# SEVEN STAGES OF GREAT TRANSITION

# A Middle Path to a Sustainable and Surpassing Future

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#### **AN INVITATION**

The human family has entered a time of unprecedented change and profound choice. Powerful forces of our own making are accelerating and now converging. The collective impact of escalating climate disruption, rising population, global hyper-consumption, species extinction, genetic engineering, and advanced artificial intelligence, to name a few, is nearly beyond our comprehension. The time has arrived for us to realistically envision the future being shaped by the enormous changes ahead in this century of great transition.

It would be wonderful if this time of transition could be straightforward and simple—we humans could step back, re-evaluate our situation, and step onto a path that is truly sustainable and life-affirming. However, real life does not work so easily or smoothly. Real change involves deep learning through direct experience. Great suffering is the evolutionary fire that awakens our compassion for ourselves, one another, and the world. Here is how our time of great transition is summarized in my book, "The Living Universe:"

"The suffering, distress, and anguish of these times will become a purifying fire that burns through ancient prejudices and hostilities to cleanse the soul of our species. I expect no single, golden moment of reconciliation to descend upon the planet; instead, waves of ecological calamity will reinforce periods of economic crisis, and both will be amplified by massive waves of civil unrest. Instead of a single crescendo of crisis and conflict, there will likely be momentary reconciliation followed by disintegration, and then new reconciliation. In giving birth to a sustainable world civilization, humanity will probably move back and forth through cycles of contraction and relaxation. Only when we utterly exhaust ourselves will we burn through the barriers that separate us from our wholeness as a human family. Eventually we will see that we have an unyielding choice between a badly injured (or even stillborn) planetary civilization and the birth of a bruised but relatively healthy human family and biosphere. In seeing and accepting responsibility for this inescapable choice, we will work to discover a common sense of reality, identity, and social purpose. Finding this new common sense will be an extremely demanding task. Only after we have exhausted all hope of partial solutions will we be willing to move forward with an open mind and heart toward a future of

mutually supportive development. Ultimately, in moving through our initiation, we can grow from our adolescent ways as a species into our early adulthood and consciously take responsibility for our relationship with the Earth, the rest of life, and the universe."<sup>1</sup>

This passage offers a summary description of our time of great transition, but it does not get down to specifics. The seven stages of great transition described below offer one, realistic pathway for how we might develop a sustainable and surpassing future. Importantly, by breaking our time of complex transition into seven, relatively distinct but overlapping stages, it makes the future easier to imagine and therefore more graspable, both personally and collectively. Further, by offering specific estimates of time frames and key descriptions for each stage, I hope others will be motivated to offer their own views of the stages ahead. Which brings me to the foremost reason for developing this scenario:

I wrote this primarily to foster a more realistic and robust, public conversation about the future that lies ahead in this century. I offer this essay with an open invitation to all who read it to challenge its premises, disagree with its conclusions and offer alternative views. It is the conversation that is most important—our active engagement in building a collective narrative that will help us choose our way into the future.

Before we dive in, I want to pause and acknowledge that looking realistically into the future isn't easy. We have never before gone through the fiery rite of passage that lies just ahead of us. Engaging with our collective future takes emotional courage as it naturally brings up legitimate, existential fears and deep-seated wounds. The sheer magnitude, complexity and devastation of what is being anticipated creates a barrier for looking ahead. However, there finally comes a point when we cannot turn away—when we must choose to intelligently respond to evolving trends or passively surrender our role as co-creators of our world.

As you read this essay, I invite you to explore your personal vision of our time of transition during the remainder of this century. To find our shared sense of direction will require being open to one another with fresh curiosity as we consider a future never before traveled in previous human experience. I also encourage you to notice feelings and reactions that arise within you as you consider each stage of transition. Unrealistic? Too optimistic? Too pessimistic? What awakens feelings of anger? What projections for the future are most overwhelming to you? What subjects make you want to shut off and disengage? What is your overall spectrum of feelings as you move through the seven stages? These natural responses offer valuable insights into the world we will be moving through together.

#### WHAT WE KNOW

Most citizens of the Earth know we confront very difficult trends such as climate disruption, resource depletion, species extinction, unsustainable consumption, and growing population. Many people are also waking up to the potential dystopian scenarios made possible by advanced artificial intelligence and genetic engineering. What has yet to penetrate the collective consciousness is how these trends are now converging to create an unyielding challenge to the workability of the global system that has emerged in the past few hundred years. There is not the space here to review the major driving trends, so I will highlight a few key trends and then step back and look at the big picture of the condition of the Earth and prospects for humanity's future.

From a big-picture perspective, it is stunning to learn that, since the agricultural revolution roughly 10,000 years ago, the amount of living matter on Earth has fallen by half!<sup>2</sup> In addition, four out of nine planetary boundaries (climate change, land-systems, biosphere integrity and altered phosphorous and nitrogen cycles) have been crossed with irreversible consequences for the Earth's livability.<sup>3</sup> Population growth continues to rise with global projections of nearly 10 billion people by 2050 and roughly 11 billion by 2100.<sup>4</sup> By the end of the century, sea level rise is expected to affect 70 percent of coastlines worldwide.<sup>5</sup> With regard to global warming, humans had not yet shown up on the planet the last time the Earth's atmosphere had this much carbon dioxide.<sup>6</sup> We have already sealed our fate with many of these trends.

What do these trends mean from a big-picture perspective? More than a quarter of a century ago, over 1,600 of the world's senior scientists, including a majority of the living Nobel laureates in the sciences, signed an unprecedented document titled *Warning to Humanity*. In this historic statement, they declared that "human beings and the natural world are on a collision course . . . that may so alter the living world that it will be unable to sustain life in the manner that we know." This is their conclusion:

"We, the undersigned senior members of the world's scientific community, hereby warn all humanity of what lies ahead. A great change in our stewardship of the earth and the life on it is required if vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated." [emphasis added]

This conclusion is in accord with my personal assessment, based on nearly a half-century of research. My mind repeatedly returns to the warning of scientists: If great changes are not made in our stewardship of the Earth, the planet will be "irretrievably mutilated." It is the last, two words—irretrievably mutilated—that reverberate in my thoughts. What do these two

words mean for countless generations ahead that will look back on the choices we made in these pivotal decades? The Earth forever disfigured, permanently damaged, maimed for all time?

A 25-year update to this famous warning was published in 2017 and concluded the warning to humanity had not been heeded—and then added this further warning:

"Soon it will be too late to shift course away from our failing trajectory, and time is running out. We must recognize, in our day-to-day lives and in our governing institutions, that Earth with all its life is our only home."

The wisdom of our species is being tested by conditions we are creating for ourselves. We are being pushed by necessity and, at the same time, pulled by opportunity to become a global family that is not at war with itself but, instead, can invest its scarce resources in delivering what we all want: uncontaminated food, clean water, shelter, safety, and meaningful lives. With a collaborative spirit, I believe these are all attainable goals. What are humanity's prospects for such a future? Let's consider two extremes and then a middle path.

#### A PATH BETWEEN TWO EXTREMES

Most views of humanity's long-range future—roughly the period between now and the end of the century—offer one of two extremes: Gradual Adaptation or Functional Extinction.

**GRADUAL ADAPTATION**: This perspective sees the world continuing along a path of growth with the aid of adaptation strategies that foster sustainability. With new energy systems, the desalination of water, sustainable agricultural methods for growing food, etc., a gradual reconfiguration of the global economy and society unfolds, fostering a sustainable future. If climate change truly threatens to get out of control, geo-engineering and technological interventions will stabilize dangerous trends, while tax incentives draw in the private sector for solutions and government reforms keep everything afloat. This optimistic view assumes a combination of human ingenuity and new technology will move the world economy onto a track of living that is sufficiently sustainable to prevent a global tragedy. Although a path of Gradual Adaptation is not rushed, it does require major changes in how we live, consume and work. Yet, our current rates of change in these areas are far too slow to meet the speed and enormity of our time of transition. "Too little, too late" is the lament of nearly all civilizations that have gone extinct. Gradual adaptation seems to be a path of delayed, functional extinction.

**FUNCTIONAL EXTINCTION**: A radically different view is that, by our own hand and relentless drive for growth, we will create a world that is no longer supportive of human biological habitation. For example, if temperatures go up by 4 degrees Celsius, it will produce a climate profoundly inhospitable to humanity's biological existence. Global warming of just over 1 degree Celsius is already producing mass migrations, agricultural disruption, famine, and disease—and these will intensify enormously in decades ahead with profound consequences. We may both drive ourselves to extinction and replace ourselves. We may functionally *extinct ourselves* by creating an inhospitable Earth in which we cannot prosper biologically. We may *replace ourselves* by using genetic technologies to produce an array of new species that are engineered for heat tolerance, disease resistance, enhanced intelligence, and more. An array of "up-leveled" species could soon rush forward on the evolutionary journey and "natural humans" could become a fascinating footnote to life on Earth—a transitional species that relinquished the evolutionary journey to a new collection of augmented species of its own making.

Is there a middle way that leverages the opportunities of "Gradual Adaptation" and averts the unthinkable consequences of "Functional Extinction?" To explore a middle way, it is important to make a distinction between the ideas of "breakdown" and "collapse."

- Breakdown means that systems are not operating properly. There are power outages. The water stops running at times and its purity is doubtful. Fire and police departments close periodically because they cannot pay people. Chains of food delivery—from farm to stores—stop operating for periods of time. Breakdown means the dis-integration of whole systems into their component parts—which, in turn, creates opportunities for new configurations of living. Breakdown creates the freedom for rebuilding in new ways that are more healthy and functional. For example, breakdowns can awaken people's creativity in building and retrofitting eco-communities whose micro-economy's support resilient approaches to living.
- Collapse is far more serious than breakdown as it describes the ruinous downfall of communities, cities, and civilizations. With collapse, society fails completely as housing, transportation systems, water and sewage systems, and more fall into a jumbled and devastated mess. Collapse is the ruinous failure of the system and its components; leaving both the whole system and components in a condition of rubble—a junkyard of broken systems, cities, corporations, and people. Collapse produces a very difficult foundation (physical, psychological, social, and spiritual) from which to build a promising future of inclusive, sustainable well-being. A graphic description of what collapse would mean for the world is offered by what is happening in Venezuela. Once one of the

economic miracles of South America with one of the largest reserves of oil in the world, its economy has collapsed in the last few years with devastating consequences:

"... workers are fleeing Venezuela's state-owned oil company, abandoning once-coveted jobs made worthless by -the worst inflation in the world.

Desperate oil workers and criminals are also stripping the oil company of vital equipment, vehicles, pumps and copper wiring, carrying off whatever they can to make money. The double drain — of people and hardware — is further crippling a company that has been teetering for years yet remains the country's most important source of income. . . . Venezuela is on its knees economically, buckled by hyperinflation and a history of mismanagement. Widespread hunger, political strife, devastating shortages of medicine and an exodus of well over a million people in recent years have turned this country, once the economic envy of many of its neighbors, into a crisis that is spilling over international borders."

With *breakdowns*, the components of life are still sufficiently intact to be re-assembled into new configurations that can work—hopefully even better than before. However, *collapse* requires starting over and building a new world on the scrap heap of ruined civilizations and a devastated biosphere. Looking ahead, *global breakdowns seem inevitable while global collapse seems optional and avoidable*.

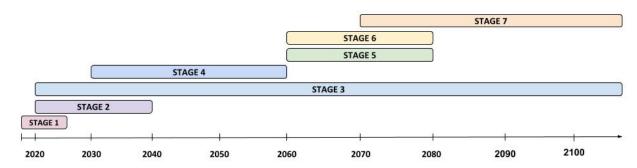
#### SEVEN STAGES OF GREAT TRANSITION

Humanity is growing up. Just as a young person makes many missteps and mistakes in their maturation, so too can the human family be expected to struggle in finding our way to early adulthood. It is unrealistic to expect billions of humans to make the transition from collective adolescence to early adulthood in a single step. Instead, I envision seven stages that are likely to emerge in making this great transition.

For purposes of clarity, the complex path of transition is presented as a series of relatively distinct stages. However, reality is resistant to being compartmentalized and these seven stages overlap and blend into one another with changing proportions of people in the different stages at different times.

#### SEVEN STAGES OF GREAT TRANSITION: 2018 - 2100

These seven stages describe a process of great transition for the human family—a time of collective initiation and collective awakening that takes us into a more mature species-civilization, both outer and inner.



**STAGE 1 (2018-2025) HARD DENIAL EVOLVES INTO SOFT DENIAL, SUSTAINING BUSINESS AS USUAL:** The prevailing, social consensus-trance rejects claims of a global systems crisis. Actions are slow and modest. The dominant majority of society remains preoccupied with distractions of entertainment, busyness and consumerism. A significant subculture is awakening to mindfulness meditation and consciousness exploration.

**STAGE 2 (2020-2040) DENIAL SHATTERED BY PENETRATING SHOCKS AND LARGE-SCALE EMERGENCIES:** Deep structural trends (in climate, population, resources, etc.) converge to create planetary-scale emergencies that shock humanity into realizing the urgency of our situation. Widespread anxiety, fear and disorientation. Meditation and related practices are important for coping with CTPS or "chronic traumatic planetary stress."

**STAGE 3 (2020's onwards) LIFEBOAT COMMUNITIES & SUSTAINABILITY MOVEMENTS FLOURISH:** Eco-villages and micro-economies of diverse design emerge to provide islands of sustainability and security. Millions of sustainability initiatives are combining with local to global communications initiatives to begin to create a new world culture and consciousness. Meditation and other practices that cultivate compassion, tolerance and service provide important sources of social cohesion for this unraveling world.

**STAGE 4 (2030's - 2060's) COLLECTIVE CONSCIOUSNESS EXPANDS AS BREAKDOWNS SPREAD:** Global breakdowns become an avalanche of system failures. Intense, global conversations are underway as the majority of the world recognizes that there is no turning back and we must move through to a new future. Grief, anguish and sorrow permeate. There is a deepening experience and growing appreciation of the interdependence of all of existence.

**STAGE 5 (2060's - 2080) AT THE BRINK OF UNSTOPPABLE COLLAPSE:** Past efforts were too little and too late, early breakdowns now move rapidly towards a global, systems collapse and the potential for extinction. Mass migrations, large-scale human death, and animal and plant extinction worsen. A future of ruin and regret awaits. A focus on material progress is largely abandoned in favor of a search for a sustainable and regenerative future.

**STAGE 6 (2060 - 2080): HUMANITY'S VOICE AWAKENS:** Faced with the prospect of self-inflicted demise, humanity steps up in maturity and accepts the opportunity for reconciliation to heal the wounds of history and move into a future of collective collaboration. A critical mass of Earth citizens awakens with a commitment to healing the Earth, our relationships with each other and the rest of life, and with the living universe that sustains us, and *is* us.

**STAGE 7 (2070 and beyond)** A RACE BETWEEN RUIN AND RENEWAL: After coming to the edge of extinction, an intensely reflective and attentive Earth civilization is born. We move from our adolescence to early adulthood. Living and working together through a time of collective trauma and heartbreak creates a new human alloy of tremendous strength. We recognize we are vastly more than consumers to be entertained in a dead universe, we are a community of bio-cosmic beings learning to live in a living universe. A new and engaging pathway of learning welcomes humanity.

### STAGE 1. HARD DENIAL EVOLVES INTO SOFT DENIAL, SUSTAINING BUSINESS AS USUAL (2018

**to 2025)**: We begin in a time of cultural polarization regarding climate change and other challenging trends. Differences in opinion range from denial of any "climate emergency" to a great concern that we are on a path of extinction. However, for the ruling elites (in politics, media, and finance), climate change, species extinction and other concerns are conveniently viewed as either non-existent or greatly exaggerated. Therefore, "business as usual" continues despite growing misgivings. Features of the hard denial stage include:

- Mainstream media, politics, economics, religion ignores and deflects great challenges.
- Mass attention to entertainment (sports, music, movies, video games) distracts society.
- Movements emerge to reclaim an imagined golden age from the past.
- People are distracted by the busyness and demands of everyday life.
- Some are narrowly focused on their own wealth, status, power and pleasure

Over time, softer forms of denial emerge. Although individual trends, such as climate disruption, are recognized as real, the prevailing social consensus rejects claims of a larger, intertwined web of problems; instead, these are viewed:

- Not as a whole-systems crisis; rather individual problems can be solved one at a time.
- Not as important as other issues such as jobs and healthcare.
- Not as urgent or immediate as claimed; therefore, there is plenty of time to respond.
- Not as big in scope as claimed; rather, these are pockets of problems to be tackled.
- Not as difficult to remedy as claimed; technology will fix many of the problems.
- Not a personal responsibility: "I did not create this mess, so why ask me to clean it up?"
- Not something I'm able to handle: "What can I do, I'm only one person."

Soft denial persists and we respond with half-hearted measures that scarcely slow us down as we move toward a ruinous future—both for the external world of ecology but also for the inner world of culture and consciousness.

#### STAGE 2. DENIAL SHATTERED BY PENETRATING SHOCKS AND LARGE-SCALE EMERGENCIES

(2020 to 2040): At some point in the 2020s, I expect deep structural trends (in climate, population, resources, and more) to converge and begin reinforcing one another; thereby creating planetary-scale emergencies that shock humanity, requiring us to recognize Earth-scale challenges of extreme seriousness and urgency. Because I grew up on a farm, one shock that is easy to imagine is this: With rapid climate change, within a single year, seasons around the planet could be profoundly disrupted, food production could plummet, and famine and civic unrest could spread so widely and quickly that the world is shocked into collective attention. A penetrating shock like this could awaken humanity to the urgency of our situation. There are

countless other crises in our interdependent world that could spur our collective awakening to the magnitude, urgency and severity of our time of planetary transition. Our responses to these shocks and emergencies include:

- Cultural shock, disbelief, numbness, alarm, amazement, confusion, bewilderment, chaos, and turmoil. These make a coherent social response nearly impossible.
- Institutional breakdowns at every level (economic, political, and social) are followed by short-term remedies for restart and renewal. Insecurities abound.
- Paradoxically, there is both great calm and great concern. Research shows that, in times
  of crisis, most people move forward with their lives without panic but with compassion
  and determination. Only a few are paralyzed emotionally by stress and anxiety for the
  future that is unfolding.<sup>10</sup>
- The systemic nature of the crisis means the entire world is becoming a traumatic and stressful place for everyone. People feel that there is nowhere to escape. No place seems safe.
- People are looking for the meaning and purpose of these hard times. Why are all of
  these calamities happening at the same time? People and countries seek *institutions* to
  blame and punish (governments, corporations, media, religions), *people* to blame and
  punish (right/left, Jews-blacks-browns, rich/poor, etc.), and *countries* to blame and
  punish (high consumption and wasteful).
- Many conflicts emerge—large and small—as some individuals and groups seek to insure their survival and well-being, even at the cost of others.
- Multiple attempts are made to catalyze global dialogues using the internet to reach to a
  new understanding for our pathway into the future. Early efforts that give the people of
  the Earth a shared voice in choosing our future are empowering—people are developing
  a sense of Earth citizenship in addition to local citizenship.

## STAGE 3. LIFEBOAT COMMUNITIES & SUSTAINABILITY MOVEMENTS FLOURISH (2020s

**onward):** As breakdowns threaten to move humanity towards global collapse, people around the world increasingly pull together in small communities of a few hundred people. There are two constants throughout the remainder of this century: 1) community building at the local levels, and 2) bridging communications from the local to global levels.

In response to the shocks of Stage 2, people begin coming together in mutual support as a natural response to our times of crisis. Mutual support expressed through community building begins to emerge on a mass scale with the retrofitting of portions of the urban landscape into small "eco-villages" oriented toward sustainability. Diverse forms of community are a logical development as short-term emergencies become persistent challenges. This is a scale that is

small enough for everyone to know one another and yet large enough to contain diverse skills for creating a micro-economy that serves many needs of the community (health care, information technologies, garden maintenance, education, etc.). Globally, a million or more eco-villages or micro-communities blossom in diverse and creative efforts for survival. Micro-communities of every imaginable design are adapted to local conditions and provide islands of sustainability, relative security and mutual support in a chaotic world.

In the social turmoil of a world in transition, where is the "social glue" that can see and hold life together? After nearly 5,000 years of dominance by the masculine mindset for approaching life (with a focus on increasing independence, wealth, separation, status and power), the world is recognizing the vital importance of balancing and integrating feminine qualities and capacities. The awakening feminine is vital for balancing the masculine mindset that has brought us to the edge of ecological ruin. The feminine knows the cycles of nature within her body, feels a natural connection with the seasons and rhythms of the Earth, and regards nature as a single, living organism. The sacred feminine opens to the suffering of all life and invites new pathways ahead for our transitional times.

- A common inquiry in communities around the world is underway: "Who are we?"
   "Where are we—what kind of universe do we live within?" "What kind of journey are
   we on?" In turn, communities from across science and physics are combining with
   communities from the world's wisdom tradition to offer different views on these
   foundations for how we regard ourselves and reality.
- Themes of sustainability and renewal dominate everyday life. Intensive efforts are
  underway to retrofit existing cities and suburbs into "transition towns" that are well
  adapted to a changing future. Sustainability initiatives are underway around the world,
  and include efforts for conservation, reconciliation, restoration and renewal of ecosystems.
- As systems break down, a new solidarity develops both locally (as eco-villages) and globally (online communities on the internet). A new world culture is emerging as people seek the camaraderie and support of physical communities in the context of an intensely rich world of social media and collaborative communities.

Over time, many "lifeboat" communities grow into thriving and resilient communities. Yet, despite creative efforts, people realize: Lifeboats won't save us when the entire Earth is "sinking' — becoming inhospitable to the biology and psychology of human life.

The second constant that runs through the rest of the century is the rapid awakening of humanity's collective consciousness made possible by multiple revolutions in communications technologies. Emboldened by these new systems, a new superpower is emerging on the Earth.

This new superpower is the combined voice and conscience of the world's citizens mobilized through the global communications revolution. Although often chaotic and fragmented, the emergence of social movements mobilizing the power of the internet demonstrates to ordinary citizens how their collective voice can have a powerful impact, particularly when expressed with the maturity and dignity of non-violence.

Overall, a new media mindset of empowerment is emerging. When the people of the Earth are not simply on the receiving end of media as a collective witness to genocide, climate disruption, intense poverty, etc., but also capable of offering a collective voice for change, then a new and empowered force for creative transformation is set free in the world. As the people of the Earth learn how to use the new media tools to come together as a global community and express our collective voice, a new era in human development is being born. For the first time in human history, we are acquiring a way to listen to and talk with one another as members of one community. We have the opportunity for an evolutionary leap forward. The next great superpower will not be a nation or even a collection of nations; rather, it will be the billions of ordinary citizens who encircle the Earth and who are increasingly calling, with one voice, for unprecedented cooperation and creative action to bring practical vision and hope to our endangered planet. Recognizing this, diverse "Earth Voice" movements arise seeking to use the new tools of global communication to mobilize a new consensus among the people of the Earth for a sustainable and meaningful pathway into the future.

## STAGE 4. COLLECTIVE CONSCIOUSNESS EXPANDS AS BREAKDOWNS SPREAD (2030s to 2060s):

The old culture of materialism and consumerism is declining while a new culture of aliveness and collaboration is growing. The choice for a lifeway of conscious simplicity is not driven by sacrifice but by more compelling sources of satisfaction—gratifying relationships, time with nature, opportunities for creative expression, and work that contributes to the well-being of life. Voluntary simplicity is the razor's edge that cuts through the trivial and finds the essentials in life. Simplicity is not simple. A life that is outwardly simple and inwardly rich involves continuously rediscovering our balance. The objective of the simpler life is not to dogmatically live with less but rather to live with balance to experience a life of fulfillment and satisfaction.

Two forces are at work: Breakthroughs in our manner of living and breakdowns in our ability to sustain previous levels of consumption. Breakdowns are visible and increasingly critical. By 2030, at least three billion people suffer from water shortages. Famine and disease are rampant. Global breakdowns spread and threaten to become an avalanche of system failures with large areas of Earth in full disarray and chaos. Massive human migrations are getting underway with tens of millions of people on the move. Many nation-states become ineffectual and some fail altogether. Continued extinction of animal and plant species impoverishes the

biosphere. Climate disruption accelerates with rapid global warming. The people of the Earth are experiencing CTPS: "Chronic Traumatic Planetary Stress"—an entirely new mindset. The difference between PTSD (post-traumatic stress disorder) and CTPS is that, instead of a relatively brief and contained episode, the trauma is life-long and even multi-generational as well as planetary in scope. A pressing need exists for "collective trauma therapy" as humanity's psyche absorbs decades and then generations of suffering. In this stage:

- In addition to the physical trauma of mass migrations and homelessness, millions are coping with the psychological trauma of being torn from roots of land, culture, community, and livelihood.
- There is a collective recognition by the majority of the human community that there is no turning back. There is no return to the earlier world we knew. We must engage the changing reality of these times if we are to understand how to move into a new future.
- Feelings of shame and guilt prevail as a ruinous future loom. Humanity is awash with unrelenting grief and sorrow (CTPS) as the Earth of the past is left behind, never to return.
- The growing importance of the sacred, feminine perspective awakens a conscious regard for the Earth as a single, living system. A growing regard for the overall Earth shifts the global conversation to the well-being of all life, not just humans.
- A prime topic of conversation around the world is whether humanity has "what it takes"—the maturity and capacity to respond effectively to our collective predicament.

Breakthroughs are less visible but reach deep into the human psyche and soul. A paradigm change has been underway for nearly a century. Gradually, science and wisdom traditions have been converging around a "new" view of the universe, seeing it as a unified, living system with consciousness as an integral aspect. More than two thousand years ago Plato described the universe as "a single living creature that contains all living creatures within it." With science cutting away superstition, we are seeing the world with fresh eyes and returning to the ancient insight that we live within a larger aliveness. <sup>12</sup> A growing interest in developing lives of felt connection and meaning with a living universe offers a compelling alternative to a focus on material consumption in a dead universe. The glimmer of a new paradigm of aliveness is permeating the Earth.

Another breakthrough is in the maturation of collective communication. The "Earth Voice" movement has grown steadily, using blockchain-like technologies to insure feedback can be trusted. People recognize that many factors are vital if we are to pull together and make the turn to a sustainable and collaborative future, but none is more essential than finding our collective voice to talk among ourselves as mature citizens of the Earth. The simple capacity for a collective voice changes our collective future. No longer is the

future left almost entirely to the mercy of competing interests of nations and corporations. By awakening our capacity for collective communication, citizens of the Earth can work together to envision and create a sustainable and surpassing future.

- There is rapid growth in an emerging "Earth culture and community." People connect in countless, overlapping circles of interest, both face-to-face and through the internet.
   Trusted voting and feedback systems operate from a local to global scale with their results validated by block-chain technologies. A highly participatory world conversation and culture is growing.
- Social media continues to explode in every direction: Efforts to use the Internet to create new citizen forums continue to flourish at every scale. People search for ways to mobilize our collective voice to respond to vitally important concerns.

Decades of dialogue in local to global forums are enabling people around the world to become effective citizens of the informal but powerful, electronic democracy spontaneously arising around the planet. We are discovering ourselves as ordinary citizens around the world. We are learning to communicate with ourselves at a global level and to offer meaningful, reflective feedback. This represents a giant step toward our early adulthood and maturity as a species.

# STAGE 5. AT THE BRINK OF UNSTOPPABLE COLLAPSE (2060 to 2080):

Despite stated commitments and repeated pronouncements, the public and private responses were neither big enough nor swift enough to avert an escalating systems crisis that entangles every aspect of life. Around the Earth, too many people have been holding back their full efforts. We now realize our labors were too little and too late as breakdowns move rapidly towards a global, systems collapse and the potential for the functional extinction of our species. Trends for this general period include:

- Water shortages for billions: By 2050, almost 6 billion people will suffer from water shortages.<sup>13</sup>
- Mass migrations: As we move toward the second half of the century, two billion or more
  persons (roughly a third of humanity) are expected to be on the move, searching for
  favorable places to live, in the largest global migration in the history of our species.<sup>14</sup>
- Human mega-deaths: The carrying capacity of Earth will support roughly 2 billion
  persons living in "Western, middle class" lifestyles.<sup>15</sup> With roughly 11 billion people
  expected by 2100, famine and disease seem likely to result in the die-off of one-third or
  more of humanity—unless we voluntarily make deep changes in our manner of living
  and consuming.

- The great extinction of animals and plants continues: The biosphere is impoverished as, by 2100, roughly half of all plant and animal species become extinct. Life in the oceans is also experiencing progressive extinction.
- Looking ahead, if global temperatures increase by roughly 4 degrees centigrade, human civilization will move into the realm where temperatures exceed those which allow human biology to thrive. This level of temperature increase is a realistic possibility by the end of the century or soon thereafter.

Each one of these catastrophes is a call for our collective awakening. We are crashing into an "evolutionary wall" and confront the stark reality of ourselves as a species and the impact we are having on the future of life. For a promising future to emerge, we recognize the importance of acknowledging our communal sorrow, grief and despair for the loss of a healthy natural world, the loss of countless species of plants and animals, and so much more. A vast swath of the mid-latitudes of the Earth is no longer habitable for many plants, animals, and people. Millions of people are migrating toward more favorable regions, primarily in the northern latitudes. Large portions of India, Indonesia, China, Central America and elsewhere are being depopulated by climate change, overwhelming countries into which masses are migrating. The human-constructed system is crashing down upon itself; challenging the meaning and worth of many old institutions, cultures, perspectives, and values.

Because all civilizations on the Earth are facing the prospect of collapse at the same time, beneath all of the other choices that the human community must make, one choice is fundamental to our future—do we choose to:

- Pull together as a human family accepting all of the sacrifices that will be involved, or
- Pull apart as human sub-groups enduring all of the conflicts that will inevitably result.

If the people of the Earth mobilize themselves around pulling together and collaborating for a future of well-being for the Earth, then a cascade of actions and innovations can quickly follow from that clarity of collective, social will. However, if the social will of the people of the Earth is not self-awakened on behalf of our collective well-being, then we will either turn to authoritarianism or fragment into countless sub-groups as the unresolved wounds of history fester and produce even greater separation.

After countless delays, we can hesitate no more. We must collectively choose our pathway into the future—the alternative is surrender to absolute authoritarianism or functional extinction.

# STAGE 6: HUMANITY'S VOICE AWAKENS (2060 to 2080)

It was communication that enabled humans to evolve from early hunter-gatherers to the verge of planetary civilization, and it is communication that will enable us to become a bonded human family that is committed to the well-being of all. At the very time that we need an unprecedented capacity for local-to-global communication, we find that we have the necessary tools in abundance. Humanity has the technical skills to use these tools to choose our pathway ahead. Do we have the social maturity?

By the 2060s, we are roughly three generations into the communications revolution encircling the Earth. With decades of experience in "Earth Voice" forums with near instantaneous feedback, we are savvy citizens of the Earth, skilled in using a wide range of tools for global communication. We have been learning our way into the arts of communicating among ourselves as a global community. A majority of people are eager for meaningful dialogue about the future and feel a sense of:

- **Identity** as an Earth citizen. This does not diminish other identities of nationality, ethnicity, etc. but rather acknowledges a reality of being connected with the entire Earth and its well-being.
- **Empowerment** as an Earth citizen. Having participated in numerous forums and seeing how citizen feedback that is trusted for its fairness can have a powerful influence on public policy.
- **Esteem** as an Earth citizen. Every person, voice and vote are counted and matters for humanity's future.
- Solidarity as an Earth citizen. Decades of planetary-scale trauma have been endured
  and this suffering creates new bonds of shared trust, equality and community. These
  catastrophes call for us to awaken collectively and recognize that restoring the Earth
  and securing the future is a team effort. We are all in this together with feelings of unity,
  cohesion, team spirit and camaraderie.

We have all the technologies we need to build a sustainable future but the critical, missing ingredient has been the collective will to choose important changes in how we live, work and consume. At some point in the crucible of these fiery decades, an irreconcilable level of wholesystems crisis will emerge presenting the unyielding choice that humanity either pull together in global cooperation or pull apart in global conflict. Recognizing we are facing the functional extinction of our species, humanity's collective mind is awakened with a laser-like focus on the core question of choosing either a future of collaboration or of conflict.

The "Earth Voice" process reaches a peak as everyday life comes to a virtual standstill and the people of the Earth consider our future. We debate fiercely what to do and what might happen. Finally, we confront ourselves again with the core question: Do we pull together in cooperation or pull apart in conflict? We reach beneath the surface chaos and discover a deeper, common coherence is felt intuitively in our intensely communicating world. The collective mind of humanity is becoming conscious of itself. The whole world is watching—itself! We consciously experience our collective presence at this choice point in history and recognize we can shift our collective mind with regard to how we live on the Earth. The push of unyielding necessity combines with the pull of opportunity for the web of life to be healed and humanity to again flourish—and with that understanding, the collective psyche of humanity is consciously and profoundly reconfigured. We reach into our collective psyche and make the choice to move from our competitive adolescence to our collaborative adulthood as a human family.

Support for a collaborative future pours-in as countless resolutions, petitions, declarations, and ballots from every region and level of the world. The people of the Earth make their sentiments known and confirm the results from the "Earth Voice" votes. A strong majority of the people of the Earth feel that, despite great sacrifices that are required, the future will be far superior if we pull together instead of pull apart. This is a pivotal moment in human history; a public commitment to collaboration on behalf of a sustainable and surpassing future is now visibly, consciously and deeply anchored in our collective psyche.

Saying 'yes' to a collaborative future symbolizes the launching a new trajectory in humanity's development. Our collective psyche is coming alive in new ways, directions and depths. The global brain and global heart are buzzing with new energy as we know ourselves as a single human family that can make creative choices for a common future that is sustainable and meaningful. Once the choice for a regenerative and collaborative future is made, the real race begins. The question of questions is whether we can make this transition fast enough to avoid collapse and functional extinction. We are in a race against ruin.

### STAGE 7. A RACE BETWEEN RUIN AND RENEWAL (2070 - 2100)

After coming to the edge of utter ruin of the biosphere and the functional extinction of our species, a more mature and intensely reflective planetary-civilization is being born. The trauma of the near collapse of the biosphere has shaken us from our collective, consensus-trance and we now recognize that to establish ourselves as a viable species, humanity must be forever vigilant and attentive to our actions from the local to global scale. As a species, these testing times have moved us from our adolescence to early adulthood. Although enormous challenges lie ahead, a new and inspiring understanding of the evolutionary journey draws us forward.

To genuinely pull back from the brink of extinction, we recognize that we must choose a future of communication, reconciliation and responsibility for the well-being of the Earth. We realize that we must work together at an entirely new level if we are to survive. We recognize the imperative to heal humanity's many divisions if we are to create a collaborative future. We understand the vulnerability of the Earth's eco-systems and the importance of a new ethic of living in harmony with the rest of life. We know an important key to a promising future is in our capacity for compassionate, collective communication.

With intense global communication, the growth of regenerative economies, and the conscious redesign of our living and working environments, small successes begin to grow into larger victories, and we realize the potential for achieving a future where the people of the Earth live in harmony with planetary systems and the living universe. People are designing themselves back into nature by creating sustainable ways of living that are adapted to the unique ecology, resources, and cultures of each bioregion. Even as extreme challenges continue in every global system, healing change is driven by the collective intention to work collaboratively and make sacrifices voluntarily in service of a world that works for all.

### A NEW PATHWAY BECKONS (2100 and beyond)

Step-by-step, the human community faces, accepts, and responds to the challenges of living lightly, compassionately, and collaboratively. Over time, great anxiety as to whether our species would survive is replaced by intense feelings of global community, solidarity, and kinship. People say, "Together, we made it through the greatest danger that we could imagine, and we survived. We have truly begun to know ourselves as a human family, with all of our faults and idiosyncrasies as well as potentials." We recognize the most immediate and important challenge before us is not outward rebuilding but inward reconciliation. There are so many barriers that have divided and fragmented us as a species—economic, sexual, racial, ethnic, wealth, generational, geographic, species and more. The first step in being healed is to be heard. A reflective-listening consciousness that invites the people of the Earth into a deeper understanding of these many divisions is the basis for building a new world. In turn, the next major phase of human learning is characterized by movements for communication and reconciliation that, in turn, lead to healing and rebuilding our world as a community-spirited enterprise.

Although many material privileges of the urban-industrial era are no longer available to us, most find satisfaction and a new sense of community and purpose in the creative challenge of

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living sustainably on this Earth. The world has broken apart in countless ways and is now reassembling itself in new ways.

- **NEW ECO-ETHIC**: The devastating negligence of the past allowed the Earth to come to the brink of collapse. We truly understand all life on the Earth is an interdependent system and we make a commitment to its restoration. A collective sense of ethical responsibility for the Earth grows in world culture, we see, for example, how a focus on consumerism makes sense in a dead universe, and a focus on material simplicity and non-material wealth makes sense as a path for well-being in a living universe.
- **NEW ECONOMY**: If we regard aliveness as the only true wealth, then it is only natural for us to choose ways of living that afford greater time and opportunity to develop the areas of our lives where we feel most alive—in nurturing relationships, caring communities, time in nature, creative expressions, and service to others. In seeing the Universe as alive, we naturally shift our priorities from an ego economy based on consuming deadness to an aliveness economy based on growing aliveness. An aliveness economy seeks to touch life more lightly while generating an abundance of meaning and satisfaction. A highly decentralized system of relatively self-reliant eco-villages creates a resilient economic foundation for the planet. Each village has a roughly similar micro-economy involving the essentials such as food production, education, health-care, solar energy, tech support and more. Individual micro-economies connect through diverse communication networks into countless global grids that aggregate into a dynamic global culture and economy.
- NEW CULTURE AND CONSCIOUSNESS: The entire Earth community is in need of healing. The traumas, psychic wounds, and shocks of planetary transition cascade forward and are now an integral part of our global psyche and culture. Social media are a key vehicle for social healing, bringing unresolved social wounds into our collective consciousness to mend. New learning and understanding permeate our language, education systems, art, music and more. As the wounds of history and transition begin to heal, a vibrant Earth culture and community is emerging.
- **NEW DEMOCRACY**: Citizenship takes on a new life at both the local and global level. Locally, the governance of community relationships is a key concern. Globally, assuring equity and justice are key concerns. At every level, people are learning to gather, speak and work together in citizen forums. From physical town halls in local communities to bio-regional scale "Electronic Town Meetings" and then upwards in scale to national and global "Earth Voice" Meetings." The Earth is finding its voice.

- **NEW SCIENCE:** Humanity is acquiring God-like powers that cry out for the moderating influence of an ecological ethic and bio-cosmic perspective. For example, we are not only curing diseases with genetic engineering, but also to creating a new array of genetically augmented humans whose great advantages could make them both essential and unstoppable, almost instantly producing a bio-genetic basis for social status and structure. Each generation of super-humans could establish a new base line for upgrading the next generation, thereby rapidly advancing the evolution of different types of humans. It is important that these powerful technologies are developed within an appreciation of our larger, cosmic journey: We are bio-cosmic beings learning to live within a living universe. A similar caution is appropriate with regard to the advance of artificial intelligence.
- NEW REALITY: Our "new" understanding of reality is actually a return to an ancient insight: As the frontiers of science meet the deep insights of the world's wisdom traditions, the universe is increasingly described as a single, living system.<sup>16</sup> Our aliveness is an inseparable part of the larger aliveness of the universe. We each have an ever-present invitation for learning to live within this living universe.
- **NEW IDENTITY:** Physics now understands that 95 percent of the known universe is invisible to our physical senses. Because we are an integral part of this universe, the vast majority of who we are is also invisible and is not limited to our physical nature. In short, we are both biological and cosmic in nature—we are "bio-cosmic" beings.
- NEW JOURNEY: We have been on a long journey of separation and differentiation, increasingly identifying ourselves with our material possessions and status. However, our separation from others and from the Earth is an expression of our separation from deeper parts of ourselves. Pushed by necessity and pulled by opportunity, we are turning toward home and our wholeness as bio-cosmic beings learning to live in our living universe.

#### TRANS-PARTISAN CONVERSATIONS AS A NEXT STEP

Our situation is unprecedented in human experience. We are being pushed by ecological necessity to heal the wounds of an injured Earth. At the same time, we are being pulled by evolutionary opportunity to awaken and step up to a higher maturity as citizens of the living Universe. Given the promising but difficult journey ahead, it would be immensely valuable for the human community to engage in a broad, deep, and sustained conversation regarding our time of great transition. A range of public forums could host trans-partisan conversations with

diverse views regarding the future. By thinking together in systematic and realistic ways about the new world emerging around us, we can respond more consciously and with greater choice to our time of great transition.

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I appreciate the important and unique contributions to this article by Liz Moyer, Sandy Wiggins, Chris Bache, Coleen LeDrew Elgin, Bill Melton and Roger Gibson.

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<sup>&</sup>lt;sup>1</sup> D. Elgin, *The Living Universe*, San Francisco, CA: Berrett-Koehler, 2009, p. 141-142.

<sup>&</sup>lt;sup>2</sup> "Half of Earth's Life has Vanished," New Scientist, May 26, 2018, p. 8.

<sup>&</sup>lt;sup>3</sup> Steffen et al. 2015. *Planetary Boundaries: Guiding human development on a changing planet. Science* Vol. 347 no. 6223.

<sup>&</sup>lt;sup>4</sup> https://esa.un.org/unpd/wpp/Publications/Files/Key\_Findings\_WPP\_2015.pdf

<sup>&</sup>lt;sup>5</sup> https://www.ipcc.ch/pdf/unfccc/cop19/3\_gregory13sbsta.pdf

<sup>&</sup>lt;sup>6</sup> "The last time CO2 was this high, humans didn't exist," Andrew Freedman in *Climate Central*, http://www.climatecentral.org/news/the-last-time-co2-was-this-high-humans-didnt-exist-15938

<sup>&</sup>lt;sup>7</sup>Warning to Humanity, 1992: https://www.ucsusa.org/about/1992-world-scientists.html#.WwRXoFMvwc0

<sup>&</sup>lt;sup>8</sup> The 2016 edition of the "Living Planet Report" can be found here: http://wwf.panda.org/knowledge\_hub/all\_publications/lpr\_2016/

<sup>&</sup>lt;sup>9</sup> "Workers Flee and Thieves Loot Venezuela's Reeling Oil Giant," New York Times, June 14, 2018. https://www.nytimes.com/2018/06/14/world/americas/venezuela-oil-economy.html <sup>10</sup> Rebecca Solnit, *A Paradise Built in Hell: The Extraordinary Communities that Arise in Disaster*, Penguin Books, 2009.

<sup>&</sup>lt;sup>11</sup> http://unesdoc.unesco.org/images/0026/002614/261424e.pdf

<sup>&</sup>lt;sup>12</sup> Do many people experience the everyday world around ourselves as 'alive?' Scientific surveys give us insight into this key question: A global survey involving 7,000 youths in 17 countries was taken in 2008. It found that 75 percent believe in a 'higher power,' and a majority say they have

had a transcendent experience, believe in life after death, and think it is 'probably true' that all living things are connected. (Roehlkepartain, E.C., Benson, P.L., Scales, P.C., Kimball, L., & King, P.E. (2008). With their own voices: A global exploration of how today's young people experience and think about spiritual development. Search Institute, www.spiritualdevelopmentcenter.org. Also, see article by Jane Lampman in the November 6, 2008 edition of the Christian Science Monitor.) These views are in accord with a paradigm of aliveness. We can secure further insight from scientific surveys conducted in the United States that show a measurable transformation in mainstream consciousness is underway. In 1962, a survey of the adult population in the US found that 22 percent reported having a profound experience of communion with the Universe. By 2009, the percentage of the population reporting a 'mystical experience' had grown dramatically to 49 percent of the adult population. (Greeley, A., & McCready, W. (1975, January 26). Are we a nation of mystics. New York Times Magazine.) In a national survey of the US in 2014, nearly 60 percent of adults reported they regularly feel a deep sense of 'spiritual peace and wellbeing,' and 46 percent say they experience a deep sense of 'wonder about the Universe' at least once a week. (Pew Research Center. (2015). U.S. public becoming less religious. Retrieved from http://www.pewforum.org/2015/11/03/u-s-public-becoming-lessreligious). A 2002, national Gallup survey asked respondents to rate the statement "I have had a profound religious experience or awakening that changed the direction of my life." A stunning 41 percent of Americans (about 80 million adults at the time) said the statement completely applies to them. (George Gallup Jr, "Religious Awakenings Bolster Americans' Faith," Gallup Organization, January 14, 2003. http://www.gallup.com/poll/7582/religious-awakeningsbolster-americans-faith.aspx ) These surveys show that experiences of profound communion with the aliveness of the Universe are not a fringe phenomenon but, instead, are familiar encounters for a large portion of the public. Humanity is measurably waking up to a bio-cosmic view of ourselves within the Universe.

<sup>13</sup> Ibid.

https://www.sciencedaily.com/releases/2017/06/170626105746.htm

<sup>&</sup>lt;sup>14</sup> A <u>2017 study by Cornell University</u> showed that rising seas could result in two billion refugees by 2100. Moreover, that data is based on lower sea level rise projections; predictions may well increase in the near future.

<sup>&</sup>lt;sup>15</sup> C. Bradshaw and B. Brook, University of Adelaide in Australia; their work is described in the article, "A killer plague wouldn't save the planet from us," in *New Scientist*, November 1, 2014, p.9.

<sup>&</sup>lt;sup>16</sup> See, for example, J. Currivan, *The Cosmic Hologram*, Rochester, Vermont: Inner Traditions, 2017 as well as my book, D. Elgin, *The Living Universe*, San Francisco, CA: Berrett-Koehler, 2009.