

# Where are we in History?

Reflections on the New Core Work of the 21<sup>st</sup> Century

Ruben F. W. Nelson

Executive Director

Foresight Canada

May 2023

29 Des Arcs Road, Lac Des Arcs, AB, Canada, T1W 2W3

[rubennelson@shaw.ca](mailto:rubennelson@shaw.ca)

## **Acknowledgements**

**I am deeply aware that I am indebted to dozens of exceptional persons, both mentors and friends – persons who saw in me more than I often saw in myself. With one exception, I cannot begin to name them here. If you see value in this piece, it is in large measure because so many invested time, energy, heart and mind in me and my development.**

**The exception is Heather Mae (Ross) Nelson. On September 22, 1960, when she committed her life to me, and I committed mine to her, neither of us understood what we were getting into. Over 63 years Hezzie has created the supportive space that enabled me to test and adventure beyond the limits of what it is to be a successful male in our Modern Techno-Industrial Canadian culture. Without her my work – exploring how history works, where we are in history and what we would do if we knew what we were doing – would have died decades ago. I cannot do more than begin to express my wonder than she loves me and how thankful I am that she chose to travel and stick with me.**

**WHERE ARE WE IN HISTORY?**  
**REFLECTIONS ON THE NEW CORE WORK OF THE 21<sup>ST</sup> CENTURY**  
**By Ruben Nelson**

**Preface**

What follows is an essay, not a book, still it is long enough to demand stamina. It is an essay limited to the investigation of a particular question. I am aware that this focus means that a host of interesting, important, but ultimately ancillary issues will only be touched on or acknowledged in footnotes.

The core question of this essay has been central to my life and work for at least six decades:

*In the early 21<sup>st</sup> Century, do we who are Modern Techno-Industrial (MTI) peoples and cultures really know who we are and what we are doing, or is there a serious chance that we are kidding ourselves; that we are simply wrong about the superiority of the ways we grasp and respond to reality; that today we are in a kind of trouble that is both far deeper and far different from that which we now think we are in?"*

You will see that I have grave doubts about our confidence and our character. As I see it, we have an inadequate understanding of where we are in history and an ill-founded confidence that our core work of the 21<sup>st</sup> century is to double down on the only work we have known for centuries—to improve and extend our MTI cultures and consciousness world without end.

I shall lay out a roadmap of our journey. In the Introduction I expand on the ideas in the above paragraph. I want it to be clear that in my own mind, my critique of our MTI form of civilization is more than another all-too-vague cry of alarm and a call for a new tomorrow.

Section I lays out my response to the question “Where do we in MTI cultures *think* we are in history?” I do so by drawing on the experience of my home province of Alberta, Canada, as being exemplary of MTI cultures.

Section II concerns the nature and psychology of two mental models—“S Curves” and “Nested S Curves.” Both are useful when it comes to understanding and exploring how human cultures respond to transformational change.

Section III uses these two models to understand where MTI cultures actually are in history.

Section IV discusses the coming end of MTI civilization.

Section V explores: “The Adventure of the Exodus that Awaits Us.”

## Introduction

I can no longer avoid writing this essay.

I say this for many reasons: my age, my life's work, what I have come to see as the deep dynamics of the 21st century, our congenital blindness as Modern Techno-Industrial<sup>1</sup> (MTI) peoples and cultures to our actual situation, and the promise of a future we refuse to know, love, and pursue. As for my age, I am eighty-four. I feel that for me, it is literally *now or never*. As for my work, I have invested my life in exploring and seeking to understand how human history actually works, especially how particular futures emerge out of the wide range of possible futures which we as peoples and cultures have faced over some 350,000 years. I have also focused on the roles we play and the agency we do and do not have in these dynamics as persons, communities, and whole cultures. Finally, I have explored the question of who and where we are in history—and this is the focus of this paper.

My life-long work as a futures researcher and teacher/practitioner of strategic foresight has led me to conclusions that are heart-breaking, to anticipation of a future I now fear. If my sense of these things is at all adequate, then we who are MTI are in far more and far deeper trouble than we now understand or are prepared for. Worse, my conclusions are insights which we, as MTI persons, communities, and whole cultures have little inclination or capacity to even hear, much less respond to courageously. This is not good news for any child who is ten today.

Put simply, I have concluded that we who are MTI peoples and cultures are not where we think we are in history. Therefore, we are preparing for, investing in, and counting on a future that is not going to happen as we now anticipate it will. Rather, as I shall explain, we face a future which will deepen our existing trauma. We and our descendants will know despair, both personal and societal.

As I see things, most MTI cultures,<sup>2</sup> not only the North American versions, are already suffering from substantial degrees of post-traumatic stress. The trauma has been induced by our inability as MTI cultures to comprehend and respond with wisdom and a deep sanity to the increasing chaos caused by the mashing together of the systemic superficiality of our MTI ways of knowing, doing, and being; the financialization of our hearts, minds, and cultures; our tragically inappropriate responses to 9/11; the global credit crisis; the shenanigans of OPEC;

---

<sup>1</sup> I use the phrase "Modern Techno-Industrial" as a technical term to denote the form of civilization which now dominates planet Earth, including Canada. Our MTI roots began to grow in Northwestern Europe about one thousand years ago. The emergence of the MTI form of civilization was stimulated by the Renaissance and nurtured by the Reformation. It flowered with the rise of science in the 17th century. It provided the foundation for the first Industrial Revolution in the 18th century and several additional Industrial Revolutions since. It is the only way of construing and responding to reality that most of those who wield serious power today have ever known. Most of them do not understand that as MTI persons living in MTI cultures, they are wholly owned products of our MTI form of civilization. Worse, they do not think their ignorance matters. In this piece, I beg to differ.

<sup>2</sup> My focus on MTI cultures should not be taken to indicate that I lack either knowledge of or care for peoples and cultures which are not MTI cultures. However, given our power, if MTI cultures fail, the human project may also fail. We have the capacity to take down the rest of the world with us.

the unchecked power of those who first developed global virtual platforms; the opportunism of Russia; the ambitions of China;<sup>3</sup> the exhaustion induced by the variants of COVID; and the slide towards more extreme forms of individualism. Obviously, this list is not exhaustive.

Worse, the scale of the stresses which await us in our actual future will further weaken our capacity to act coherently both as individuals and as communities. We are caught in processes which, already, are deepening distrust. We sense that many of those who lead our major institutions are out of their depth. Too many of our leaders appear to lack understanding that learning how to succeed in an MTI culture is not at all the same as knowing how history actually works. In turn, their ignorance deepens our suspicion, our cynicism, and our paranoia. Many are asking themselves: “*Why, then, do we listen to them?*” “*Why do we still allow them to command our lives?*” “*What possible justification is there for the wealth they extract from our culture, wealth which exacerbates an already outrageous inequality?*” “*Who, then, can we trust?*” To make matters worse, none of these dynamics will better equip us to make reliable sense of what is going on within and among us and respond to it courageously with a fresh imagination.

I am saying that, as far as I can see, in this and the coming decades, personal, community, and societal despair will deepen and be unavoidable. Unwittingly, by our past actions, deep despair is already baked into our future as MTI peoples and cultures. If this is the case, then you will understand why I have long sought a *post-despair* hope, a grounded hope that lies on the other side of despair. I speak of a depth of hope that will enable us to face, explore, and work through our responsibility for the “mess of wicked living messes”<sup>4</sup> in which we now find ourselves, a depth of hope which overcomes denial and the projection of blame onto others. With such hope, cynicism becomes a tool to pierce the superficialities of our MTI cultures, but cynicism cannot be the last word. Rather, grace, love, forgiveness, beauty, and conscious co-creation must have the last word.

On this foundation we can clean up, suit up, and show up as prophetic warriors. We can recognize the impulses to hold on to our MTI identities for what they now are—temptations to be named and resisted. We can learn to face the reality that the processes of collapse of our MTI form of civilization have begun and that they are irrevocable. This will be hard, harder than war. We face an enemy whom we should learn to forgive and love. As Pogo Possum observed, “*We have met the enemy and he is us.*”<sup>5</sup>

---

<sup>3</sup> Ancient China imagined itself to be the centre of the world, the “middle” or “central” kingdom.. Under the leadership of Xi Jinping, China’s ambition to have a greater leadership role in global affairs through the Belt and Road Initiative and other means. China has offered an alternative model of governance involving strong state control to the Western liberal-democratic model.

<sup>4</sup> In the 1960s, Professor Russell Ackoff at the Wharton School, University of Pennsylvania, used the concept of “messes” as a technical term to capture the situation we are in. Recently, the Cascade Institute revived the notion that we are in a “polycrisis.” I find that both concepts are useful.

<sup>5</sup> Walt Kelly, poster for first Earth Day, April 22, 1970 (italics added), and “Pogo” (syndicated cartoon), April 22, 1971. For a history of the saying, see <https://library.osu.edu/site/40stories/2020/01/05/we-have-met-the-enemy/> (accessed April 26, 2023)

Over my life, I have developed mental models<sup>6</sup> which have enabled me to see, explore and understand the collapse of our MTI cultures. I have seen enough that I now take it for granted that in my lifetime our MTI form of civilization has peaked. This means that today we are past “*Peak Modernity*” and into the ever-increasing incoherence of cultural and civilizational decline. Of course, as MTI peoples and cultures, the vast majority of us are not yet aware that this is our situation in history or what it portends for our future. For example, this means that progressives who are calling for an end to the MTI system are unaware that they are pushing on a door which already is inching open. Nor do conservatives who are trying to nail shut the door to a truly new future know that the MTI order of things—the only world they have known, the world they hold on to with increasing desperation—is not long fit for life on this planet regardless of what they do. In my view, MTI cultures and ways of life will cease to dominate Earth and its life within this century. To continue to try to extend their life is both foolish and tragic.

I have also come to see the reality that truly new life, life beyond MTI, is already emerging within and among us. As I experience this moment of history, there is a palpable hunger in hundreds of millions of us for truly new ways of living. The desire is real for ways of living that are aligned with and able to meet the novel conditions and requirements of the remainder of the 21<sup>st</sup> century and beyond. They aspire to lives and communities that are wise, prophetic, visionary, courageous, respectful, self-limiting, secure, prosperous, playful, inclusive, innovative, sustainable, deeply humane, and easily moved to both tears and laughter. They intuit that, as Dr. William “Bill” Rees has said, the *sine qua non* for our continued human existence is “*a way of being on Earth in which humans can live spiritually satisfying, economically secure lives more equitably within the means of nature.*”<sup>7</sup>

In my view, Bill is quite right about what we need. But caution is advised. Needing a new form of civilization, even being hungry for it, is not at all the same as being on a secure path to achieving it. This is particularly true when we do not yet have reliable models of the kind of transformative evolution we require. In short, much of today’s talk about “new tomorrows” I find to be ungrounded and wrong-headed. Much of the talk about “societal transformation,” is still unknowingly promoting a future which, when you scratch under its surface, is mostly a vision of a better MTI world. By and large, our aspirations for the future are still caught up in a web of MTI presuppositions, myths, images, paradigms, logics, conclusions, aspirations, and identities. Therefore, as yet, few of our imaginings of a future are deep and powerful enough to break the unseen bonds of MTI ways of being, of reaching what I call “*civilizational escape velocity.*”

At this stage, the important point is that the hunger for a more human future is growing, as is our dissatisfaction with things as they now stand. This impulse offers the opportunity to begin

---

<sup>6</sup> Since this is an essay, not a book, these models will not be explored here. Should you be interested, I work with a four-layer, causal-layered synthetic model, the deepest level of which contains the ontological and epistemological presuppositions of the form of civilization which a given culture exemplifies. If you are interested you may see the development of this model [here](#), [here](#), and [here](#).

<sup>7</sup> These words (italics added) are on the final slide of Bill’s recent presentations. See “[Will Modern Civilization Be the Death of us?](#)” and “[Too Clever by Half, but not Nearly Smart Enough: Why Societal Collapse Is Increasingly Likely.](#)” I recommend them to you and, also, [his recent interview with Nate Hagens](#).

new conversations, develop new understandings, and embody new commitments to make the changes we need. But this road will be rocky and treacherous. Consider that as the grip of MTI presuppositions, myths, and storylines weakens in our MTI cultures, the resentment, anger, and spite of many who have been unseen and voiceless will become part of the conversation for the first time. We must learn to hear their cry and engage them as casualties of our MTI cultures. Such people are not our enemies. Given that we have overlooked and neglected them, their inability to engage in well-schooled conversation should shame, rather than surprise, us. We who have succeeded in MTI cultures have participated in their formation. We are culpable at levels we have yet to see, much less own up to or make amends for.

Make no mistake, we face an extraordinary, even historically unprecedented, challenge. The collapse of our MTI cultures is now guaranteed. Escaping the grip of our MTI formation is required. *To do this we must consciously and reflexively nurture into robust and resilient persons, communities, and whole cultures which transcend and outgrow our MTI formation.* Those who embrace this work will have good reasons to get out of bed every morning. Since the emergence of the next form of human civilization depends on this work, may there be many.

This essay is directed to those who are reasonably successful MTI persons who live within reasonably successful MTI cultures and I count myself as one of them. It is directed to us because we are the ones who bear the primary responsibility for creating the life-threatening mess of complex living messes in which the over eight billion people on planet Earth now find themselves enmeshed. Because of us, the long-term future of humanity and much else that we love about this Earth is now in question. If we fail to turn ourselves around, the human experiment on this Earth may well fail.<sup>8</sup> Our Earth will be so severely damaged that flourishing post-MTI cultures will no longer be an option.

What I am writing weighs on me as much as any other. I am a person who now knows I am a white, privileged, MTI male who was formed in and by an MTI culture. I was taught to become and be what my culture wanted me to be. I willingly complied, especially when I was younger.

That said, I am also aware that I have been blessed and privileged beyond measure. I have been nurtured and loved by a host of extraordinary persons who have encouraged me not only to grow up and be a responsible MTI citizen, but to adventure beyond the boundaries and limits of my MTI formation and culture. My conviction that post-despair hope is warranted and that the disintegration and collapse of our MTI form of civilization need not be the end of the story is grounded in the joy, damage, and tragedy of my own adventuring. I owe my life to those who have encouraged my adventuring and adventured with me.

My first intention in writing this piece, then, is not to depress you. Rather it is to help you see that you too are, or can become, an adventurer in the service of not merely your own life, but

---

<sup>8</sup> In saying this, no suggestion is implied that we who are MTI peoples and cultures can deal with the root challenges of the 21<sup>st</sup> century all by ourselves. Such hubris must be our past, not our future. We must learn to partner with those whom we have oppressed and taken for granted. It is an illusion to think that either we or they can accomplish what needs to be done by working alone.

of the personal-to-civilizational transcendence which must become the core work of the 21<sup>st</sup> century. As I see things, the time is ripe for this new work. Many of us are warming up to it. Such persons are finding that they are more ready for it than they ever imagined.

My second intention is to help you see that personal-to-civilizational adventuring is now required of us as persons, families, communities, organizations, and whole societies. The future of humanity hangs on our willingness and our efforts to outgrow, to transcend, the MTI apprehension of and response to reality. A better version of our MTI selves and cultures simply will no longer do.

For my part, I have done my best to offer a fresh and reasonably coherent way of making reliable, big-picture sense of the increasing incoherence as well as the promise of the 21<sup>st</sup> century. I have done so because over a lifetime devoted to exploring the need for and nature of personal-to-civilizational evolution, I have come to these conclusions:

- The primary obligation we have as human beings is to keep open the possibility of the emergence of a truly human future. Lest this obligation sound self-centred, you know as well as I do that we cannot survive, let alone be fully human, without the companionship not only of other people, but of millions of other species. They truly are *our relations*.
- It is both futile and wrong-headed to continue to devote our primary passion, money, and energy to intensifying, improving, and extending our MTI ways of being and living.
- While I am thankful for and build on much that others have written about the nature and root sources of our present condition, I am not completely satisfied with the big picture understandings that now dominate what I have come to call *“the conversation about civilizational crises and transformation.”* Therefore, I offer what appears to me to be a firmer foundation, which is to first understand and then take up the new core work for humanity in the 21<sup>st</sup> century, which is *outgrowing our MTI selves at every scale as we nurture into robust and resilient being, cultures which exemplify the next form of civilization*.
- If my line of thought is at all sound, then there are more adequate ways to make sense of the roughly 350,000 year-long human journey—ways which come to terms with the mess of complex living messes we are in; ways which understand and respond courageously to the unique, strategic, existential, and still largely invisible challenge of the 21<sup>st</sup> century; ways which support a post-despair hope that, as persons and whole cultures, we can learn to cooperate with our own evolution as we nurture a new future into being.
- Much hangs on the sense we make of ourselves and our situation. The chief reason is that *“our perspective on the world determines our behavior in the world.”*<sup>9</sup> A corollary of this is that inappropriate behavior almost always follows from an inadequate

---

<sup>9</sup> Robert Fouts and Mary Lee Jensvold, “Armchair Delusions Versus Empirical Realities: A Neurological Model for the Continuity of Ape and Human Language,” in *Probing Human Origins*, ed. Morris Goodman and Mary Simon Moffat (American Academy of Arts and Sciences, 2002).



understanding of ourselves and our situation. Best we seek understandings that are as reliable as possible. If such understandings mean that we must move beyond our MTI frames of reference, so be it. Only so will we have any hope of being effective, co-creative agents of truly transformative change, of acting in ways which, over time, actually enhance the prospects for a long and humane future in an Earth in which, in time, life flourishes again.

In what follows, I attempt to make clear my understanding of reliable responses to questions such as these:

*Just how much trouble we are in?*

More than we who are MTI now know and can easily understand.

*What kind of root challenge do we face?*

One we, as MTI peoples and cultures, have not yet grasped because it is in an MTI blind spot.

*Is a good deal of tragedy and despair already baked into the human future?*

Sadly, yes.

*Is there hope beyond despair?*

Yes, there are grounds for post-despair hope if we are open to them.

*What, then, is to be done?*

Learn to cooperate with our own evolution at every scale from personal-to-civilizational. This, and only this, will enable us to outgrow our MTI formation: Embrace the adventure of consciously participating in humanity's first species-wide conscious and reflexive struggle to transcend its inherited cultures and forms of civilization in order to co-create personal-to civilizational scale ways of being that are wise, inclusive, systematic, integral, and meta-reflexive.

By the end, it is my hope that you will understand the power of this perspective.

## **Section I**

### **Where Do We in MTI Cultures Think We Are in History?**

#### **The Albertan Example**

*"Where do we in MTI cultures think we are in history?"* is truly an interesting question. The reason is this, as noted above, *as we apprehend reality, so we respond to it*. Our takes and our miss-takes of reality matter. Our preparations for tomorrow as individuals, communities, and cultures are a function of our takes on the future. Our takes on the future are a function of our reading of history—how it works, what agency we do, and do not, have and where we are in history. Consider, for example, that once we have a modicum of life experience, we expect to be stressed and excited the evening before a significant event—a final exam, our wedding, a

major presentation, or an interview. In such situations we both expect and allow for the stress and the excitement. Our capacity to anticipate our future state helps us cope when that moment arrives. We know we are having a normal human experience and that we are prepared for it.

But when we are blind-sided by events, when the truly unexpected happens, we are startled. One of the things we learn even as an older child is that when startled, human beings, along with grizzly bears and rattlesnakes, react spontaneously and, from our point of view, badly. It is wise to do what we can to avoid such situations. One of the ways of doing this is to test explicitly the reality of our anticipations. This way we may burst the balloons of our false anticipations before the fall occurs for which they set us up.

In this light, consider the pain Albertans have been suffering since 2014 when the price of oil dropped precipitously and, for almost all Albertans, unexpectedly. We<sup>10</sup> have been startled by how long the price remained so low—until 2021. The pain, even tragedy, has been real. Almost 100,000 real jobs were lost. Real businesses went under. Real marriages were broken. Nothing I say here is meant to take away from these facts.

However, we in Alberta set ourselves up for tragedy by being utterly unwilling to test the reality of our core assumption—the *risk of putting all of our eggs in the high-carbon energy basket*. We *thought this risk was well worth taking because high-carbon energy would rule the world and not be seriously challenged until at least 2050, if not longer*. This defining belief meant that for decades we could safely ignore a wide variety of folks who warned Albertans about what they saw as our foolishness. We hardened our hearts against them. We had ears but could not hear. We had eyes but would not see. Often, we rode those who challenged us out of the province and took pride in doing so. Willful blindness ruled.

Not once have we in Alberta seriously explored and checked the adequacy of our taken-for-granted anticipation that coal, oil, and gas—the only energy sources we who are settlers<sup>11</sup> in Alberta have ever known<sup>12</sup>—would continue to be the world’s dominant energy sources long into the future. Rather, we carried on pridefully with our mindless bet that they would. For example, consider the top-line advice of the Premier’s Council for Economic Strategy—a \$7 million effort from 2008 to 2011. Its first theme was “Realizing the full potential of our energy resources.”<sup>13</sup> The recommendation was to “*Take steps to ensure that Albertans and all Canadians benefit from development of our hydrocarbon energy resources as much as we can for as long as we can.*” When you consider how much had already been published by 2010 that challenged the wisdom of this advice, you begin to understand the depth of denial that is

---

<sup>10</sup> I was born and raised in Alberta and am now again a resident of the place in which I was formed.

<sup>11</sup> The recognition is slowly dawning on us that we who have long thought of ourselves as pioneers on an empty prairie are really settlers who moved in on our Indigenous cousins without coming clean about our intentions. This new consciousness, while late in its development, is essential as we learn to walk the journey of reconciliation.

<sup>12</sup> The oil age was well under way in North America by the time European settler culture moved into Alberta in any significant numbers in the 1880s.

<sup>13</sup> Slide 6, used by the Council to report its work to the public. The final report, *Shaping Alberta’s Future: Report of the Premier’s Council for Economic Strategy* (Edmonton, AB, Government of Alberta, 2011), is available at <https://tinyurl.com/rpcesab> (accessed April 15, 2023).

present in Alberta. In our own minds we have the courage to be “mavericks.” The thought that we are out of touch with reality is not entertained.

It is not surprising then that our initial response to the 2014 downturn was “We’ve seen this rodeo before.” The implication seems clear—we believed there was nothing for us to learn from that experience. The collapse of the price of oil was then seen as just another normal hiccup on our endless road of milking the high-carbon energy cow. By 2016, 43,000 jobs had been lost in the oil and gas industry alone. Almost half of the office space in downtown Calgary was empty. We were hurting and increasingly angry. And we were still confident that yet another boom in high-carbon energy would again save our necks and our future. Even the anomalous heat dome we experienced in late May and June 2021 was not enough to shake our commitment to high-carbon energy. Most of our leaders in every sector took the resurgence of the price of oil in 2022 as a sign from heaven that we had been right all along. Oh my.

In Alberta, we are still trying to figure out ways to increase production and get back to normal. For example, we have chosen to become champions of carbon capture, utilisation, and storage (CCUS). The Alberta version of CCUS purports to set us up for continued success to and beyond mid-century. As we see it, we will continue to develop the oil industry. The only change is that we will capture and utilize the CO<sub>2</sub> we create. We imagine this will add new lines of profitable business. And the best part is that most of the capital costs for this new technology will be covered by the public purse. As I write this, the industry is lobbying for Canada to match the offer made by the Biden Administration to this industry in the USA, namely 66% of the capital costs. The Trudeau government has only offered 50%. As of today, the province has offered nothing in this regard. The profits, of course, will be kept by the industry. Socialized development of new technologies and privatized profits from their use is a well-established pattern in the MTI world. So are work arounds which appear to deal with the troubling condition at hand, but do not really do so. We in Alberta are extraordinarily inventive engineers. However, we are not what you would call *deep and thorough thinkers*. No one comes to Alberta for insights into the deep dynamics of the 21<sup>st</sup> century. Our overwhelming commitment is still to build a better version of yesterday in the hope that it will serve us well tomorrow.

Nevertheless, the reality of global warming is slowly sinking into the consciousness of a minority of citizens. Some are seeing that which up to now we in Alberta were incapable of seeing. The empty offices in downtown Calgary<sup>14</sup> are stranded assets. They bear witness to the foolishness of blindly believing what everyone in your crowd apparently knows, even in the face of evidence to the contrary. Yet even this is not enough to keep our provincial government and our leaders in industry from doubling down on its commitments to a high-carbon, neoliberal capitalist economy.

Unable to learn, we feel betrayed and have become increasingly panicky. History is startling us, and we do not like the experience at all. We are grieving the loss of the only life most Albertans have ever known—Alberta as a high flyer with gushers of money. Few alive today are

---

<sup>14</sup> As I write this almost 30% of Calgary’s office space is empty. More square feet of office space stand empty in Calgary than all of the office space in Vancouver.

even aware that it has not always been like this, that in 1937 we had to declare bankruptcy. Worse, as was the case in the USA in response to 9/11, the leadership of the province is not up to the task of even recognizing our situation for what it is, much less helping us see it clearly and owning up to it with intellectual honesty, emotional maturity, and spiritual strength. We are stuck in resentment and anger as we project blame onto others and deny our responsibility for the messes we are in. Our present and former premiers<sup>15</sup> would have us circle the wagons and dig in for a long siege against “them.” We must go to war. The dominant mood in Alberta is to set ourselves up for a civil war in Canada in which we play the role played by the South in the American Civil War.<sup>16</sup> As a result, “*next year’s country*” is in real danger of becoming “*yesterday’s country*” in less than a generation.

The wider and deeper questions I am raising with this riff on Alberta’s inability to read the signs of the times and alter its anticipations appropriately are these:

*Is there any possibility, even a small one, that we who are MTI peoples and cultures have set ourselves up for an analogous fall? Is there a real possibility that history is moving out from under our MTI feet and onto a new trajectory in a way that we can see is already happening to Alberta? Instead of being the future of humanity, could our MTI cultures already be past their peak and into a long and increasingly incoherent disintegration? Could the main storyline of the 21<sup>st</sup> century be about the collapse of our MTI form of civilization, rather than the technology-driven triumphal expansion now widely taken for granted?*

If there is any serious possibility that the answer to these questions is “yes,” then we, and now the whole inhabited Earth, are in far more and deeper trouble than we now know, imagine, think, or are in any way prepared for. As Charles Hall and John Daly, Jr., pointed out in 2009, “*The concept of the possibility of a huge, multifaceted failure of some substantial part of industrial civilization is so completely outside the understanding of our leaders that we are almost totally unprepared for it.*”<sup>17</sup>

I want to explore these questions in this way: First, I will explore two mental models which I find to be useful—the “S Curve” and “nested S Curves.” The latter marks a phase transition. Then I will return to the question of whether the blind spots of our MTI form of civilization are leading us into a future which will startle us with a power that is beyond our present MTI imaginations.

---

<sup>15</sup> In 2022 the Hon. Jason Kenney was replaced by the Hon. Danielle Smith as Alberta’s premier.

<sup>16</sup> I have spoken about this situation and its dangers. See the video [here](#).

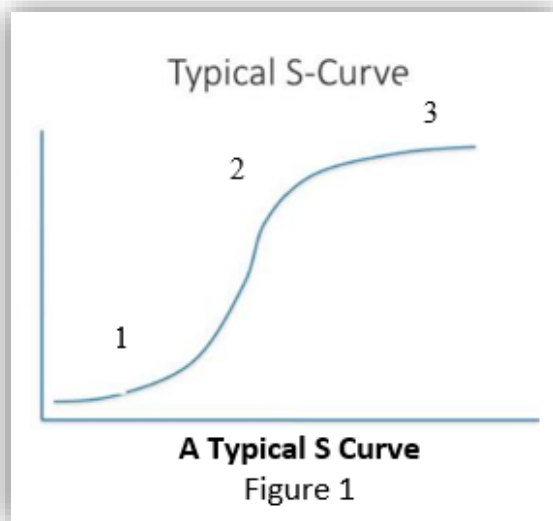
<sup>17</sup> Charles A.S. Hall and John W. Daly, Jr., “Revisiting the Limits to Growth after Peak Oil”, *American Scientist*, May 2009 (italics added), available at [https://www.researchgate.net/publication/250968872 Revisiting the Limits to Growth After Peak Oil](https://www.researchgate.net/publication/250968872_Revisiting_the_Limits_to_Growth_After_Peak_Oil) (accessed April 16, 2023).

## Section II

### Two Useful Mental Models

**S Curves:** S Curves are useful because they capture the dynamics of many changes, human and non-human, which occur on this Earth. These dynamics have three basic phases in common.

(See Figure 1.)



In the First Phase the rate of change (the Y axis) is much less than the time taken to change (the X axis). Positive feedback accelerates the pace of change. Each movement up a unit of the Y axis takes *less time* than the unit before it. In time, the rate of change “goes critical” as the pace speeds up around the bottom curve. This takes us into the Second Phase. In this stage for every unit of time there is far more progress on the Y axis than on the X axis. In some case the pace of change becomes exponential. Finally, as the constraints of negative feedback kick in, the rate of change slows until development peaks. In the Third Phase, each movement up a unit of the Y axis takes more time than the unit before it.

An S Curve applies to human learning. Consider the human psychology of these three phases. In the First Phase, there is a good deal of confusion, uncertainty, and ambiguity. Uncertainty abounds. We know what we want to achieve, but at this stage we do not yet know how to secure it. It can rightly be said that, at this stage, we do not yet know what we are doing.

But, in time, as we begin to get our sea legs, we “go critical” and enter the Second Phase. At this stage, we find that we are able to dance with what had been new and strange music. Things begin to come together. Coherence increases. Familiarity and focus are found and the pace of change speeds up. The experience is exhilarating. In time, we may be tempted to think that we know what we are doing. Now the question becomes, “*How long will this go on?*” “*Can we trust the experience enough to continue to plan on it?*” If the second phase lasts long enough—years, decades, centuries, or longer—we may take it for granted that this state of affairs is normal and will go on forever.

However, eventually constraints of some kind always kick in. The pace of change begins to slow down as we enter the Third Phase. The coherence we have known begins to give way to increasing incoherence. That which has been solid ground under our feet begins to disintegrate. That which once was utterly taken-for-granted begins to become less trustworthy. Signals we once trusted no longer seem to mean what they once did. Uncertainty of a new kind emerges—self-doubt. “*If we are as experienced and knowledgeable as we think we are, as our record attests, why are things not working the way they used to?*” This is truly an uncomfortable experience.

We hang on to the hope that things haven't really changed. Everything in our recent experience tells us that we have faced and conquered a host of difficulties in the past. Accordingly, we see today's difficulties as just more challenges to be conquered. As we enter the Third Phase it simply does not occur to us that something so truly new is happening that to cope with it we must unlearn much we had previously learned and taken for granted; that we must re-learn the nature, character, and dynamics of reality. Nothing in our long period of success prepares us for this shift. On the contrary, our sustained success in Phase Two tends to set us up for *miss*-understanding Phase Three.

We enter Phase Three conditioned to trust our record in Phase Two and meet its accelerating demands, and thus to ignore signals that our situation is fundamentally changing. This thought may nigger at the back of our minds, but it evades our day-to-day agendas. To enter the reality of Phase Three requires deep learning—*we must invest serious time and attention if we are to understand our emerging situation and respond to it intelligently*. Instead, we double-down on what we already know how to do as we seek to stave off what we experience as decline. Today, Alberta is a stellar example of this dynamic.

MTI culture globally has entered Phase Three, that of unexpected-novel decline. As in Alberta, the normal MTI response is to assume that whatever is happening can be seen, explored, understood, and responded to by well-established MTI ways of knowing and doing. We believe that is needed is more courage, commitment, money, technology, and labor. What is unimaginable is that we are up against realities which our deeply ingrained ways of knowing and being cannot see or understand. Therefore, we default to making heroic MTI efforts<sup>18</sup> to get us back to familiar patterns of success.

In the Third Phase, *heroic efforts to get back to familiar patterns of success do not work*. At this stage, continuing to trust well-established habits and indicators is foolish and contra-indicated. What is required to navigate the Third Phase is deep context-sensitive learning. This, however, is not a skill routinely taught or fostered in sadly, context-blind MTI cultures.

Deep, context-sensitive learning requires non-trivial courage, extraordinary insight, profound humility, and a radical openness to new patterns and dynamics of reality. These are required not only personally, but at every scale of the group involved in the transition. When whole cultures enter decline, if they are to have any hope of adapting profoundly enough to survive the experience, then society-wide processes supported by appropriate infrastructures for *whole-of-society deep learning* are required. Sadly, as of today, no MTI culture has developed such processes and infrastructures. This means that no MTI culture is prepared to even recognize, let alone explore, understand, and respond courageously to a personal-to-civilizational scale transition that transcends the form of civilization it has inherited. I repeat, this is not good news for a ten-year-old.

---

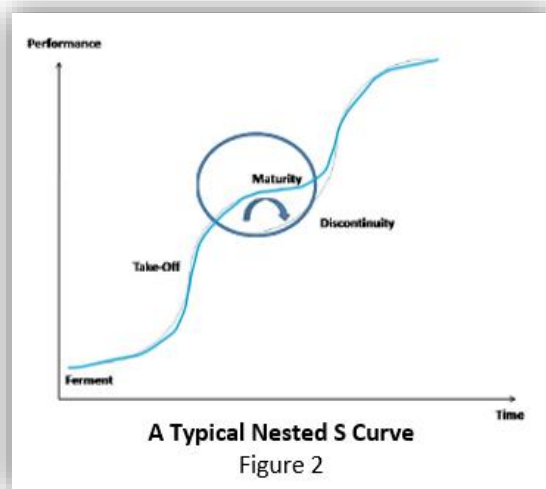
<sup>18</sup> In MTI cultures in the 21<sup>st</sup> century, heroic" efforts are cast in the language of "game changing innovation and transformation." Notwithstanding this terminology, such efforts prolong the deep MTI game we are playing, namely improving and extending our MTI cultures.

I have noted that this pattern of trying to keep Phase Two going forever can be seen clearly in Alberta. It affects every sector of Alberta's society, including, ironically, those who are masters of the language of innovation, creativity, and entrepreneurship. There is a deep unspoken agreement that all our activity should continue to be directed towards the only goal we have ever known<sup>19</sup>—*extending our success as a model MTI culture*. No serious thought is given to, much less sustained investments made in, the possibility that history has called "*time, gentlemen, time*" on MTI cultures; that we need to be inventive regarding the fundamental frames of modernity; that being inventive within those frames now leads to failure.

This notion was expressed by William M. Birenbaum, in his 1969 book *Overlive*:<sup>20</sup>

*Much of what passes for future-think is an imagination of what the world would look like if it "worked right." . . . It is an imagination dominated by now, which aims to imprint the "best" of now upon the future. The trouble is that the "best" of now . . . is not very satisfactory.*

**Nested S Curves:** If we are to make reliable sense of the 21<sup>st</sup> century Nested S Curves (see Figure 2) are also important. They capture what is called a "phase transition"—the transformation of something from one state of affairs to another, for example, when ice melts into water or water boils into water vapor. I use the term here in an analogous sense—*when an established and dominant phenomenon weakens into incoherence and a truly new space-shaping phenomenon begins to emerge*. If at somewhat different scales, getting a new job, becoming a parent, growing out of childhood into adolescence and becoming a widow or widower are all familiar human phase transitions.



In a phase transition we need to pay particular attention to the dynamics which occur where the two S Curves overlap. This space is marked as a "discontinuity" on Figure 2. As noted in the discussion of Figure 1 above, those who have ridden the Second Phase of the first S Curve are thoroughly familiar with its reality. They are used to its quirks, rhythms, characteristics and challenges, and rewards. They are at home with it at every layer of their being, from the way they know reality to the way their body responds to it. It is what they know and are. They are unaware that the Third Phase is coming or has come or of the new S Curve that is coming into being.

<sup>19</sup> This "we" is literally true for Alberta. It was roughly 1870 before European settlers arrived in any number. By then London, UK, was over 3 million. In Alberta, the only aspiration of the settlers was to create a fine example of an MTI culture.

<sup>20</sup> William. M. Birenbaum, *Overlive: Power, Poverty, and the University* (New York, Delacorte Press, 1969) (italics added).

Consider in this light, MTI males in 1980. Then, the only culture the overwhelming majority of MTI males had known was a version of a somewhat misogynistic, patriarchal, economically-focused, liberal democracy. Such modern males knew that, as sure as the sun would rise tomorrow, in any given setting someone had to be in charge. Further, they knew that that *someone* would be a male. They also, knew that this was *right and good—the natural order of things*. Few of these insights were explicitly taught. Rather, they were picked up by a normal human process of socialization that can be characterized as cultural osmosis.

In 1980, there were precious few serious signs in MTI cultures that this order would be seriously challenged or that it was already in the process of disintegrating. Back then there was no pressure on Wall Street and corporations to get serious about learning to hear feminine voices as distinctive, much less listen to them for their equally necessary perspective. There was no serious pressure from legislatures to listen either. With few exceptions. These demands for change would wait until later to manifest themselves.

Yet, even in 1980, there were clues that such pressures would build. For example, the United Church of Canada had been ordaining women since 1936. Dr. Sylvia Ostry, as Canada's Chief Statistician, had removed this question from the decennial census: "Who is the head of the house?" *Ms. magazine* had been around for eight years and the modern women's movement was reaching a critical mass. Still, MTI cultures remained male-dominated. Most medical research was carried out on males. It was just assumed that what worked for males would also work for females in spite of obvious biological differences. To repeat context sensitivity is not a major feature of MTI cultures. In effect, we who are MTI are context blind.<sup>21</sup>

A general point I wish to make is that when a long-lived and well-established order dies, it is typically on death's door well before those who rule the order catch on to the fact that their day is over.<sup>22</sup> This story of habit-induced, culturally-embedded willful blindness<sup>23</sup> is the core of the story of the demise of past civilizations and today of our MTI form of civilization. As the widely-read Canadian author Louise Penny put it in her 2018 book, *Kingdom of the Blind*, "Nothing good ever came out of a blind spot."<sup>24</sup>

A second point is that the slow pace of recognition by MTI cultures of women as distinctive and important in their own right is a fine example of the "thickness" of established human cultures. In thick cultures the pace at which deep whole-of-society cultural change occurs is painfully slow, and always multi-generational, over centuries. We would be wise to keep this reality in mind, especially when so many today talk loosely about the need for and even the possibility of rapid whole-of-society systemic adaptation. I do not deny the desirability of

---

<sup>21</sup> In my view the "context blindness" of MTI cultures is the root of "energy blindness," "biosphere blindness" and blindness to all humans as "persons" that afflict MTI cultures world-wide. These forms of blindness are now front and centre in the views of those to whom I pay closest attention, e.g. [Charles A. S. Hall](#), [Nate Hagens](#), [Thomas Homer-Dixon](#), [Joanna Macy](#), [Bill Rees](#), and the late [Hazel Henderson](#), to name only a few.

<sup>22</sup> Max Planck's infamous quip that "science advances one funeral at a time" maps onto this point.

<sup>23</sup> For an extraordinary exploration of this all-too-human characteristic see Margaret Heffernan's [Willful Blindness: Why We Ignore the Obvious at Our Peril](#), (Toronto: Doubleday, 2011).

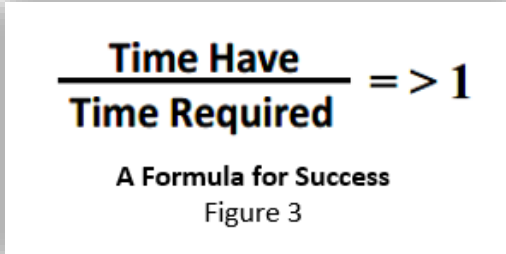
<sup>24</sup> Louise Penny, *Kingdom of the Blind* (New York, Minotaur Books, 2018).



rapid and systemic personal-to-civilizational change. I do caution that the expectations which are being created regarding the capacity of MTI cultures to adapt deeply and quickly are both ill-founded and dangerous.

The primary issue is not the lack of goodwill, money, or effort. Rather, as of today, few people in our MTI cultures have an adequate grasp on the actual dynamics and pace of the evolution of major, well-established predispositions in human societies. As a result, most efforts intended to bring about serious systemic cultural change are still far too superficial, un-systemic, and un-reflexive to result in non-trivial lasting differences. As a general rule, the “*culture change*” efforts we make are not nearly enough to achieve the outcomes we desire. This is to be expected, since, given our ignorance about personal-to-civilizational scale transitions, we grossly underestimate both the “gravitational pull” of our now well-established MTI cultures and the degree of effort it takes to reach escape velocity from the cultural/civilizational forces that have shaped us.

In the context of serious threats to the future of our species, this lack of understanding matters. One question we must face is this: *How does the adaptation time of whole cultures which are unprepared for profound transitions map onto the time requirements we must meet in order to avoid various types of disasters—requirements that are set for us by our historic context?* The formula for any given people in any given situation is this—the time the persons/culture in question actually require to make the transition is divided into the time the situation provides to make a successful transition. If the answer is 1 or more, the transition succeeds. Less than 1 means failure. (See Figure 3.)


$$\frac{\text{Time Have}}{\text{Time Required}} = > 1$$

A Formula for Success  
Figure 3

For example, MTI cultures have set the somewhat arbitrary date of 2050 as the date by which we must be “*carbon-neutral*,” which they also refer to as the time we must reach “*Net-Zero*.” Thus, we have determined that roughly 30 years is the time required. The trouble is we really do not know how much time is required to avoid major self-reinforcing tipping points. If we reach vital tipping points before 2050, we are hooped.

Foolishly, we established the 2050 date by determining the time in which we believe we can accomplish the goal (the time we have), not by trying to determine what the living systems of Earth require of us. The presumption that Earth must bend to accommodate our habits, wishes, and aspirations is fundamental to MTI cultures. Sadly, it is not supported by evidence. It is dangerously wrongheaded. Further, our calculation of what can be accomplished in thirty years based on our perception of our extraordinary powers is not supported by current trends. We fudge both the numerator and the denominator to neatly match. MTI cultures have an especially difficult time coming to terms with the fact that reality has no obligation to meet our expectations and timelines. This we know: When the time required for us to adapt takes longer than the time we have, disasters occur.

In short, we who are shaped by the habits of mind, heart, and body of MTI cultures are not likely to notice that our most fundamental takes on reality are *miss*-takes. This is a sobering

thought when we realize that we do not have the widely-developed, reflexive, self-critical insight required for us to imagine and work through just what it would take for MTI cultures to engage in and sustain a personal-to-civilizational scale evolution—an evolution that would successfully enable them to transcend their MTI formation.

### Section III

#### Where MTI Cultures Actually Are in History

Let us begin by asking,

*“What might be called the “official future” of today’s MTI cultures?”*

*“Where do leaders the major institutions of MTI cultures imagine we are in history?”*

*“What future are such people—and to be truthful, most of the rest of us—anticipating, planning, counting on, investing in, committed to, and lobbying for?”*

Evidence relevant to answering these questions may be found in the public utterances of such leaders given in newscasts, documentaries, interviews, public statements, webinars, public speeches, public writing, blogs and social media posts, open letters, advertisements, essays, position papers, political tracts, public policy, and legislation and the justifications given for legislation.

On my reading of this evidence, it seems clear that the major opinion leaders of MTI cultures are anticipating, investing in, committing to, arguing the value of, and planning for a future which is essentially an improved continuation of our MTI form of civilization. No significant deviation in the trajectory of our MTI form of civilization is given serious thought or even anticipated as an eventuality for future thought. An even better version of the world as we who are MTI peoples and cultures have come to know it is both promised and planned for. For example, it is widely agreed that the economy must grow; that a continuously growing economy will provide jobs for those who seek them; politics and business and religion and ethics operate on different planes and these two planes should not interfere (too much) with each other; that STEM x M (science-technology-engineering and math multiplied by vast amounts of money) holds the key to our future; the humanities can be safely neglected; the nature of money should be respected and it makes sense to monetize nature; philanthropy without regard to purpose is a good thing; and while gross inequality is shameful, we must not act too hastily to overcome it.

While there are many disagreements in MTI cultures—for example, the proper weight to give to the profit motive, the relative size and responsibilities of governments, how much of our lives should be guided by the “invisible hand of the market,” whether women should have a right to an abortion at various stages of their pregnancies, whether citizens should have the right to refuse to inoculate their children, whether law-abiding citizens should have unlimited rights to possess guns, and whether, as the US Supreme Court determined, money should be

seen as speech<sup>25</sup>—our disagreements are argued within the wider framework of our MTI form of civilization. Those on the left may do battle with those on the right, communists and socialists may argue with capitalists, the disadvantaged groups may challenge the privileged, but they agree on the MTI way of apprehending and responding to reality. I call this way of framing human life on Earth the “MTI Mantra.” It captures the official version of the civilizational game we are playing, whether we are aware of it or not.

The MTI Mantra runs something like this:

*As a species we who are Homo sapiens have faced many profound challenges and a handful of existential threats over our 350,000 year-long journey. Before we became modern, we were at great risk because we could not tease out the real objective truth about Earth, other species, and ourselves from our inherited cultural traditions, myths, superstitions, and prejudices, from our theological suppositions and from village gossip. Nor could we protect those we loved from the ravages of weather and disease. However, now that we have the science of the Enlightenment we can wrestle truth to the ground and own it. With the technologies which that science enables, we can also own the Earth. Our success over the past 500 years makes this clear. Happily, today, we who are MTI peoples and cultures know what needs to be done and have (or will soon have) the capacities, human and technological, to do it. Therefore, our core work in the 21<sup>st</sup> century is to find the leadership, political will, science-based technologies, and money which will enable us to extend our MTI ways of being and living to and even beyond the ends of the Earth, and as we do create a future which is more just, equitable, and inclusive.*

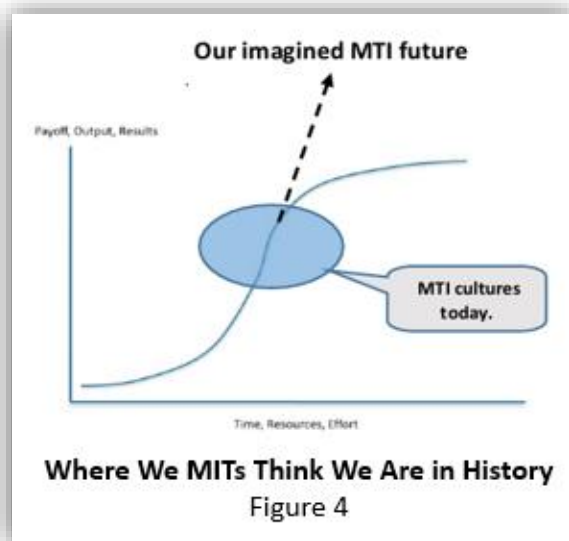
I note especially that, by and large, the now-global, multi-faceted, multi-billion-dollar sustainability industry rests on, reflects, and reinforces this mantra. Its purpose is to make some new version of our MTI world sustainable. Even the United Nations Sustainable Development Goals (SDGs) presuppose the righteousness of the MTI mantra, as do virtually all responses to climate change and the offerings of political parties and business associations. All promise a new and improved version of MTI life.

Given the above, I believe we can state clearly and unequivocally that leaders of MTI cultures think they are in Phase II of the S Curve and take its continuation for granted. (See Figure 4.) Yes, *The Limits to Growth*<sup>26</sup> was published in 1972. It even became a best seller. Several studies since have confirmed the 1972 projection that obvious signs of societal collapse would become evident in the 2020s and the 2030s. But the leaders and major institutions of our MTI cultures show no hint that there is anything truly important to be learned from the work of those who have devoted their lives to limits-to-growth studies.

---

<sup>25</sup> In *Citizens United v. Federal Election Commission*, 558 US 310 (2010), the US Supreme Court ruled (5–4) that laws preventing corporations and unions from using their general treasury funds for independent “electioneering communications” (political advertising) violated the First Amendment’s guarantee of freedom of speech. In effect, US corporations now have broad rights to buy the results of elections.

<sup>26</sup> Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, *The Limits to Growth*, Universe Books, New York, 1972.



There is a great irony in this situation. On the one hand, we claim that MITI's scientific ways of knowing are objective and are thus open to alternative understandings of the data at hand. We tell ourselves that this openness to endless revision and improvement will protect us from error when the data indicates changes are needed. On the other hand, we fail to understand that it is precisely this way of thinking that is leading us into error—we believe, somewhat magically, that we are exempt from the implications of Einstein's famous quip,

*We cannot solve our problems with the same thinking we used when we created them.*

Today, those of us who are pursuing the line of thought that runs through this essay, namely that the root source of our troubles is our MITI way of apprehending and responding to reality, are still at the margins of our cultures. This is a pity, because our well-established MITI ways of knowing, imagining, thinking, and doing cannot enable us to understand or deal with our troubles. A recent remark made by Ben Ehrenreich makes this point,

*A strange sort of faith lies at the core of mainstream climate advocacy – a largely unexamined belief that the very system that got us into this mess is the one that will get us out of it. For a community putatively committed to scientific empiricism, this is an extraordinary conviction.<sup>27</sup>*

As of today, our MITI ways of apprehending and responding to reality are not on any of the growing number of lists of the “*existential threats*” to humanity. They are not even on the lists of the institutions whose explicit *raison d'être* is to become experts in identifying and figuring out appropriate responses to them. We are simply not seeking to transcend and escape from the ontological and epistemic roots of our MITI form of civilization. Rather, we still rely on the deep presuppositions we have inherited. In the 21<sup>st</sup> century this project is doomed to fail as

*MITI cultures are in Phase Three of the S Curve*

*and, more pointedly,*

*MITI cultures are in the discontinuity phase of the Nested S Curve.*

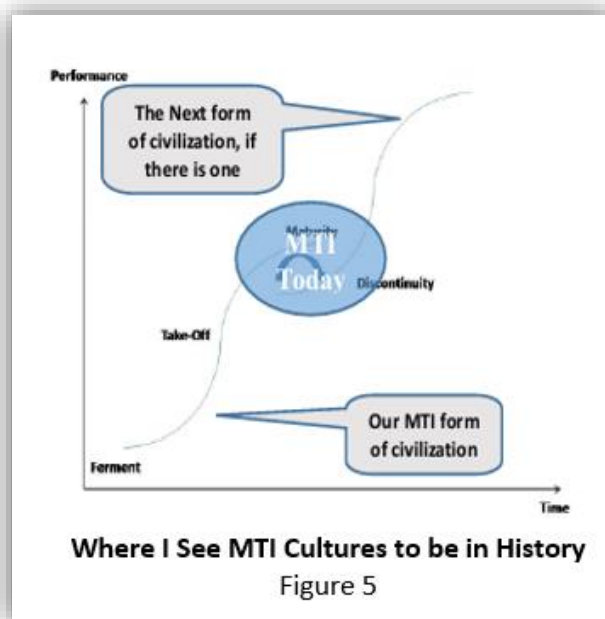
---

<sup>27</sup> Ben Ehrenreich, “We’re Hurtling Toward Global Suicide: Why We Must Do Everything Differently to Ensure the Planet’s Survival.” *The New Republic*, March 18, 2021 (italics added).

## Section IV

### The Coming End of MTI Civilization

What if we are past peak modernity and are headed not into the fifth, sixth, and seventh industrial revolutions, but to a personal-to-civilizational scale collapse and the end of the MTI way of being, knowing and responding to reality? (See Figure 5.)



Allow me to recall the psychology of a culture which arrives at such a place on a Nested S Curve. Remember, it has learned to live in ways which have been extraordinarily successful for centuries on the basis of its stated and unstated assumptions and presuppositions about reality, people, and the relationship of one to the other. And all of this without wide-spread reflexivity. Then it enters a period of discontinuity where what is needed is context-sensitive, reflexive, self-critical, self-consciousness understanding, and, in the case of the current discontinuity, at every level of human consciousness and culture and at every scale from unique persons to the civilizational.

Before moving on, I want to note that there is a sense in which it is inappropriate to blame the elites of MTI cultures for the collapse of their and our MTI cultures. While we tend to see them, and they tend to see themselves, as independent actors, they are as much products of MTI cultures as are the rest of us. They have done what the culture asked of them. They have become what the culture taught them to become. They have done it in the terms set by the categories, logics, rationalities, and standards of MTI cultures. It is not their fault that they did not develop the capacities required to understand the phase transition that is occurring between two forms of civilization and the promise hidden in the disintegration of our MTI form of civilization. Where would have learned these things? Who would have taught them? Neither Enlightenment science nor today's STEM is about becoming wise, inclusive, systematic, integral, and meta-reflexive in order to explore, understand, and cope with this personal-to-civilizational scale phase transition.

We are in a situation I call "civilizational overshoot," a term I coined 2018.

*Civilizational overshoot occurs when the key terms, logics, and rationalities established by the core paradigms of a form of civilization no longer enable the cultures which exemplify that form of civilization to make reliable sense of, much less enable them to cope with, the existing and emerging realities/challenges which have come to characterize their time.*

When this happens people in this form of civilization have gotten themselves into a Wittgensteinian fly-bottle—a situation they can neither understand nor escape from. In such a situation a culture has only two choices: either it collapses due to increasing incoherence caused by irrevocable disintegration, or a critical mass of its citizens become meta-reflexively aware not only of the danger they are in but of the root cause of their plight, namely, the fact that the root paradigm of their own inherited form of civilization no longer understands reality well enough to cope with it.

No people in human history have ever had to consciously face such a condition. To date there have only been three personal-to-civilizational-scale phase transitions—transitions during which a new form of civilization emerged. The first saw the emergence of local, small-group, hunter-gathering peoples and cultures. The second saw the emergence of regional agriculture-based peoples and cultures. The third saw the emergence of MTI peoples and cultures. Each of these transitions was a process that was (a) slow, (b) local or regional, (c) optional, and (d) unconscious. There simply was no need for any of the dozens of generations which lived through any of these personal-to-civilizational scale phase transitions to be aware that they were participating in the process of giving birth to a novel form of human civilization. To date, such transitions were only recognized for what they were long after the fact.

Today, our situation is dramatically different.

***Our MTI cultures are now disintegrating within us, among us, and around us. While we may not be ready to face the personal-to-civilizational transformation, it is not optional, it is required. Further, it must be rapid by any historical standard and be globally scalable.***

***By continuing to base our future on the adequacy of MTI categories, logics, rationalities, standards, and aspirations, we are making matters worse than they need to be.***

***Our first task is to learn that the bad news about our situation and condition—that our MTI form of civilization has no long-term future—is the best “bad news” we will ever hear.***

***These understandings open doorways to a new human adventure, to a new Exodus.***

## **Section V**

### **The Adventure of the Exodus that Awaits Us**

The emergence of a settled agricultural-based cultures out of hunter-gatherer cultures took millennia. The emergence of MTI cultures out of agriculture-based cultures took centuries. The emergence of the next form of civilization out of what we have today must be consciously and securely underway by 2050.

This is asking a lot. As of today, the new work of the 21<sup>st</sup> Century is not even on our agendas. Rather, we live with the somewhat comforting illusion that if we just substitute alternative

energy for fossil fuels so that we become carbon-neutral by 2050, we will be good to go. We believe our MTI culture has a “green” future.

At this point, it is to be expected that many will resist the conclusions to which I have come. To do so is perfectly normal. After all, there is a global advertising industry worth almost a trillion dollars whose sole purpose is to sing the praises of our MTI form of civilization so convincingly that we will stay committed to it regardless of its inconsistencies and inherent threats. Within MTI cultures this conviction is constantly reinforced. Repeatedly, we say to ourselves,

*With so much that is good, even great, in MTI cultures, surely, there are ways we can fix the problems and find solutions to our difficulties within this framework. There is no need to outgrow and transcend our MTI formation. Saying such extreme things is simply not helpful.*

I understand this response. Nothing in our MTI ways of living prepares us to radically question its extraordinary gifts or its legitimacy, much less its future.

So what can I say that may be helpful?

I see intriguing parallels in the deep patterns of our present situation in the early decades of the 21<sup>st</sup> century and those of the ancient Hebrews in Egypt in the 13<sup>th</sup> century BCE as told in the Bible.<sup>28</sup>

Consider that:

- **The journey begins:** When the ancient Hebrews fled to Egypt in the 18<sup>th</sup> century BCE, it was not for a holiday. They abandoned the life they knew so to save their lives and their future. Our journey into the MTI form of civilization has been equally life-affirming. We not only invented the notion of “progress,” we lived it. We have celebrated our move to modernity as a great advance for us and for our children and for their children.
- **Things go sour:** Over time, things went sour. While initially welcomed into Egypt as refugees and fellow citizens, over five centuries their status devolved into slavery. The only future they could see was as slaves in Egypt. Our MTI cultures have also evolved over five centuries. While we are not yet slaves of modernity, the bloom is coming off our sense of unending progress. The unsettled turmoil that marks most societies today can be read as a sign of a deep, deep restlessness; a loss of faith in the promises of the MTI gods. Many here at home, as well as in the Global South, now cheer our suffering. They have come to see our collapse as a necessary condition of their liberation.
- **A More Promising Future Beckons:** Moses appears to offer the Hebrews a more promising future. But the Egyptian Pharaoh was no more inclined to force his people to adapt to life altering change than our public leaders are willing to force us. So the anti is upped. Intensifying plagues occur. Water turned to blood, then frogs, then Gnats, then flies, then death of livestock, then of boils, then of the worst hailstorm

---

<sup>28</sup> For this purpose, I am concerned with the story as it is told in the Bible, not concerned with the historical accuracy of this account.

ever, then of locusts, then of darkness, and then of the death of first-born sons. All this happened before the Egyptians were ready to change their lives as they knew it and let the Hebrews leave. (Exodus 8-12) It is worth noting that this terrifying time of plagues must have been equally upsetting for the Hebrews. The certainty of their future was also being dissolved. At best a mixed blessing. Today our plagues come in the form of heat domes, floods, droughts, atmospheric rivers, biophysical overshoot, climate refugees, desertification, overdrawn aquifers, melting glaciers, deforestation, pollution, sea level rise, slowing ocean currents, storms of increasing frequency and intensity, toxic mining and working conditions, soil erosion and depletion, dead zones in seas, plastic in oceans, autocracies, corruption, wars, and ever-expanding militarization and ever-more-lethal weapons. Economic inequality widens. Global elites play the role of Egyptians; the oppressed now include nonhuman species and future generations of all species. Our confidence that the future will be better for our children is dissipating.<sup>29</sup> And yet, as of today, we are unwilling to pursue a radically new and more promising future. Will we too need to see the death of our first born before we get serious about journeying beyond our MTI ways?

- **The Exodus and two generations in the wilderness:** So Pharaoh relented. The Hebrews fled Egypt only to find themselves in a place where uncertainty was piled on uncertainty. What is manna? Will it come tomorrow? Many longed for a return to the certainty of slavery. Life was stripped to its essentials: food, water, sex and meaning. The emergence of a new sense of community and meaning took time – two generations. Most who fled Egypt died in the wilderness. Few lived to see future they had been promised as slaves in Egypt. I agree that we who are living in MTI cultures are not yet come the conclusion that we must flee our formation; that living as MTI peoples has become lethal to us and to so much that we love about this planet. It takes a lot to arouse us from our default view that the security of the MTI world we know is far, far better than the insecurity of a vague promise of a better future that lies beyond our MTI frames of reference. As of today, only a small percentage have reached the conclusion that we have no future if we stay committed to a MTI future. Are you now among us? I invite you to watch that percentage grow over the next few years, let alone decades as our fear of an MTI future becomes greater than our fear of uncertainty.
- **One great difference—not Exodus but reinhabitation:** There is one great difference in the Exodus of our time as compared to the Exodus of the ancient Hebrews. Today everywhere is Egypt, which is to say everywhere is MTI culture or under the influence of MTI culture. There is no sea we may cross to leave Egypt behind. Globalization means there is no place to hide. Our task as I have noted is to cooperate with our own evolution at every scale from unique persons to a new form of civilization as we seek

---

<sup>29</sup> The [2023 Edelman Trust Survey](#) reveals that the citizens of only one of the twenty-seven countries recently surveyed think that their family will be better off in five years. This country was China. The increase was 1%. In twenty-four of the twenty-seven countries, the level of confidence in the future reached a new all-time low.



to transcend our formation unconscious citizens of MTI cultures. As Northrop Frye put it, our journey is to “make here home.”<sup>30</sup> T.S. Eliott offers this clue in “Little Gilding”:

*We shall not cease from exploration and  
the end of all our exploring  
will be to arrive where we began and  
to know the place for the first time.*

Remember, where we all began was as indigenous peoples who knew they were a living people in a living world they could not control, but could learn to dance with.

I will pause the story here. As I write this in early 2023, we in MTI cultures can be seen to be about where I imagine the Ancient Hebrews in Egypt were as they watched the second or third plague in Egypt – unsettled, but not yet ready to make a major move. Both Egyptians and the ancient Hebrews wanted more evidence before they were willing to act. In their case, Moses was willing to provide it. In our case, the Earth and our species will continue to oblige us.

If we cannot learn from subtle signals, the strength of the signals will be increased. The question is, “How much death, destruction and suffering will we have to experience before we are ready to move beyond the boundaries of our MTI cultures?” This is still an open question. Today, the answer appears to be, “A good deal more.” Sadly, it appears that, as with the Egyptians, we will not learn fast enough to avoid tragedies which move ever closer to every home. I fear that our need for a post-despair hope is not a figment of my imagination.

I have written this essay in the hope that by reading and reflecting on it you may find some of the understanding and courage you and we will need to make reliable sense of our times and respond with a fresh imagination of where we are in history and the nature of the work that this moment calls for.

So I end—as I began—with the ending of MTI cultures. The new Exodus begins with leaving Egypt behind. What we knew, no longer suffices. We are in discontinuity. The wilderness beckons. As I emphasized earlier, we are in a unique situation. For the first time, we are entering into a personal-to-civilizational phase transition with self-conscious awareness and the outcome will depend on decisions made and actions taken by humans over a historically, and certainly a geologically, short period of time.

Allow me to close with this thought: I have learned that none of us is responsible for the length of our arms, or the time in history into which we were born. However, we are far more responsible than our MTI cultures teach us for what we take as real. What we allow ourselves to know as real is the key to seeing what needs to be done, thinking/feeling our way through we will be able to get it done, all without having to be told what to know, see, think, or do.

Let go.

Let’s go... together!

---

<sup>30</sup> Northrop Frye in a 1970s National Film Board documentary on Canada, “Journey without arrival.”