

Unforeseen Extinction

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PREFACE

This essay is the fifth I have written since 2017 on accelerating global climate change and its deadly consequences. Every thesis has been a labor of moral duty, not of happiness. I quixotically hope that this fifth essay, with its primary thesis “the underlying reasons for the problem itself,” will be the last I need to write.

Years earlier I also wrote five ignored book manuscripts. The first was written in my twenties, and is the one most relevant to today’s essay. Parts of that 1974 book¹ are still very essential for understanding *why* we are where we are in 2019.

Seemingly nobody “has the time” to read most quality books. Short climate change essays are the best way to reach at least a small number of serious readers in this Internet age. I imagine that my insights will have a positive global butterfly effect – but that’s a flighty idea in a world of objective dialectical forces.

Whereas there is substantial overlapping among my recent climate chaos theses, each essay approaches the same extinction

¹ <http://astronomy-links.net/TheAmericanEutopia.pdf>

phenomenon from a different perspective: In 2017 I wrote about boiling frogs.² In 2019 I discussed the danger of accelerating climate change³ – then about butterfly-effect climatology⁴ – and most recently about global warming oceans.⁵

There are within my *astronomy-links.net* host site a few other original essays relevant to the question of *why* human extinction would be unforeseen until it's too late for easy solutions, despite our supposed high level of historical intelligence. One case study shows *two* major reasons for why all the great dinosaurs perished 66 millions years ago.⁶

This “unforeseen extinction” essay is in two parts:

PART ONE examines several *dialectical elements preceding unforeseen human extinction.*

PART TWO examines a few *practical strategies that humans can affordably carry out to delay and help shape the emerging biosphere.* A serious, global, and coordinated wise strategy will allow some more time for societal adjustments that may slightly ameliorate the coming existential species challenge.

Unforeseeing humans have over centuries blindly created our unprecedented climate disaster. *In the past our ignorance was naive. Today's persistent ignorance is willful*, driven by greedy short-term considerations. In 1974 I fully appreciated the basic Malthusian danger, but did not yet fully embrace the shrinking carrying capacity component with its negative tipping points.

² <http://astronomy-links.net/Boiling.Frogs.pdf>

³ <http://astronomy-links.net/Accelerating.climate.change.pdf>

⁴ <http://astronomy-links.net/Butterfly.effect.climatology.pdf>

⁵ <http://astronomy-links.net/Global.Warming.Oceans.pdf>

⁶ <http://astronomy-links.net/dinosaurs.pdf>

The “climate wolves” of our own creation are mostly not yet here, but our scientists can see them. Maybe we humans have the skills to save at least enough of us with sufficient assets to avoid self-extinction. While most without means will eventually die horrible deaths, some will live. This is *the something-beats-nothing outcome*:

The “something” outcome refers to a few million surviving humans and comphumans⁷ in near-future centuries preserving a critical mass of technological and philosophical knowledge.

In the “nothing” outcome, after selfish greed and localism continue unabated,⁸ maybe with the hot sauce of a nuclear war, there may only be left primitive life forms 100+ million years of future evolution away from renewed wisdom. Life on Earth will exist for another billion years, but will any of it be recognizably human life?

Ironically, likely discovery this 21st century of primitive residual life on Mars may reveal less about our past, and more about our future.

⁷ <http://astronomy-links.net/HandC.html>

⁸ https://www.huffpost.com/entry/hothouse-earth-study_n_5b6966f0e4b0fd5c73dd1f6d

PART ONE: We Create our Own Judgment Day

The historical concept of Judgment Day in western culture has involved an anthropomorphic, anthropocentric sky deity with no remaining patience for our evils deciding to flood or incinerate us. Old Testament stories of Noah, of Sodom and Gomorrah – and future disasters depicted in the New Testament – all serve to spice the surprisingly ghoulish Biblical narrative.

Fear of a nasty Hell awaiting properly unrepentant single souls, and fear of global divine retribution against the many unholy, have long been negative recruitment tools for those who would lure us into taking their parochial path.

However, the scary clerical recruiters used the wrong fear: Instead of teaching us to fear the destructive potential of our own emerging godlike powers, we were taught to fear the personal consequences of heresy.

The flip side of Biblical disaster is the promise of deliverance for the chosen few who properly believe and genuflect. In this crazy model, life on Earth is *just* a sorting-out arena between the holy and the damned. Even now many fatalistic believers are unconcerned with climate change, believing that any emerging threat would be divine destiny.

The hypothetical possibility of a second coming of Christ within climate chaos is even appealing for those who believe they are following the correct path and will be among the chosen few. Our god of choice (not limited to Jesus) will swoop rescue the properly faithful, and replace our current Sodom and Gomorrah culture with a new Eden. Sure.

Despite religious piety, we big-brained naked apes with core reptilian brain stems are capable on our own of unforeseeably

engineering a “grand exit” of our own. *The dialectical causes and effects of everyday individual actions leading to unforeseen global self-extinction have little to do with vertical piety, and everything to do with routine horizontal actions.*

We semi-willfully ignorant humans have unforeseeably acquired by our individual and social actions sufficient godlike powers to engineer the devastation of our global Garden of Eden. We have behaved like entitled children driving muscle cars. So much for the fantasy of “evolved” higher brains ruling our reptilian brains. Ancient genes and slave-mentality Bronze-Age religions are not designed to prepare us moderns to presciently conquer an emerging biosphere crisis.

Imminent Anthropocene climate disaster is *not* something that anybody wants or has consciously schemed to achieve, even though it is a blunt reality that everybody will experience. As the global disaster emerges, a few will initially benefit from new sets of opportunities. Apparent “climate winners” (such as well-positioned land speculators) will themselves eventually be overwhelmed by consequences of even more extreme global deviations from what we today imagine is “the norm.” The next quasi-stable “norm” many centuries from now may not include any ironically-named *Homo sapiens*.

If we can retain and improve our technology beyond the next two centuries, then that distant “new norm” likely may include philosophically sentient androids (advanced comphumans) able to survive in what would be for us fleshy apes a totally alien and hostile world. Yes, life will go on, but what kind of life?

The only possible “rescue scenario” that “makes sense” is the highly unlikely arrival of benevolent space aliens. *Benevolence is relative*, as the price for such “help” could likely be biosphere replacement of Earth’s inferior hominid thinkers.⁹ Just as we

⁹ <http://astronomy-links.net/Dark.Forest.pdf>

cannot expect the Christian God to pay off our student loans,¹⁰ we cannot hope for any other equally weird rescue scenario.

I will here below introduce a few specifics illustrating how and why *the generally unforeseen will become seen only after it's already too late*. (See my other essays and books for more examples.)

In **PART TWO** I will explain a few strategies that we fleshy humans could employ to help bridge the species gap to the singularity of ethical android comphumans capable of surviving within a harsh biosphere, even if naked-ape humans can't.

Global Carrying Capacity

Everything we can measure and describe operates within feedback loops among dialectical systems. *Systems theory* is the main tool for understanding climate changes within any global biosphere. Systems theory is not how most people logically think, being locked into simple stimulus-response loops in the here-and-now. Thinking in terms of embracing real ecological systems is not that hard.

However, we are habituated to think not much deeper than the current welfare of our nuclear families. Personal values and actions continue to unconsciously shape the emerging global system, which in turn increasingly challenges our very local fortunes.

There is little essential difference among all mammal families when it comes to survival strategies in the short term. Most such families don't think about heritage and ancestry. Their primary thoughts are about immediate food, sex, and security. However, global climate change is a much different phenomenon, requiring *different time thinking* and a new set of facts, along with new levels of cooperative action.

¹⁰ https://www.huffpost.com/entry/student-loan-debt_n_5ca63bfee4b05acba4de2597

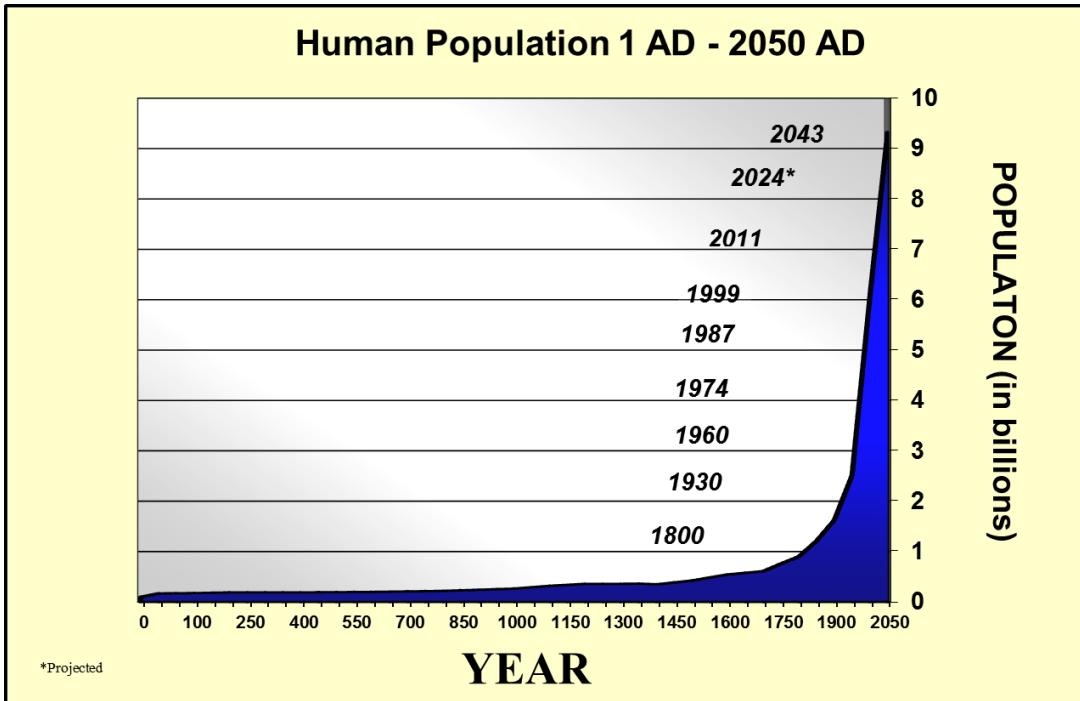
The problem with current thinking is that it is modeled around the idea of a stable ecosystem. We are talking both about secular and religious thought. We think we can manage our futures, because past, present, and future challenges seem dynamically similar. *This fundamental climate thought error leads to reduced objective Malthusian carrying capacity:*

The Reverend Thomas Malthus in 1798 wrote that population tends to increase geometrically, but resources tend to increase arithmetically. This simple dynamic when without sufficient “moral restraint” guarantees disaster, which he called “positive checks” whenever the geometric population growth curve exceeds the linear power of biosphere resources to respond to rising needs.

For a while this “dismal science” formula was either ignored, or used for nefarious purposes. During the great Irish potato famine in the 1840s British politicians told Queen Victoria that the famine was properly Malthusian. Even though more than a million Irish peasants perished, many others fled to escape-valve America.

In the latter 20th century there was some growing concern for the power of population growth. For every starving baby in the Third World that was rescued by do-gooders, a new family of starving babies could be generated. For a while that type of remote checkbook philanthropy was OK, even though there was no longer an “empty” America to welcome refugees. The “Green Revolution” introduced new gene modified plants (along with lots of pesticides and weed herbicides), and better hygiene and resource management. This so-called revolution temporarily kept the Malthusian math at bay with temporarily boosted productivity *within a stable climate*, so it seemed.

Below is a brutal chart illustrating how the recent eruption of global population – accelerated by healthier babies and longer life expectancies – is concurrent with a general shrinking ability of polluted Earth to provide for sufficient standards of living:



This global chart runs from the birth of Jesus, at far below one billion people; to the 7.5 billion today; and finally to a projected total of 10 billion or more just thirty years from now. From my own birth day the world's human population has now tripled, and it may reach five times as many when I hopefully die near 2050.

A gentle slope upward persisted for many centuries, until after 1750 when the Industrial Revolution began. Hyper-growth in today's world is happening on the same limited global surface that cave men enjoyed. Even where individual women are having fewer children, the growing absolute number of fertile women worldwide offsets per capita reductions. There appears to be no necessary population plateau or downslope ahead for those who blissfully won't see beyond their immediate bed sheets.

Corrective demographic disaster arrives with or without rapid climate change. Nevertheless, accelerating climate changes – concurrent with higher per capita resource consumption and pollution among the affluent – accelerates and intensifies the Malthusian mess.

From Permafrost to Tempafrost

Before and between the ice ages the climate was occasionally warm enough to allow for abundant life at northern latitudes. Plant and animal remains from these interglacial periods have built up across the Arctic region as permafrost. With our newest era of rapid warming the permanently frozen permafrost is rapidly becoming what I call “tempafrost.” In deep winter formerly frozen soils now temporarily freeze, and they start to melt in spring through fall. Eventually, with continued warming the tempafrost will be gone, and deep mud will often predominate in many areas.

There are critical consequences following the appearance of tempafrost, most of which were generally unforeseen until recently. This type of frost is not at all like the pure water frost that appears on our car windshields in winter mornings. The tempafrost contains very potent greenhouse gases, such as nitrous oxide, that will synergize the effects of carbon-dioxide air pollution. All sorts of prehistoric bacteria and viruses will be released to menace us moderns.¹¹

Another consideration is that much of Alaska, and large parts of northern Canada and Siberia, are permafrost. Where mud is feet deep, not inches deep, it's more challenging to engineer a high-density human refugee civilization.

Even the appearance of ocean water rushing over permafrost will not stop the escape of dangerous greenhouse gases, which will simply bubble up to the water surface.

This negatively synergistic northern scenario is similar to the very dangerous emerging problem associated with vast ocean releases of potent methane in areas such as Bermuda, as the ocean floors heat up.

¹¹ <https://e360.yale.edu/digest/melting-permafrost-releasing-high-levels-of-nitrous-oxide-a-potent-greenhouse-gas>

Because the oceans accumulate almost 90% of the sun's heat, the process of releasing new heat energy into the atmosphere will be catastrophic. *It will be like another sun's heat energy from below added to the immediate sun from above.*

Earth has recently witnessed extreme global weather, but the on-ramp for the road to climate chaos has just been entered. Losing Florida, parts of the Gulf coast, the Virginia Tidewater, and more low areas along the Atlantic from rising sea levels will be just one fairly early aspect of the new water crisis.

Part Two: **Behind Hubris and Tipping Points**

Nature abhors a vacuum. History abhors actions without consequences. Americans have lived for too long inside a smug self-love cocoon, enjoying fantasies of "might makes right," and "when the going gets tough the tough get going."

Throughout prehistory our killer ape ancestors joined the rise and exodus of nimble hominids in Africa, and subsequent genetic replacement of near-modern humans such as the Neanderthals. We like always being the winners, and we expect it to continue.

Within history there are many instances of empires being built on the bones of weaker societies, only to be replaced by newer empires even more vicious. Europe has been an amazing zone where all of these trends have taken place. Europeans have been so consumed with their assumed cultural and religious superiority that they conquered the western hemisphere for "god and king." Oppression of so-called inferior peoples continues to this day.

Successful European imperialism and industrialism has inspired similar responses in China, India, Japan, and Korea. Russia is a rare example: Though nuclearized, Russia could become most

fortunate when people (mostly Chinese) race to Siberia and pay the Russians for land to build their new homesteads and towns.

Newton explained, "For every action there is an equal and opposite reaction." American/European science and industry have created unprecedented prosperity, including personal longevity. However, a reactive element has arisen to negate the good: That complex opposite is pollution and greenhouse gases heating the biosphere, plus the erupting Malthusian population crisis.

Now is hardly the time to reactively thump our chests, to raise the flag, to send out the Marines, to build unnecessary cultural barriers, or oppress and scapegoat women and minorities. This is time for humanistic consciousness, free from slave religions, that will persist through future centuries in a healing way.

Yes, Isaac Newton, for every opposite reaction there could be an opposite to the opposite.

With the above in mind, *I offer eight ideas in no particular order that may help humanity become more likely to survive:*

- (1) Even though the oceans will determine our climate fate, that hard fact alone is no reason to surrender to human-caused pollution. At the least, humanity can buy some more time and space to hopefully find a new homeostasis.
- (2) Most pollution is coming from Asia.¹² Chinese and Indians need to acknowledge the existential threat to their own ancient civilizations from near-term greed. At the same time, these countries need to quickly reduce populations and reform their governments. This all will be a huge challenge, probably not to be seriously carried out until it is too late.
- (3) Nuclear weapons are our potential dinosaur-killing asteroid.

¹² https://www.washingtonpost.com/climate-environment/2019/03/26/blow-climate-coal-plants-emitted-more-than-ever/?noredirect=on&utm_term=.f6b3180df073

- (4) Vicious circles need to be transformed into virtuous circles.
- (5) It is affordably cost-effective, timely, and ultimately more humane to prioritize survival strategies – rather than to spend several trillions on marginally effective green planet agendas. I recommend spending what we can, but not at the expense of realistic survival strategies. Using strong tax incentives, and targeted laws and green regulations that shape behavior, rather than just raising taxes, is feasible.
- (6) We need to *modify or eliminate fundamentally dark ideas* such as: might makes right, racing to the bottom, birth entitlement, predestination, quarterly profits, classes and castes, tribalism, racial and sexual prejudice, lies and rudeness, linguistic prejudice, mercantilism, religion for rulers, blaming victims, objectifying other people, history only written by the victors, imperialistic religions such as Manifest Destiny – and thinking that the future will be a linear extension of the past.
- (7) When the climate food crisis reaches a tipping point, and *millions of refugees* rush toward prosperous lands such as the USA and Canada – there will re-emerge the Darwinian argument for a strong Trump-styled wall, hopefully not a Berlin-styled wall, along the entire Mexican border. Hungry poor families will seek what they must where they must. At the same time there will emerge critical climate issues inside large areas of the USA. However, walls condemning millions of desperate alien families to death will showcase our killer-ape species sinking to its lowest common denominator.
- (8) There are no viable utopian options. We can never escape to barren Mars and terraform its global desert. Even if we did try to establish colonies, it would take hundreds of years and more trillions than would ever be available. Like it or not, blue planet Earth alone is our alpha and omega.¹³

¹³ <http://astronomy-links.net/Saving.Lives.pdf>

From another perspective...

Thinking optimally, it would be amazing to witness a timely global renaissance in higher values, whereby humane philosophy and ethical consciousness replace selfish greed. A prevailing spirit of mutual respect among all peoples, freed from thought police, is possible for us all – but unlikely soon enough.

Nevertheless, already there are several million people in over 190 countries professing peaceful values. These people and many more will be needed across coming generations to help neutralize the global nuclear threat, and for all sentient beings to just get along.

Let us hope that the deep darkness of spiritual night will soon be followed by the happy light of enlightenment.

Another way of expressing this wish is to say: Let the light shining in you be brighter than the light shining on you.