# Our Wicked Predicament and the Consensus Trance

*Facts do not cease to exist because they are ignored.*

—ALDOUS HUXLEY

*The most radical thing any of us can do at this time is to be fully present to what is happening in the world.*

—JOANNA MACY

*Our loyalties are to the species and the planet. We speak for Earth. Our obligation to survive and flourish is owed not just to ourselves, but also to that Cosmos, ancient and vast, from which we spring.*

—CARL SAGAN

It is hard to imagine a threat that is better able to elude our understanding and response—one that is more abstract, insidious, inconvenient, and spectral—than the presence of too much human-originating carbon dioxide ($CO_2$) in the air. It is colorless and odorless—utterly invisible. The biggest sources are distant from our own locus of control. The worst effects are still in the relatively distant future. The identities of the victims and

their dates of reckoning are unknown, yet we need to act now if they are to be spared. Full understanding of the problem requires scientific sophistication far beyond that of most citizens, politicians, and journalists—and any action taken against this threat will require the agreement and understanding of politicians, business interests, and the electorate. Meanwhile, amidst simmering culture wars, vested interests are already using and will continue to use sophisticated disinformation campaigns to turn voters and decision makers against such actions, intensifying polarization and gridlock, and blocking our collective capacity to comprehend and respond proactively to *any* aspect of our ecological predicament (which, as we'll see, goes well beyond climate).

At the same time, there are real reasons for hope. Solar and wind power and electric vehicles are enjoying an enormous boom. The majority of the world's nations have expressed commitments to counter climate change, and public opinion around the world supports strong action. Humans have already devised and begun implementing technological and policy initiatives that, if widely implemented, could—according to scientific experts from multiple disciplines—not only halt the growth of carbon emissions but actually begin to *reverse* global warming within a generation.

Some of the most promising initiatives were recently analyzed by Project Drawdown, which quantified the hundred most effective *currently existing* solutions to address climate change. (The findings are described in the book *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming,* edited by Paul Hawken.[1])An international team of researchers identified promising solutions, conducted research into their viability and modeled them, quantifying their costs and benefits and how much each can contribute to "drawing down" atmospheric carbon levels by 2050. Each of these solutions requires enormous projects or social transformations, but they are not pie in the sky; each of them is at least beginning to be implemented. They encompass such widely diverse projects as large-scale conversions to solar and wind power, reducing food waste, converting refrigeration technology, and reducing livestock emissions (responsible for up to 20 percent

of greenhouse gases annually) by transitioning to plant-rich diets. These solutions taken together can (this project calculates) not just halt increases in atmospheric carbon, but *roll them back*—and this can begin within thirty years! All of this can be done by scaling up current proven technologies.

But these are each massive projects, and even efforts to implement demonstrably effective existing solutions are meeting formidable resistance. We don't have agreements—the political and popular will—to enact all those solutions on the scale and schedule called for. Instead, cultural wars and political conflict are intensifying. Wars and economic instability threaten to further disrupt progress. And climate change is only one facet of our enormous ecological predicament. Meanwhile, contemporary culture is focused on more "immediate" concerns.

In addition to the elusive nature of global warming, a tangle of additional causes and effects conspires to further distract, divert, numb, or dull human beings into incomprehension of our actual situation and of the full scope of our wickedly complex challenges. These factors are so numerous and appear in so many guises that here we can only offer a general survey of a few of the critical hidden causes.

In broad terms, these impediments to understanding fall into two categories. One is the elusive nature of the problem itself, and the other relates to glitches in human nature, affecting both individuals and collectives. These two types of impediments affect all of us—not just "climate deniers" and the scientifically ignorant. Every one of us is playing our part in what often appears to be a slow-motion train wreck.

## A GLOBAL TIPPING POINT

There is overwhelming evidence that we are living at an enormous global tipping point—"the moment of critical mass, the threshold, the boiling point."[2] There are many signs—from actual weather and ecological events to volumes of shocking data—that point to the conclusion that our planet and biosphere, our life-support system, is in deep trouble. The consensus of the world's environmental scientists is that our species

is encountering an epochal array of global and environmental challenges that threaten the future of industrial civilization and human-friendly planetary conditions.

In a 2009 article in *Nature,*[3] a team of natural scientists tried to quantify our overall situation. They identified nine interconnected planetary thresholds that, if crossed, risk disrupting the "unusual" ecological and climatic stability that has marked the last ten thousand years. We've already passed three of the boundaries, are close to crossing four, and two can't really be measured. We may be approaching multiple tipping points that may affect Earth's capacity to support human life.

As of this writing, our most accurate measurements of atmospheric carbon dioxide ($CO_2$) are 400–410 parts per million (far above the presumably "safe" level of 350 ppm, and inexorably climbing). Serious environmental scientists believe it is too late to prevent the dramatic changes associated with at least a two-degree Celsius increase in global temperatures, and that it will take a huge breakthrough in public awareness and enormous changes in our lifestyles to keep increases from rising much further.

What does this imply? The climate is already warming even faster than early predictions regarded as "worst-case," and given the potential for runaway effects as tundra thaws and methane is released, some scientists believe warming is likely to accelerate. We are already seeing extreme weather events. More big storms and floods and droughts are likely, as well as major crop failures and famine, millions of deaths from heat waves, and even more massive refugee influxes. These and other potential impacts are likely to continue to send shock waves and a cascade of chain reactions through our already vulnerable economic, social, and political systems.

But this tipping point does not just relate to climate and the biosphere; it relates to every arena of human and nonhuman life on Earth.

As if that weren't enough, there's a dimension of our predicament as fundamental as ecology—the fact that acceleration itself is unsustainable. Human civilization is addicted to growth, and that growth has been steadily accelerating. Physicist Geoffrey West, in his book *Scale*, studied organisms and cities to discover the ratios and patterns that

show up when biological and social sciences are approached through the lens of physics. West observes that patterns of growth and change are self-accelerating, with cycles of innovation shortening, and that these bear toward a mathematical singularity (or evolutionary deadline) in time. He concludes that present trends, if extended, would lead to an economic crash and the collapse of the social fabric. But, he says, this crisis is not inevitable. For this to be averted, we would need a grand unified theory of sustainability "bringing together the multiple studies, simulations, databases, models, theories and speculations, concerning global warming, the environment, financial markets, risk, economies, health care, social conflict, and the myriad other characteristics of man, as a social being interacting with his environment."[4]

Even before West's book appeared, Peter Russell quietly published an essay expressing similar conclusions by reasoning inferentially from the patterns of history and current events:

> *However fast we find the pace of life today, one thing is sure, twenty years from now it is going to be much faster, and twenty years after that much faster still, and twenty years after that... almost unimaginable.*
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> *Some look at where this acceleration is taking us technologically; to the so-called singularity when computers surpass human intelligence. We would then move into a new era of development unlike anything we have seen so far. But whatever may transpire in a post-singularity world, one thing is certain: The acceleration in the rate of development will not stop. Quite the opposite; it will leap upwards even steeper.*
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> *Herein lies our blind spot on the future. Continued acceleration is inevitable, and is winding us up faster and faster in a whirlwind of change from which there is no way out. Yet any notion of a long-term future for humanity implies the acceleration has ceased. You cannot have it both ways.*
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> *In addition, accelerating change puts ever-increasing stress on the systems involved—human, social, economic, and planetary. Stress stems from failure to adapt. And failure to adapt leads ultimately to breakdown of these systems.*[5]

Russell concludes that long-term human survival is highly improbable, but that in the generations we have left, we have an amazing opportunity to grow spiritually and to incarnate what is best in our human character. We can make eternal contributions to what Kabbalists call "the book of life." The logic of acceleration seems to clearly imply an inevitable end to the human experiment. However, West and Russell admit they don't know for sure. The future is indeterminate. Unpredictable change is perhaps the only sure thing.

For three decades I have been deeply contemplating exactly what we know and what we don't know (and there is a *lot* we don't know), and what this crisis or tipping point means for each of us, and what we can and must do about it. Like many others, I have passed through periods of disorienting despair, feeling—on the basis of persuasive evidence—that human civilization has likely passed the point of no return and is in the process of collapse. Along the way, I encountered the invisible fraternity of brave souls who have endured a dark initiation into these disorienting prospects, and I've benefited from their fellowship and counsel.

I have also been heartened by the fact that people have wrongly imagined doomsday since the beginning of time, and by the fact that Earth and its biosphere are so alive, dynamic, and unpredictable that no one knows exactly how things will unfold—which leaves us ample room for hope. A crisis, says one dictionary, is "the point in the progress of a disease when a change takes place which is decisive of either recovery or death." And principles of physics offer another hopeful analogy. Nobel physicist Ilya Prigogine studied the levels of order in open systems, and discovered that as they become more and more chaotic, they reach a bifurcation point, where they either collapse into chaos, or spontaneously reorder themselves, *"escaping to a higher order."* Prigogine believed human societies were reaching a bifurcation point.[6]

So I've been contemplating the multitude of fronts on which we are simultaneously arriving at the threshold of radically transformative breakthroughs offering promise for a disruptively wondrous future—including almost unimaginable, revolutionary scientific and technological advances, but particularly focusing on transformative advances in human consciousness and culture. And, as you will see, I have not

only come to believe in our potential to evolve into a life-sustaining society, I have made it my life's commitment to help bring that into being. But a serious conversation cannot begin, especially among people steeped in a cultural climate permeated by denial, without the proverbial "two-by-four across the forehead." So let's begin this journey into hope and inspiration by facing the reality of our sobering, shocking predicament.

## A LIFE SUPPORT SYSTEM IS NOT OPTIONAL

Let's look for a moment at how we got to this state of affairs. Although we've approached these critical thresholds only recently, the basic recipe that has gotten us here has been cooking for centuries. For the past five hundred years, Western civilization has grown by expanding into new frontiers—first by colonizing the New World, and then through new levels of technological, industrial, and agricultural efficiency, powered by fossil fuels and other nonrenewable resources. We have consumed a great proportion of the nonrenewable resources we can efficiently mine or drill for (including metals, minerals, and especially fossil fuels). Meanwhile, we are each personally and collectively embedded in a capitalist industrial economy that requires perpetual growth.

A healthy future for humanity requires a healthy living planet.[7] And a growth economy based on constant material expansion eventually becomes incompatible with the health of a finite planet. To radically re-engineer the system, we will have to simultaneously re-engineer ourselves. This requires whole system transformation—including a healthier, more creative, more compassionate and engaged humanity than we have ever seen up to now. Both of these together—our Earth and its biosphere, and our own inner lives and life choices, individually and in community—constitute our life-support system.

The nature and unprecedented seriousness of our predicament presents us not only with great challenges but with a basis for radical hope ("radical" in a sense that I will explain fully later in this chapter). The more I have learned, the more I have found myself moving in two

directions simultaneously—grieving more profoundly for the worsening state of the planet, and opening to radical inspiration about what we can do on behalf of our future, even amidst great uncertainty.

Much of what I am sharing here is not news. Books and media have educated us about our climate and ecological predicament for decades. They also report innovative technologies—actual and anticipated—with transformational potential. Learning to absorb the true implications of these apparently contradictory realities and to respond effectively to the urgency of our predicament calls for us to develop and deepen our capacity to hold contradictions—and discomfort. But for this to begin to happen, we need to bring our hearts to the material, not just our minds.

In our explorations we will encounter much that seems contradictory. The way to take all of this in is to contemplate its implications at a deeper level than we are accustomed to doing—to feel it as well as conceptualize it. Take it slow, imagining the impact on your life, on everything you love, on your favorite places, and on your beloveds in the generations to come. This might bring you more in touch with the reality and seriousness of this conversation.

Let's take an unflinching look at the ways that we humans are hardwired to engage in modes of denial or disoriented states of upset. By understanding these issues, we can get past the state of gridlock that paralyzes us, individually and collectively.

## WHY IS ADDRESSING THIS PROBLEM SO DIFFICULT?

There are two kinds of factors that obstruct our ability to grapple with the human predicament. On the one hand, there are the defenses and other mechanisms (largely fear-based, as we will discuss later) within human psychology and consciousness that result not only in widespread denial—which has done so much to paralyze effective action in relation to our ecological and evolutionary emergency—but in less obvious (and often quite unconscious) forms of resistance to facing other inconvenient or complex truths. But there are also "external" factors—the confounding elements in the situation itself that impact our ability to take it all in fully and objectively.

The complexity and enormity of our current predicament set it apart from any other problem humanity has faced in its history. Every systemic challenge is intertwined with a host of others, all highly dynamic. Ecological problems are intertwined with economic, political, social, and cultural dynamics. For a committed activist, even deciding where to focus first is daunting enough. Without an understanding of the nature of this territory, we run the great risk of assuming we can solve our current problems in the same ways—and as easily—as we've eventually solved most of our other challenges historically. That would be a grave mistake.

So let's look more closely at some of the confounding factors that make our current predicament so difficult to face and understand.

## WICKED PROBLEMS AND BLACK SWAN EVENTS

There is a technical term in the social sciences for the kind of problem (or suite of problems) we now face. They are referred to as *wicked problems* (so named because they are wickedly hard to solve). This term was created to describe problems—along with the challenges of addressing them—at the level often faced by world leaders, military planners, and corporate leaders. But at this unique time, arguably, all of us—not just world leaders—face a slew of such problems.

Social science theorists define a problem as "wicked"[8,9,10] when it:

- is multidimensional; has multiple causes, symptoms, and potential solutions;
- cannot be definitively delineated or demarcated because its many stakeholders frame it within different worldviews;
- can be considered a symptom, as well as a cause, of other problems;
- is unprecedented, complex, and consequential, yet solutions are hard or impossible to test accurately;
- and has a tendency to fester or get more severe, with nothing automatically stopping the vicious cycle or intensifying feedback loop.

Some have categorized climate change as "*super*-wicked"[11] because, additionally:

- there is no central authority;
- those seeking to solve the problem are also causing it;
- current policies have increasingly negative future implications;
- and time is running out.

Additionally, we are increasingly aware that the whole landscape will probably be periodically transformed—dramatically and suddenly—by events we have little hope of predicting. Unpredictable and seemingly unlikely events—sometimes with positive and sometimes with negative cascading effects—periodically transform everything. These have been called *black swans*[12] because of their unpredictability. (At one time all swans were presumed to be white, and sighting the first rare "impossible" black swan defied all expectations.)

There are many examples, negative and positive, of black swan events—from World War I to the impacts of the internet and the rapid dissolution of the Soviet bloc, and, more recently, the 2016 U.S. election cycle.

A black swan, according to Nassim Nicholas Taleb, is defined by three criteria:

- It is an outlier, far outside the realm of regular expectations. Nothing in the past pointed clearly to its possibility.
- It has extreme consequences and impact.
- Human nature leads us to concoct explanations for its occurrence *after the fact*, creating the *illusion* that it was explainable and predictable.[13]

This has further confounding implications for planners, including activists: the future is quite likely to be shaped to a significant degree by events that are right now beyond our imagination. The wicked problem/black swan convergence describes conditions that bring to mind another term used by military and corporate planners—an acronym for a special category of planning challenges: VUCA, which stands for Volatile,

Unpredictable, Complex, and Ambiguous.[14] These are among the most difficult circumstances in which to plan and strategize, and they apply fully to our ecological predicament. Action is clearly urgent, and yet finely refined strategies need to be constantly adjusted; because the situation is VUCA, strategies are wickedly difficult to keep on target.

Of course, it is still necessary to do our best to anticipate future conditions. But clearly, our ability to foresee the future is going to be severely limited by these unpredictable factors. These dynamics call for forms of activism rooted in something much more profound than prediction and strategy. The nature of the problem demands a kind of thinking that we mostly don't yet know how to do. As Einstein is quoted as saying, "We can't solve our most pressing problems with the kind of thinking that created them."

We are being called to make a transformative leap to a whole new paradigm not only of thinking but of *being human*—a new consciousness and a whole new stage in the evolutionary trajectory of our species. This great transition, which requires "whole system change," is probably necessary for sustainably resolving any of the many facets of our larger predicament. Therefore, this is what I focus on here—along with the life practices that can midwife and nourish the consciousness and culture of the human beings who will enact it.

## DATA SMOG AND APERSPECTIVAL MADNESS

The wicked nature of our predicament is further complicated by what has been dubbed *data smog.* More than ever in our history, today we are all inundated by an avalanche of information. Ironically, today's unprecedented quantity and ubiquity of information have obscured what is important, rather than making it obvious. The result is *less* certainty about our world and even about ourselves. More information usually means more conflicting information. So rather than settling things, information is now leaving many of us more up in the air.

We must remember that all the information we receive daily (whether "news" or "science") goes through many hands, many "editors" and algorithms,

before reaching us. We are at the far end of a great game of Telephone. By the time we find out about a news event on television or radio, in newspapers or magazines, online, or from friends and peers, it may have been unrecognizably altered out of context, oversimplified, and "spun," perhaps even to the point of being downright false. In fact, increasingly, it may actually have been false to begin with!

Some of our confusion is manufactured via intentional disinformation, but much of it comes innocently, courtesy of the postmodern explosion of "many valid perspectives." Gradually, in the eyes of many, this has relativized all truths. Amidst this cognitive imbroglio we can find evidence to justify any opinion, to fan the passion of every prejudice. This has led to our becoming more committed to our preconceptions, more polarized, and less certain of any objective truth. The slippery, fragmented, and superficial nature of our cultural discourse—what integral philosopher Ken Wilber has called "aperspectival madness"—is a recipe for confusion, paralysis, and disaster.

Although some research seems to show that our multimedia culture can accelerate development of certain cognitive capacities, other evidence seems to indicate that the never-ending avalanche of information may, in important respects, be actually making us *dumber*, eroding attention spans, memory, and judgment. More and more social critics are coming to the conclusion that this trend is far more consequential and pernicious than we generally have suspected. Many believe, in fact, that it represents an unnoticed cultural crisis that has sapped the basic health of our whole society.

Moreover, thinking more, even in the ways that build capacities, doesn't necessarily make us more insightful. Incessant cogitation may make us smarter in certain ways, but it certainly doesn't automatically make us wiser—or even better able to see what is in front of our faces.

More significantly, under these conditions we tend not to contemplate the questions that ultimately matter, which can be truly explored only in *slow time*—questions such as those concerning the mystery of being, the nature of love, what makes a human life truly meaningful, or, in the context of this consideration, *what is to be done.*

Too often, the sensational and banal hold sway. A sad consequence is that, numbed by a constant drumbeat of grim warnings, we sometimes tend to dissociate from everything except our most immediate experience. Our daily "hands-on" experience of life and our network of trusted friends and associates may seem to be the only trustworthy sources; everything else may seem profoundly suspect, because it is always contradicted by another bit of news or opinion, and because it is not part of our direct experience. So many overwhelming threats loom on all sides that there often seems little to be gained from thinking about the world's urgent problems, or life's deep questions—or from preparing, materially and spiritually, for potential disruptions of our current lifestyle.

This particular kind of overload creates both confusion and paralysis. Amid the cacophony of clashing opinions about the nature or extent of our predicament, how do we winnow out the false, overblown, distorted, or oversimplified assertions and discern the underlying reality? How do we discover what is real and important to us now?

## CORNUCOPIANS, MALTHUSIANS, AND A GROWTH ECONOMY

Our ecological predicament and the prospect of collective peril are so emotionally upsetting that most people flinch and automatically gravitate toward the public consensus that we need not allow the news to register. Any contradictory "good news," on the other hand, feels so profoundly relieving that we gravitate toward it as well. Most discussions of our ecological predicament are not actually real considerations of the facts about our situation and opportunities; the real discussion is the subtext, which is all about emotions—hope versus despair. If that is our only choice, of course we'll choose hope. But what is that choice really based on?

The tension between hope and fear—between facing stark ecological limits and the belief that technology, ingenuity, or innovation will save the day—is not new; in fact, it has been debated for centuries. These two poles of thought and belief have been referred to as the *Cornucopian* (optimistic) and *Malthusian* (pessimistic) perspectives.

The term "cornucopia" is derived from the "horn of plenty" of Greek mythology. *Cornucopians* generally argue against limiting economic and population growth. They believe that advances in technology can take care of society's needs. An increase in population is good because it drives economic growth and generates more creative ideas. These ideas drive new technology, procedures, systems, and models that will address any problems associated with sustaining human life on the planet.

*Malthusians* are named for Thomas Malthus (1766–1834), an influential British cleric and economist who popularized a pessimistic view of population growth and its associated problems. Malthusian theory is predicated largely upon the idea that exponential growth, in population and consumption, demands more and more of certain inherently finite resources, eventually leading to collapse. The ultimate Malthusian scenario predicts that the exhaustion of resources will result in wars, famine, and environmental degradation or destruction—hardly foreign or unthinkable ideas today.

At their extremes, the two theories propose either that the end is near, or that we don't need to worry at all. Of course, there are more cranks at the extremes than there are in the middle. And yet those holding the middle ground are not necessarily taking everything into account either. You will find people arguing every position between the extremes—and all the internal and external influences we have just examined are pulling on anyone who attempts to parse this equation.

This debate has gone on for hundreds of years. In the history of Western civilization (ignoring for now Easter Island, the Mayans, and even the Roman Empire), the Cornucopians have always been right. Every time people have argued that we were coming upon a limit, we have engineered our way beyond it.

But while the Cornucopians have been historically vindicated, the Malthusian perspective, refined and upgraded, may be ultimately relevant again. Geoffrey West points to superlinear scaling and a finite time singularity as new emergent dynamics that seem likely to put an end to our recent cornucopian era.[15]

In his classic 1982 book, *Overshoot: The Ecological Basis of Revolutionary Change,* William Catton described the Cornucopian myth as the belief that resources are unlimited. He described our last five hundred years of history as a period of unique discoveries—first of the "new world," and then of coal and oil and natural gas—that created functionally unlimited resources to power ever-expanding Western economies. But with the exhausting of all unexplored terrestrial frontiers and the advent of "peak oil" (the migration to extracting inaccessible, offshore, and inefficient tar sands and shale fuels), we are now encountering the beginning of the end of our era of unlimited cheap resources.

Those facts are persuasive. And yet the much more palatable Cornucopian viewpoint is also powerfully persuasive, not only because it is comforting, not only because it fits nicely with all of the other tendencies and social pressures previously described—but also because proponents can point to so much history during which it has proved true. And it's true that brilliant scientists are hard at work on breakthrough technologies they hope can open up yet another era of expansion.

The optimism of Cornucopians has been a driving force in Western civilization. In more recent times—powering the beginning of the Industrial Revolution—coal, then oil, offered nearly unlimited quantities of extra energy that we could exploit. For two hundred years, everything that has happened in Western history has been based on this constant increase. We have been able to keep growing during all of this time.

Growth is necessary in an economy based on interest-bearing currency, but it also has become a deep psychological and cultural presumption: "We have always grown, and we need to keep growing." If we can't keep growing, we're in trouble. Theoretically, to live sustainably shouldn't require any growth at all. Same number of people; same need for food; same number of pesos/dollars. Nothing has to increase. Yet because of the nature of our money, because of the nature of our history, because of the nature of our marketplace, we are forced to increase. And we *want* to increase, because we think increase equals success.

This presumption about growth—this association of growth with thriving and success—functions in the lives of every individual, every country,

and every culture: as a bribe. If you participate, you can have wealth and respect. There is comfort. There is convenience. There is mobility. But a civilization so addicted to growth that it cannot slow down without crashing is caught in an unsolvable predicament if there are *any* limits to *any* aspect of growth. And yet the gospel of growth is now extending to everybody. "Let's educate everybody. Let's raise the standard of living of everybody"—as if it were possible to guarantee this. This is the promise of modernity. Postmodern pluralistic idealism wants to promise this possibility universally.

This idealism ignores something big. Like a scuba diver neglecting her air line, it forgets our dependence upon our ecological foundations. And the enormous consensus around the presumption that we all *can* thrive without a great reckoning—a presumption of even those (including politicians and policymakers) who warn of limits and demand climate action—is a mighty and nearly invisible undertow that can pull us into the kind of hope that blinds us to reality.

Global capitalism has worked miracle after miracle, and continues to be our most prolific mechanism for manifesting the new miracles we so badly need. And yet it has also been a blind "machine of more," consistently wreaking terrible destruction across modern history, and has not proved quick or efficient about cleaning up its own messes. A transition to a radically new economic model (perhaps neocapitalist or post-capitalist) will clearly be necessary. And yet it is almost impossible for most of us to imagine how that can happen, short of a global collapse.

## ULTIMATE HOPE VERSUS FALSE HOPE

If the measure of a human life is its significance, its ability to have positive effects much larger than itself, then all of us alive now have hit the jackpot. We are the lucky ones who have been born "where the action is," in a time when we have the potential to make a difference on an evolutionary scale. And we have unprecedented access to, and the ability to draw on, the highest accumulated knowledge and wisdom of all cultures across all ages.

Even deeper than our anxiety, and buried below our unspoken fears, I believe many of us sense this. And many of us also feel what might be described as a radical, defiant, unreasonable hope.

Here I am not speaking of the commonplace "hope" that rests on denial or rationalization. I am speaking of something more difficult to articulate, yet discernible by one who resonates with the music of the soul. It is a hope born of faith in the process of life itself, in the human spirit, in sacredness—or in an intuited sense that, in spite of everything, reality is whole and holy. However we describe it, most of us have at some point glimpsed a wondrous power beyond the mere observable mechanics of things, and we know it can work miracles. When we keep showing up in the next moment with openness, intelligence, positive expectancy, generosity, the desire to be of benefit, and the courage to throw ourselves into life completely—that is when we participate in miracles. The virtue of hope confers the courage it takes to lean forward into the future. That is what we intuitively choose; we recognize that this positive orientation to life is healthy, whatever the prognosis of experts may be.

With this hope, therefore, we place our intuitive bet on life and the creativity of evolution. When hope is powered by this kind of faith or intuition—our sense of the ultimate wholeness and beauty of things and our own power to meet real challenges—it is actually not irrational at all.

But we must not confuse the ultimate hope we may have in the goodness or rightness of things with the false hope that they will automatically turn out well for us and for our world. A radical, robust hope lies *on the other side* of despair. It can energize and sustain us, inspire our highest capacities, make us a powerful positive force in the world, and help us to effectively address our inconceivably vast challenges. False hope anesthetizes us, not only against unpalatable truths, but against the direct perception of the challenges necessary to address them creatively and dynamically. In order to productively address and adapt to our global predicament, we need to face the facts, and we need to act.

In the face of these wicked global challenges, the temptation to space out, or to narrow our view down to a single limited perspective that we can imagine accounts for them, is nearly overwhelming. That is why climate denial has so much political and cultural force. In order to discover the truth about our world, we need to notice the deep ways that our social practices are reverse-engineering our brains and nervous systems, enabling us to systematically deceive ourselves.

## THE SEDUCTION AND POWER OF HOPE

Belief in technological progress, and general optimism that things will turn out well, are both essential and dangerous. On the one hand, commitment and positive thinking have tremendous self-fulfilling prophetic power. Henry Ford's one-liner is justly famous: "Whether you think you can, or you think you can't—you're right." On the other hand, as we've seen, hope functions to justify denial or feel-goodism, and can be an excuse for doing nothing—or for being so focused on certain solutions that the downsides (which can prove deadly) get played down or ignored.

It is not hard to see the value of optimism. People frequently succeed by imagining positive outcomes and working hard, often while also making creative use of advanced technical skills. The energy of optimism and positivity is infectious and unmistakable. The enormous body of literature devoted to personal growth, self-help, and success is itself evidence of the creative power of positive attitudes—and the vast majority of men and women in positions of prominence and power affirm similar sentiments. Optimism is a great unspoken agreement, and absolutely necessary if we are to attract and inspire others.

But blind optimism ignores the damage caused by cheerful denialism. We have conducted a centuries-long experiment in techno-optimism that has produced both wonders and horrors, doing grievous damage to the family of life. But perhaps if our innovative spirit is chastened by sober prudence, we can now help turn things around for the better. Let's take a brief look at some promising possibilities in this direction.

## *Where Radical Hope and Conventional Hope Meet*

As we have seen, there are solid reasons to believe we can meet today's challenges. But not as we are. The challenges call for changing the character of human societies around the world, and the human beings who comprise them. The needed changes are so complex and comprehensive that they have multiple causes and effects and logical starting points and bottom lines. Is it "really" about policies, or economics, or technological advances, or human values, or culture, or consciousness? The answer is yes to all of those. But it doesn't stop there. We're being called to undertake a great transition of the whole human system, even while we are living within its old patterns.

To me the greatest grounds for hope are in the resilience and creativity that have emerged many times before in human history and prehistory when we have been faced with unprecedented challenges. This is a key meeting place between radical hope and *realistic* forms of conventional hope. There is ample good news, as the abovementioned Project Drawdown has fully analyzed and documented. The success of these present and future efforts, however, will depend on our ability to take in (emotionally as well as intellectually) the dark scenarios implied by current scientific data.

Some of this good news involves the use of clean, renewable energy. In addition to the possibility of massively scaling up wind and solar, we will develop additional renewable energy sources. Perhaps researchers will even discover the hoped-for godsend—a new source of energy that's radically clean and efficient, and that's scalable and practical.

Another crucial and miraculous breakthrough would cheaply, cleanly capture and sequester greenhouse gases, drawing carbon out of our atmosphere, and potentially reversing human-caused climate change. It seems unlikely, but human knowledge is too limited for us to be certain it won't happen.

Some experts suggest that we could learn new ways to enhance natural ecological processes, speeding up the ability of the natural world to restore its health.

But all technologies, present or future, miraculous or not, need to be not just invented but also implemented on a wide scale, and implementation requires political will and tremendous resources. That means a series of *social* transformations—some of which we will discuss more deeply in the latter portion of the book—will be the sine qua non for efforts such as those mentioned above to be successful. These cultural and social projects can take place on many different scales, but they could perhaps be accelerated through large-scale mobilization efforts—think of what that level of mobilization did for the U.S. during the Great Depression and then during World War II.

Radical hope is based partly on an awareness that there is much we don't and can't know. Therein lies an opening for possibility. We might even contemplate another opening: Maybe future "solutions" don't depend entirely on human agency. Perhaps the processes governing the dynamics of the biosphere are even more nonlinear than we realize, and just a few of these human-caused breakthroughs will enable our planetary living system to self-regulate and tip the scales back toward restoration of natural balances.

There are also numerous futuristic scenarios that are taken seriously by scientists, such as those involving machine-based ethical "superintelligence." These speculative possibilities range from realistic (but far from fait accompli) to fantastical. But we cannot blindly put our faith in any of them. As I've repeatedly stated, *all* of these depend on what we choose to do, individually and collectively. Paradoxically, these optimistic scenarios are much more likely to become reality if people cut through denial and soberly take in the magnitude of our ever-intensifying predicament.

Profound large-scale transformations at every level—physical, behavioral, technological, scientific, economic, political, social, cultural, and personal—are implied here. We are talking about profound "whole system change." Can it happen? Critical masses of people rising up as one have made positive differences (as well as negative ones) many times throughout history. But in this case, more is required than simply winning some political and technological victories; it will also require quantum leaps in human

maturity and spiritual vision. It will take a new structure of consciousness to catalyze many other cultural and societal breakthroughs, and a new kind of politics in which wisdom can increasingly guide human affairs.

One of the foundations for that innovation in consciousness, and for the relationships and communities that would express and embody it, would be *radical honesty and basic shared agreement about at least certain aspects of reality.* We will need to penetrate or cleanse everything that veils and distorts our personal and cultural doors of perception in order to achieve such a clear view.

## *The Shadow Side of the "Light"*

The pull toward continuing our habitual business of growth as usual is so much a part of our ordinary habit that it will take enormous pressure—or enormous insight—for radical changes to take effect. Each new technological innovation, whether necessary or not to our quality of life, tends to mesmerize and distract us. A new gadget or vehicle or weapon or other technology is something we can create quickly and successfully. We can see the results directly—right before our eyes. Our minds are not challenged to imagine abstract, distant, or ominous implications.

In addition to the fact that hope feels like both a core human value and a national one, the prospect of a grim human future tends to evade cool rational assessment and consideration. The subject of our predicament is avoided like kryptonite—because we recoil in pain from what we believe are its profoundly debilitating psychological and emotional effects.

Human beings, myself included, find much of our strength by being motivated toward hoped-for futures. Our psychological need to maintain an optimistic perspective on life is so deeply ingrained that it colors all our thoughts, actions, and decisions.

People make decisions emotionally; afterward, we rationalize them with logic. Factual evidence rarely persuades people to change their attitudes and beliefs—on the contrary, research shows human beings more commonly harden their attitudes when confronted by evidence that seems to undermine their pre-existing beliefs. So we respond instinctively,

deflecting instead of absorbing objective facts if their implications challenge our attitudes, especially if we fear they might cause us to lose heart.

Studies in neuroscience, psychology, and social science keep underlining this reality. So it is extremely hard to sort out how our own emotions are influencing our assessment of the real facts of our human situation.

Mainstream culture reflects individuals' fierce tendency to imagine a future much like the present, one that denies any reckoning with its own unsustainability. As social creatures, we can't help but participate in this mass illusion, or at least in some parts of it. It is so easy to go with the flow of conventional expectations, most human beings actively dismiss and exclude much of what we know at some deeper level to be true. We censor our own thoughts. We change the subject.

Denial-based hope makes us feel good, and it pulls us more and more into its fantasy world, which allows us to become more and more oblivious to the fragility of our situation. Beneath this false hope—looming large and yet hidden from us, like an elephant in the room—lies *fear.*

## THE ELEPHANT IN THE ROOM
## THE HIDDEN FEAR AGENDA

In order to function, human societies must agree on a consensus reality. Without it we lack a social common ground. But the agreements we have are of a "lowest common denominator" variety, which critically limits our ability to picture reality in a way that's adequate to the complexity of our current dynamics. Some of us want to revise the old social agreements while others cling to them, and our common ground is increasingly unstable.

Not everyone thinks alike; there are seemingly unbridgeable gulfs between the ways different individuals think about complex issues such as climate change. These differences are not arbitrary and are not easily solved. They are not only matters of cultural identity; they reflect deep developmental and educational differences. They not only make it hard to understand each other; it also becomes very hard for most of us *not* to begin to relate to our divisions as if we were facing a competing tribe. So our mutual distrust grows, resulting in our civic dysfunction.

We critically need conversations that build connections across all the world's subcultures. But a shadow falls across all these urgent, crucial conversations and keeps even the most climate-savvy among us in a state of cognitive dissonance: the shadow of fear. Fear overtakes and overpowers all other agendas.

We fear the disruption of our lives. If our predicament threatens the future of human civilization, it jeopardizes everything that gives our lives a sense of meaning. It implies a bleak or nonexistent future for our grandchildren, friends, students, and all legacies we might hope to leave behind. It is the death, not just of us, but of the whole world we know. It is the most terrible scenario we can imagine. If we allow ourselves to imagine it as a realistic prospect, we fear being immobilized by depression. But we also fear what would happen if we took the predicament to heart and began to do everything we could to address it. In that case, the obligation and sacrifices of our activism would upend our lives and comforts and identities—and maybe, when all is said and done, no good would come of it anyway.

The subtle shadows of all these fears are operating invisibly in the background, distorting all supposedly rational conversations about our civilizational predicament. Fear and our inability to face it give rise to denial of the scope and urgency of our predicament, and reflexive faith in imagined technological salvation. This is made worse by the many "experts" who try to persuade us (at least implicitly) to think of this subject as if it were only a matter of politics and economics, rather than physics and ecology. Our individual and collective psyches function very differently, depending on whether we are emotionally dominated by hope or fear. These powerful unacknowledged emotional responses are the subtext that usually dominates every attempt at objective discussion. A dark synergy operates between hardwired denial (which we also see in the face of atrocities, especially those in which people are complicit) and the extremely complex, elusive nature of this whole subject.

Sometimes we humans have to hit bottom before we wake up and really change. This is the language of addiction and recovery. We are nearing that moment in the human story.

Much like a family sitting down with an addict for an intervention, it seems to me that our whole species is being commanded "Halt!" by the scientific evidence of our planet's ecological crisis. We have a destructive addiction—and we are ruining our home and destroying the lives of our family members. We are hearing, in no uncertain terms—from the rising $CO_2$ levels, mass species extinctions, melting glaciers, dying coral reefs, and rising seas—that we have to stop what we are doing *right now*, and go into radical rehab. And the voices are only getting louder.

Even so, many leaders—not to mention regular folk, including my own peers—seem to close our ears to these voices. And part of the issue is that, as addictions and their dynamics go, this one is a whopper—in size, momentum, and complexity.

The immobilizing potential of fear is magnified by our sense of personal impotence. It is simply easier to block out horrible realities if we seem to have little ability to affect them. We'd rather be resigned to it as one of "the things we cannot change" and choose serenity. We like to focus on the things we can change—on our personal goals, dramas, trials, and satisfactions. And our personal lives always demand constant and immediate attention. So, many people confidently assert that our "emergency" is an unhealthy preoccupation—a distraction.

Instead of changing the world, many of us simply change the subject. After all, if we can't actually improve our situation, what's the point of getting worked up? Both reflexive optimism and learned helplessness are based on deep-rooted cultural agreements as well as subtle but very effective personal indoctrination. The idea of the "consensus trance"—which we will now examine—does much to explain both of these behavioral root factors.

## CONSENSUS TRANCE: HOW WE PERCEIVE (AND DENY) REALITY

I was an undergraduate in Ann Arbor, Michigan, when I first encountered experimental psychologist Charles Tart's powerful idea that what is usually called "normal" consciousness may also function as a "consensus trance."[16] This idea explained why my inherited cultural assumptions about what is

true and how we come to find the truth had begun to ring hollow. It also goes a long way toward explaining why "climate denial" is so pervasive in politics, corporate culture, talk radio, and among ordinary people.

Simplified, the premise of consensus trance is that "normal" waking consciousness is actually a trance state. One of its implications is that people believe what they are indoctrinated to believe—and that this mass hallucination is powerful, often impervious to our own direct experience and critical thinking.

This concept defines the psychology of social consensus and conformity, and helps explain why the collective agreement related to our predicament can be so fierce. Consensus trance supports the tacit acceptance of "official" narratives (however unfounded they may be), and encourages us to unconsciously repress, deny, or reject unpalatable truths.

Like Freud's initial insights, Tart's thesis about the consensus trance emerged from his study of hypnosis. He saw that the process of drawing children into a sense of "the right way to do and see things" functioned very much like a hypnotic induction. Particular views are reinforced again and again throughout our lives, starting in childhood, via countless social cues.

Tart connected this with the implications of research into how beliefs influence perceptions, and proposed that normal waking consciousness is actually the product of an extensive collective hypnotic induction. This induction is practiced consistently by parents and teachers, and reinforced by every social interaction. It is sometimes brutally enforced via powerful taboos.

While a requisite amount of this kind of "training" helps uplift a child's primitive, unformed awareness, it also tends to inhibit free, expansive, and critical perceptions of reality in those who don't outgrow it.

Tart describes the effects of this induction not just in terms of behavioral shaping but in terms of consciousness itself. In Tart's view, our *entire state of consciousness* is indistinguishable from a trance. Tart proposed that we are inhabiting this trance together, and we have even been given hypnotic suggestions to ignore the evidence that we are in a trance.

This explains in part why the "consensus reality" about which almost everyone agrees rarely corresponds to objective reality. Groups of people

gradually come to agree on which perceptions should be allowed into their awareness, and then quite spontaneously and automatically train one another to see the world in only in that way.

Tart's insights, grounded in experimental psychology, explained for me the mechanism behind so many of the hidden contradictions I had noticed in my everyday life since adolescence. And today, they continue to inform me about why it is so difficult for the perils of climate change to gain traction in our society—even among those individuals who acknowledge its reality at some level.

Tart's findings became a focus of lifelong investigation for me, and perhaps laid an important foundation for my enduring passion for spiritual practice. After all, a very common and enduring metaphor in world mysticism is that of awakening from a dream. Almost 2,500 years ago, the great Taoist sage Chuang Tzu wrote, "While…dreaming [the dreamer] does not know it is a dream…. Only after he wakes does he know it was a dream. And someday there will be a great awakening when we know that this is all a great dream. Yet the stupid believe they are awake, busily and brightly assuming they understand things…how dense!"[17]

Tart's insight extends not just into spirituality but also into social and political theory. Noam Chomsky's book *Manufacturing Consent* traces how Freud's nephew, Edward Bernays, extended principles of psychology to the new field of public relations. It demonstrates how intentional manipulation has exploited the habitual tendencies of the human nervous system to manipulate public opinion. In a sense, public relations (and today, many other forms of media, marketing, and other methods of communicating news, advertising, and sociocultural trends) continues the hypnotic induction that begins in school, advancing and deepening the indoctrination.

Back in the 1960s and 1970s, the mechanisms responsible for "manufacturing consent" were rather crude by contemporary standards. We didn't have neurohacking, micro-targeting, digital content optimization techniques, bots, or fake news to influence public consciousness. The world of mass media was relatively new and innocent; consequently, it was perhaps a little easier to see what was really going

on. Today, the sophistication and volume of the mechanisms responsible for manufacturing consent make it at once more powerful and more insidious.

The hypnotic power of the consensus trance explains and affects many of the other challenges to our full, open, objective perception of our planetary crisis. It has played—and will continue to play— a central role in our collective response to the predicaments at hand. It shapes and anchors in place our collective agreements about technology and about hope; it encourages denial. The consensus trance is not easily penetrated, even by the reality that our home is on fire.

## THE CHALLENGE AND THE OPPORTUNITY

We have seen how several factors—the wickedly complex nature of our current set of problems, combined with the illusion of technology's limitless resources, and finally the consensus trance into which we have all been inducted—have made it dramatically difficult for any individual or group to know exactly what is happening, let alone for a whole *society* to understand and agree on what is happening and what to do about it. And we have seen that what we over-simplistically call "climate change" is itself only one facet of a larger ecological and cultural predicament that is the most "wicked" and elusive problem we have ever faced, because it reveals or hides itself in so many ways, and it affects literally everything.

How do we get from where we are now to where we are required to be? That is the issue we will briefly return to now.

As we have seen, none of the great issues of our time can be effectively solved without acknowledging and then meaningfully addressing our climate emergency and broader ecological predicament. But those issues are intertwined with the whole structure of our lives, of our societies, and of human civilization. They challenge our whole way of life. And, as we have also seen, we cannot fully accept this challenge until we begin to understand and change the circumstances—both external and internal to us—that have kept this urgent imperative off our radar.

Whole-systems change is required, and in a real sense it must begin inside ourselves.

But how to begin? Nothing could be more confounding! Facing the impossible questions that our predicament asks of us is like confronting a multidimensional koan, an impossible Zen riddle that has no direct answer the mind can devise and understand, but which must nonetheless be answered.

Classically, a koan is pondered for minutes, hours, days, years, or even a lifetime. Eventually it confounds the conventional mind, awakening insight and transforming one's whole way of being. The question transforms the questioner, awakening at least a glimpse of higher consciousness. The practitioner stays present to the koan by "living the questions" and "loving the questions" over time, until they reveal their answers (and then even deeper questions), as Rilke wrote to his young poet friend Franz Kappus.

Among the most famous classic koans are "What is the sound of one hand clapping?" and "Show me your original face, the one you had before your parents were born!"

Dogen, the founder of Zen Buddhism and koan practice in Japan, wrote *Genjo Koan,* a monograph in which he pointed to the inseparability of life and practice, and called for recognizing the koans given to us by life itself. He might have called our world crisis the great Genjo Koan of our time, the existential Genjo Koan of humanity's whole evolutionary trajectory.

Our mission, if we choose to accept it, is to face these impossible questions, this Genjo Koan. If we face the questions of our time; if we recognize that they really cannot be avoided; and if we acknowledge how important, real, and existential they are, we will have accepted our mission. If we don't numb and distract ourselves, these deep questions will inevitably affect us. Facing them will deepen, awaken, and transform our consciousness, our whole way of being, and our behavior.

Once this challenge is accepted, the real work begins—and this work takes place both inside and outside of us. It requires quantum leaps in consciousness, community, and dedication, as well as in

technological and social innovation. It requires new creativity at the levels of the individual, the local community, the virtual community, institutions, corporations, cities, and nations. It requires us to develop and express creative potential that has been virtually untapped—or, all too often, sabotaged—until now. It involves, in countless ways, the need to translate abstract ideas into concrete terms, and to discover what mandates such knowledge creates. And—starting at the level of every individual—it involves taking stock of where we are, and *who* we ultimately are.

I believe the only way we can come to terms with the many dimensions of our ecological crisis—and with all of our built-in resistance to acknowledging and acting upon it—is to become a conscious, effective, connected community, and act together. And that is wise in any case, regardless of our future. Our best security will be our families, our friendships, our communities, our ability to be self-responsible, resourceful, and resilient—and these connections are also how we reweave the social fabric, at a new level. Our psychological, social, and spiritual resilience will become our most essential capital. More important, our thriving may depend on our ability to work with our fear, find happiness and peace amidst sorrows and difficulties, and bounce back creatively after traumatic setbacks.

When he was in his eighties, James Hillman wrote *The Force of Character,*[18] in which he identified the soul work of his moment in the life cycle, which is to withstand the ultimate ordeal of decline and death with grace and grit, and to put "finishing touches" on one's life's main creative product—one's own character. If "it's too late," we can at least write the end of the human story well, through self-understanding, love in action, brother-sisterhood, elegance, and genius.

That is why it's so crucial, regardless of ultimate outcome, that we cultivate our best capacities and form intimate spiritual friendships that can grow into a broader social movement inspired by a grounded, healthy, and responsive spiritual vision. I believe such responses will emerge organically from practices and activities you and I can engage in. Having spent a lifetime exploring and facilitating and collaborating in such practice, I will be sharing here what are, for me, revelatory insights.

By acting together in the ways this book suggests, a truly auspicious future could well await us, as well as a deeply meaningful relationship to apparently "dark" times. Together, we can forge a productive path through a landscape that will undoubtedly be forever altered, literally and figuratively. It will be a future of joy and wonders as well as destruction and heartbreak—as is our present moment. It will be shaped by human beings, and by what is best in our collective character and imagination—if, that is, we grow up and show up at our very best.