexorably inclined toward hope. Hopefulness is stamped in our genes and prowls our neurology. It permeates language. We can no more be taught to be hopeful than instructed on how to breathe or digest our food. The best our teachers can do (and it's a critically important task, to be sure) is to illuminate the bonds that shackle our innate hopefulness and diminish our creativity and resolve.

Here is where this chapter turns contrarian. Despite the accepted view among my professor colleagues that we must somehow "teach hope" in our courses, and notwithstanding the common student complaint of "I wish the class was more hopeful," the first step toward a pedagogy of hope for the New Earth is to abandon the misplaced, even arrogant belief that educators can or should teach hope in any systematic or enduring way. We already are a naturally hopeful species—and thus there is no need to waste time devising an Anthropocenic pedagogy that strives to instill hope in students. Instead, a pedagogy for the future must be deaf to student complaints that the facts of life in the New Earth are deeply distressing and persistently depressing. It is a pedagogy that will respectfully listen to classroom questions like, "Is there hope?" "How do I find

hope?" or "How do I remain hopeful?" But it will offer no answers in return. It is a pedagogy delivered by educators who understand their own inner landscape, seek authenticity in the classroom, and see in their students an inherent hopefulness waiting to burst forth. It is a pedagogy preoccupied with highlighting and dismantling the myths and misperceptions that separate students and teachers alike from their own reservoirs of creative hope.

And so it's worth repeating: the problem we face is not some dearth of hope. It is a set of walls and canals, many of which are unwittingly produced and reproduced in the classroom, that funnel and imprison our hopefulness in cell blocks of immobility and despair. Attack these structures and answers to students' questions about hope will emerge organically and spontaneously. Litfin's mentors did this for her—and her chapter is best read not as a how-to guide for contemplative education (recall Palmer's words above) but as a story of introspection and self-discovery that delivered her to an authentically hopeful place in her work. Perhaps teaching for hope is little more than this, and as much as this.

What, then, are these structures that separate us from our innately creative hopefulness? Alas, much that has been written on this question for global affairs educators<sup>16</sup> has gone unnoticed, and relevant treatments outside environmental studies<sup>17</sup> have been largely ignored. This isn't surprising. My own sense, after facilitating or participating in several "teaching hope" roundtables and panels at professional conferences, is that educators and students quickly plunge into the nuts-and-bolts of teaching techniques for fostering hope. Like moths to a flame, we are drawn to the erroneous notion that a lack of hope is the problem to be solved. The counterformulation—that there are forces afoot that imprison our innate hopefulness—is pushed to the shadows.

To move this argument forward, the remainder of this chapter explores eight myths and misperceptions that stifle hope and then offers one example, the trinity of despair, to illustrate how these myths can interact to shackle hopefulness. The chapter ends with a personal note to those intrepid readers who make it that far.

## Myths and Misperceptions

Some subset of the following eight myths and misperceptions lurk in the global environmental affairs classroom (see box 6.1). They either go unnoticed or are accepted as established fact by students and professors, and thus

#### Box 6.1

## **Eight Hope-Restricting Myths and Misperceptions**

- 1. The state prevails.
- 2. Complexity makes action impossible.
- 3. You'll never get people to sacrifice.
- 4. We just don't have the right values.
- 5. Things change only in a crisis.
- 6. If everyone does a few simple things, we can change the world.
- 7. A good way to mobilize people politically is to start them with small "green" lifestyle changes.
- 8. Bottom-up change is good; top-down change is bad.

remain unchallenged. Expose and question them, and room for hope grows.

1. The state prevails. Global environmental change is transnational in character and global in reach. And yet despite the limited utility of a state-centric lens on global environmental affairs, we see what Ken Conca calls "the persistent personification of sovereign states." 18 "The problem," Conca notes, "is not that we pay too much attention to the state but rather that in doing so we allow cartoonish ahistorical personified imagery to shape our view of what a state really is." This personified imagery of "Brazil needs, China wants, or America refuses" miscasts the problem of global injustice, distorts the nature and distribution of power, and hides some of the most empowering responses to global environmental ills. The statist lens reifies the nation-state as the principal agent in environmental affairs and dominates for a variety of reasons: the ubiquity of national data in the field, the weight of intellectual history, the relative ease with which state behavior can be documented and studied, and the ways in which nonstate activity lives on the margins of discourse (per Paul Wapner's chapter 15).

If left underproblematized, this statist frame stifles hope, for it comes to appear as the only viable lens through which we might see the world. As a result, our attention gravitates to political struggle at the national level, where the price of entry into the conversation seems impossibly high and environmental concerns are too often an afterthought. More promising (and hopeful) domains of political action escape our gaze.

2. The hegemony of complexity. On a grand scale, global environmental challenges are understood as a product of complex human systems interacting with complex natural systems, producing a host of "wicked" and "superwicked" problems that defy easy solution. Additionally, specific instances of these problems (e.g., overconsumption or the depletion of water resources) frequently arise from layered political-economic forces interacting at multiple levels over time. At some point, the weight of this complexity sidelines questions of power and agency, making any action seem meaningless. As I suggest elsewhere, "It may come to seem that no single actor has the power to alter [outcomes] arising from the intricate interplay of social, cultural and material forces, and that the notion of power itself, diffused across an expanding set of nearly autonomous practices and norms, is little more than a quaint concept. Agency becomes ephemeral. Social change ... seems unpredictable and episodic."<sup>21</sup>

If the story of complex systems stops at this point, where complexity itself is overwhelming and disempowering, then our inherent hopefulness is challenged. We must remember that complex systems also offer positive feedback loops and thresholds that can transform small and strategic interventions into large and positive system changes—"the punctuated equilibrium of hope," if you will—where social systems and political life suddenly shift for the better.<sup>22</sup> When this aspect of the systems-complexity story goes untold or underanalyzed, as it too often does in the classroom, the hegemony of complexity needlessly marginalizes hope.

3. The impossibility of sacrifice (a.k.a. "evolutionary wrong turn"). Sacrifice—the giving up of something valuable now for the possibility (but not the promise) of benefits, individual or collective, in the future—is generally assumed to be an impossibility in environmental politics.<sup>23</sup> In this view, we are the products of an "evolutionary wrong turn"<sup>24</sup> that produced clever and nimble bipeds that are inherently shortsighted, selfish, and materially acquisitive. They are destroying the planet and themselves. Although this narrative of defective human nature can be dismantled on any number of fronts, not the least of which is evolutionary,<sup>25</sup> it still holds influence in the global environmental affairs classroom. It may be the most potent impediment to hope, yet one of the easiest claims to creatively interrogate with students. Individual and collective sacrifice, both voluntary and involuntary, surrounds us daily. Rather than simply conclude that "people will never sacrifice for the environment/future generations/sustainability," it is more rewarding, intellectually and

- politically, to assess those conditions under which sacrifice occurs, often joyfully and voluntarily, and to consider how these conditions can be reproduced and scaled.
- 4. *The quicksand of values*. The absence of proenvironment values or "environmental consciousness" is sometimes perceived as a principal driver of global environmental decline. In this formulation, navigating the Anthropocene without destroying the planet, and ourselves, demands fundamental change in cultural software and human perception. For some who hold this view, the problem lies with human nature; for others, "bad" values are the product of other forces that include the weight of history (e.g. an expansionist value set that served us well when environmental space was abundant), industrial capitalism and its creation of consumers, a growing disconnect with nature, long chains of production and consumption that distance us from the impacts of our actions, and educational systems that direct us away from an intense consciousness of the land.<sup>27</sup>

Cultural orientations toward nature and societal value sets are important factors in global environmental affairs, but conversation about them often degrades into wobbly claims about human nature (as in "people just don't care about the environment") and the pace of change (as in "societal values must change, and that is always a long process"). It is also common to assume that individuals lack the values necessary to a sustainable society, as opposed to recognizing that existing "sustainable" values already reside within us, just waiting to be primed.28 Avoiding the quicksand of this hope-marginalizing trifecta requires careful classroom scrutiny of the connections among values, environmental degradation, and social change. Complicating the meaning and role of values in environmental politics can be helpful here. For instance, investigating the "environmental values-behavior gap," where strong environmental values fail to yield environmentally sustainable behaviors, can create classroom space for understanding values as just one of many elements in a politics of sustainability, with other, more malleable factors (e.g., structures, habits, and options in everyday life) emerging as equally, if not more, important.

5. *The prime driver: crisis*. Faith in the restorative effect of crisis runs deep in the student psyche.<sup>30</sup> The belief that social change occurs only during crisis is the inevitable result of myths 3 and 4, though it must be the right kind of crisis: not so small as to be ignored but not so devastating as to overwhelm. Such crisis thinking locks our innate hopefulness into a dark and tiny closet by stating as fact the tenuous claim that

individuals and their leaders cannot change absent external coercion. This view is blind to the many important social, political-economic, and technical changes that have occurred in the absence of crisis. It also ignores the unsettling fact that crisis does not typically privilege progressive, thoughtful, longer-term thinking. Agents of social change should never waste a good crisis. But believing that change happens only in the midst of crisis infantilizes our own capacities to alter our world and offers few avenues for meaningful action beyond attempts to accelerate the onset of crisis.

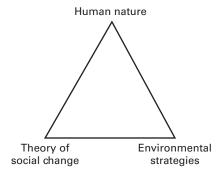
- 6. Every little thing helps. As the Pulitzer Prize-winning journalist Thomas Friedman observes in his "205 Easy Ways to Save the Earth," doing the "small and easy things" to save the environment has become the overarching mantra for contemporary environmental politics.<sup>31</sup> Saving the planet becomes a lifestyle choice rather than a political act. This thinking, familiar to us all and alive and well in the global environmental politics classroom, asserts that small, individual acts of environmental consciousness model good behavior for others, who will be inspired to act accordingly. The aggregation of these millions, if not billions, of small acts (taking shorter showers, eating less meat, reusing containers, and the like) will then translate into significant political and economic change. This understanding of personal agency and social change appears to create room for hopefulness; we can all be productive agents of change without engaging in difficult political struggle. In fact, in ways described in the following section, this view fosters a theory of social change, a politics of guilt, and a growing faith in crisis that is the antithesis of hope.
- 7. The escalator theory. Ever since the backlash against mainstream environmental policymaking in the 1980s, environmental activists and practitioners have embraced the notion that individual acts of green consumption and lifestyle change are ultimately politicizing. The hope, then and now, is that small and easy environmental behaviors activate what US environmental leader Annie Leonard calls our "citizen muscle," and lead to more environmental activism in a variety of political spaces. This is sometimes known as the escalator theory: start people off with something easy, like buying an energy-efficient lightbulb, and before you know it they'll be engaged citizens fighting for better energy policy. Alas, despite recent scholarship sympathetic to the escalator theory, this notion remains more wish than fact: green consumption and environmental activism are at times correlated, but little evidence suggests that this escalator view accurately

- describes the connection. (It is most likely that committed environmentalists engage in political action and adopt small lifestyle and consumption changes, without the latter driving the former). This is a version of myth 6 and suffers from the same deficiencies, described in the next section.
- 8. Top down versus bottom up. If there is one common article of faith in the global environmental politics classroom, it may be that necessary change in key institutions will come from mass mobilization from below rather than elite action from above. In this view, elites are too heavily invested in the status quo, and even if they aren't, the concentration of power and wealth typical of most societies—facilitated or accommodated by elites—in and of itself privileges and perpetuates global environmental ruin. And so bottom-up, mass mobilization it is. This binary view of agency and social change so common to the classroom is attractive for its simplicity, but it romanticizes the power and progressivity of local action while taking off the table a host of elite-driven interventions that could foster needed change. More fundamental, it tends toward a lack of engagement with power and privileges a view that social change occurs only when supermajorities are fully engaged around an issue. The ascendancy of this view in the classroom and the policy arena may be the single greatest constraint on the full flowering of hope, as the next section explains.

## The Trinity of Despair

While each of these eight elements alone can keep hope at bay, it is the interaction among them that is particularly troublesome. One especially disabling synergism that I observe in the classroom is what I call the trinity of despair (TOD). This section describes this trinity, which appears to me to be pernicious and widespread, operating under the radar of most classroom inquiry. The TOD stands as but one instance of how many of the elements I have described can converge to undermine our innate hopefulness. As teachers and students, we needn't talk explicitly about hope. We must simply recognize and disarm processes like the TOD through careful thinking and honest conversation. If we do that, hope will find its own way.

Consider figure 6.1, with human nature at the apex and environmental strategies and theory of social change at the corners. One can be drawn into the TOD at any of these three points; locating human nature at the apex



**Figure 6.1** The Trinity of Despair

does not mean that the TOD starts there, though for many students it does. Similarly, one can escape the TOD by challenging the assumptions about human nature and social change at any of these three points.

Let's arbitrarily begin with human nature at the top of the triangle. The human nature at work here is the narrowly self-interested, short-term thinking "I won't sacrifice" caricature of human beings. To subscribe to this view does not mean that one judges people as evil or mean-spirited. Instead, it is to see humans as Garrett Hardin saw them when writing about the tragedy of the commons many decades ago: rational, calculating, short-term maximizers of immediate benefit. Many of the students who join my global environmental affairs course hold this view—perhaps because of an earlier environmental science or studies course that celebrated Hardin's model, or because of a need to easily explain patterns of environmental simplification and decline. Blaming human nature is an easy and perhaps natural thing to do.

If one believes humans to be as Hardin describes, and if one is also attached to a bottom-up view of social change, then the best way of "saving the planet" is to appeal to humans with environmental strategies that focus on easy, cost-effective individual action—the strategies represented at the bottom right of the triangle. After all, Hardin's rational man isn't going to work hard on behalf of the environment. He won't support legislation that will increase his taxes or disrupt his way of life. He will be motivated by win-win measures that save him money; if these measures shrink his environmental footprint, that's a bonus. The best way to involve this rational man, at least initially, is through environmental

strategies that highlight small acts of green consumption. Consuming is something he likes to do.

For those who are drawn into the trinity of despair, getting individuals to adopt small consumer and lifestyle changes is just the beginning. TOD aficionados believe that as small groups of people begin to behave and consume more environmentally, perhaps by riding their bike or buying organic food, others will observe this behavior and jump on board. As this process builds, aided perhaps by the dissemination of information about the benefits of adopting these small measures, even more people will join in, and the cumulative benefits to the environment will become apparent. These environmental benefits will be inspirational, leading to even wider adoption of an array of simple and easy behaviors. Meanwhile, many of those who began with simple acts of green consumption will become politically active, thanks to the escalator effect, and policymakers will begin to feel pressure to change. They won't get much opposition from corporations, because consumers will be voting in the marketplace with their dollars for clean and green products. The result will be a more sustainable and just planet, initiated by small and easy changes that seemed insignificant at first but grew into a force to be reckoned with.

My current students call this the "many drops in the ocean" approach. Others with whom I've worked on campus sustainability issues understand it as "setting an example for social change." Still others think of it as the "starting people off with easy things, after which they'll move on to more difficult tasks" maxim. I find that many accept this to be a good and plausible strategy, especially given the belief that "most people" won't accept inconvenience or sacrifice to increase environmental quality.

This path forward also fits nicely into a narrative of change promoted by industry and government. For example, when the US Environmental Protection Agency many years ago launched its core energy-efficiency initiatives, one of the primary slogans splashed across its web pages was "buy a bulb and save the world" (the bulb being an energy-efficient one). The recycling bins just outside my office door, which are part of a government program, say "Recycle and Save the Planet!" Marketers of green products amplify the claim that we save the world with our small, individual actions of environmental conscientiousness—by buying one of their organic or recyclable or recycled products. For those still unsure of how to proceed, or why, there are seemingly countless books and websites that describe how we can save the planet in 5, 10, 20, or 101 ways.

Advocates of this approach agree that its success depends on a great many things: strong environmental education, good information campaigns, continued technological development that generates even more ways for people to save money and help the environment, and systems that fully communicate to individuals the environmental consequences of their consumption decisions. What these defenders miss, however, is the third corner of the trinity of despair. In their eagerness to make their plan work, they've neglected to fully interrogate the theory of social change that unavoidably flows from the "small things save the world" perspective. And that is their undoing.

This theory, in a nutshell, is that change happens when you get everyone (or almost everyone) on board. Change won't happen, moreover, until you do. Environmental strategies that revolve around small tweaks to lifestyle and consumption choices require mass participation. It's simple math: small things add up to big outcomes only if there are lots of small things happening. Change through mass commitment and participation is also a big part of the larger narrative—environmental advertisements like "If everyone recycled their phone book, we'd save 10,000 trees a year" or "If everyone moved to energy-efficient lighting, we could shut down five coalfired power plants" are ubiquitous. Corporations won't change their practices unless there is a huge shift in buying patterns. Governments won't change policy unless a whole lot of people get on the escalator that moves them from ecoshopper to noisy citizen. My clueless neighbor won't start composting until all his neighbors do, at which point he'll awkwardly realize that he's the odd man out. There is way no around it: a bottom-up, small-and-easy strategy tailored to shortsighted consumers leads inexorably to a theory of social change that demands dedicated participation by the masses. And this spells trouble.

The "despair" in the TOD arises when this theory of social change is accepted as truth by those who seek to improve the world. In fact, the notion that we change the world through small interventions spread across large populations is wildly inaccurate. During periods of mobilization for change, you *never* get everyone on board—not even close: not with the end of slavery, not with women's suffrage, not with the rise of economic liberalism, and certainly not with any shift toward political and economic structures conducive to environmental sustainability. Change typically happens through the determined and strategic action of small minorities within a population, with the rest being slowly pulled along.

This fact of political life is difficult to see for individuals trapped in the trinity of despair. It challenges their entire view of how change occurs. And

that has costs. So, for instance, instead of celebrating that 15 to 20 percent of Americans regularly engage in determined green behavior (a remarkable level, given the structural incentives in the United States to be anything but environmentally sensitive), and strategizing about how to further mobilize this dedicated minority, those caught in the TOD will highlight the other 80 to 85 percent of the population as further proof of the ignorance and selfishness of humans. Those drawn into the TOD have been set up to struggle for an impossible goal of full participation wrapped around a deceptive theory of social change.

When those trapped in the TOD observe that they aren't getting the supermajorities they need to practice environmentally sound behaviors, they logically respond with more environmental education and information. When that doesn't work, their next step is guilt and blame; if we can't reason with people rationally, the thinking goes, we'll shame them into appropriate behavior. To my eye, this is the single most powerful explanation for why the environmental movement, which used to celebrate the human spirit and the potential of the possible, has succumbed to an ineffective politics of guilt. To the extent that this is true, it is not because the environmentally concerned are naturally judgmental or dictatorial. It is because their theory of social change—a theory that says, come hell or high water, we need to get everyone on board doing the little things, and if information won't work, then guilt might—requires them to be this way.

The students, activists, and policymakers I know who stay trapped in the TOD move in one of two dismal directions. Some conclude that human beings are even more shortsighted and narrow-minded than they initially believed, and they start their path around the triangle with more intensity and vigor. They work harder to figure out even easier, more attractive, and economical environmental strategies. They try to come up with snappier ways of communicating environmental information. They struggle and strive to draw even more people to green lifestyles, first through example and then by guilt. They are never effective in getting everyone on board, but they work hard, all the while losing faith in their fellow humans and despairing for the planet.

Others trapped in the TOD simply conclude that people have "bad values" that produce a lack of broad and enduring interest in easy environmental lifestyles. They see no option other than waiting for some ecocalamity to come along that will teach the uncaring the error of their ways, realign environmental values, and move policymakers in the right direction.

Both reactions are antithetical to hope. They are inevitable responses, however, of initially hopeful (even idealistic) individuals who became trapped in an interlocking set of plausible but inaccurate assumptions about how people behave and how social change occurs. These responses explain much about the cynicism and despair I see in many of my students and in some of my activist colleagues.

Escaping the TOD isn't difficult, however, once you know you're in it. Getting out requires entertaining alternate ideas about the nature of humans, how societies change, the kinds of environmental strategies that inspire and mobilize, and the dangers of a dogged commitment to mass mobilization. So, for instance, learning about theories of social change that highlight how small segments of a population can reengineer culture toward sustainable ends has catapulted some of my students out of the TOD and toward creative, hopeful thinking about social change. Other students have escaped through careful inquiry into elite-driven mechanisms of "choice editing" for sustainability, where a small minority structures everyday life to make it natural and normal to behave in environmentally sustainable ways.<sup>36</sup> Still others are intrigued by thinking strategically about human psychology and the propensity for sacrificial behavior. Of course, these strategies are not without their own complications. Just who are these elites doing the cultural engineering and choice editing, for instance, and how will they be accountable to the larger public? And who is doing the sacrificing, and who isn't, and is this fair? But these are complications with creative and hopeful answers, grounded in a more accurate understanding of the fluidity of human behavior and the dynamics of social change.

## And to Avoid Any Misunderstanding

Some of you will note that I have neglected the other side of the hope coin, which is the naive hope that "everything will work out fine" that my colleagues and I are increasingly seeing in the classroom. This hope rests on the shaky assumption that when things get bad environmentally, prices for products will shift to drive the development of new technologies that will solve our problems. The interplay between price and innovation can be a powerful force, but the fallacy underlying this sort of hope should be clear to students of environmental systems. Much of the environmental damage we're risking is characterized by irreversible thresholds, like driving a car off a cliff or pushing grandmother's fine china cup off the table and seeing it shatter on the floor. The "rising-prices equals

nifty-technologies that solve the problem" dynamic may work for slowly worsening problems with adequate time for innovation, but it's a poor foundation for hope when dealing with rapidly changing systems that can surprise you, and for which there is no easy or immediate technological solution to environmental damage or resource depletion. Too many of my students underappreciate these arguments; their faith in technological innovation driven by the price mechanism seems unassailable. The hope that springs from this naïveté is disconcerting and counterproductive, and deserves far more attention than I've given it in this chapter.

In addition, my reflections here could be read as giving the cold shoulder to hope in the classroom, or perhaps as disparaging techniques for teaching hope developed by others. Neither was my intent.

I have long been a fan of method and technique for inspiring and soothing my global affairs and environmental studies students. I confess to smarting whenever comments like, "Wow, what a depressing class. Why couldn't you have been more hopeful?" pop up on my teaching evaluations. For a few years in one of my classes, I actually scripted one reading or exercise a week that was meant to address the "hope issue." But I confess to having never been satisfied with this response, as diligent as it was.

As I worked through this chapter, I came to conclude that there are no genuine techniques or tools for teaching or learning hope. It is ultimately conceit to think otherwise. As professors, we don't try to teach empathy or love or compassion in the classroom, do we? And as students, we aren't troubled by a class if it fails to teach us courage or thrift or prudence, are we? So why does hope get special billing? Why, to some extent, have students and their teachers been drawn into a codependent relationship where we each expect to have hope in our hearts at the end of the term?

Our job in the academy, as teachers and students, is to expose myth and uncover the truth. Doing that, in ways that obliterate the fraudulent obstacles to hope, is how we best cultivate optimism and action for a New Earth.

#### Notes

- 1. Daly and Cobb, For the Common Good.
- 2. Poundstone, "Lean, Green Fighting Machine," 80.
- 3. Orr, "Optimism and Hope in a Hotter Time" and Hope Is an Imperative.
- 4. Jensen, "Beyond Hope."

- 5. Maniates, ed., Encountering Global Environmental Politics.
- 6. Hempel, "Ecoliteracy."
- 7. Di Chiro, "Living Environmentalisms"; Evans, Occupy Education.
- 8. Assadourian, "Building an Enduring Environmental Movement."
- 9. Palmer, The Courage to Teach.
- 10. Ibid.. 5.
- 11. See, for example, Ayers, "Teaching as an Ethical Enterprise"; Brookfield, *Becoming a Critically Reflective Teacher*; Horton et al., *We Make the Road by Walking*; Horton and Jacobs, *The Miles Horton Reader*.
- 12. See McDonough and Braungar, "Foreword to the Chinese Edition of Cradle to Cradle."
- 13. Sharot, The Optimism Bias.
- 14. Dodds et al. "Human Language Reveals a Universal Positivity Bias."
- 15. See Horton et al., We Make the Road by Walking.
- 16. See, for example, Conca, "Imagining the State."
- 17. See, for example, Lappe and Lappe, Hope's Edge.
- 18. Conca, "Imagining the State," 77.
- 19. See, for example, Rittel and Weber, "Dilemmas in a General Theory of Planning"; Balint et al., *Wicked Environmental Problems*; Levin et al. "Overcoming the Tragedy of Super Wicked Problems."
- 20. See, for example, Sayer's 2012 critique of one way of analyzing overconsumption: "Power, Sustainability and Well-Being."
- 21. Maniates, "Sustainable Consumption."
- 22. Baumgartner et al., "Punctuated Equilibrium Theory."
- 23. Maniates and Meyer, The Environmental Politics of Sacrifice.
- 24. Orr, Hope Is an Imperative.
- 25. Judson, "The Selfless Gene."
- 26. See, for example, Litfin, Ecovillages.
- 27. Princen, Treading Softly.
- 28. Gunster, "Self-Interest, Sacrifice, and Climate Change."
- 29. Kennedy et al., "Why We Don't `Walk the Talk."

- 30. Maniates, "Teaching for Turbulence."
- 31. Friedman, Hot, Flat, and Crowded.
- 32. Leonard, The Story of Stuff.
- 33. See, for example, Lorenzen, "Convincing People to Go Green."
- 34. I began to suspect there was a trinity of despair (TOD) on my return from international teaching in 2005. My time away sensitized me to what I'd taken to be normal back home. Since then I have gently queried my environmental studies and global affairs students about the fit of the TOD to their experience while serving at three rather different institutions: Allegheny College in Meadville, Pennsylvania; Oberlin College in Oberlin, Ohio; and Yale-NUS College in Singapore. I have also shared the TOD in several guest lectures around the United States and at workshops at international conferences. A large majority of students report that the TOD accurately describes their experience or the experience of others with whom they closely interact around environmental concerns. For many, the TOD is something of an epiphany. But then again, perhaps in some way I primed my audiences for this response. I've sought to build on this anecdotal evidence with more thorough and systematic data gathering to assess the factors underlying the TOD. A national US survey of undergraduate students in environmental studies and science programs in 2009 and 2010 (Rigotti, Environmental Problem Solving) offers tentative support for the TOD. More ambitious survey work, now underway with help of advanced environmental studies undergraduates at Oberlin College and Yale-NUS College, suggests that the TOD is more pronounced across the US undergraduate classroom than I'd initially suspected.
- 35. Hardin, "Tragedy of the Commons."
- 36. Maniates, "Editing Out Unsustainable Behavior."

#### **Bibliography**

Alinsky, Saul. Reveille for Radicals. New York: Vintage Press, 1969.

Assadourian, Erik. "Building an Enduring Environmental Movement." *In State of the World 2013: Is Sustainability Still Possible?* edited by Erik Assadourian, Tom Prugh and Linda Starke, 292–303. Washington, DC: Island Press, 2013.

Ayers, William. "Teaching as an Ethical Enterprise." *Educational Forum* 63, no. 1 (Fall 1998): 52–57.

Balint, Peter, Ronald Stewart, Anand Desai, and Lawrence Walters. *Wicked Environmental Problems: Managing Uncertainty and Conflict*. Washington, DC: Island Press, 2011.

Baumgartner, Franks, Byron Jones, and Peter Mortensen. "Punctuated Equilibrium Theory: Explaining Stability and Change in Public Policymaking." In *Theories of the Policy Process*, 3rd ed., edited by Paul Sabatier and Christopher Weible. 59–103. Boulder, CO: Westview Press, 2014.

Brookfield, Steven. *Becoming a Critically Reflective Teacher*. San Francisco: Jossey-Bass, 1995.

Conca, Ken. "Imagining the State." In *Encountering Global Environmental Politics*, edited by Michael Maniates, 71–86. Lanham, MD: Rowman & Littlefield, 2003.

Daly, Herman, and John Cobb. For the Common Good. Boston: Beacon Press, 1989.

Di Chiro, Giovanna. "Living Environmentalisms: Coalition Politics, Social Reproduction, and Environmental Justice." *Environmental Politics* 17 (2008): 276–98.

Dodds, Peter, Eric Clark, Suma Desu, Morgan Frank, Andrew Reagan, Jake Ryland Williams, and Lewis Mitchell. "Human Language Reveals a Universal Positivity Bias." *Proceedings of the National Academy of Sciences of the United States of America* 112 (2015): 2389–2394.

Evans, Tina Lynn. *Occupy Education: Living and Learning Sustainability*. New York: Peter Lang, 2012.

Friedman, Thomas. 2009. Hot, Flat, and Crowded: Why We Need a Green Revolution—and How It Can Renew America, Release 2.0. New York: Picador.

Gunster, Shane. "Self-Interest, Sacrifice, and Climate Change: (Re-)Framing the British Columbia Carbon Tax." In *The Environmental Politics of Sacrifice*, edited by Michael Maniates and John Meyer, 187–216. Cambridge, MA: MIT Press, 2010.

Hardin, Garrett. "The Tragedy of the Commons." *Science* 162 (1968): 1243–1248.

Hempel, Monty. "Ecoliteracy: Knowledge Is Not Enough." In *State of the World 2014: Governing for Sustainability*, edited by Tom Prugh and Michael Renner, 75–88. Washington, DC: Island Press, 2014.

Horton, Miles, Paulo Freire, Brenda Bell, and John Gaventa. We Make the Road by Walking: Conversations on Education and Social Change. Philadelphia: Temple University Press, 1990.

Horton, Miles, and Dale Jacobs. *The Miles Horton Reader: Education for Social Change*. Knoxville: University of Tennessee Press, 2003.

Jensen, Derrick. "Beyond Hope." *Orion Magazine* (May/June 2006). https://orionmagazine.org/article/beyond-hope.

Judson, Olivia. "The Selfless Gene." Atlantic 300, no. 3 (2007): 90–98.

Kennedy, Emily, Thomas Beckley, Bonita McFarlane, and Solange Nadeau. "Why We Don't `Walk the Talk': Understanding the Environmental Values/Behaviour Gap in Canada." *Human Ecology Review* 16 (2009): 151–160.

Lappe, Frances, and Anna Lappe. *Hope's Edge: The Next Diet for a Small Planet*. New York: Jeremy P. Tarcher/Putnam, 2002.

Leonard, Annie. The Story of Stuff. New York: Free Press, 2010.

Levin, Kelly, Benjamin Cashore, Steven Bernstein, and Graeme Auld. "Overcoming the Tragedy of Super Wicked Problems: Constraining our Future Selves to Ameliorate Global Climate Change." *Policy Sciences* 45 (2012): 123–152.

Litfin, Karen. *Ecovillages: Lessons for Sustainable Community*. Cambridge: Polity Press, 2013.

Lorenzen, Janet. "Convincing People to Go Green: Managing Strategic Action by Minimising Political Talk." *Environmental Politics* 23 (2014): 454–72.

Maniates, Michael. "Editing Out Unsustainable Behavior." In *State of the World 2010: Transforming Cultures*, edited by Erik Assadourian, Linda Starke, and Lisa Mastny, 119–126. New York: W.W. Norton, 2010.

Maniates, M., ed. *Encountering Global Environmental Politics*. Lanham, MD: Rowman & Littlefield, 2003.

Maniates, Michael. "Sustainable Consumption" Three Paradoxes." *Gaia* 23, Suppl. 1) (2014): 201–208.

Maniates, Michael. "Teaching for Turbulence." In *State of the World 2013: Is Sustainability Still Possible?* edited by Erik Assadourian, Tom Prugh, and Linda Starke, 255–268. Washington, DC: Island Press, 2013.

Maniates, Michael, and John Meyer. *The Environmental Politics of Sacrifice*. Cambridge, MA: MIT Press, 2010.

McDonough, William, and Michael Braungart. 2003. "Foreword to the Chinese Edition of Cradle to Cradle." www.mcdonough.com/speaking-writing/foreword-to-the-chinese-edition-of-cradle-to-cradle/.

Orr, David. *Ecological Literacy: Education and the Transition to a Postmodern World*. Albany: State University of New York Press, 1992.

Orr, David. Hope Is an Imperative. Washington, DC: Island Press, 2010.

Orr, David. "Optimism and Hope in a Hotter Time." *Conservation Biology* 21 (2007): 1392–1395.

Palmer, Parker. The Courage to Teach. San Francisco: Jossey-Bass, 1998.

Poundstone, Paula. "Lean, Green Fighting Machine." Mother Jones (March/April 1997): 80.

Princen, Thomas. Treading Softly: Paths to Ecological Order. Cambridge, MA: MIT Press, 2010.

Rigotti, Samuel. *Environmental Problem Solving: How Do We Make the Change?* Meadville, PA: Department of Environmental Science, Allegheny College, 2010.

Rittel, Horst, and Melvin Webber. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4 (1973): 155–169.

Sayer, Andrew. "Power, Sustainability and Well-Being: An Outsider's View." In *Sustainable Practices: Social Theory and Climate Change*, edited by Elizabeth Shove and Nicola Spurling, 292–317. London: Routledge, 2012.

Sharot, Tali. *The Optimism Bias: A Tour of the Irrationally Positive Brain*. New York: Vintage, 2012.