

*Today's Contemplation: Collapse Cometh-*



*A Compilation of Collapse Cometh Essays,  
Volume One*

**Steve Bull**

## Contents

### Pre-Contemplation Essays

2018

'Patriotism' and Manipulation of it by the State, January 24

Hell in a Hand Basket and Why We're Going There, Guaranteed (Sort of), February 28

Don't Spill the Beans, March 4

Is 'Growth' a Positive Force? Part One, April 5

2020

Covid-19 and Our Competing Narratives, April 25

### Today's Contemplation: Collapse Cometh Essays

2020

Collapse Cometh, August 8

Mythical Narratives Everywhere to Avoid Reality

Collapse Cometh II, August 8

Feeding the Growth Monster: Fiat Currency and Technology

Collapse Cometh III, August 14

Grieving: There Are No 'Solutions' to Overshoot

Collapse Cometh IV, September 24, 2020

Fiat Currency: Debasement and Infinite Growth

Collapse Cometh V, October 2, 2020

Electrify Everything: The Wrong 'Solution'

Collapse Cometh VI, October 9, 2020

Infinite Growth, Finite Planet; What Could Possibly Go Wrong?

Collapse Cometh VII, October 12, 2020

Science: It May Not Be All You Think It Is

Collapse Cometh VIII, October 30, 2020

Peak Oil and Sociopolitics

Collapse Cometh IX, November 7, 2020

Hear, Speak, See No Evil: Sociopolitical Collapse

2021

Collapse Cometh X, April 29

Who Do Representative Governments Actually Represent?

Collapse Cometh XI, May 7

Fiat Currency, Infinite Growth, and Finite Resources: A Recipe For Collapse

Collapse Cometh XII, May 14

Growth Greenwashing: A Comforting Narrative

Collapse Cometh XIII, May 17

Electrifying Everything: Neither 'Green' Nor 'Sustainable'

Collapse Cometh XIV, May 20

Reducing Population: Degrowth Or Enrich Everyone?

Collapse Cometh XV, May 21

Finite Energy, 'Renewables', and the Ruling Elite

Collapse Cometh XVI, May 24

Finite Energy, Overconsumption, and Magical Thinking Through Denial

Collapse Cometh XVII, June 1

'Renewables' and the Overton Window That Ignores Biophysical Realities

**Collapse Cometh XVIII, June 5**

**'Renewables', Electrifying Everything, and Marketing Propaganda**

**Collapse Cometh XIX, June 7**

**Fossil Fuels: Contributing to Complexity and Ecological Overshoot**

**Collapse Cometh XX, June 9**

**Climate Emergency Action Plan: Electrification and Magical Thinking**

**Collapse Cometh XXI, June 16**

**Loss of Trust in Government: A Stage of Collapse**

**Collapse Cometh XXII, June 22**

**'Net Zero' Policies: Propaganda to Support Continued Economic Growth**

**Collapse Cometh XXIII, June 28, 2021**

**'Clean' Energy and the Stages of Grieving**

**Collapse Cometh XXIV, July 2**

**Climate Change and Narratives to Support Continued Economic Growth**

**Collapse Cometh XXV, July 8**

**More Greenwashing: 'Sustainable' Development**

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**If you've got something out of my writing, please consider ordering the trilogy of my 'fictional' novel series, Olduvai (PDF files; only \$9.99 Canadian), via my [website](#) — the 'profits' of which help me to keep my internet presence alive and first book available in print (and is available via various online retailers).**

**Encouraging others to read my work is also much appreciated.**

## Pre-Contemplation Essays

### **'Patriotism' and Manipulation of it by the State**

January 24, 2018

The notion that we must 'support our troops', that we must be 'patriotic' towards our nation state and its military because they are fighting for our freedoms and democracy is at a minimum misguided and more egregiously a manipulated conditioning by the state.

The idea that military 'interventions' are necessary to maintain our freedom or expand democracy ignores the evidence that the invasion and occupation of foreign sovereign states is motivated by imperial expansion to control fundamental resources (e.g. fossil fuels) and sustain or improve financial/economic hegemony (i.e. maintain the US petrodollar as the world's premier reserve currency).

War is racket as US Marine Corps Major General Smedley Butler argued[1]. It serves the financial interests of the State oligarchs. The State, however, must persuade the masses that this is not the case. It must have the support of the people for the political class to remain in their privileged positions and avoid blowback from the citizens over which they rule.

As Murray Rothbard argues in *The Anatomy of the State*[2]

"[t]he State is almost universally considered an institution of social service...[and that] we are the government...[But] the government is not 'us.' The government does not in any accurate sense 'represent' the majority of the people...Briefly, the State is that organization in society which attempts to maintain a monopoly of the use of force and violence in a given territorial area...Having used force and violence to obtain its revenue, the State generally goes on to regulate and dictate other actions of its individual subjects...[Moreover, the] State provides a legal, orderly, systematic channel for the predation of private property; it renders certain, secure, and relatively 'peaceful' the lifeline of the parasitic caste in society...The State has never been created by a 'social contract'; it has always been born in conquest and exploitation...While force is their modus operandi, their basic and long-run problem is ideological. For in order to continue in office, any government (not simply a 'democratic' government) must have the support of the majority of its subjects...[Thus] the chief task of the rulers is always to secure the active or resigned acceptance of the majority of the citizens...For this essential acceptance, the majority must be persuaded by ideology that their government is good, wise and, at least, inevitable, and certainly better than other conceivable alternatives...Since most men tend to love their homeland, the identification of that land and its people with the State was a means of making natural patriotism work to the State's advantage."

The State uses this patriotic 'feeling' to convince its citizens that any 'attack' is upon them and not upon the ruling caste. Any war between rulers thus becomes a war between people, with the masses defending the rulers in the misguided belief that they are defending themselves and certain ideologies.

In *Hegemony or Survival*[3], Noam Chomsky argues that Empire (the American one in particular) attempts to maintain its hegemony through military, political and economic means, demonstrating a total disregard for democracy and human rights in the process. He goes on to provide evidence that 'preventative' wars by the current global superpower are often used to keep potential/imagined threats from ever reaching a stage where they become real threats to its hegemony.

There is also increasing evidence that, in fact, the State's citizens have far more to fear from its own government with regard to a loss of freedoms and erosion of democracy than some concocted threat

from outside its own borders. The mass surveillance programmes revealed by NSA insiders, undermining of elections, and constant devaluation of currency/purchasing power comes to mind.

To once again quote Murray Rothbard:

“The greatest danger to the State is independent intellectual criticism; there is no better way to stifle that criticism than to attack any isolated voice, any raiser of new doubts as a profane violator...[and] to depreciate the individual and exalt the collectivity of society...[In fact,] the State must nip the view in the bud by ridiculing any view that defies opinions of the mass...Thus, ideological support being vital to the State, it must unceasingly try to impress the public with its ‘legitimacy,’ to distinguish its activities from those of mere brigands.”

The State, therefore, relies upon and manipulates its citizens’ very emotional notion of ‘patriotism.’ It uses it to maintain and expand its control of resources (both physical and financial) both domestically and abroad. And those who question or challenge it are branded treasonous and attacked/ostracised in any number of ways. Questioning is not allowed.

[1] War is Racket. 1935. Smedley D. Butler.

[2] Anatomy of the State. 1965. Murray N. Rothbard.

[3] Hegemony or Survival: America’s Quest for Global Dominance. 2003. Noam Chomsky.

## Hell in a Hand Basket and Why We're Going There, Guaranteed (Sort of)

February 28, 2018

[My love of music has me suggesting that a song be played in the background while you're reading this. There are a couple I'd like to suggest: Talking Heads-Nothing but Flowers; Blue Rodeo-Lost Together (must have some Canadian content); or, given the Ukraine/Syria/Iran/North Korea/Venezuela/Congo African Republic/Senkaku-Daiyou Islands/etc. situations, Frankie Goes to Hollywood-Two Tribes. Enjoy]

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The ebb and flow of societies is well documented by historians and archaeologists. It seems every society rises in complexity to a zenith of some kind and then falls. There are an increasing number of people who contend that this sociopolitical transformation is fast-approaching for our globalised, industrial civilization, and of those some believe that this shift will be a long drawn out affair of slow decline[i], while others suggest it may be more of a sudden shift[ii], or collapse[iii].

Whether this change takes generations or is much more sudden and dramatic matters not (unless you're living through the latter one, I suppose); one's perception of this depends upon the temporal perspective taken. For example, let's assume, for the sake of argument, that the oil-dependent, industrialized society of humans lasts 400 years, 200 years up and 200 years down (I think I'm being overly generous here on the demise side).

A 200-year decline may, given normalcy bias, not be perceived as a significant shift at all by those experiencing it. However, if we can step back and view this rise and fall in larger historical terms, say on a 10,000-year basis, this ascent/descent scenario may be perceived as quick and calamitous. I think perspective is everything here. (Note that I'll continue to refer to the impending change as 'collapse' because I tend to believe the change will come quickly, especially once the power grid fails.)

That being said, the antecedents of such collapse are varied and complex. They range from declining marginal returns[iv] to environmental collapse[v] to psychological shifts[vi] to overshooting local carrying capacity[vii] to Peak Oil[viii] to population growth[ix]. Humans don't require artificial intelligence that perceives us as a threat, a viral pandemic leading to a zombie apocalypse, or an alien invasion for our resources to push us over the cliff; we don't even need a nuclear war. We have our own non-military, sociocultural peculiarities to accomplish it.

As with any complex, dynamical system, the variables that lead to collapse interact in ways both knowable and surprising (such are the emergent phenomenon that arise from complex systems). Feedback that might provide clues to the coming demise tends to be ignored, delayed, or misinterpreted, resulting in dismissal of clear signals. In fact, oftentimes, the actions taken by players can expedite the process of collapse. To this end, I believe that our economic system, with globalisation efforts and its underlying foundation of infinite growth, may be the catalyst that pushes our industrial civilisation over the impending cliff of collapse. But, who really knows? My guess is about as good as anybody else's[x].

What are some of the components contributing to this collapse endgame? I offer a few: exponential growth of population; dependency on fossil fuels; human hubris; economic credit/debt obligations; climate change; peak resources (especially oil and water); delayed feedback; corrupt political/economic systems; misperceptions; accumulation of toxins/pollutants; misleading information; and just plain, old ignorance (some purposeful I believe). And, don't forget the black swans.

To me, population growth seems to be the factor that we have pushed in the wrong direction but the underlying variable to this is energy. Populations do not grow if there is not enough energy to support such growth. This energy may take the form of domesticated animal and plant life, or long-stored,

concentrated energy (i.e. fossil fuels), but at its base is solar energy and how it is exploited. For tens of thousands of years human population was held in check by limited energy exploitation. The 'Agricultural Revolution' certainly gave a boost to human population, especially within new villages, towns, and cities erupting all over the globe. However, once fossil fuels began to be exploited our population took off in a global, exponential explosion. It is this exponential growth of human population that has put us in this bind we are in.

To better understand what is happening, I believe one of the fundamental pieces of information to get a grip on is, in fact, exponential growth. Exponential growth is a concept well-known (think compound interest) but whose consequence has been lost on many. The late Dr. Albert Bartlett was perhaps one of the leading authorities on the implications of such growth and spent much of his professional career attempting to educate people about it. In a presentation he gave thousands of times and was viewed many more times on youtube (viewed more than 1/4 million times; not bad for an old guy lecturing about mathematics) he outlines the importance of it and its consequences.

Entitled 'Arithmetic, Population, and Energy'[xi], Bartlett argues, among other things, that zero population growth will happen whether we wish it to or not, it is a mathematical certainty. In the words of others, if something cannot grow forever, it won't. However, as Bartlett points out, we hold near and dear to our hearts many things that are contributing to overpopulation: education, healthcare, immigration, sanitation, law and order. On the other side of the ledger, however, are forces that counter these: war, famine, disease, accidents, murder, abortion, and infanticide. His point is that we can either deal with the issue of overpopulation by changing our behaviours (and attitudes) or nature will do it for us; the choice is ours (or is it?).

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...here we can see the human dilemma — everything we regard as good makes the population problem worse, everything we regard as bad helps solve the problem. There is a dilemma if ever there was one.

Dr. Albert Bartlett

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A burgeoning population and its implications for human sustainability on a finite planet has been around for some time. Thomas Malthus's treatise on the subject in 1798 being perhaps one of the most well known. Had Malthus known of the incredible boost to global carrying capacity that was about to be unleashed by the exploitation of a one-time windfall of concentrated and easily-transportable energy, petroleum, he may not have been so adamant in his conclusion that the end of growth was near-at-hand. But such are the chances when one attempts to foretell the future.

My own biases, prejudices, predilections, observations, and experiences, suggest this human experiment we are a part of will not end well[xii]. I believe that there is too much momentum, too many people with a sense of entitlement, too many sociocultural myths, too many elite protecting the status quo, and far too much ignorance for us to avoid a global collapse. Unless, of course, Zephram Cochrane's trans-warp engine test on April 4, 2063 at 11:15 am, after the Third World War (aka Eugenics Wars), is seen by a Vulcan survey expedition and makes First Contact, saving us from ourselves[xiii].

What typically follows social, political, economic collapse is a 'dark age' of some kind and is perhaps best known (at least within Western history) by the years that followed the collapse of the Roman Empire. But more on this in another post.

Despite all of the above, there are a variety of other variables that could push a teetering globe into a collapse scenario, particularly geopolitics or a natural disaster. No one knows. Prediction of the future is for meteorologists and economists, neither of which is very good beyond a couple of days for the former, and much less for the latter. I must admit, however, that Marion King Hubbert's prediction of the coming

demise of industrial civilization[xiv], along with the seminal text, *The Limits to Growth*[xv], are pretty good guesses in my books.

The one thing I am sure of, the more I learn, the more I am finding that I am ignorant of. Although I spent a career as an educator[xvi], I continue to be a student...and perhaps this diatribe is all just an elongated justification of my belief system, “a tale told by an idiot, full of sound and fury, signifying nothing”[xvii]

[i] Greer, J.M.. *The Long Descent: A User’s Guide to the End of the Industrial Age*. New Society Publishers, 2008. (ISBN 978-0-86571-609-4)

Kunstler, J. H.. *The Long Emergency: Surviving the End of Oil, Climate Change, and Other Converging Catastrophes of the Twenty-First Century*. Grove Press, 2009/2006/2005. (ISBN 978-0-8021-4249-8)

[ii] Diamond, J.. *Collapse: How Societies Choose to Fail or Succeed*. Penguin Books, 2005/2011. (ISBN 978-0-14-311700-1)

Orlov, D.. *The Five Stages of Collapse: Survivor’s Toolkit*. New Society Publishers, 2013. (ISBN 978-0-86571-736-7)

Ruppert, M.. *Confronting Collapse: The Crisis of Energy and Money in a Post Oil World*. Chelsea Green Publishing, 2009. (ISBN 978-1-60358-164-3)

[iii] I use the following definition of collapse, as proposed by Joseph Tainter (see footnote below): “[It] is fundamentally a matter of the sociopolitical sphere. A society has collapsed when it displays a rapid, significant loss of an established level of sociopolitical complexity....To qualify as an instance of collapse a society must have been at, or developing toward, a level of complexity for more than one or two generations...The collapse in turn must be rapid — taking no more than a few decades — and must entail a substantial loss of sociopolitical structure. Losses that are less severe, or take longer to occur, are to be considered cases of weakness and decline.” (p. 4)

[iv] Tainter, J.A.. *The Collapse of Complex Societies*. Cambridge University Press, 1988. (ISBN 978-0-521-38673-9)

[v] Diamond, J.. *Ibid.*

[vi] Orlov, D.. *Ibid.*

[vii] Catton, Jr., W.R.. *Overshoot: The Ecological Basis of Revolutionary Change*. University of Illinois Press, 1982.

(ISBN 978-0-252-09988-4)

[viii] Ruppert, M.. *Ibid.*

[ix] Malthus, T.. *An Essay on the Principle of Population as it Affects the Future Improvement of Society*. J. Johnson, 1798.

[x] Take a good, long critical look at the world and its leaders. Do you have faith, enough faith that you would risk your own life and that of your family, in the leaders of this world to be capable of circumnavigating successfully the various crises that are erupting with greater magnitude and frequency, from climate change to geopolitical stresses to resource depletion to economic collapse? If you have that much faith in them, well good luck to you. Quite simply, I don’t. I believe they are incapable of managing these dilemmas and cascading failures of the various systems of industrialised civilisation will occur some time in our future. NO, I have no idea when.

[xi] Bartlett, A..

*Arithmetic, Energy, and Population*. (Transcript:

[http://www.albartlett.org/presentations/arithmetric\\_population\\_energy\\_transcript\\_english.html](http://www.albartlett.org/presentations/arithmetric_population_energy_transcript_english.html)).

[xii] I must admit that my particular pessimistic perspective makes for an interesting dynamic between my spouse and I, for she is the eternal optimist who, as a practising educator, believes in the successful implementation of social engineering to prevent many of the negative consequences (I’ve just retired from the profession but have always been a ‘little’ critical of it, and authority; the latter, in no small part, likely the result of being the child of a police officer).

[xiii] *Star Trek, First Contact*. See [http://en.wikipedia.org/wiki/Star\\_Trek:\\_First\\_Contact](http://en.wikipedia.org/wiki/Star_Trek:_First_Contact)



[xiv] Hubbert, M.K.. Energy from fossil fuels. *Science*, February 4, 1949. v.109, pp. 103–109.

[xv] Meadows, D., J. Randers, & D. Meadows. *Limits to Growth: The 30-Year Update*. Chelsea Green Publishing Company, 2004. (ISBN 978–1–931498–58–6)

[xvi] 9.6 years as a classroom teacher (grades 6–8), 13.7 as an administrator (K-8 school).

[xvii] Shakespeare. *Macbeth* (Act 5, Scene 5, lines 26–28)

NOTE: This was originally written in 2014 and appeared on [twicefloes.com](http://twicefloes.com) and my personal website <https://olduvai.ca>.

## Don't Spill the Beans

March 4, 2018

Don't Spill the Beans was a game I recall playing in the late '60s with my brother whenever we would visit my grandparents. At that time it was the only game they had besides a crokinole board and a deck of cards. If you are unfamiliar with the game, it quite simply was a plastic 'pot' precariously balanced in which players take turns adding 'beans' until the pot tips and spills the beans.

The objective was to NOT be the one to spill the beans and to be the first player to run out of beans. The game is a great example of tipping points in systems and as I have read more and more on systems thinking and complexity theory, the concept I learned so many years ago is seeming more relevant.

During my readings I happened across research referring to the Abelian sandpile model, also known as the Bak-Tang-Wiesenfeld model. Simply stated, it was research examining how the random placement of sand grains on a pile of sand would behave.

As Wikipedia states:

"Once the sandpile model reaches its critical state there is no correlation between the system's response to a perturbation and the details of a perturbation. Generally this means that dropping another grain of sand onto the pile may cause nothing to happen, or it may cause the entire pile to collapse in a massive slide."

What are some of the 'beans' we keep adding to our pot? Off the top of my head, here are just a few broader beans with smaller beans embedded within them:

- 1) Geopolitics (e.g. Ukraine, Syria, Libya, South China Sea, Iraq, Iran...)
- 2) Climate change (e.g. disaster-level storms, Polar Vortex, drought, flooding...)
- 3) Peak resources (e.g. oil, gas, coal, uranium, minerals, soil, water...)
- 4) Economics (e.g. fiat currency, Ponzi, trade sanctions, currency wars...)
- 5) Liberty (e.g. militarisation of police, digital surveillance, drones, rise of Totalitarianism/Fascism/etc....)
- 6) Environmental/ecological crises (e.g. disease, accidents/unintentional consequence of human activities, species loss...)

In his book, *The Collapse of Complex Societies*, archaeologist Joseph Tainter argues that a society becomes more prone to collapse when stress surges — that are a common occurrence for every society — can no longer be accommodated due to a lack of 'reserves'. In other words, when a society has hit the limit of its capability of dealing with stress it becomes increasingly susceptible to collapse (i.e. spilled beans).

In his words:

"...Excess productive capacity will at some point be used up, and accumulated surpluses allocated to current operating needs. There is, then, little or no surplus with which to counter major adversities. Unexpected stress surges must be dealt with out of the current operating budget, often ineffectually, and always to the detriment of the system as a whole. Even if the stress is successfully met, the society is weakened in the process, and made even more vulnerable to the next crisis. Once a complex society develops the vulnerabilities of declining marginal returns, collapse may merely require sufficient passage of time to render probable the occurrence of an insurmountable calamity" (p. 121).

I can't help but think that the beans are piling up quickly...

## Is 'Growth' a Positive Force? Part One

April 5, 2018

Over the next few articles I post, I am going to put forward some ideas about several of the predicaments the human species may be facing in the not-too-distant future (Note that I may veer from this somewhat circumscribed topic as I consider and respond to comments/ideas/challenges that force me to explore my own thinking about this and related topics).

As my commentary develops, I am going to try to be very careful with my wording because I believe it is impossible to make accurate predictions about the future of complex systems, particularly when they involve human behaviour. There are just too many non-linear feedback loops and emergent phenomena to be able to predict with 100% accuracy the future state of complex human systems. I am going to try and avoid any firm prognostications about the future of such systems. What I think may happen is probably going to be very different from what may actually happen years, decades, centuries, or millennia from now. It is purely speculation — I don't care how much data one has or how 'sophisticated' one's model might be. And I will tend to rely upon pre/historical examples to bolster ideas about what might greet us down the road as we stumble towards the unknowable future.

I am also mindful of Nassim Taleb's argument regarding prediction. He argues that we form our guesses about the future (and associated risks) based upon the scientific notion of normal distributions but the really impactful events in life are those that lay outside these 'bell curve' estimates and create what he termed 'Black Swan Events'. Any number of Black Swan Events could send the variables that make up the complex systems I will be discussing sideways in totally unexpected ways.<sup>1</sup>

I am going to start by asking a 'simple' question that I'd like the reader to consider: is 'growth' of human sociocultural phenomena a positive force or not? This is where I want to start because I am increasingly convinced that most of the dilemmas we are encountering are a result of this particular phenomenon. I realize that this is a fairly broad swath of concepts to consider but, in general, what do you believe?

As with most things, there are both pro and cons to growth, depending on your perspective. There is evidence that could be used to argue either side fairly well. Your immediate judgement may come down on one side of the fence here or the other. Or, perhaps you're not sure; you see both sides and view the world more gray than black and white (something that I am personally finding with more and more issues). If you feel relatively strongly about one side of this debate, you likely orient towards evidence that supports and reaffirms your personal preference/bias. I am aware of my personal bias and answer to the question, but shall leave that opinion aside for now and do my best to not let it overly influence my attempt at a balanced rendering of the subject matter.

First, let me talk a little bit about how we form our knowledge/ideas/opinions/worldview/schema, whatever you wish to call it, about the world. While there is a physiological/biological underpinning to how our brains function, the field of study that attempts to understand how we perceive the workings of the world and form our models/understanding of such a world is psychology. And it suggests that there are a variety of phenomena that work to form our view of the world. As the American Psychological Association asserts: "The way we perceive ourselves in relation to the rest of the world influences our behaviors and our beliefs.

The dynamics of psychology — cognition, perception, learning, emotion, attitudes and relationships — all play a significant role in how humans see themselves and the many elements in their environment."<sup>2</sup>

Some of these processes can prevent us from accepting or viewing information that challenges our core beliefs and/or assumptions. I believe the most powerful is one called 'cognitive dissonance'. Simply put,

humans tend to strive for internal consistency in their belief systems by reducing the cognitive dissonance that arises when information threatens their beliefs. To this end, there is a tendency to dismiss or ignore evidence or ideas that challenge their core beliefs. So, for example, if we firmly hold the belief that growth is positive, then any facts or information that contradicts this belief will tend to be dismissed or interpreted in a way to maintain our prior beliefs. On the flip side, there is a tendency to orient towards and overemphasise evidence that supports or provides affirmation for our core beliefs. In brief, we will see the information that suggests growth is a positive force while we don't see that which points to growth being a negative force.

There are numerous mechanisms that perform in this manner to affirm our core beliefs regardless of data or evidence that might challenge them. Confirmation bias. Saliency. Anchoring bias. Selective perception. Blind-spot bias. And others.<sup>3</sup> This lends credence to the quote attributed to author Robert Heinlein that "man is not a rational animal, but a rationalizing one". The twists of logic our minds will engage in to maintain our belief system can be astounding at times.

Given such phenomena, it is easy to see why it is often so difficult to shift people's opinion on issues, especially if their belief system is well-ingrained and widely held. Edward Bernays—often referred to as the father of propaganda—understood these qualities of the human mind and leveraged them for various corporations and governments to assist them in framing important narratives and I would recommend his 1920 book, *Propaganda*, for anyone interested in the subject.

But before I get into my personal bias regarding the growth of human sociocultural phenomena, let's deconstruct the concept of growth a bit.

The first definition of the online Oxford Dictionary states it is simply "the process of increasing in physical size". As stated above, there are pros and cons to this depending on one's perspective. For example, setting aside medical 'anomalies' a person's weight grows as they mature until the body reaches a certain sustainable, mature level. Too much growth may lead to certain physical ailments, but the same can be said of too little growth. As long as a person's caloric intake and physical activity remains relatively constant, the person's stops 'growing'.

But 'growth' can also be interpreted as 'progress'. For many, this concept of growth is primarily a positive attribute. It is a "development towards a more improved or advanced condition". I won't explore the conflation of 'progress' with 'growth' too much in this first article except to say this is perhaps where the rubber meets the road in deciding if growth is a positive force or not. If you are in favour of 'progress', then it is likely that you perceive 'growth' as positive.

Listen to any politician or economist and implicit in their discussion of growth is the idea that growth has primarily, if not solely, positive attributes. It is something they both seek and encourage. There are a variety of reasons people do this. The cynic in me believes that economic growth, for example, is pursued by particular segments of society because it benefits them directly (in terms of power, prestige, influence, and/or monetarily), but perhaps they do truly believe that growth is only a positive force that benefits us all. This belief is repeated so often that the vast majority of people accept it as a given without the slightest challenge to its veracity. I'm also coming to a better appreciation of the argument that our credit/debt-based monetary system requires perpetual economic growth in order to meet the servicing requirements of interest-bearing money; otherwise the system could collapse — and, of course, politicians don't usually want such a collapse to occur on their watch as it's bad for any hope of re-election or avoiding a domestic revolution; as a result, they pursue growth most vigorously.

One of the steps I believe we need to take to avoid, or at least mitigate (if it's not too late), some of the predicaments we are likely going to have to face in the not-too-distant future is to challenge the 'growth

is progress' mindset that I've just outlined and scale back on the pursuit of growth at all costs. In fact, as these articles evolve my hope is that readers will come to appreciate that 'growth' is not just a positive force but has negative attributes as well that we tend to ignore or downplay.

Some of this is due to the cognitive biases discussed above, but some of this is also due to lack of information in the marketing of growth and the lag-time that occurs between the onset of growth and the negative consequences that arise. For example, we can all see and acknowledge the nuclear power plant that has been constructed to power our businesses and homes. What's not to be positive about with regard to green, carbon-free, too-cheap-to-meter energy? (yes, I'm being just a bit sarcastic here). What we often don't consider are the negative environmental/ecological/economic impacts of this construction as they are in the shadows, left out of the marketing propaganda, or delayed — sometimes for years/decades.

1. See Taleb's Fooled by Randomness, The Black Swan, Anti-Fragile.
2. See the American Psychological Association.
3. See Medical Daily.

A great site that explores the conflict or cognitive dissonance we experience in trying to make sense of our world is Two Ice Floes.

## **Covid-19 and Our Competing Narratives**

April 25, 2020

It's fascinating to watch the competing narratives regarding Covid-19 and risk assessment duke it out across the media universe (from social to mainstream to alternate media). As I've increasingly come to believe, we all believe what we want to believe. The continuum of beliefs seems to be that: we have faith in the complex systems we live within, our 'leaders' have things under control, everything will work itself out in some optimistic fashion, and life will return to 'normal' after a while; to the opposite belief that all hell is about to, or is, breaking loose and life will never return to where it was as sociocultural collapse is dead ahead.

'Facts' seem to make little difference to our belief systems. It is as author Robert Heinlein mused some years ago: We are rationalizing animals, not rational. We are not only not 'objective', but we are prone to using all sorts of cognitive/logical distortions to justify and confirm our beliefs and personal biases; because, after all, reducing our cognitive dissonance is a hugely powerful motivator. Our minds experience significant stress when 'evidence' opposes our belief system so we ignore or dismiss it and actively seek confirming information.

Science is not necessarily helpful here, although it is used as the ultimate arbiter by many. But one of the observations I made while attending university and shifting through different faculties as I sought a path to follow in those crazy formative years of mine in the 1980s was that the exact same 'facts' could be used for what were essentially diametrically-opposed 'interpretations'. What one scientist saw as evidence supporting their paradigm was used by a colleague to justify their particular, and often very different, worldview.

This view of mine is supported by the opposing arguments regarding the reactions to the global pandemic currently sending our world sideways in some totally unexpected ways. We have a variety of interpretations of what the 'numbers' mean. We have some 'experts' assuring us that all is well, or at least manageable, to others ringing alarm bells and warning of very dire consequences for humanity.

What is the 'truth'? Who knows.

Another thing I've come to believe is that complex systems with all their various feedback loops and emergent phenomena are impossible to predict or control no matter how sophisticated one's model to interpret the system in questions is. While I have my own biases based upon my readings, research, and experiences (especially with respect to what pre/history tells us about complex societies and their 'evolution'), I'll make my predictions about what will happen when everything has worked itself out. That's the safest bet for guessing what the future holds. I will say this however, it is likely in one's best interest to prepare for the worst and hope for the best...whatever that may be. Life rarely, if ever, quite works out the way we expect.

(NB: I wrote this back on March 12 and sent it to a website I frequent for publication. I never heard back and thought I'd publish it here.)

## Today's Contemplations

### Today's Contemplation: Collapse Cometh

August 8, 2020

#### Mythical Narratives Everywhere to Avoid Reality



Palace of Knossos, 1993 (Crete, Greece). Photo by author.

As I approach my 7th decade on this planet, I have reached the conclusion that we all interpret the world through mythical narratives; some of our own creation, many (most?) others 'imposed' upon us. The ruling class of society conditions us in numerous ways to accept stories that, for the most part, support and prolong their position of power and control.

From hereditary chieftains/monarchs to 'democratic' leadership, the 'elite' of society maintain a hold over the 'tribe' so as to ensure their revenue streams and wealth (some would argue this is a parasitic arrangement since this class returns little in the way of productive value to the system). They use the various tools at their disposal (e.g., education system, media, etc.) to inculcate/predispose us to accepting this arrangement and continuing to control and expand the wealth-generating/-extraction systems that arise from everyday human economic interactions.

Power and wealth is concentrated significantly at the top of the pyramid; yet we are constantly exposed to narratives that we not only have agency, but that the 'elite' put our needs at the forefront of their policies and decision-making. I strongly believe these are false and propagated to influence/manipulate our thinking and beliefs.

Just like our financial institutions (especially the big banks) who knowingly engage in criminal activity and then receive raps on the wrist with minimal fines when caught (making their brazen thievery well worth it), the ruling class is more than willing to break 'rules/laws' (in fact, I would argue they are constantly

doing so) because the 'price' for doing so is negligible (with the occasional sacrifice made to appease the masses).

I don't believe there is a 'solution' to any of this (unlike most who do because, you know, hope — and reduction of cognitive dissonance) aside from complete sociopolitical collapse — which I would argue will eventually happen as it has for every complex society that has preceded ours. My response to this has been to accept it, and try and remove myself from the Matrix as much as is possible and prepare accordingly.

The world is not as we have been conditioned to believe by the narrative managers who weave the various storylines (read Edward Bernays book Propaganda for interesting insight on this). Awareness of this is a first step towards a better understanding of how messed up this world truly is and, possibly, doing something for your family/community to make it more resilient as the system inevitably declines/collapses.



## Today's Contemplation: Collapse Cometh II

August 8, 2020

### Feeding the Growth Monster: Fiat Currency and Technology



Monte Alban, Mexico (1988). Photo by author.

My response to an ongoing discussion regarding debt-/credit-based fiat currency and its impact on our pursuing the infinite growth chalice.

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Yes, credit-/debt-based fiat is certainly one of the most significant causes of our pursuing the infinite growth chalice. Not the only one, but one of the main ones, certainly. And having 'sound' money that was not created and distributed by private interests may help, but there are no guarantees especially if it were in the hands of the political class who, much as they do now, would very likely use such 'power' to 'buy' votes, 'pay off' supporters, and fund boondoggles.

I honestly don't know if there is any 'solution' to this monetary conundrum. In the words of Men Without Hats in their song 'Unsatisfaction': I'm never satisfied when the answers could be real. I may not know what's right but I know this can't be it.

Regardless of what change occurs with our monetary system, I've reached the conclusion that if we don't begin pursuing degrowth strategies as of, like yesterday, we are destined to experience the collapse that always accompanies overshoot.

We are well into the diminishing returns fiasco that archaeologist Joseph Tainter outlines in his monograph *Collapse of Complex Societies*, and sets the stage for sociopolitical (and economic) collapse;

and it is likely no amount of 'tinkering' in our business-as-usual trajectory is going to prevent collapse/decline at this point.

All of our debates are probably quite academic and moot at this point. Making one's local community/neighbourhood/family as self-sufficient/-reliant as possible may be the only way to ensure some of us make it through the other side of the inevitable transition since our society's collapse will be unlike every other one in pre/history as virtually none of us have the skills/knowledge to survive without modern society's energy-intensive technology and long-distance supply chains.

This is one of the main motivations for me to transition our yard towards food production rather than monoculture grass and begun helping family and neighbours do the same.

We have painted ourselves into a corner from which there is unlikely any escape route and we are beginning, quite vociferously and violently in some cases, to fight over a shrinking economic pie.

Arguments over how to 'fix' things abound (the ruling class has latched onto infinite money printing to 'paper' over things, much like the Romans did when they began clipping coins during their decline) but most of these are not 'fixes' to our unsustainable trajectory but part and parcel of our attempts to reduce the cognitive dissonance that arises from realising we cannot continue business as usual but the path we need to follow is 'unthinkable' for it would mean sacrificing almost everything we hold dear in 'modern' society.

Most of us want to believe that technology and human ingenuity will 'save' us (thus arguments from academics/educators about focusing more resources into education, not realising that there isn't the time nor agreement over 'solutions' for education to play a role) but it is most likely that our efforts at greater and greater technological 'solutions' are just expediting our journey over the cliff since technology speeds the exploitation of finite resources, much as money printing does, and creates a host of negative consequences we conveniently ignore.

If people believe the world is in chaos now, just wait a few years...

## Today's Contemplation: Collapse Cometh III

August 14, 2020

### Grieving: There Are No 'Solutions' to Overshoot



Athens, Greece (1993). Photo by author.

My comment posted on The Tyee in response to an [article](#) highlighting the increased occurrence of earthquakes as a result of hydraulic fracturing by the oil and gas industry in an area of British Columbia, Canada, and imperilling local infrastructure and construction of a large hydroelectric dam.

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Until and unless there is a complete dismantling and dismemberment of the current sociopolitical and socioeconomic systems in place globally, these types of situations and associated abuses of people and the planet will continue with little disruption.

I realise that a significant majority of people believe democracy, technology, and human ingenuity can save us from ourselves but this is highly unlikely (impossible?). We are so far down the rabbit's hole that such magical thinking is likely common so as to reduce our cognitive dissonance en masse (and compounded by the constant propaganda thrown at us). It does nothing to resolve our dilemmas; in fact, it might actually hamper 'solutions' by avoiding more effective pathways and harvesting our finite resources even faster.

I truly believe we need to move quickly through Kubler-Ross's stages of grief, getting past the denial and bargaining (for this is what is happening as more and more people come to realise we are pursuing unsustainable and suicidal ways, but don't want to face the uncomfortable and negative consequences that are becoming increasingly obvious; they engage in magical thinking to convince themselves we're okay with just a tweak here or a tweak there).

We need to come to accept that our chasing the infinite growth chalice must stop, and that all the 'baubles' promised from this pursuit by the sociopathic 'leaders' that profit from their control of the wealth-generating and -extraction systems that arise from this economic/political quest of growth are not worth the journey over the cliff ahead.

If we do not choose to stop this insanity now, we can be assured that nature will do it for us and we are not going to enjoy the choices nature makes for us to reset things to some sort of balance. The collapse that accompanies overshoot is never 'fun' for the species experiencing it.

And we have a species that will be fighting over the scarce resources remaining with the most destructive weaponry in human history. In fact, this fight has been going on for some decades (one could argue it's been going on since humans first 'arrived' on the planet) and seems to be intensifying quickly (and has little to do with the left/right political spectrum disagreements, but a result of diminishing returns on our exploitation of resources). If we should have learned anything from the spread of Covid-19, is that exponential growth moves much faster than we imagine and can overwhelm a system in no time.

While it is very likely (guaranteed?) that our sociopathic ruling class will not stop this insanity (for it is their revenue stream and base of power), it is up to each and every one of us to remove ourselves as much as is possible from the Matrix and all the components of it that supports the unsustainable systems we are enmeshed in.

The journey will not be easy nor straightforward, but if we reach a tipping point of world citizens that reject the systems imposed upon us by the 'elite' we may just have a chance...maybe.

**Today's Contemplation: Collapse Cometh IV**  
September 24, 2020

**Fiat Currency: Debasement and Infinite Growth**



Tulum, Mexico (1986). Photo by author.

My comment on an [article](#) in The Tye about our federal government's latest throne speech by Prime Minister Justin Trudeau.

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The idea that a sovereign nation can never run into trouble financially because it can create its own currency is certainly the dominant narrative amongst government and 'mainstream' economists/bankers.

After all, who benefits the most from this storyline?

But is it in fact true?

Scratching below the surface of this 'experiment' suggests it is not.

If printing one's own money were a panacea, then nations like Venezuela, Zimbabwe, or the German Weimar Republic (and countless other nations throughout history) would never have experienced the hyperinflation and/or currency debasement that they have. They would be the richest nations ever to have existed.

One could counter that this is because they had to use their debased currency to import goods. True, but if one is debauching one's currency through exponential 'printing', then this may be true for any nation dependent upon imports, which almost every nation is in our globalised, industrial world.

The solution that nations have rested upon given this reality is that the central banks collude to all print at relatively the same rate, so currencies don't fall/rise too drastically compared to their trading partners.

Fine, but what does endless money/credit creation due to the purchasing power of this fiat currency created from thin air?

Previous trials in this approach indicate that it totally debases/debauches the currency, significantly reducing the 'wealth' of the people holding/using it because of the inflation that it creates.

Here's what John Maynard Keynes had to say about this: "By a continuing process of inflation, government can confiscate, secretly and unobserved, an important part of the wealth of their citizens."

And while it's interesting to note 'official inflation' is subdued, the manipulation that goes into creating this gauge of price inflation makes the official number meaningless to people's real-world experience (look up hedonic adjustments to get a sense of how manipulated these numbers are; and then compare your experience in price increases to official numbers — my family's utilities, food, health, housing, transportation, insurance, education, etc. expenses far, far outpace 'official' inflation; by several times).

Then there's the whole issue of continuing to chase the infinite growth chalice and pulling substantial growth forward through debt/money creation. We live on a finite planet despite hopium narratives to the contrary and all this push for growth does is get us further and further into overshoot by quickening our exploitation of finite resources.

There is no consideration whatsoever of the limits imposed upon us. There is only more growth to try and address our dilemmas that are created by us pursuing growth in the first place.

Despite the story that these policies are being used to solve our problems and help people, the reality is that they are very much probably doing the exact opposite.

In fact, a good argument could be made that the 'all in' aspect of this is further evidence that the planet is reaching the endgame of overshooting our natural carrying capacity and the fallout is quickening towards its obvious conclusion: collapse of the complex systems we have come to depend upon.

To paraphrase Canadian economist Jeff Rubin in his book *Why Your World is About to Get a Whole Lot Smaller*: things are going local and simpler, whether we want them to or not.

Prepare accordingly.

**Today's Contemplation: Collapse Cometh V**  
October 2, 2020

**Electrify Everything: The Wrong 'Solution'**



Pompeii, Italy (1993). Photo by author.

Yet another of my comments for an [article](#) on The Tye regarding energy and how we should approach our coming dilemmas.

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While I certainly appreciate the need to 'correct' our global industrial civilization's path from its current trajectory there is an obvious 'problem' with the argument presented here: forcing the wrong 'solution' upon society is a recipe for an expedited collapse.

As in the movie/series *Snowpiercer* (where an attempt to 'correct' global warming ended up leading to a frozen planet), the human need to 'do something' often leads to negative, unintended consequences and, quite frequently, the opposite of what was desired.

A great example of how the above 'solution' would likely bring about more quickly the opposite of what is desired is found in this statement: *"We must conduct an inventory, determining how many heat pumps, solar arrays, wind farms, electric buses, etc., we will need to electrify virtually everything and end our reliance on fossil fuels."*

To me, this shows quite clearly that the 'solution' is not to address the dilemmas created by chasing infinite growth, as our 'modern' world does, but maintaining business as usual by trying to have our cake and eat it too. It proposes maintaining all the technological, industrial, and energy-intensive

baubles/conveniences that fossil fuels have brought us without realising the price that must be paid to do this (in fact, I would argue the impossibility of doing this).

As I have argued several times on these pages, renewables are NOT the panacea they are marketed as. The energy-return-on-energy-invested (EROEI) is markedly lower than fossil fuels resulting in significantly less energy available for end use.

They all rely on environmentally-destructive processes for their material input. They depend upon industrial processes in their manufacture that cannot be done without fossil fuels. They use finite resources, some of which are already experience diminishing returns. They cannot replace fossil fuels.

Then there is the issue of absolute government tyranny/authoritarianism being proposed here. The political class, being what it is — a caste in society whose primary motive is to control, protect, and expand the wealth-generating systems that provide their revenue stream — will jump at this kind of power grab and most certainly market it as the best thing since sliced bread for society; and look, it's been proposed by 'expert' academics, so, 'Science!' And, of course, nothing could ever go wrong with a government that has such power.

We cannot, nor should we, be trying to 'electrify everything' and forcing such a misguided solution down the throats of people. What we need to be doing is having a very frank discussion about what is 'needed' in our world (not 'wanted') and how we can support a calm and equitable 'degrowth' of it.

Attempting to maintain our current iteration of society is not only a fool's errand but one that will simply speed the exploitation of finite resources and bring about all the negative consequences of such a flurry of activity.

An energy descent is in our future whether we wish it or not. We can go through the 'collapse' that always accompanies a species that has overshoot its environmental carrying capacity in a relatively dignified way by addressing the dilemma head on, or we can spend our last breath attempting to sustain the unsustainable and go out with a bang.

I'd like to believe we could do the former but my bet is on the latter for humans very much engage in behaviour that reduces their cognitive dissonance to avoid reality and, unfortunately, the foxes are firmly in charge of the henhouse and seldom, if ever, allow a good crisis to go to waste...



## Today's Contemplation: Collapse Cometh VI

October 9, 2020

### Infinite Growth, Finite Planet; What Could Possibly Go Wrong?



Teotihuacan, Mexico (1988). Photo by author.

My comment on this Tye [article](#).

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It's truly unfortunate that our society pursues such self-evidently egregious exploits on our environment. You can't continue to pollute your backyard without eventually destroying the complex ecological systems that support you — to say little about the finiteness of most resources we overly depend upon. And, certainly, we can't continue to allow our sociopolitical 'leaders' to pursue such destructive policies and actions.

Yet, the issues and underlying dilemmas are much more complex than just exploitive foreign capital and revenue-seeking politicians. Yes, these are problematic; without a doubt. But they are one piece in a multi-layered puzzle that may or may not have a 'solution'.

Society's embracing of several self-destructive behaviours must be undone and reversed. Perhaps the most fundamental of these is the pursuit of 'growth'. Economic. Population. Technological. Et cetera.

We do not live on a planet with infinite resources and the exponential increase of our activities continues to paint us further and further into a corner. While it is unlikely there will be a definitive 'day

of reckoning' because of our blasting past our natural carrying capacity (since collapse is a process, not an event), the consequences of our actions will be felt as surely as day follows night.

In fact, it could be argued that we are already and have been experiencing the fallout of our expanding and increasingly complex activities for some time now. Decimated species required for food crop pollination. Expanding geopolitical tensions over resources, especially fossil fuels and water. Supply chain interruptions. Environmental disasters. Increasingly authoritarian government policies and edicts to control populations. Currency debasement. Global pandemics. And on and on.

A group of MIT researchers some years ago proposed that there were real biophysical limits to the pursuit of growth and that the time to alter our trajectory was upon us. That was almost 50 years ago (The Limits to Growth, 1972). Unfortunately, humanity has followed the 'Business-as-Usual' scenario outlined by the study. The path forward from this point does not look promising. Yet, it is virtually guaranteed to be the one we continue to follow since we have ignored the warnings.

In our haste to believe 'this time is different' or that 'we are smarter' (usually in the form of the trope 'human ingenuity and technology'), we have continued to pursue growth in almost all its guises. And it's almost all of us that are guilty. Yes, our 'leadership' has led the way and been the main cheerleaders of the idea that growth only has positive attributes. And, yes, the pursuit has been exacerbated by the fiat currency swindle imposed upon the world. But most of us, perhaps unwittingly, have been consumption machines, endlessly purchasing and expanding our environmental footprints.

Unless and until we all begin serious discussions about degrowth on a global scale (even just local/regional would be a great start), I fear we will continue along our current path; in fact, it would appear we have actually picked up speed in these exploitive and damaging endeavours as diminishing returns (see archaeologist Joseph Tainter's The Collapse of Complex Societies) have made it necessary to invest more and more effort, energy, and resources into finding and retrieving the resources necessary to hold our complex systems together for a bit longer.

Australia's investments in Canadian resources is a natural consequence of our growth pursuits. And politicians, whose primary motivator is the control, maintenance, and expansion of the wealth-generating systems that provide their revenue stream, will almost always encourage such activities. Negative consequences be damned.

If we cannot change the conversation and our behaviours, then we cannot change the eventual outcome. Nature will do for us what we are unable to accomplish ourselves. And we will likely not enjoy the way nature brings the planet back into balance.

## Today's Contemplation: Collapse Cometh VII

October 12, 2020

### Science: It May Not Be All You Think It Is



Pompeii, Italy (1993). Photo by author.

*Ha! It's poetry in motion  
Now she's making love to me  
The spheres are in commotion  
The elements in harmony  
She blinded me with science  
(She blinded me with science!)  
And hit me with technology  
-Thomas Dolby, 1982 ([She Blinded Me With Science](#))*

*Science, it turns out, is a process not an answer. And, it usually has many answers from various sciences, each having their own methods and standards. When someone tells you, "the science says," be skeptical. They are usually being paid to say what they are about to say or at least have been thoroughly indoctrinated by others who are paid. There is never just one answer to any supposedly scientific question.*

*-Kurt Cobb ([Why am I feeling so anxious? The end of modernism arrives](#))*

*Unfortunately, there are many other misconceptions about science. One of the most common misconceptions concerns the so-called "scientific proofs." Contrary to popular belief, there is no such thing as a scientific proof...all scientific knowledge is tentative and provisional, and nothing is final. There is no such thing as final proven knowledge in science. The currently accepted theory of a*

*phenomenon is simply the best explanation for it among all available alternatives. Its status as the accepted theory is contingent on what other theories are available and might suddenly change tomorrow if there appears a better theory or new evidence that might challenge the accepted theory. No knowledge or theory (which embodies scientific knowledge) is final.*

-Satoshi Kanazawa ([Common Misconceptions About Science I: "Scientific Proof"](#))

*In short, we can never be 100% that our perception of reality is accurate, and scientific experiments are virtually impossible to totally and completely control. Further, science often uses inductive logic, and it relies on probabilities to draw conclusions. All of this prevents science from ever proving anything with absolute certainty. That does not, however, mean that science is untrustworthy, or that you can reject it whenever you like. Science tells us what is most likely true given the current evidence, but it is a skeptical process that always acknowledges the possibility of being wrong.*

-Fallacy Man ([Science doesn't prove anything, and that's a good thing](#))

*The answers you get depend on the questions you ask...What man sees depends both upon what he looks at and also upon what his previous visual-conception experience has taught him to see...Observation and experience can and must drastically restrict the range of admissible scientific belief, else there would be no science. But they cannot alone determine a particular body of such belief. An apparently arbitrary element, compounded of personal and historical accident, is always a formative ingredient of the beliefs espoused by a given scientific community at a given time...Because scientists are reasonable men, one or another argument will ultimately persuade many of them. But there is no single argument that can or should persuade them all. Rather than a single group conversion, what occurs is an increasing shift in the distribution of professional allegiances...The competition between paradigms is not the sort of battle that can be resolved by proofs.*

-Thomas S. Kuhn ([The Structure of Scientific Revolutions](#))

Science! That is the refrain from some to argue for what IS and what IS NOT 'true' or 'factual' in this world of social media edicts and memes (and associated self-created echo chambers), especially regarding fake news, climate change/global warming, pandemics, politics, and life in general.

The idea that science provides us with 'objective proof' about issues is a common error I've encountered time and time again. It is held for many reasons, primary among them may be the 'politicisation' of the notion; that is, the use of 'science' by politicians and others to reinforce what are for all intents and purposes desired goals/policies/actions/narratives/etc., and their insistence about science providing definitive support. We are certainly seeing this more and more with competing narratives regarding Covid-19 and what should and should not be done to address certain concerns.

My enlightenment, as it were, regarding scientific 'proof' and associated beliefs came in two parts during my [university education](#). First was a poignant discussion with a [professor](#) providing feedback on a paper I had written and used the idea of science proving something to support my conclusion. He stated rather bluntly that "'proof' is only relevant in mathematics and jurisprudence, not science." He then went on to explain the concept in greater detail, but it was that short statement that has stuck with me and altered my view of 'objective science' as 'proof' of various beliefs.

The second tipping point for me was during a presentation on human intelligence by the psychology department of the university (I had become interested in the subject as I explored human evolution via physical anthropology classes and sat in on a presentation by a guest speaker). As I recall, the visiting professor asked somewhat rhetorically what was the definition of intelligence we could use to explore the concept. After entertaining a few responses (all of which were different) he stressed that if we were to ask 100 psychologists such a question, we would get back 100 different answers: there was no agreed upon definition. One's particular perspective 'coloured' what was important and observed.

There were also a handful of texts I read that impacted my beliefs. Some of the most pertinent ones were: [The Structure of Scientific Revolutions](#), [The Mismeasure of Man](#), [Ever Since Darwin](#), [The Interpretation of Cultures](#).

The two experiences described above and the books I read impacted my interests at the time and I set off exploring other ideas and perspectives, getting into [deconstructivism](#), [philology](#), [hermeneutics](#), [dialectics](#), [epistemology](#), [objectivity versus subjectivity](#), and [skepticism](#). More recently I've explored the somewhat related subjects of [complexity](#) and [cognition](#).

All of these 'colour' my belief system and my arguments regarding 'collapse'. Do I know for certain some of the things I pontificate about. Absolutely not. And I hope I couch my rhetoric in words such as 'likely', 'evidence', 'probably', etc. to demonstrate my uncertainty. Because when we get right down to it, not one of us can be certain about the future and our beliefs about it. As [several people have been credited with stating](#): It's difficult to make predictions, especially about the future. We live within complex systems made up of complex systems that, because of the [nonlinear feedback loops](#) that exist and [emergent phenomena](#) that arise from them, can neither be predicted nor controlled. Of this, I am fairly certain.

Do I believe 'collapse' of our current globalised, industrial world will occur? Yes. The evidence, to me, seems overwhelming; particularly all the experiments involving complex societies that have been carried out before us and ended with decline/collapse (see [Tainter's The Collapse of Complex Societies](#) and [Diamond's Collapse](#)) and the 'fact' that we live on a world with finite resources but are pursuing perpetual growth (see [Meadows et al's The Limits to Growth](#) and [Catton's Overshoot](#)).

Will, as some argue, our technology and human ingenuity save us in this current trial in complex societies? I'm doubtful; in fact, I'm fairly certain these things will simply expedite the fall as we rush into them to try and solve the problems we have created, bumping up against the real biophysical limits imposed by a finite world in the process and creating even more problems and dilemmas.

Of course, because I cannot predict the future with certainty, only time will tell...

## Today's Contemplation: Collapse Cometh VIII

October 30, 2020

### Peak Oil and Sociopolitics



Chitchen Itza, Mexico (1986). Photo by author.

Once again, a comment I posted in response to an [article](#) on The Tyee.

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Where to begin? I realise this article is primarily about a federal political party and its future but there are two underlying issues that are discussed that need far more exploration and understanding if we are going to be projecting where a particular party or even government will be down the road (let alone the entire world).

If we are going to be discussing energy and Peak Oil then there is SO much more to bring into the conversation. Yes, politics plays a role (as it always does) but the topic is vastly wider than sociopolitics. It encompasses virtually everything in our complex, globalised industrial world. Everything. From the way we create potable water, to how we feed ourselves, to how we build and heat our homes (I've purposely focused on the three items we NEED to live...everything else is icing but just as dependent on energy, especially fossil fuels).

First things first. There is NO substitute for fossil fuels. At least not one that can sustain our current world the way it is configured. No, alternatives to fossil fuels cannot do it. They are not 'clean' as the mining, refinement, and manufacturing processes for them are environmentally damaging. They have a low energy-return-on-energy-invested (EROEI) and provide little 'bang for the buck'. They cannot fuel many

important industrial processes such as steel and concrete production. They depend very much on continued exploitation of fossil fuel, both upstream and downstream. They are NOT a panacea.

We are stuck with fossil fuels, until and unless we are ready and willing to give up probably 90% or more of what we consider 'modernity'.

Then there's the fiscal aspect discussed here. While it may be 'progressive' to be discussing and believing that money grows on trees (or at least within the 1 and 0s of computers), this infinite money growth that is being bandied about as another wonderful panacea for our world that's gone sideways carries with it enormous consequences.

Let's agree for the sake of argument that we can indeed just print as much money as we want to 'pay' for all that we want and desire — and we can, we just create it from thin air. Presto. More money.

I think most would see that if everyone was suddenly in receipt of, say a million dollars, there would be knock-on effects in the price inflation we would experience; after all, more money chasing the same amount of goods and services would, as most economists would agree and experience has shown, result in higher prices experienced by the population (unless of course it just gets left in the computer data banks and accumulates interest; oh wait, interest rates are zero or lower).

Okay, so let's say price inflation hits. Solution: we deposit another million, or maybe two million in everyone's new digital bank account...same problem.

In fact, we're probably beginning to experience hyperinflation; and experiments in this realm have never ended well. The surest way to bring about a loss of faith in fiat currency and eventual economic collapse is through currency debasement, which is exactly what endless money printing does. But, again, for the sake of argument, let's say that doesn't happen (miracles do sometimes occur; although I'm not sure the Leafs winning the Stanley Cup is one of them).

So are the creation of goods and services ramped up to meet demand since everyone has money to buy things? Likely. Here is where we get back to the first issue.

Every dollar spent requires energy to produce the goods or services provided. Think this doesn't happen? Take a look at GDP and energy use. They are correlated almost perfectly. They increase together. Think alternative energy will meet this demand? Hardly. Increased alternative energy production has not even been able to keep up with increasing demand. The world has had to continue to ramp up fossil fuel use to meet demands. The more money that is created and spent, the more demand there is for energy and resources.

But we have a slight problem. We live on a finite world with finite resources but especially fossil fuels which underpin our current world and all of its interconnected complexities. Our world as designed and functioning currently is fubar without fossil fuels.

It doesn't matter what party is in charge of things. It never has. The Liberals, NDP, or Greens for that matter can wrap themselves in cloaks of green (to give the illusion of being environmentally friendly; or, of having lots of money; or, both perhaps) and promise a green/clean economy where everyone has everything they want and need, and it won't mean a damn thing in the end. We could all sit around the campfire holding hands and singing kumbayah but that won't keep the impending cliff at bay.

These inconvenient truths, as it were, are already biting us and we can only 'paper' over them for so long. At some point we have to realise that like Wile E. Coyote we left solid ground some time ago and

have been running on air with nothing holding us up. Until a tipping point of people come to this realisation it will be business as usual and the telling of comforting narratives to reduce our mass cognitive dissonance and avoid the pain of reality.

Rant concluded.



**Today's Contemplation: Collapse Cometh IX**  
November 7, 2020

**Hear, Speak, See No Evil: Sociopolitical Collapse**



Chichen Itza, Mexico (1986). Photo by author.

Once more a [comment posted in the Tye](#) in response to ongoing 'debate' with others in regard to the 2020 U.S. presidential election and some of the accusations of irregularities surrounding the process. While not obviously related to 'collapse' I will add some context to draw it into my ongoing thesis afterwards.

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For the sake of argument, let's say some of these [a list of supposed election irregularities] are fabricated and/or misinterpretation of events (which is what the video of the polling clerk filling out ballots is being explained away as — they were filling out 'damaged' ballots). That does not mean they all are and should just be summarily dismissed. They merit further scrutiny and investigation. Conspiracies (that is, an agreement to perform together an illegal, wrongful, or subversive act) are common in politics (in fact, perhaps far too common).

A few thoughts to share for those that believe otherwise.

The fact that the sources are not mainstream should not lead to their immediate dismissal as many suggest. All one has to do is look at how many mainstream sources are deliberately suppressing the whole Julian Assange debacle or the Hunter Biden laptop evidence that suggests pay-to-play shenanigans involving his father. Or Glenn Greenwald deciding to resign from the media company he founded because fellow editors refused to publish an article unless he removed all criticism of Joe Biden.

These examples (and there are many, many more — a pertinent one is how many mainstream media accepted the Bush administration’s declaration that Iraq had weapons of mass destruction and then basically ran PR for the government’s invasion) should show that mainstream media is quite biased and often does not perform due diligence in its reporting, suppresses stories, or primarily runs opinion-editorials and passes them off as investigative journalism, especially if one is questioning the dominant narratives that they tend to support quite adamantly. It is often, unfortunately, only those outside of the mainstream that question the stories told by the-powers-that-be and challenge them.

And the supposed importance of elections and sanctity of voting are two of those narratives (the ones that this article goes to great lengths to further). And these are very, very important social narratives for several reasons. First, the political class overseeing society need legitimization. They need the citizens to believe with all their hearts and minds that the ruling class has a ‘right’ to be making the decisions they are making and enacting the policies they are enacting with the support and blessings of the people. Without this legitimization they would not only run into significant difficulty with social ‘order’, they would lose control of the wealth-generating systems that supply their revenue streams (their primary motivation). This right to govern supposedly derives from the choices made via the ballot box; we quite often hear leaders claim they have a mandate from the people to justify (rationalise?) their actions.

Second, people want to believe they actually have agency in the way their society is managed. Believing you have agency in your life is a fundamental need. So, people want to believe they can significantly impact the political process by voting. And we are socialised almost from birth to believe this story. Our public schools initiate us into the dominant narrative, teaching children the importance of our political system and how we need to support it. We are told it is a civic duty to vote. That if you don’t vote, you can’t complain. That major wars have been fought to protect our freedoms and the right to vote. People do not want to confront the possibility that it is all just theatre; that it is a story to keep us mollified, well behaved, and compliant; that the real power may lay well beyond their reach or influence (or as George Carlin opined: it’s a big club and you ain’t in it). The people do not want to face the idea that their leaders do not have the interests of the masses as their primary motivation; that would just create far too much cognitive dissonance.

For these two reasons alone the majority of people and certainly almost all the ruling class (and this includes academics, media, politicians, corporations) will refuse to see or acknowledge the flaws when exposed. Evidence is memory-holed. Whistleblowers are vilified (or worse). The believers and those benefiting from the dominant storyline will fight tooth and nail to defend the system. The narrative must be protected. Just read up on the various inquisitions of the Catholic Church to see how narratives that support the powerful are protected.

PS

I truly do want to thank those who challenge my thinking in a constructive manner. It forces me to rethink and reflect on my own biases and blindspots. For those who fall back on the ad hominem fallacy of attacking me or calling me names, please grow up.

One of the arguments made by Dmitry Orlov in his book *The Five Stages of Collapse* is that there exist a number of tipping points as it were that indicate a complex society is on the verge of collapse. He states these “Serve as mental milestones...[and each breaches] a specific level of trust or faith in the status quo. Although each stage causes physical, observable changes in the environment, these can be gradual, while the mental flip is generally quite swift.”

His five stages are:

1. Financial collapse where faith in risk assessment and financial guarantees is lost.
2. Commercial collapse that witnesses a breakdown in trade and widespread shortages of necessities.

3. Political collapse through a loss of political class relevance and legitimacy.
4. Social collapse in which social institutions that could provide resources fail.
5. Cultural collapse that is exhibited by the disbanding of families into individuals competing for scarce resources.
- 6.

As I suggest in a [review and commentary on his book](#): “all that is needed for political collapse is for more citizens to come to the realization that the status quo is no longer working for the benefit of all but for the benefit of the elite. When the masses finally come to better understand the corruption and malfeasance that percolates throughout the political world, collapse of the political class will occur.”

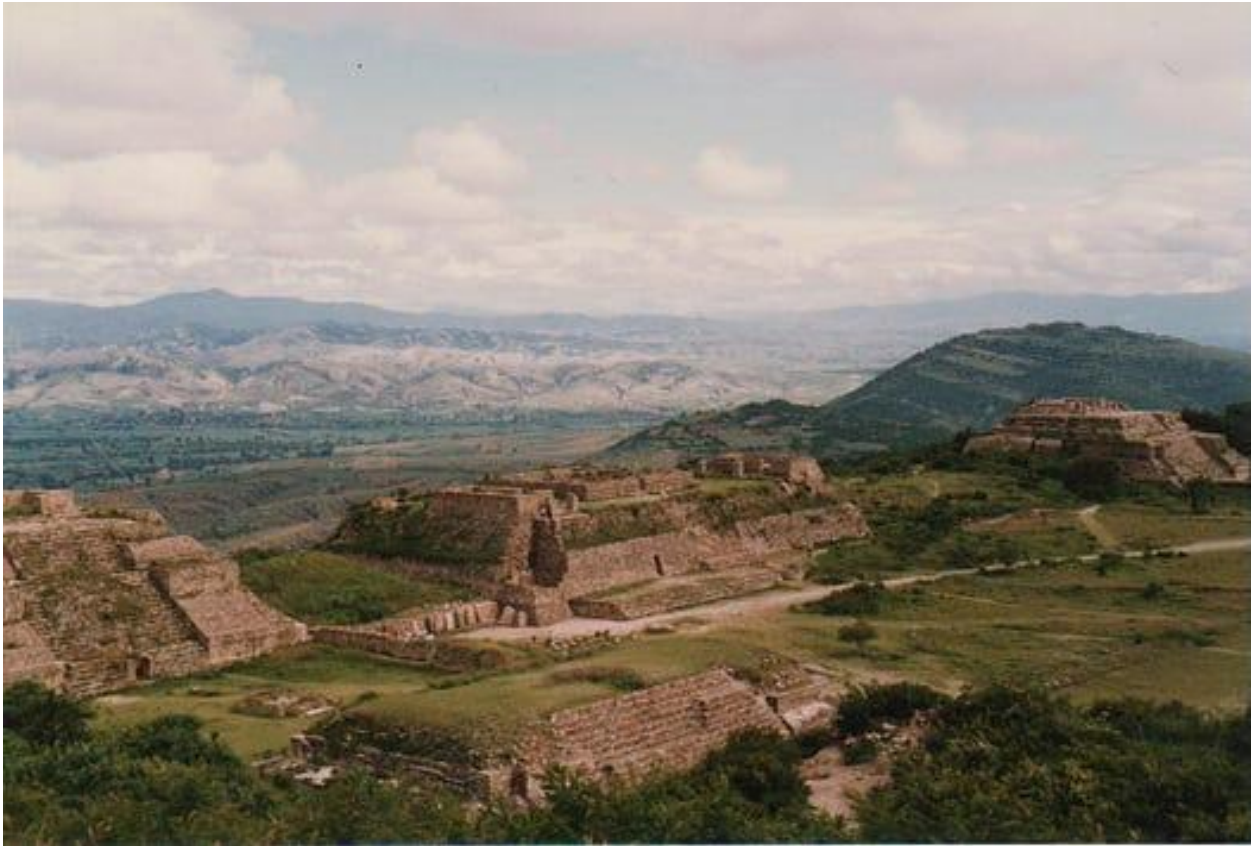
This is perhaps what we are witnessing with greater frequency in the U.S. and elsewhere, suggesting sociopolitical collapse may not be too far off in the future. And with sociopolitical collapse comes some pretty serious knock-on effects that will upset the complex systems we all rely upon, especially long-distance supply chains and social ‘order’.

As I have argued in other places, when it comes to politics we seem to be chickens arguing over which fox will guard us while the henhouse is burning down in the background.

## Today's Contemplation: Collapse Cometh X

April 29, 2021

### Who Do Representative Governments Actually Represent?



Monte Alban, Mexico (1988). Photo by author.

Circumstances have kept me sidetracked from writing for a few months. As life has settled a bit, although the spring weather keeps me busy working in the food garden, I felt it time to post again. Here is a comment I wrote this morning in the Tye in response to an [article on corporate bailouts](#) and a call to give government more power.

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Almost all of us live within a narrative matrix that we exist in a fair and transparent world where the ruling class exists to serve the people of a particular territory, that government and its efforts/energies are directed primarily towards benefitting the citizens it is supposed to represent, and that the resources of the nation will be distributed in a way that is equitable and just. We are taught such a world exists through our government education systems and repeatedly told this via our corporate media. If glitches in the matrix occur, it's because of some particular individual's defect but never a systemic problem.

A look through pre/history and a gentle scratch at the surface of this general perspective, however, will show that this view is all bullshit. The ruling class exists to benefit itself, and this is always done at the expense of its citizens. They have created an elaborate narrative to market themselves as 'representatives' of the people in an ongoing and expansive attempt to legitimise their rule and power. And the vast majority of people believe the stories (primarily to reduce the cognitive dissonance that is created when the notion of living within a massive, propagandised world where one has little true

agency in sociopolitical and socioeconomic matters collides with the sociocultural myths of 'representative' government and citizen participation).

Once you realise that the world you thought exists does not, you come to view situations such as corporate bailouts as part and parcel of the ruling class taking care of itself as they always do, and not in the least surprising. We can stamp our feet and shout as much as we want but such travesties of justice and righteousness have been going on since large, complex societies came into existence and it will continue to go on as long as they exist. Periodically a sacrificial corporate lamb is paraded out to demonstrate to the public the government's not subservient to the oligarchs/elite, but this is all just part of the theatre. Occasionally a massive revolution comes along to try and shift the balance of power back to the citizenry, but mostly this simply results in one set of sociopathic elite being replaced by another equally sociopathic group of elite.

Giving government more power and control, as this author suggests, is not a solution by any stretch of the imagination. In fact, it is probably the opposite of what we want and plays right into the hands of the ruling class (for example, the narrative that we can continue business as usual by electrifying everything and transitioning to non-fossil fuel alternative energies is mostly about shifting capital from one dead-end, unsustainable, resource-intensive, and ecologically-destructive industry to another equally dead-end, unsustainable, resource-intensive, and ecologically-destructive one so the financial/economic Ponzi we exist within can continue for a while longer and further enrich those at the top of our social power structures).

The best thing one can do is attempt to remove one's family and local community from this delusional matrix as much as is possible. Yes, make your displeasure and contempt for the way things are known, especially at a local level, but focus on building your community's self-sufficiency and -reliance. Reduce your consumption. Grow your own food. Re-localise as much as possible. Stop depending on both government and corporations. Stop feeding the beast for it will consume us all while selling us lies and stealing our 'wealth'.

Today's Contemplation: Collapse Cometh XI  
May 7, 2021

Fiat Currency, Infinite Growth, and Finite Resources: A Recipe For Collapse



Knossos, Crete (1993). Photo by author.

Yet another in an increasing collection of comments I have posted to the online media site [The Tye](#). This time it is a commentary on an [article](#) that reviews a book arguing in favour of the implementation of Universal Basic Income.

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“No stone is left unturned in their thorough and convincing argument...”

I’m not so sure this is true. My personal focus for the past decade+ has been on the unsustainability of our complex society, particularly as it is impacted by our propensity to chase growth — especially population and economic, for these both have a significant connection to our ever-increasing drawdown of finite resources and ecological destruction of our planet. If we are not correcting this tendency to ‘grow’ in any way, shape, or form, then we are just creating more ways to kick-the-can-down-the-road of our wasteful and ruinous path; and place the significant burden of our misinformed ways on future generations.

One of the key arguments of archaeologist Joseph Tainter’s thesis regarding societal collapse as presented in his text *The Collapse of Complex Societies* is that a society becomes increasingly susceptible to collapse once it encounters diminishing returns on its investments in complexity. It is not a stretch at all to argue that we have been on the path of such decline for decades, particularly once we began creating a purely fiat currency that has allowed an explosion in debt/credit. If one looks at the ‘growth’ of our world since the late 1960s when central banks/governments shifted the world to a monetary system that creates money from thin air with no connection to physical commodities that could

constrain our growth somewhat, it is almost all predicated on debt/credit expansion; a conundrum since debt repayment necessitates the growth imperative to continue (yes, basically a gargantuan Ponzi scheme).

Why is this connection to fiat currency important? Primarily because money is basically a claim on future resources and such resources are in terminal decline. So, the more money we 'print' (regardless of the reason for its printing), the more claims there are on future resources; resources that not only are disappearing quickly and getting more costly to access (because we always retrieve the easiest and cheapest to get to first), but whose retrieval results in monumental ecological destruction.

And on top of all this is the whole overshoot conundrum we have led ourselves into because of the above. Again, it is not difficult to argue that we have far surpassed the natural carrying capacity of our environment and only been able to 'sustain' our population by increasing our drawdown of resources through technology, energy-averaging systems (based on trade/geopolitical conquests), and this explosion of debt.

So, if we want to support our most vulnerable in society in a world that must pursue degrowth (the antithesis of our current pursuits and its expansion of debt/credit), then we need a much more complex discussion of how to do this. I see zero mentions of these complexities in the article. Just creating more money to distribute to a portion of our society is not a solution. In fact, the creation of more and more fiat is likely to have the negative consequence of our ruling class pursuing (more than they already do) increasing and significant price inflation, something that tends to hurt the majority of society more so than the elite at the top of the monetary/financial/economic system.

Today's Contemplation: Collapse Cometh XII  
May 14, 2021

**Growth Greenwashing: A Comforting Narrative**



Teotihuacan, Mexico (1986). Photo by author.

My comment on an [article](#) regarding the cessation of a provincial programme for municipalities in British Columbia meant to support and fund climate change initiatives.

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Not sure what the situation is like in BC surrounding provincial mandates and municipalities, but I would judge a programme that is supposedly to support climate change initiatives in Ontario municipalities to be primarily about political theatre, certainly not about addressing any type of environmental dilemma. I live in a municipality on the edge of the Greater Toronto Area that has been chasing perpetual growth for many, many years. In fact, it uses this growth to try and attract more growth, marketing itself as one of the fastest growing areas in Ontario and thus the place to live and work.

This growth comes at a steep cost, if you ask me. That being the expansion of suburban residences over prime agricultural land and sensitive ecological habitat being on the glacial till known as the Oak Ridges Moraine. They have shifted their plot somewhat in arguing that they are concentrating on densification of the town proper (they just approved a large apartment/condo complex in the middle of town that far exceeds previous 'bylaws' regarding height restrictions — you know, a one-off exception), yet the construction of residential communities continues unabated in areas outside this supposed new approach as farmland continues to be paved over; adding to the looming crisis Ontario will face as it adds more and more people yet already imports more than 80% of its food.



As my once 'small' town (about 18,000 when we moved here in 1995) approaches 50,000 and supposedly will 'max' out at around 80,000, I have to wonder how the town's motto (Country Close to the City) connects to the reality on the ground. I've been suggesting for a number of years the town should abandon this farcical slogan and change it to what is actually happening: Suburbia Close to More Suburbia.

When pushed about this ongoing pursuit of growth, our municipal politicians invariably skirt responsibility stating they are simply following the diktats of the provincial government; their task being to implement provincial mandates in a manner that considers local 'needs', particularly the environmental sensitivity of the area (leading me to conclude these municipal 'representatives' are really little more than local, middle managers doing as instructed from the more distant 'representatives' of the province — I put 'representative' in quotes as one has to wonder who exactly the politicians 'represent' in their policies/decision-making; I tend to believe it is those at the top of our power structures, not the 'average' citizen).

I have to laugh at the bombastic rhetoric. They cheerlead 'sustainable' development and growing with the environment in mind without flinching at the hypocrisy in their oxymoronic statements at all. They talk about protecting the environment while undermining it with expansion. They speak of responsibility to future generations while using up all the finite resources that support life. They expand and expand and expand with no understanding of how exponential growth quickly overwhelms systems and that overshoot of the environmental carrying capacity of a region always ends in collapse.

The foxes truly are in charge of the henhouse. But they have created a comforting narrative so that the chickens can avoid the cognitive-dissonance that comes from realising it's all just a fairy tale. Ontario, a place to 'grow'.

## Today's Contemplation: Collapse Cometh XIII

May 17, 2021

### Electrifying Everything: Neither 'Green' Nor 'Sustainable'



Tulum, Mexico (1986). Photo by author.

Electrifying everything has become a rallying cry for many people concerned with the ecological/environmental impact of humanity. But do such attempts to mitigate/solve such problems/dilemmas actually do what they claim to? I would argue no. They are simply substituting one set of problems for another set of problems and completely avoiding the underlying causes. They are primarily about creating the idea that they are a solution, not that they truly are. They are a marketing scheme to sell products and gloss over using language the problematic issues they prolong or create. It is fundamentally about propaganda, not addressing the plight that human expansion is.

In this vein, here is my comment on an [article](#) that looks at substituting electric long-haul trucks for internal combustion engine ones.

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We really do need to stop using language that does not reflect reality. Electric vehicles are neither 'green' nor 'clean'. A shift to them is not in any way, shape, or form helping us to address the various ecological/environmental dilemmas humanity has created in its endless expansion and exploitation of the planet's limited resources (and that go far beyond carbon emissions).

Narratives that use the small Overton window of internal combustion engines vs. electric vehicles completely disregard the underlying issues of our dilemmas and avoid the hard choices that need to be made — to say little about the fact that they mislead and propagate false beliefs. They do, however, help

significantly in reducing our mass cognitive dissonance that is created from our pursuit of the growth chalice on a finite planet with hard, biophysical limits.

The question that needs to be confronted and at the forefront of hauling goods around is why we continue to pursue an energy- and resource-intensive approach to living and should real sustainability not be primary in our thoughts? We need to not only be discussing fervently the concept of degrowth and how we can implement it equitably, but focusing our energies and finite resources on localising everything so such wasteful pursuits are curtailed significantly, not attempting to use up the remaining resources in some hollow pursuit to hold on to unsustainable practices.

Electrifying everything is not a panacea. In fact, I have increasingly come to view the entire idea as primarily an attempt to shift capital from one unsustainable, ecologically-destructive enterprise (fossil fuels) to another equally unsustainable and ecologically-destructive one (all the alternatives). It is a marketing scheme concocted to 'sell' the idea that we can seamlessly transition to other energy sources and address our toxic legacy. All it is doing, however, is substituting one problematic technology for another (and that still depends upon and requires massive amounts of fossil fuels from the mining for resources to the processing of minerals to the manufacture of products...to say little about the impact of the toxins that must be considered in the after-life of electric products and alternative energy sources, especially the batteries necessary).

We have been increasingly propagandised through repetitive sloganeering that electric vehicles and alternative energy sources to fossil fuels is our saviour. They are not. They are snake oil from salesmen whose primary purpose is to generate wealth and profit regardless of the cost. We would do well to stop listening to such nonsense and shout as often as possible "the emperor has no clothes!"

**Today's Contemplation: Collapse Cometh XIV**  
May 20, 2021

**Reducing Population: Degrowth Or Enrich Everyone?**



Pompeii, Italy (1993). Photo by author.

Part of an ongoing conversation with another regarding globalisation and whether it is a beneficial or detrimental endeavour of humanity. You can find the entire back and forth [here](#).

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The notion that to address our overshoot dilemma by bringing the impoverished up to the level of the so-called 'advanced' economies so that population levels out or decreases (eventually) requires some significant magical thinking.

As I stated, the primary reason for 'advanced' economy riches is the exploitation of a finite resource; a finite resource that is already in its death throes due to the law of declining marginal utility (to say little about all the other resources that are similarly experiencing diminishing returns and requiring greater and greater amounts of energy to even maintain or slightly increase extraction levels).

There are not the resources remaining to bring the entire world up to the level supposedly necessary to lead to smaller families. What resources remain would be best used in helping everyone relocalise which is going to be most difficult for those caught in the trap of globalisation: dependence upon long-distance supply chains, especially for food.

Then there are the environmental/ecological consequences of attempting to enrich the majority of the world that continues to increase global population, resulting in even more stress on the various complex

systems that 'sustain' humanity (and many other species). In fact, there are many who would argue our resource exploitations have already resulted in irreparable harm and must be halted immediately, not doubled- or tripled-down as you suggest to provide 'riches' for everyone.

I think you've got it completely backward; in fact, your suggestion would likely expedite the impending 'collapse' of our complex and energy-intensive, industrialised world. The 'advanced' economies are going to have to become far, far less 'rich' and as I said, either we choose how this might be done before we fall over the impending energy cliff or nature WILL do it for us; and nature doesn't give one single iota of care or concern about how populations are brought back into balance with an area's environmental carrying capacity. There are many who suggest a massive die-off of humans is the most likely scenario for the planet.

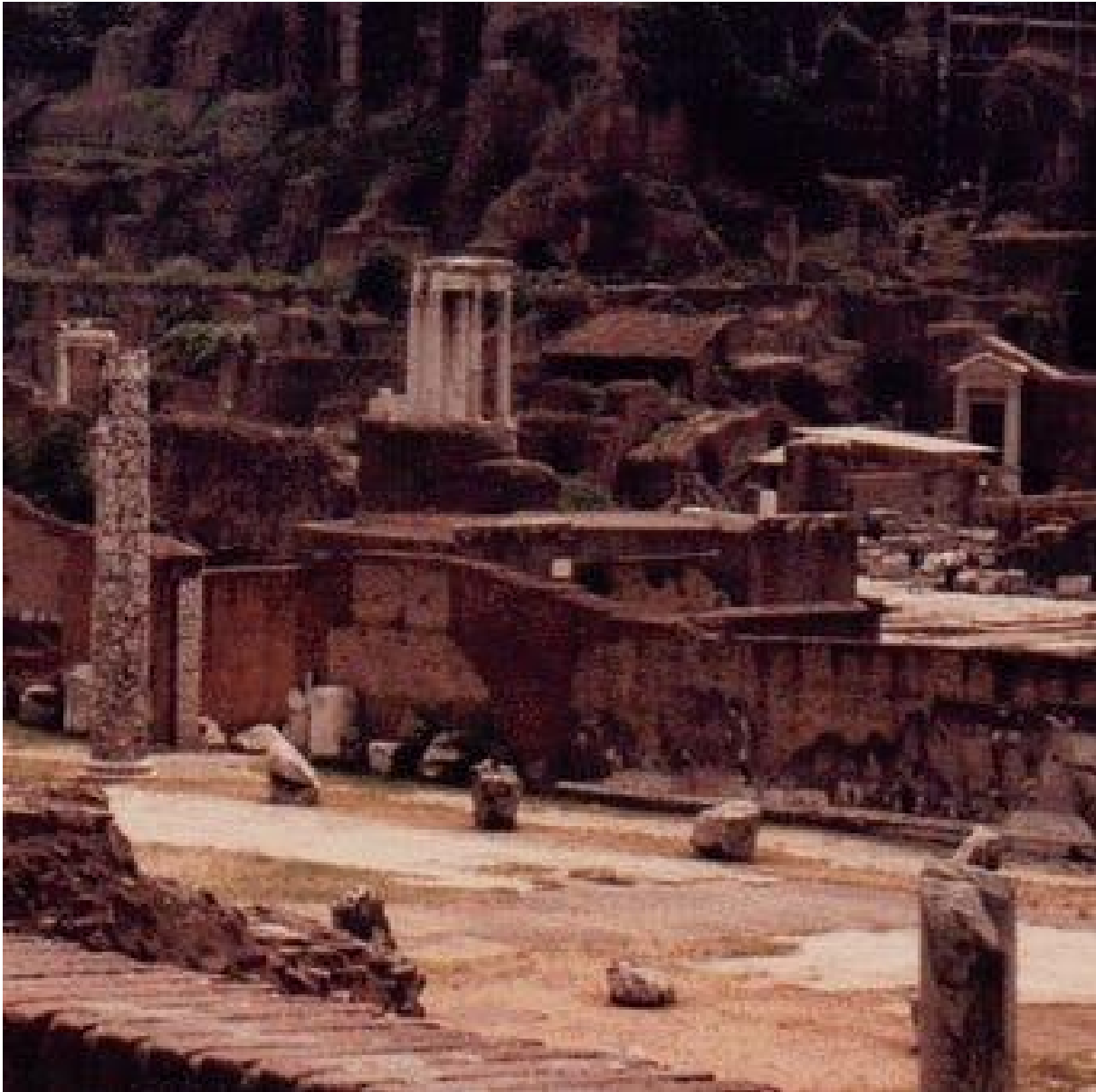
And I won't even get into the fact that our current complex systems have been continuing only because of the economic Ponzi that the ruling class has created through flooding of the world with (increasingly debased) fiat currency and debt (hundreds of trillions of dollars). This is a monetary/financial/economic system that could 'collapse' at any moment, especially if people lose faith in the system.

I would suggest investigating the dilemma of Peak Oil, maybe start with [Gail Tverberg](#), [Alice Friedemann](#), Peak Prosperity's [The Crash Course](#), and the late Michael Ruppert's [Collapse](#). Then also watch the following clips: [William Catton](#) (author of Overshoot), the late [Dr. Albert Bartlett](#) on our conundrum: , and archaeologist [Dr. Joseph Tainter](#) (author of The Collapse of Complex Societies).

## Today's Contemplation: Collapse Cometh XV

May 21, 2021

### Finite Energy, 'Renewables', and the Ruling Elite



Rome, Italy (1984). Photo by author.

Energy. It's at the core of everything we do. Everything. Yet we take it for granted and rarely think about it and what the finiteness of our various energy sources means for us.

As Gail Tverberg of [Our Finite World](#) concludes in a recent [thought-provoking article](#) that should be read widely: "Needless to say, the powers that be do not want the general population to hear about issues of these kinds. We find ourselves with narrower and narrower news reports that provide only the version of the truth that politicians and news media want us to read."

Instead of having a complex and very necessary discussion about the unsustainable path we are on (especially as it pertains to chasing the perpetual growth chalice) and attempting to mitigate the

consequences of our choices, we are told all is well, that 'science', 'human ingenuity', and 'technology' will save the day, and we can maintain business-as-usual with just some minor 'tweaks' and/or a 'green/clean' energy transition. Pre/history, physics, and biology would suggest otherwise.

Here is my relatively long comment on a [Tyee article](#) discussing the International Energy Agency's recent report that calls on all future fossil fuel projects to be abandoned and drastic reductions in demand in order to avoid irreparable climate change damage to our planet. The answer, however, will not be found in 'renewable' energy and related technologies as many contend because the underlying and fundamental issue of overshoot has been conveniently left out of the story.

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Having followed the 'energy' dilemma for more than a decade I've come to better understand the complexities, nuances, and scheming that it entails; not all mind you, not by a long shot, but certainly better than the mainstream narratives provide. I have no incentive to cling to a particular storyline, none. I have discovered the following information through continued reading and questioning. My perspective on almost everything has shifted dramatically as a result — one cannot unlearn certain things once they've been exposed to them.

One has to ask oneself a few questions and keep in mind a number of facts when putting the puzzle together as to what exactly is going on; and energy applies to many, many issues in our world far, far beyond climate change because it is the fundamental basis of life and all this entails. I won't/can't post everything since it would involve a massive text, but here are a few pertinent issues to consider in the energy story and our fossil-fuel future.

First, fossil fuels are indeed a finite resource so their coming decline in use was inevitable. This is not only because they are finite but because of falling energy-return-on-energy-invested (EROEI). Given our tendency to exploit the low-hanging fruit first (use up the easy-to-access and cheapest-to-retrieve), the law of declining marginal utility (also known as diminishing returns) was destined to occur and our use of them diminish significantly. We now have to rely upon oil sands, tight oil, and deep-sea drilling to sustain or just barely improve extraction rates. This is not only not economical because of the complexities involved, but uses up increasing amounts of the energy extracted (to say little of the environmental impacts).

The energy industry and governments have known about this predicament for decades. It is not a surprise at all (several 'research' reports by government agencies/bureaucrats over the years are available that discuss the issue; to say little about the 'academic' discussions). Geophysicist Marion King Hubbert projected this situation while working for the Shell Oil Company in the mid-1900s and developed the Peak Oil Theory, which has more-or-less been quite accurate in its predictions, especially for conventional crude oil production. Given that the largest and most profitable conventional crude oil reserves have all been found and exploited, and the increasing costs and diminishing returns of alternative methods of extracting oil and gas, it's really not surprising that the industry has greatly reduced capital expenditures in exploration and instead ventured into alternatives; there is little additional profit to be made in oil and gas — better to move to other energy sources and market them as a panacea that will not only address climate change but support our energy-intensive living standards. This dilemma is also outlined in the 1972 text *Limits to Growth* that used emerging computer simulations to explore various scenarios given the fact that we live on a planet with finite resources. Of the various models generated, we seem to be tracking most closely the Business-As-Usual one that projected problems arising for humanity as we entered this century (and peaking around 2050); problems/dilemmas due to a variety of things, not least among them the consequences of population overshoot.

Second, transitioning to alternative sources of energy is not a simple nor straightforward shift; not even close. We have created a complex, interlinked world almost entirely dependent upon fossil fuels. This one-time, finite cache of energy reserves has underpinned virtually our entire 'modern' way of living. From the ability to create a complex energy-averaging system via globalised, long-distance trade routes to industrial agriculture that feeds our billions (some quite well, others not so much), oil and gas makes it possible. There are no alternatives that can replace fossil fuels for a number of reasons but mostly because many of our necessary industrial and extraction processes must use fossil fuels since alternatives are inadequate — and alternatives all rely upon these processes for their production, distribution, and maintenance. Rather than acknowledge this dilemma, we have crafted a narrative that such a transition is not only possible but will more or less be forced upon humanity for its own good (more on why I believe this is so below).

Much of our geopolitical and economic chaos over the past number of decades can be tied directly to our energy issues as well. Maneuvering by various nation states, in the Middle East especially, has a link to the massive fossil fuel reserves that have been discovered around the planet. Alliances with questionable governments and proxy wars with competing nations has been the storyline for some years now as access to and control of oil and gas reserves (among other important resources) has been paramount. The untethering of our currency to physical commodities (i.e., gold and silver) in the late 1960s and early 1970s (especially the abrogation of the Bretton Woods Agreement by the United States), and subsequent ever-increasing debasement of it, can be said to be one of the consequences of diminishing returns on our most important energy sources and attempts to counteract the energy decline — especially in the US where oil and gas production peaked about this time. Geopolitics is mostly if not always about control of resources, not about freeing a nation's citizens from its tyrannical government and bringing 'democracy' to them — we chose which 'tyrants' we support and which we vilify (even within our own 'democracies').

Finally (although I could ramble on forever), the ruling class/oligarchs/elite (whatever you wish to term the power brokers and wealthy in society) have one primary motivation that drives them: the control/expansion of the wealth-generating systems that provide their revenue streams — this has been the story of the ruling classes throughout pre/history. All other concerns either serve this first one or are secondary/tertiary. Energy is one of the most profitable of the various wealth-generating systems (control of the creation and distribution of fiat currency perhaps the most; along with taxing powers). What better way to ensure continued wealth generation than convincing everyone that a shift to alternative energy sources is necessary to save ourselves and planet, even if such a shift is impossible and untenable.

We cannot mitigate, let alone solve, the issues at hand for humanity and the planet if we do not correctly identify the cause(s). Clinging to a narrative that is primarily marketing propaganda might help to reduce the cognitive dissonance created by holding two or more beliefs that conflict with each other, but it does zero in addressing our needs. Holding on to the hope that we can continue to live as we have because 'someone' will solve these conundrums is in my opinion misplaced faith.

Our major dilemma is overshoot, defined simply as the point where a species has placed more demand on its environment/ecology than that system can naturally regenerate and sustain the population. The one-time cache of fossil fuels has allowed our species to proliferate (and helped to provide amazing wonders) well beyond the natural carrying capacity of our planet. And now that it is in terminal decline nature is sure to bring our species' population back into alignment. Those at the top of society's power structures are well aware of these issues for they have driven most of their actions and policies for decades. It is far better for them, however, if the masses are focused elsewhere and their use of propaganda to do this has a long history as well. We are being sold a comforting narrative about 'clean/green' energy while the underlying reality of what is occurring is being purposely ignored or



dismissed, often as conjecture or conspiracy. The idea that we need to reduce our fossil fuel use to save the planet is convenient cover for the truth that fossil fuels are becoming too expensive to retrieve because the cheap-to-access and easy-to-retrieve reserves are quickly running out.

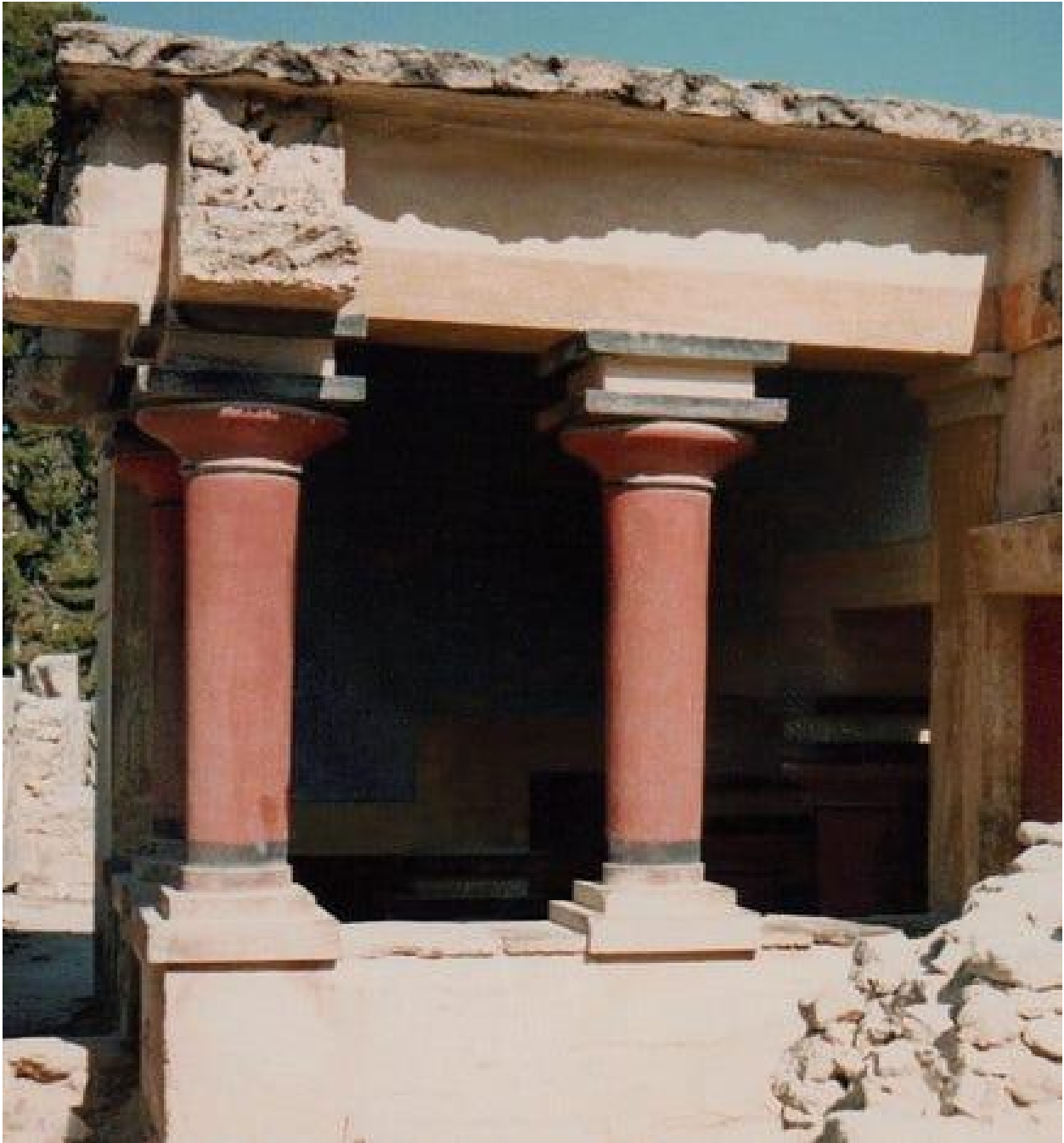
I'm increasingly doubtful we are going to face the ultimately very difficult decisions that need to be made (in fact, needed to be made decades ago) and we will continue to stumble along hoping and praying that all will work out just fine, thank you. Only time will tell how this all plays out for none of us can accurately predict the future but the path of decline/collapse seems fairly certain. Every complex society that has existed up to this point in history has experienced it and we are not significantly different when push comes to shove. If archaeologist Joseph Tainter's thesis in his monograph *The Collapse of Complex Societies* is accurate, complex societies 'collapse' due to the inability to deal with stress surges because they have been experiencing diminishing returns on their investments in complexity; and this is exactly the situation with humanity's investments in fossil fuels.

This is what I have been able to cobble together in the couple of hours of a few household chores and while enjoying my morning coffee. Now I will prepare to spend my usual day out and about our yard enhancing our fruit/vegetable gardens, and attempting to make our household a tad more resilient in light of the decline that is most assuredly upon us. You may or may not agree with my interpretation of things but I would implore you to explore the issues and certainly step outside of your comfort zone and consider a different paradigm because the ones pushed by the ruling class are not in your best interest.

**Today's Contemplation: Collapse Cometh XVI**

May 24, 2021

**Finite Energy, Overconsumption, and Magical Thinking Through Denial**



Knossos, Greece (1993). Photo by author.

Another quick thought on our impending energy cliff situation and comment on an [article](#) suggesting overconsumption is our greatest threat and that we can be happy without it.

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This is an excellent article.

The threats humanity faces are never simple and always multifaceted and intertwined. Overconsumption by a relatively small percentage of our world's population is certainly one of the contributing factors. As is the way we create and distribute 'money' and our sociopolitical systems, to mention just two.

Underpinning all of these complexities is energy and the one-time, finite cache of energy provided by fossil fuels has provided a boost to human exploitation of the planet unlike any other time in humanity's 100,000+ years of existence. In the waning days of this phenomenal energy surplus (be it due to supply constraints because of diminishing returns or some recognition of the negative consequences of its use — which are many and go far beyond the production of greenhouse gases), scaling back 'advanced' economies' overconsumption tendencies could help forestall the energy decline we have begun to experience. It is unlikely, however, to prevent it — I would argue it is mostly magical thinking to hold on to the idea that some 'clean', 'renewable', and 'sustainable' energy source will suddenly appear and save us; a 'solution' that would not in any way address the mountain of other dilemmas we face, such as lack of arable lands and fertile soils, biodiversity loss, the negative repercussions of our past several centuries of expansion and exploitation, and numerous other biophysical limits imposed by a finite planet.

In fact, I would argue there are many reasons a pullback in our consumer-(profit-)driven societies is unlikely to happen, not least of which is the ruling class's motivation to expand/control the wealth-generating systems that provide their revenue stream and the societal repercussions that always seem to arise when a people's living standards (expectations? entitlements?) are threatened.

Another, and perhaps the most significant, roadblock to 'righting' our path is the somewhat dominant narrative that alternative energy sources (that many erroneously label 'green' and 'clean'; and are used as supportive fodder by the ruling class to justify 'sustainable' growth — a perverse oxymoron if ever there was one and truly more marketing sloganeering than a reflection of reality) can be mostly easily transitioned to in order to continue 'fuelling' advanced economies very energy-intensive lifestyles. As long as the illusion persists that our current ways of living (and I'm speaking of 'advanced' economic societies) can in any way be 'sustained', we will travel towards a collapse/decline which can neither be reversed nor managed in an equitable or relatively-non-catastrophic way ('catastrophic' for advanced economies, not so much for economies that don't have the same expectations and/or are more self-sufficient, and for much of the rest of the 'natural' world).

This is the way things go for a species that has overshot the natural carrying capacity of its environment. Humanity has the unique abilities to be aware of and possibly mitigate the fall that accompanies this biological phenomenon but I am doubtful we will use our 'ingenuity' to do anything but take the easier and seemingly less painful path of attempting to maintain our current tendencies (we are, after all, genetically predisposed to seek pleasure and avoid pain, even if the pain experienced now were to be significantly less than that that is to arise somewhat later in time). We will continue to use all the cognitive distortions we are prone to to propagate and hold on to comforting narratives that avoid the inconvenient 'facts'.

Of course, denial is the first stage of grief and often, if not always, accompanies a significant loss. We, however, need the majority of people to move directly to the final stage of grief that is acceptance and as I have often argued on these pages recognise (and posthaste given the speed with which exponential growth always overwhelms a system) that the best way to mitigate our impending energy descent (and that of other physical resources) is to pursue degrowth strategies. The conversation on how to do this equitably and wisely is long, long overdue and the longer we avoid it, the more precipitous will be our 'fall'.

In fact, it may actually be too late as some suggest and all the arguments and competing narratives are just 'academic' at this point — we would only truly know in hindsight. Perhaps the best one can do is to

try and make one's household and local community as resilient and self-sufficient as possible. It is sometimes wise to plan for the worst and hope for the best; although hope is not really a strategy and the planning/action part is what's really important. Yes, stop consuming as much and change your expectations but also be prepared for a future of less and not one of perpetual growth and prosperity as our ruling class pushes (what politician has not promised 'more' to garner support? as the article highlights). 'Normal' is what we make it, not what we are told by others — especially those who seek to 'profit' from us. It is going to take a massive paradigm shift for us to weather the impending energy cliff and we are quickly losing time to prepare, both physically and psychologically.

## Today's Contemplation: Collapse Cometh XVII

June 1, 2021

### 'Renewables' and the Overton Window That Ignores Biophysical Realities



Teotihuacan, Mexico (1986). Photo by author.

'Renewables'. They will save us! This is one of the most common beliefs being bandied about by the ruling class and especially those that stand to profit from a shift to them in an attempt to power our complex society. I would argue, however, that we are not being told some uncomfortable truths about such a shift. Here is my comment to a Tyee [article](#) that discusses the city of Vancouver's plan to address air pollution.

"...shifting industrial power sources from coal to renewables..."

As Mike Tyson is credited with saying: "Everyone has a plan until you get punched in the face."

And the face punch here is the fact that many industrial processes cannot be shifted to renewables — to say little about the fact that renewables also rely heavily upon the industrial processes that depend upon fossil fuels and simply externalise the pollutants/ecological destruction required to 'energise' technology.

Here are a handful of articles that explain why alternatives are inadequate for significant industrial processes we rely upon:

<https://www.vox.com/energy-...>

<https://www.energypolicy.co...>

<http://energyskeptic.com/20...>

<http://energyskeptic.com/20...>

<https://www.independent.co...>

But let's be frank, the Overton Window being forced upon this discussion (i.e., the only choice for our energy-intensive society is to shift from fossil fuels to 'renewables'), including by many journalists, completely ignores some harsh realities, such as biophysical limits on a finite planet and thermodynamics. The assumption seems to be always that we can only fight climate change (ignoring all the other ecologically-destructive consequences of our constant pursuit of growth) by shifting away from fossil fuels (a high-density and easily transportable fuel that supports almost everything about our globalised and industrial complex world) to 'renewable' forms of energy (that are not truly renewable and especially not 'green/clean').

Where is the discussion about NOT pursuing a business-as-usual pursuit of growth and an energy-intensive society? Where is the discussion about degrowth? Where is the discussion about our fundamental problems, especially overshoot? Where is the discussion about perhaps moving towards a low-tech society that requires little to no environmentally-destructive energy sources and finite resources? Where is the discussion about challenging the pursuit of the infinite growth chalice? Where is the discussion challenging the constant refrain by the ruling class that growth is only beneficial? Where is the discussion about maybe, just maybe, we need to rethink quite seriously our entire way of life and not pursue business-as-usual with just a simple 'tweak' of energy sources? And, where is the discussion that our media and its journalists in ignoring these hard questions are contributing to our dilemmas by proliferating false, misleading, and very likely quite harmful beliefs?

Most (all?) discussions about reducing fossil fuel use are comforting narratives that help to reduce our mass cognitive dissonance that is created when one realises that our lifestyles/complex society cannot continue as it is on a finite planet. We tell ourselves and others that our human ingenuity (especially via technology and 'science') will save us without realising that all we are doing is avoiding the really tough decisions that need to be made, individually and collectively.

I would argue most of this is because of the constant propaganda by the globe's ruling class that is working hard to control/expand the wealth-generating systems that provide their revenue streams (one of the most 'profitable' here being taxation — something every society sees increase significantly as it nears its collapse due to increasing diminishing returns and the powers-that-be's attempt to keep their privileges intact), with the latest approach here to shift capital from an unsustainable and ecologically-destructive enterprise (fossil fuel use) to another enterprise ('renewable' energy use) but that is equally unsustainable and ecologically-destructive — but it will increase profits considerably for a time.

The masses are being sold a story. It is a comforting story and most will accept it without question. But scratch below its surface even gently and you will see that the emperor has no clothes.

## Today's Contemplation: Collapse Cometh XVIII

June 5, 2021

### 'Renewables', Electrifying Everything, and Marketing Propaganda



Tulum, Mexico (1986). Photo by author.

As per usual, my comment on an [article](#) in The Tye that gives an interesting perspective on the idea of 'Carbon Footprint' and individual versus collective actions in addressing the behavioural/consumption changes necessary for effective action on climate change.

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Great read and perspective.

"The problem is that climate change is as much a political problem as it is a scientific one. It's not that we've been failing to make individual lifestyle changes; it's that powerful interests have knowingly obscured, distracted from and delayed climate action over the last 50 years."

I find this key to help in understanding one of the narratives that have come to dominate the 'environmental/climate change/global warming' movement: a transition to 'renewables' (or 'green/clean' energy) and 'electrifying' everything is the best path forward; and many of The Tye writers are as guilty of this as well.

As has been shown by Jeff Gibbs' Planet of the Humans and Julia Barnes' Bright Green Lies, the 'environmental' movement appears to have been hijacked by powerful/influential political/economic interests in order to market the idea that getting everyone to shift away from fossil fuel-based industry and products is the key action in fighting climate change and avoiding the predicted consequences of it.

This idea is, I believe, primarily a marketing/sloganeering/narrative control campaign to help the businesses/corporations/industries involved in 'renewables' and associated products in expanding their consumer base and shifting capital towards them. It is not and never has been about protecting or saving the environment and ecological systems. It is about protecting and saving our energy-intensive, business-as-usual complexities and the technologies necessary to support/maintain these; and it is driven by the primary motivation of the ruling class/powers-that-be/elite: expansion/control of the wealth-generating systems that provide their revenue streams.

Scratch even gently at the surface of this propaganda/narrative and you will find the emperor has no clothes. Fossil fuels are just as necessary, in fact probably more so, in any transition to 'renewables'. Mining and processing of finite materials (particularly rare-earth minerals) require fossil fuel driven vehicles and machinery (and, of course, the fact that these materials are 'finite' in nature is key here as their production and distribution would be significantly limited and not capable of meeting the demand of our world — especially of 'advanced' economies and their complexities).

Massive amounts of concrete and steel production, which depend greatly on the high heat only available via fossil fuels (particularly coal), would be needed.

Then there's the issue of energy-return-on-energy-invested (EROEI): fossil fuels provide far, far greater energy (or at least they did when we were retrieving the easy- and cheap-to-access reserves; not so much now that we are relying on marginal sources such as deep sea reserves, tight/shale oil, and oil/tar sands) than 'renewables'. And it is the surplus energy that has been provided by high EROEI fossil fuels that has allowed our modern, industrialised, and global civilisation to grow and flourish the way it has over the past couple of centuries. Low EROEI 'renewables' are incapable of supporting our complexities in the same way; not even close.

As a final point (although there are other issues/problems/disadvantages), the production of 'renewables' also wreaks havoc on ecological systems. From the very dirty mining and material processing to the after-life/disposal of the products, 'renewables' continue to produce and disseminate toxins into the atmosphere and local environments. They are neither 'clean' nor 'green'. In fact, the notion of 'green/clean' energy is an oxymoron of epic proportions and should never be used by anyone serious about the issues involved in energy production and environmental/ecological issues for it just feeds the monster that is corporate marketing.

And here I come back to another statement in the article that supports my view: "It's about realizing that the consumer choices we have available to us are deliberately limited by the powerful interests that seek to maintain the status quo."

Yes, we have powerful interests that have hijacked the narrative via what could be considered the use of the Overton Window: a limiting of ideas of what is acceptable to consider. Fossil fuels verses 'renewables'. There's no discussion of the limitations or profoundly propagandised view of what 'renewables' actually are and require. There's just a 'you're-with-us or you're-against-us' framework and a bunch of well-intentioned but misguided people repeating the mantra: renewables/electrification now.

There's no thinking outside the box or consideration of what I believe is desperately needed: degrowth. Degrowth is off limits and its discussion suppressed for a number of reasons but mostly because it challenges the primary motivation of those at the top of society's power/economic structures: control/expansion of the wealth-generating systems that provide their revenue streams.

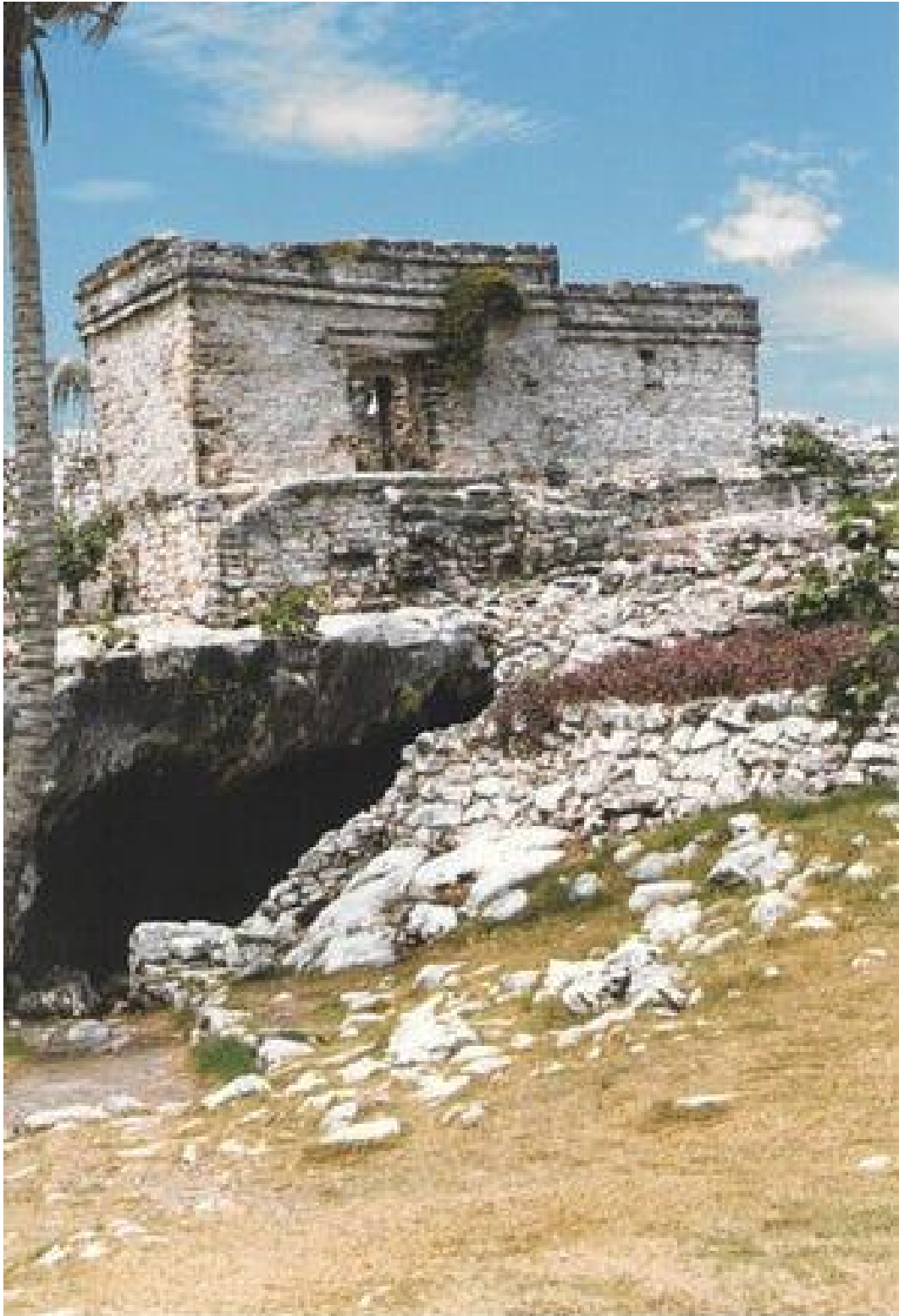


We live on a finite planet with real biophysical limits that have very likely been well surpassed in a number of areas. The sooner we realise this and reach the conclusion that we cannot in any way support or expand our high-energy complexities and the growth that accompanies this, the sooner we might, just might, get on the path towards degrowing our world in a just and equitable way rather than continue to chase the magical thinking necessary to sustain our world as currently contrived and going even further into overshoot than we already have. Reversion to the mean always happens in such instances and if we hope to mitigate in any controllable way the consequences that will flow from this, we need to get started — like yesterday.

**Today's Contemplation: Collapse Cometh XIX**

June 7, 2021

**Fossil Fuels: Contributing to Complexity and Ecological Overshoot**



Tulum, Mexico (1986). Photo by author.

[Andrew Nikiforuk](#) is an author and contributing editor of the online media site [The Tyee](#). He has been writing about the oil and gas industry for close to 20 years. In his most recent [article](#) he writes about the lies being told by the Canadian government regarding its attempts to reduce carbon emissions. The Canadian government is certainly not alone in its misinformation (propaganda?) and one of the issues I believe is contributing to the lies is a (purposeful?) misidentification of our planet's fundamental existential dilemma. Below is my comment on Andrew's excellent discussion.

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Thank you, Andrew. You've laid out the case for some very, very difficult decisions/choices/discussions that lay ahead of us.

I'm not convinced we will make what I consider to be the correct choices or even engage in some meaningful and productive dialogue since the changes that I believe are needed (degrowth) would be viewed as exceedingly painful to many as it challenges not only some core beliefs but what could be considered rights/entitlements/expectations regarding living standards (and it doesn't help that we are genetically predisposed to avoid pain and seek pleasure). The brakes that need to be applied to some social practices/policies (perhaps most? all?) would also be challenged by some because I would contend the fundamental dilemma we are having to address is not necessarily carbon emissions, which I would argue is one of the consequences of the underlying issue, which is ecological overshoot.

The finite, one-time cache of easy-to-retrieve and cheap-to-access energy provided by fossil fuels has 'fuelled' an explosion in human numbers and sociopolitical/cultural/economic complexities unlike any other time in human pre/history. With this energy resource at our disposal we have constructed a complex, global, and industrialised world with technological wonders that would certainly appear magical to past generations.

Perhaps one of the most important consequences of this finite energy reserve has been our creation of exceedingly complex, fragile, and energy-intensive long-distance supply chains, especially for food, that have allowed us to expand and occupy quite marginal lands and completely ignore consideration of a land's carrying capacity and ability to 'sustain' a local population; but also created a complete dependency by many on these systems. I use my home province of Ontario as an example. We have a population of about 15 million (and growing) but less than 9 million acres of arable farmland (and lessening), suggesting (based upon an estimate of the need of 1 acre of food production per person to supply adequate caloric intake) we are well past our natural environmental carrying capacity. It's even worse than these numbers suggest since about 70+% of our 'food' production is dedicated to corn and soybean for animal feed and ethanol production. As a result we import about 80+% of our food. And many, many regions of the world are in a similar (or worse) predicament.

One of the 'memes' I have often used over the past few years has been 'Infinite growth on a finite planet, what could possibly go wrong?' We live on a finite planet with biophysical limits. These limits impact what we can and cannot do. Human ingenuity (i.e., science and technology) has allowed us to push on the boundaries of some of these limits to a certain extent but physics and biology can only be 'delayed', not vanquished. The energy-averaging systems we have in place (i.e., long-distance trade) to support occupation of marginal lands and expand beyond a region's carrying capacity require huge amounts of energy to sustain. This has been possible via fossil fuels. In fact, fossil fuels have allowed us to push the apparent carrying capacity of the planet well beyond the biophysical limits imposed by a finite planet.

So what happens when this finite energy source begins to decline in not only actual physical quantities but in the amount of surplus energy it can supply us with due to diminishing returns?

The two extreme and relatively polar-opposite responses are simple. We could curtail our dependency on this resource and greatly reduce our complexities (something that was probably needed to begin decades ago). Or, we could create stories about how our ingenuity will provide us with a scientific/technological solution to avoid the tough path of degrowth — primarily through the magical thinking necessary to believe that there is a 'green/clean' energy source that we can tap into to sustain our energy-intensive living standards and global complexities.

I am increasingly convinced we need to take the first path but it seems quite apparent we are taking the second, a path that not only avoids the 'pain' that would be perceived by many as we reduce our complexities but one that weaves comforting myths to reduce our cognitive dissonance. The unfortunate thing is the easier path also puts us further into overshoot leading to an eventual steeper and calamitous decline that we cannot mitigate or manage at all. It is well past time to have the tough discussion (especially about how to do it equitably), if we are to have any hope of avoiding a future that will be much, much more challenging if we don't.

## Today's Contemplation: Collapse Cometh XX

June 9, 2021

### Climate Emergency Action Plan: Electrification and Magical Thinking



Pompeii, Italy (1993). Photo by author.

Today's contemplation is once again generated by way of an [article](#) from the online media site The Tye. It's topic is the city of Vancouver's (British Columbia, Canada) attempts to require 'electrification' of all new buildings as part of their Climate Emergency Action Plan and the pushback by the Canadian Institute of Plumbing and Heating.

My first comment below was to bring to the surface the Overton Window that most media articles tend to display when discussing climate change actions and associated issues, particularly that it is only via 'electrification' of our society that we can adequately sustain our complexities and wean ourselves from the energy provided by fossil fuels; and thus 'save our planet'.

The comment that follows is in response to another who responded to my comment with the tendency of some to buy into false (magical?) 'solutions'. We tend to do this for any number of reasons, most (all?) of which are bio-psychological in nature.

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The Overton Window established around policies/actions to address our ecological/environmental dilemmas is on full display here.

Want to reduce our impact on the planet? Stop adding to the problem that is the fundamental one: growth. None of the growth we continue to pursue (i.e., economic, population, etc.) is 'Net Zero' even if its needs are all 'electrified'. 'Electrification' still requires ecologically-destructive sources to supply the energy; the notion that it is in any way 'Net Zero' is a comforting narrative that helps reduce the

cognitive dissonance created when conflicting beliefs exist (e.g., growth can continue with little impact on the planet if we just 'electrify' it verses we live on a finite planet with hard biophysical limits that we have overshoot in many cases).

The end of the fossil fuel age appears to be approaching and we need to acknowledge that the coming decline in the cheap and powerful energy it has provided will send our world (and most? all?) of our assumptions about modern, complex societies sideways in mostly unexpected ways. And this energy cliff we are beginning to experience is not because of our choosing to abandon fossil fuels (that is just the mainstream/dominant narrative being weaved); it's because they are a finite resource that has encountered diminishing returns for some decades now and can no longer be economically accessed — to say little about the negative ecological impacts their use (and more recently, retrieval) have.

We can continue to weave comforting narratives such as 'it's just a matter of transitioning to a new, clean/green energy source and all will be well', or we can confront the coming energy cliff and its significant knock-on effects (e.g., resource shortages, long-distance supply chain breakdowns, economic disruptions via bankruptcies/infinite currency devaluation-via fiat money 'printing', etc.) and attempt to build local/community resilience and self-sufficiency with our remaining (and finite) energy and material resources.

Which path is chosen (or some iteration of it) will impact how well a region/community fares as our energy-intensive living standards hit the wall that appears to be fast approaching.

I truly do believe many people are susceptible to/persuaded by misleading stories/narratives for a variety of reasons. Perhaps the most prominent of those being the deference to authorities/experts that we tend to display (think Stanley Milgram's electric shock experiments). We tend to have trust/faith in particular people/professions and the marketers/propagandists (aka snake oil salesmen) are quite aware of this. So, a handful of academics/politicians/'experts' come out and declare 'electrification' of everything will lead us to the promised land...and here we are, only discussing the more comforting (and misleading/false) 'solution' and completely ignoring a more painful one that may be much more realistic in nature.

We are also genetically predisposed to avoid pain and seek pleasure, so a story of hope that can delay or bypass possible unpleasant consequences is much more easily believed and clung to than one that portends discomfort and difficulty. And one of the primary ways we reduce the psychological pain created by conflicting belief systems (that I've repeatedly emphasised) is to dismiss/deny/ignore the more painful one, such as having to forfeit comfortable living standards/expectations.

Another confounding factor in all this is the grieving process that people oftentimes go through when realising a significant loss (i.e., the lifestyle you ordered/expected is out of stock). Kubler-Ross's original stages of grief is a great checklist for how many of us confront such loss. Denial (where the loss is imagined to not exist — many people are in this stage); anger (a lot of blame put on 'others' here); bargaining (when we begin creating 'if only' narratives — I would argue those in this stage become especially susceptible to the snake oil salesmen); depression; and acceptance. It is likely that until most of us are in the final acceptance stage will we be able to reach consensus on how best to confront the existential dilemmas we have created for ourselves and this planet.

## Today's Contemplation: Collapse Cometh XXI

June 16, 2021

### Loss of Trust in Government: A Stage of Collapse



Tulum, Mexico (1986). Photo by author.

Today's contemplation is prompted by an online media [article](#) that argues for cancelling Canada Day, our national 'celebration' for the day the nation state of Canada was 'born' (July 1, 1867). I raise this topic for the growing sense of 'disappointment' with our national government and, more generally, of all government/politicians. A feeling that seems to be fairly widespread around the globe and, of course, waxes and wanes depending on media attention and events.

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I am thinking of this loss of 'trust' within the framework of Dmitry Orlov's thesis of societal 'collapse' that is presented in his book [The Five Stages of Collapse: Survivor's Toolkit](#).

Orlov argues that "my five stages of collapse...serve as mental milestones...[and each breaches] a specific level of trust or faith in the status quo. Although each stage causes physical, observable changes in the environment, these can be gradual, while the mental flip is generally quite swift" (p. 14).

Here are his five stages:

- a) Financial collapse where faith in risk assessment and financial guarantees is lost.
- b) Commercial collapse that witnesses a breakdown in trade and widespread shortages of necessities.
- c) Political collapse through a loss of political class relevance and legitimacy.
- d) Social collapse in which social institutions that could provide resources fail.

e) Cultural collapse that is exhibited by the disbanding of families into individuals competing for scarce resources.

The concept of the 'nation state' and how the 'patriotism' one feels towards it is manipulated by the-powers-that-be/elite/ruling class are interesting sociological/psychological areas to explore and reflect upon. One of the more interesting books/essays I have read about the 'State' is Murray Rothbard's Anatomy of the State. This particular section has stuck with me:

"The State is almost universally considered an institution of social service...[and that] we are the government...[But] the government is not 'us.' The government does not in any accurate sense 'represent' the majority of the people...Briefly, the State is that organization in society which attempts to maintain a monopoly of the use of force and violence in a given territorial area...Having used force and violence to obtain its revenue, the State generally goes on to regulate and dictate other actions of its individual subjects...[Moreover, the] State provides a legal, orderly, systematic channel for the predation of private property; it renders certain, secure, and relatively 'peaceful' the lifeline of the parasitic caste in society...The State has never been created by a 'social contract'; it has always been born in conquest and exploitation...While force is their modus operandi, their basic and long-run problem is ideological. For in order to continue in office, any government (not simply a 'democratic' government) must have the support of the majority of its subjects...[Thus] the chief task of the rulers is always to secure the active or resigned acceptance of the majority of the citizens...For this essential acceptance, the majority must be persuaded by ideology that their government is good, wise and, at least, inevitable, and certainly better than other conceivable alternatives...Since most men tend to love their homeland, the identification of that land and its people with the State was a means of making natural patriotism work to the State's advantage."

The 'State' works hard to legitimise its position and power (their primary motivation being the control/expansion of the wealth-generating systems that provide their revenue streams). For the most part, it 'controls' (or, at least, heavily influences) all of those aspects of society that help to do this: legislative powers, military/security, education, money creation/distribution, taxing power, communications/media, etc..

They constantly 'market' themselves as representative, transparent, responsive, responsible, accountable, etc. when, in truth, the exact opposite tends to (is always?) the case. When one scratches at the surface, even gently, of the facade of what we are told is true about our governments and 'representatives' we find an upside down world of corruption, nepotism, self-serving interests, and manipulation. But question the status quo belief system and you are often characterised as traitorous or a conspiracy theorist because the curtain can never be drawn aside to show the emperor has no clothes. The group think and reduction of cognitive dissonance that maintains the illusion is strong.

Don't like what the government is doing? Go vote them out of office. Problem is, citizens have zero agency via the ballot box. Nothing ever changes. The system remains. It continues to extract wealth (in terms of labour and resources) and expand ruinous policies (both environmental and social). The rich and powerful continue to pull the strings of, well, virtually everything.

And this is not some new historical phenomenon. The 'evolution' of complex societies and the hierarchical power structures/sociopolitical systems that develop in response to the growth of populations has often (always?) been dominated by a certain 'caste' of people who find themselves 'above' the others. This is particularly true as the society gets larger (both in numbers of citizens and geographic size) and 'representatives' lose touch with the 'average' person, socialising primarily within an echo chamber of sycophants and like-minded/educated people. As the saying goes: power corrupts; absolute power corrupts absolutely.



I've come to the conclusion that government, especially big government, is virtually the last place I am going look to for leadership, virtue, or even just common sense since their motivation is to subjugate the majority of us to serve their interests and that of their close supporters (primarily the rich and influential financiers), not mine, my family's, or my community's.

**Today's Contemplation: Collapse Cometh XXII**

June 22, 2021

**'Net Zero' Policies: Propaganda to Support Continued Economic Growth**



Knossos, Greece (1993). Photo by author.

A personal view of the 'Net-Zero' policy being implemented by governments around the world, particularly those of the 'West'.

As happens so often (always?), the ruling elite are manipulating what is possibly one of our more (most?) existential dilemmas so as to have their cake and eat it too. The chicanery that takes place within statistical calculations is widespread and occurs in virtually everything they touch but of course gives the impression of 'objectivity' and 'transparency' because figures can't lie (although liars can figure, simply take a look at the statistical manipulations that take place in determining a nation's consumer price index). The trickery goes far beyond numbers, however, for the use of statistics is just one of many narrative control mechanisms used to support the stories they want citizens to believe.

They have leveraged carbon emissions as THE most pressing environmental/ecological issue (even though it is only one of many predicaments resulting from humanity overshooting its natural carrying capacity on a finite planet) and have presented a variety of 'solutions' from carbon taxes to widespread 'electrification' of society to 'net-zero' policies. I would argue all of these 'solutions' derive from their primary motivation: the control/expansion of the wealth-generating systems that provide their revenue streams. From ever-increasing taxation to capital reallocation towards 'green/clean' technology to increasing curtailment of once-expected liberties and mass surveillance, the ruling elite are enhancing and consolidating their grip on wealth and power but marketing it as a necessary societal shift to 'save' humanity from itself.

There is certainly a grain of truth in all of the efforts to shift society away from fossil fuels. Apart from the fact that fossil fuel exploitation has encountered significant diminishing returns on its investments, I am increasingly convinced humanity has blown past several very important biophysical limits that exist on a finite planet and if it wishes to make it out of the other side of the very narrow bottleneck we have created for ourselves some very difficult choices need to be made. The ruling elite, however — as they always do — are taking advantage of various crises for their own self-serving ends. They are selling a 'Build Back Better' narrative to the masses — as snake oil salesmen do — as beneficial for everyone while accruing the benefits to themselves that may come from this shift in what remains of our dwindling resources, especially energy, for our use.

There is massive evidence that we have reached significant diminishing returns in our exploitation of fossil fuels and there exist no comparable replacements. This has gargantuan implications for our exceedingly complex and global industrial world. The energy decline it portends CANNOT, with current technology, be offset. Yes, there are 'potential' alternative energy sources but none are currently available at scale or cost, or offer the energy-return-on-energy-invested that fossil fuels have — in fact, many are just concepts on paper or test projects and critical views of them show they offer little if any surplus energy; to say little about the hard fact that they all depend upon the fossil fuel platform from the mining and processing of raw materials to the construction and maintenance to the after-life care and disposal of waste products (resulting in further environmental/ecological distress).

And even if by some miraculous turn of events we were to discover a truly 'green/clean' new energy subsidy to replace the relatively inexpensive and easy-to-access/readily-transportable fossil fuels that have allowed almost all of our expansion and 'progress' the past couple of centuries (but especially the past 100–150 years), this would do little to address the variety of other negative consequences of humanity's spread and impact across the globe (e.g., biodiversity loss, soil fertility issues, etc.). Powering all of our technology and complexities does NOT address the underlying cause of our dilemmas: ecological overshoot.

Rather than acknowledging our plight, our elite are actually doing the exact opposite of what very likely needs to be done to address overshoot. They continue to pursue the perpetual growth chalice taking humanity even further down a path that is becoming both narrower and far more dangerous for most if not all.

The elite are well aware of the human tendency to defer to 'experts' and 'authority' (think Stanley Milgram's shock experiments) and think in 'herds' so as to go along with the 'mainstream' narrative even if it goes against our own experiences and observations, so they dispatch their narrative managers/propagandists. These people have been working overtime crafting comforting and cognitive dissonance-reducing tales to overwhelm the contrarian evidence that shows the emperor has no clothes. To say little about Big Tech increasingly censoring alternative narratives.

The 'net-zero' propaganda is a perfect example. It continues to push expansion (the very cause of our dilemmas), particularly of certain 'solutions', while marketing itself as the road to sustainability because, you know, it all evens out in the end. Sit back, relax, fire up the Netflix, watch another sports event, your 'leaders' have everything under control. Pay no attention whatsoever to the kerfuffle behind the curtain over there. We can have our cake and eat it too!

## Today's Contemplation: Collapse Cometh XXIII

June 28, 2021

### 'Clean' Energy and the Stages of Grieving



Tulum, Mexico (1986). Photo by author.

Today's thought was motivated by another Tye [article](#) that carries on the notion of 'clean energy' and the 'magical thinking' needed to buy into such narratives.

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As long as language is being manipulated (e.g., 'clean energy' is a gargantuan oxymoron), magical thinking employed (e.g., 'green hydrogen' or some iteration of it has been on the books for 2+ centuries and is still far, far away, if ever, given the physical and economic hurdles/roadblocks), and fundamental causes of our dilemmas conveniently ignored (e.g., our pursuit of the infinite growth chalice on a finite planet), the 'solutions' we so desperately seek will always elude us (if they even exist).

Despite relatively general recognition of humanity's impending 'challenges', we continue to follow the 'Business-As-Usual' (BAU) scenario painted for us by Meadows et al. in their 1972 [Limits to Growth](#). Our 'leaders' talk a good talk but the reality (given the obvious lack of 'progress' in mitigating our issues and their increasingly probable negative consequences) is that we have painted ourselves into a corner from which we apparently cannot extricate ourselves (except through some very convoluted narrative creations).

There is overwhelming and increasing evidence that there is a significant reckoning in terms of energy decline (and various other resources) in our future, regardless of our wishes, ingenuity, and technology.

The complexities of our globalised, just-in-time, and highly resource-dependent industrialised societies are losing their support systems in terms of the resources they require. We have encountered significant diminishing returns on our investments and can no longer 'afford' them. All the talk of 'solutions' is, at this point, seemingly reflective of the first four stages of grief outlined by [Kubler-Ross](#): denial, anger, bargaining, and depression.

We are very keen on avoiding the final acceptance stage. Instead, we listen and accept faulty narratives about how this will all work out just fine. We create and propagate misleading phrases like 'clean energy' and 'net zero emissions' which are primarily marketing slogans. We allow ourselves to believe in 'promising' technological 'fixes' that require us to ignore or dismiss the constraints and physical impossibilities that are involved. And perhaps the worst of all, we look the other way when our 'leadership' completely '[jumps the shark](#)' and whispers in our ears that we indeed can pursue 'sustainable growth' (a phrase that totally twists the concept of sustainability and ignores the biophysical constraints of a finite planet) and live, for the most part, happily-ever-after.

Such a fairy tale ending is indeed possible, but only in our imaginations. The momentum of our complex systems and the reality of a finite world straining under the exploitation of cognitively 'advanced' walking-talking apes are taking us down a path that is best described by William Catton Jr. in [Overshoot](#): a species that overshoots its environmental carrying capacity is destined to encounter a population 'collapse' and any response that increases the drawdown of the fundamental resources upon which the species is reliant only speeds up the process. And this seems very much to be exactly what we are doing as we 'debate' ways in which to sustain our living standards and most of our energy-reliant and -intensive sociocultural practices.

Our best option may be to, in the words of author and social commentator John Michael Greer, "[Collapse Now and Avoid the Rush](#)". [Degrowth](#) is coming. We can have some say in how this occurs but the longer we delay (and we're very, very good at delaying our encounters with 'reality'), the less 'control' we will have in meeting the coming challenges.

My suggestion is to detach from the 'Matrix' as much as possible by relocalising production of necessary goods but particularly shelter needs and organic and regenerative food production, and ensure the procurement of potable water. The government/politicians/ruling elite are not coming to the rescue; that is not their primary concern despite everything they say. The way in which they have met these challenges (that have been known for a number of decades) is evidence of that. We have continued to follow the BAU path set out in 1972 and simply managed to put ourselves further and further behind the eight ball. It's perhaps no exaggeration to suggest that the planet burns while our 'leaders' are fiddling. Rely on yourself, family, and like-minded community members; not some politician promising more of the same actions that brought us to where we are.

**Today's Contemplation: Collapse Cometh XXIV**

July 2, 2021

**Climate Change and Narratives to Support Continued Economic Growth**



Tulum, Mexico (1986). Photo by author.

The following commentary was once again prompted by an online media [article](#), this one discussing the necessary paradigm shift required to confront the existential dilemma of climate change, particularly how we view our relationship with nature and the use of financial capital to expand our exploitive ways.

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This article does a good job of highlighting one of the various complexities of the issue(s) involved in addressing our various existential dilemmas and the fact that there is no single panacea for humanity's predicaments. It's an interlinked combination of aspects that flow from humanity's relatively long-time interaction with and exploitation of our natural environment. And how we view our relationship with nature is fundamental to better addressing the consequences of our current relationship but I believe it goes beyond how we tend to use 'capital' to exploit our world since humanity's exploitive ways have carried on for millennia; long before 'capitalism' became a thing.

I would add to this partial story that it involves not just financial capital but our more 'recent' tendency to increasingly: expand our population, seek ever-improved living standards for a burgeoning population, create useful and then overly rely upon 'technology' to expand our exploitation of the natural world, urbanise more and more space at the expense of food-producing lands, depend upon 'marginal' lands to sustain us, and concentrate dependence upon finite resources that have encountered diminishing returns on our investments in them. These patterns of behaviour, however, are incongruent with existence on a finite planet regardless of the economic system used to pursue them. Even a far more 'equitable' one would likely result in a similar outcome at some point. Humans have not, for millennia, lived 'sustainably' with our world.

But since our behaviour does not align with the biophysical realities of finite resources to support them, we go about creating comforting narratives to reduce the resulting cognitive dissonance that arises. As animals with complex cognitive abilities and self-awareness, we cannot hold such conflicting belief systems without significant psychological stress being created so we seek confirmation that one of them is wrong and the other is correct. Rather than confront the more 'depressing' story that our ways are completely unsustainable and must be abandoned, we weave stories that appear on the surface to be more 'acceptable' to our current lifestyles and belief systems, and then look for evidence to support them; 'facts' being irrelevant. We refuse to acknowledge the counterevidence to our belief system. We deny. We get angry. We bargain with 'what ifs' and 'if onlys'. We construct a reality that we prefer, exorcising the one we don't from our minds.

While it's commonplace among some to point fingers at our current global economic system, such overexploitation and eventual negative consequences have been with human complex societies for millennia — long before 'capitalism' emerged. Our 'ingenuity', as it were, has allowed human societies to expand their footprint repeatedly throughout our pre/history and in my opinion it's going to take more than a paradigm shift to balance our species' impact/exploitation with that of the environment. Paradigm shifts take time. They begin on the margins and then they rely on a tipping point of participants to be convinced by the evidence that their current worldview conflicts with the data and a new paradigm better explains the phenomena being observed and experienced.

And here's the rub. Humans are wonderful at creating stories. We have the ability to convince ourselves and others that our senses are lying to us. What you are witnessing is not what you think it is. It is something else entirely. Add on top of this the fact that we are social animals and think and believe in herds, and that there exist powerful psychological mechanisms that steer our thinking and beliefs. We are often convinced of things that are not true, that 2 plus 2 doesn't equal 4 but 5. And our thinking can be manipulated in many different ways, and oftentimes without our even having the foggiest idea that this is happening.



So, if it's in the best interests of the powers-that-be/ruling class/elite/social power structures to have the masses believe in a particular storyline, we can be fairly certain that the narrative(s) we are exposed to align with it and we consequently convince ourselves it is correct and arose from the 'evidence'; it's what all 'right-thinking' people believe and if you or others believe differently then it's you that is wrong — believing otherwise is dysfunctional. We see this playing out repeatedly in both the mainstream and social media platforms on a variety of fronts. But we also want to believe in happy endings, that we have agency to alter significantly the future, that there is hope, that if we put our minds to it we can accomplish any and everything, and that we are an ingenious species that can control not just our local environment but nature itself and the future. And this seems especially true in 'advanced' economies that exploit our world far, far, far more than so-called 'emerging' ones and rely so much more on finite resources for their functioning and perpetuation.

Chasing the perpetual growth chalice is currently being kept alive through such narratives as the Build Back Better, Green New Deal, and Great Reset storylines. These attempt to convince us if we 'electrify' everything or expand using 'net-zero' approaches we can continue to exploit the world at our leisure, and do so in a way that addresses climate change and 'saves' us all. But these stories avoid the obvious hurdles and roadblocks. They ignore the biophysical limits that exist on a finite planet. They discount the thermodynamic realities that restrict such policies. They depend very much on unproven or significantly uneconomical technologies (i.e., they take more energy/resources than they provide back). But it is likely we will continue to chase these 'solutions' for they offer us salvation and prolonging of the status quo. We do not like uncertainty and do not embrace change.

Who wouldn't want to keep the party going especially with its many conveniences and obvious 'benefits' for those reaping the 'rewards'? Life without these wonderful things would be a lot more work and less certain. Without the complex support systems we have created and depend upon, most of us would be in certain dire straits — to say the least.

Perhaps most glaringly we have lost our skills/knowledge to live/survive self-sufficiently but instead depend entirely upon complex and fragile systems (especially long-distance supply chains) over which we have zero control and so seek to find ways to convince ourselves that there are somewhat easy 'solutions'. We have created a financial/economic/monetary system that necessitates chasing the perpetual growth chalice but since infinite growth is impossible on a finite planet we have leveraged debt and Ponzi-type structures to continue the party for a bit longer. We have pushed biophysical limits into dangerous territory while allowing ourselves to believe it can last forever, and a day. We have overshot our natural environmental carrying capacity and encountered increasingly problematic diminishing returns on our investments in complexity and like so many complex societies before us have begun the decline/fall/collapse that always follows.

Given all of this, I am increasingly coming to believe that regardless of our understanding of our dilemmas we will fail to address them in a way that would differ from complex societies of the past. We will continue to pursue growth and attempts to prolong such growth for as long as we can, damn the consequences. We will, for the most part, continue to believe biophysical limits do not, well, limit us. We will continue to tell ourselves and believe the comforting narratives our 'leaders' will tell us. We will continue to cling to faulty paradigms and rarely, if ever, admit the crumbling social structure (and physical structures) around us is anything but the 'fault' of those who didn't believe in our ingenuity and inventiveness; to say little about the fact that the rich and powerful marketing these fantasies stand to become even richer and more powerful as we pursue them. It's a final blow-off top of 'growth' before the eventual collapse that always accompanies a species overshooting its natural environmental carrying capacity.

'Collapse' is in all likelihood inevitable — I state 'all likelihood' since not one of us can accurately predict the future but from my perspective the evidence pre/history provides us with is overwhelming. It cannot be avoided but will be denied well beyond its in-your-face obviousness.

I close with quotes from two 'experts' on the issue of societal 'collapse'. First, archaeologist Joseph Tainter from his 1988 text *The Collapse of Complex Societies*:

"However much we like to think of ourselves as something special in world history, in fact industrial societies are subject to the same principles that caused earlier societies to collapse. If civilization collapses again, it will be from failure to take advantage of the current reprieve, a reprieve both detrimental and essential to our anticipated future."

And this from Jared Diamond's 2005 text *Collapse: How Societies Choose to Fail or Succeed*:

"Those past collapses tended to follow somewhat similar courses constituting variations on a theme. Population growth forced people to adopt intensified means of agricultural production...Unsustainable practices led to environmental damage...Consequences for society included food shortages, starvation, wars among too many people fighting for too few resources, and overthrows of governing elites by disillusioned masses. Eventually, population decreased through starvation, war, or disease and society lost some of the political, economic, and cultural complexity that it had developed at its peak."

## Today's Contemplation: Collapse Cometh XXV

July 8, 2021

### More Greenwashing: 'Sustainable' Development



Tulum, Mexico (1986). Photo by author.

This contemplation was prompted by an [article](#) regarding an 'independent' think tank's report that presented the argument that government funding of the oil and gas industry needed to be shifted towards 'green/clean' alternatives. I've included a few hyperlinks to sites that expand upon the concepts/issues discussed.

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Context, it's always important. This 'independent' think tank, the [International Institute for Sustainable Development](#), is part and parcel of the corporate/business 'greenwashing' of our world and 'solutions' to its various dilemmas. It's primary mission is 'sustainable' development/growth, a gargantuan oxymoron on a finite planet. Infinite growth. [Finite planet](#). What could possibly go wrong?

In fact, the perpetuation of this continued pursuit of perpetual growth is seen quite clearly in the absence of any discussion about curtailing our growth but rather finding ways to 'sustain' it, and the misuse of language (that has become endemic in the environmental movement) and the simplified 'solution' offered by arguing that government funds need to be directed away from the climate change-causing oil and gas industry and towards the 'clean' energy alternatives of 'renewables'.

Left out of this discussion to shift funds to what the think tank argues is more 'sustainable' (and one has to wonder how much funding is derived for the think tank's activities from individuals and businesses seeking to profit from increased funding for widespread adoption of alternative energy) is the increasing

evidence that 'green' alternatives to fossil fuels are neither 'green' (because of their ongoing dependence on fossil fuels and environmentally-destructive upstream industrial processes and downstream waste disposal issues) nor actually 'renewable' (because of their ongoing dependence upon finite resources, especially fossil fuels and rare-earth minerals). These are, of course, quite inconvenient facts regarding all energy sources: they are ecologically destructive and depend upon finite resources. The only source that is truly 'renewable' is biomass but it would be required in such massive quantities for our current world population and global complexities that it must be considered finite and environmentally problematic.

Nowhere is the non-mainstream idea of [degrowth](#) proposed. Instead, we are led to believe that business as usual (continued growth) is entirely feasible and infinitely sustainable by adjusting where our resources in terms of money and labour are directed: away from the oil and gas industry and towards energy alternatives. Devastating climate change will then be averted (as well as all the other negative consequences of exploiting and using fossil fuels) and life can continue uninterrupted as we all live happily ever after.

Until and unless we confront the very idea of continued growth and, in almost all cases, reverse this trend there is zero chance of us stopping, let alone mitigating, the various existential dilemmas we have created as a consequence of our expansion and its concomitant exploitation of finite resources. I believe it's fair to argue we have significantly overshot the planet's natural environmental carrying capacity, have blown past several important biophysical limits that exist on a finite planet, and have just the collapse that always accompanies such situations to experience in the future.

Many will continue to deny this predicament we find ourselves in. They will firmly believe in the comforting and cognitive dissonance-reducing narratives that individuals and groups, like the International Institute for Sustainable Development, are leveraging to direct resources to particular industries. This is quite normal for anyone beginning to grieve a significant loss which is what we are facing: the imminent demise of our globalised, industrial world and its many complexities and conveniences. We (particularly those in so-called 'advanced' economies that consume the vast majority of finite resources and rely upon the exploitative industries that leverage these resources to create the many conveniences to feed and house us) would rather believe in [fantasies, myths, and fairy tales](#) than recognise and confront the impending challenges of a life without most (all?) of our complex and energy-intensive tools.

Life without these conveniences is fast approaching it would appear. We have encountered diminishing returns on our investments in such complexities. We have soiled vast regions of our planet with the waste products of our expansion and exploitive endeavours. We have very likely reached a [peak in global complexity](#) and will begin our reversion to the norm of much more simplified ways.

Some of the negative consequences of our expansion and increasing complexity have been acknowledged. Instead of slowing our march towards the cliff ahead, however, the vast majority (all?) of our 'ruling class' (whose primary motivation, I would argue, is the control and expansion of the wealth-generating systems that provide their revenue streams), as they so often (always?) do is leverage the increasingly obvious crises to enrich themselves. They use [narrative control](#) mechanisms (particularly their influence over the mainstream media and governments) to craft stories extolling solutions and salvation that not only preserve their revenue streams but expand them in a kind of final blow off top of resource extraction and use; ignoring, of course, the environmental fallout of this.

The more obvious 'solution' of reversing the growth imperative is avoided at all costs. Marketing 'sustainable' growth via 'green/clean' energy alternatives is preferred. Humanity cannot only have its cake and eat it, but it can do so in a vastly improved world of technological wizardry and infinite improvements. Ignore that pesky fact about living on a finite planet over there, it's a distraction from our

ingenuity and creativity. Do not raise [skepticism](#) about our ability to overcome challenges. Life is much more happily viewed from inside the [Matrix](#).