Saving Ourselves from Ourselves

By Geoffrey Holland

Recently, the great renaissance city of Venice, Italy flooded yet again. It is happening ever more frequently. Each time it happens, it seems to get worse. What is happening to Venice provides a foreboding glimpse of what will likely become a permanent condition in many of our Earth’s coastal cities over the next few decades. At the same time, massive wild fires are consuming the landscapes of Australia, the state of California, the Amazon River basin in South America, and numerous other places around our planet. Driven by human-induced climate change, events like these are becoming ever more frequent and catastrophic as time goes on.

As we move past the second decade of the 21st century, prospects for future generations on planet Earth appear to be on a very dark trajectory. In November, 2019, 11,000 plus scientists from around the world endorsed a joint statement.¹ It warned of a climate emergency. It stated that humans have crossed the line with the pollution we are creating, and the massive demands we are putting on our planet’s living biosphere.

“Our collective failure to act early and hard on climate change means we now must deliver deep cuts to emissions. This shows that countries simply cannot wait until the end of 2020, when new climate commitments are due, to step up action. They – and every city, region, business, and individual – need to act now.” - Inger Andersen, Executive Director, United Nations Environment Programme²

We’re seeing evidence of human overreach everywhere we look. We are stripping the life from our oceans and replacing it with hundreds of millions of tons of our plastic waste. We are cutting down our forests, exhausting our fresh water aquifers, and losing our precious top soils. Our pollution is driving climate change that causes heat waves, droughts, and wild fires that are shredding the fabric of life on every continent. We’ve got toxic industrial chemicals awash in our environment. We’ve got a billion plus humans struggling with thirst and starvation. The scope and breath of the existential threats to life on Earth are mind-boggling and getting worse every passing day.

The Most Dire Consequence of All

² https://truthout.org/articles/un-warns-only-rapid-and-transformational-action-can-stave-off-climate-disaster/?eType=EmailBlastContent&eId=a4ec2611-eb70-425a-9238-5e5169c32960
There is a climate phenomenon that has been called a ‘methane gun’ that is truly terrifying. It could feed on itself. It could be unstoppable. It could end human life on Earth.

At the Earth’s polar latitudes, there are trillions of tons of methane trapped in permafrost soils and in shallow, ocean floor sediments. The warming caused by humans is most extreme at polar latitudes. This is causing the melting of permafrost, releasing massive amounts of methane into our atmosphere. We’re seeing this manifested in huge methane vent holes opening up in the Arctic tundra, and in large patches of ocean surface bubbling with methane.

‘The release of methane (CH\textsubscript{4}) from melting permafrost and bubbling from methane hydrates from the oceans has already raised atmospheric methane from about 800 to 1863 parts per billion which, given the radiative forcing of methane <25 times, renders methane highly significant…Budgets on a scale of military spending (US1.7 trillion in 2017) are required in an attempt to slow down the current trend across climate tipping points. The choice humanity is facing is whether to spend resources on this scale on wars or on defense from the climate calamity…Time is running out.’

Andrew Glikson, Paleo-Climatologist, Australia National University

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Figure 1. A mysterious crater in the Yamal region of Siberia. One of many recently discovered. A sign of a runaway methane feedback loop? (Credit: Public Domain)

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3 https://mahb.stanford.edu/blog/the-methane-gun/
4 https://arctic-news.blogspot.com/search/label/Andrew%20Glikson
Methane is from 20 to 80 times more powerful as a greenhouse gas than carbon-dioxide.\(^5\) The more methane that is released, the hotter it gets, causing ever more methane to be vented. To understand the potential impact, we have to look at the planet Venus. The temperature on that planet’s surface is nearly 900 degrees Fahrenheit. It is essentially a self-perpetuating heat engine. The physics that apply on Venus also apply on Earth.

The science tells us a runaway greenhouse loop is a real possibility. We don’t know how much of a possibility. We do know, if it can’t be stopped, the simple physics that apply suggest temperatures on Earth would rise to the point that no life, save perhaps for some microbes and insects, could survive.

The Root Cause of Our Troubles

It starts with our own unparalleled success as a species. Beyond any other lifeform on our planet, humans share a unique level of intelligence and self-awareness, and also the singular ability to communicate complex thoughts through speech. That has allowed us to dominate every continent, every ocean, every corner of planet Earth. The human success is manifest in our sheer numbers. It took all of human history up until about 1970 for our population to reach 3 billion. Just in the fifty years since then, human numbers have more than doubled to nearly 8 billion; from 3 billion to nearly 8 billion in just fifty years. Moreover, we continue to add about 75 million more humans every passing year; each of which needs food, water, and shelter to survive. Worst case projections suggest that the human population will continue to grow to 10-12 billion by the end of this century.

I believe this issue is at the core of our environmental problems. And people are so resistant to discussing the issue. But if we don’t lower our birth rates we will not solve any ecological challenge, and we will be faced with wars over resources, unfettered migration and a widening split between the haves and have nots. – **Alexandra Paul, Actress, Planetary Citizen**\(^6\)

Our Earth is not getting any larger. It has only so much to give. As humans take more and more of the rapidly dwindling store of critical resources life depends on, we find the living fabric of the planet coming apart all around us. Consider what is happening to the other lifeforms with whom we share our Earth; their numbers are collapsing. We’re talking about plant species as well as many animal species, including insects, amphibians, reptiles, fresh water and pelagic fish; birds, and mammals. We humans are mammals. As our numbers have exploded, populations of other warm-blooded wild mammalian species are plunging in the opposite direction.

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direction. Elephants, lions, tigers, giraffes; the numbers of pretty-much all of the most iconic, warm-blooded animal species on Earth are in free fall.

A recent study by the National Academy of Sciences looked at just mammals. It found that of all the mammalian biomass on the planet, 60 percent is accounted for by livestock animals raised, and destined to be slaughtered, and turned into fillets, cutlets, burgers, and nuggets for human consumption. Another 36 percent of total mammalian biomass is human; just humans. The total for all other wild mammals remaining on Earth amounts to only 4 percent. I repeat: 4 percent; for all the rest of Earth’s wild mammals.

Just in the wild fires that started in Australia in 2019, estimates of wild animals lost exceed one billion Koalas, kangaroos, wombats; Australia’s wildlife heritage has been decimated in a single fire season.

Anybody who chooses to thoughtfully consider these facts must conclude that the world’s remaining wild animals are in great peril. We live now in a planetary biosphere hugely out-of-balance; egregiously and relentlessly exploited and increasingly overwhelmed by humans.

The Origins of Overreach

Humans are thought to have emerged as Homo Sapiens, the distinct species we are today, somewhere between 200,000 and 400,000 years ago. We began our story on the African continent as omnivorous hunter-gathers. Over many thousands of years, human numbers slowly expanded as we migrated and adapted to every habitable corner of the planet.

During that long, formative period, humans lived in nomadic, clan-like groups. The evidence suggests that human relationships, more often than not, were gender equal. In fact, females appear to have had a special place in stone age culture, because their ability to birth life connected them directly to the rhythms and mysteries of nature.

The next big evolutionary step came 10,000-12,000 years ago as the age of agriculture emerged. Humans began to gravitate away from the nomadic, stone-age life, moving into permanent settlements and relying on crops grown and animals domesticated to meet their subsistence needs. A warrior class emerged to protect vulnerable communities and their food stores from

7 https://www.pnas.org/content/115/25/6506,
http://www.pnas.org/content/early/2018/05/15/1711842115

violent marauders. Out of that warrior mentality came the male dominant paradigm that has shaped the human culture ever since.

The written historical record of humanity is almost entirely about men doing good things and bad things, punctuated by a lot of mayhem and bloody conquest. Human social structures, governance, economics, education, and religion have all been built on a foundation of male dominance, and on the idea that conquest and exploitation are how success is defined.

Across planet Earth, men came to be in charge; men made the rules; men shaped the human destiny. At every remarkable moment in history, it has been the male of our species whose mark has been left.

Male dominance flourished in the industrial age that arrived in the 19th century, propelled by the advent of the steam engine. In the industrial lexicon, nearly all humans have been reduced and commodified to fit under the definition of the word, labor. Along with employment of labor, capitalists, the owners of industrial production, accelerated a massive demand for raw materials that were used to manufacture a vast range of products. Capitalists thrived. They have the power. They own capitalism.

We are now in the final stages of the Industrial Age. A lot has happened over the 200 years or so since it began. In that time, we’ve gone from dirty coal to clean, cheap and efficient solar power; from traveling New York to London under sail in five weeks to the same trip by air in five hours. From snail mail only to instant interconnection globally via the world wide web.

From the beginnings of the industrial age to the arrival of the solar age, the human journey has accelerated rapidly. Our Earth has gone from a yearly global economy valued under US$200 billion9 to annual commerce worldwide exceeding US$80 trillion10. In the same time frame, the world human population went from less than a billion to 7.7 billion.

Every year, we add another 75 million humans, each of which needs food, water, and shelter to survive. The amount of the Earth’s resources humans consume is already well beyond a level that is sustainable. We are taking almost everything for ourselves. The biosphere is collapsing under our weight. The Earth is the only home we have. We have no place else to go, and now we have to get real about the possibility that our kind, in fact every kind of life on Earth, may already be doomed by an unstoppable planetary heating.

**The Possibility of Human Extinction**

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Characterizing our current plight in such extreme terms is not an overstatement. Human behavior is driving life on Earth toward a precipice like none ever seen before. We are talking about a fatal reckoning from which there could be no return.

The most troubling aspect of the current human circumstance is that the vast majority of the nearly eight billion human passengers living on spaceship Earth remain largely ignorant or indifferent to the fate that awaits future generations if we continue down the same dark road.

In fact, a small but vocal minority of American citizens are downright hostile to the climate emergency warning recently declared by more than 11,000 scientists from every corner of our Earth. 11

Why is that? Why are so many citizens ignorant or even hostile to the overwhelming, scientifically validated evidence that we humans are massively eroding the resources and natural systems that are essential to life on Earth?

The Information We Rely On

To a large degree, the electronic media, including television, radio, the internet, as well as the globally marketed social media like Facebook and Twitter, now collectively serve as the nervous system for humanity. People in every corner of our planet, from many cultures, speaking many different languages, are linked instantly by our global media. This is a truly remarkable development considering there was no direct communication beyond shouting distance only 200 years ago, when the industrial acceleration began.

So, why isn’t the public aware of and singularly troubled by the fact that the next few generations may be the last for humans on Earth?

To answer that question, one has to look at the sheer volume of information delivered 24/7, on the public airwaves, and via the internet. It’s overwhelming; it’s mind-numbing; it’s finely tuned to influence targeted audiences. By and large, it is shaped to serve private interest over the public good.

To understand how the mass market media can be so sophisticated technically and creatively in the way it communicates information to the public, and at the same time be so ineffective in elevating awareness of the existential threats that loom over the human culture, you have to tunnel beneath the flashy veneer, and consider who the global media is shaped to serve.

Short answer: it is not the public.

Who Controls the Airwaves

These days the electronic media – television, radio, the internet, cell phones – is the place where most people get their information. Every nation on Earth owns and regulates the radio frequency bandwidth that carry media messages to citizens within their sphere of influence.

In the US, the Federal Communications Commission licenses privately-owned media companies to deliver its services over the airwaves in the public interest. In theory, this regulatory structure includes standards that should assure that the media actually shapes its programming to serve the public interest with truth without bias. In practice, it doesn’t work that way.

The simple reality is the US functions within a market capitalist economic system. In that system, bankers, billionaires, and giant corporations own nearly all the world’s wealth. In fact, just 26 people, 26 billionaires, own more wealth than the three billion plus at the bottom of the human pyramid. The super-rich use their money to shape the marketplace to serve their self-interest. The end game for capitalists is about maximizing profit, protecting revenue streams, and avoiding taxes. They do it two ways. First, they use their deep pockets to buy politicians. They co-opt political candidates open to moral compromise and help them get elected to public office. What they get in return is public policy that serves their focus on profit. The second part of the winning formula for capitalists is ownership and corruption of the media.

Public policy shaped by private self-interest. That’s how it works in much of the world, and particularly in the United States of America. The politically-driven Federal Communications Commission has sanctioned consolidation and ownership of much of the mass media - television, radio, the internet, cell phone service – into the hands of a handful of very large, media-focused corporations. To survive, these media giants must be profitable. Who pays their bills? Who gets what they want in return for paying those bills?

Most media revenue comes from selling advertising. It is largely other corporations that buy advertising. Advertisers are the real customers of the mass media giants.

The media is too concentrated, too few people own too much. There's really five companies that control 90 percent of what we read, see and hear. It's not healthy. – Ted Turner, Founder, CNN

So, if giant corporations own the media, and the customers that pay their bills are other giant corporations, where does that leave the public that is powerfully influenced by what the corporate media serves up?

13 https://www.brainyquote.com/quotes/ted_turner_146533
At best, the mixed nature of the media messaging leaves much of the audience confused about what is true and what isn’t. At worst, it leads to indifference or even hostility to well-vetted science.

The celebrated journalist, Edward R. Morrow once said, “A nation of sheep will beget a government of wolves.” At least in part, that appears to be exactly what too many of us have become; sheep, who have ceded their fate to bankers, billionaires, and giant corporations; veritable wolves, who put their profits and perks before nature, people, and planet.

### Overcoming Our Worst Instincts

The sad fact is governments around the world are at best only tepidly engaged as our planet is ravaged by fires, floods, and the other existential forces we ourselves have unleashed. We are caught up in a global ecological emergency. This is not some kind of simulation or game. We are challenged by a range of existential threats that are unprecedented in the history of life on Earth. Half-measures layered on to ‘business as usual’ are entirely inadequate as remedies.

“People are suffering, people are dying, entire ecosystems are collapsing. We are in the beginning of a mass extinction, and all you [world leaders] can talk about is money and fairy tales about eternal economic growth.”  **Greta Thunberg, Climate Activist**

Greta Thunberg gets that our planet is sagging under the increasing weight of extreme exploitation at the hands of humans. This remarkable teenaged girl and her global cadre of young climate activists are demanding nothing less than wholesale transformation; putting the needs of people and planet first. School children from all over the world have stepped up to stand with Greta; and its not just kids, who she represents.

Women also have a massive stake in a genuine planetary scale transformation. For most women, nurturing is a natural instinct. Most favor survival; not just for themselves, but even more for the unborn generations. For thousands of years on Earth, women have been subjugated and exploited, just as the land and the living biosphere have been exploited. Any kind of future that is sustainable will be built on a foundation of complete gender equality. Half of the humans on Earth are female. Women have a right to an equal place at the table. They have an indispensable role in shaping and encouraging a worthy future for life on Earth.

“I think it is vital that we [women] go into the future as equal partners with men. And I do not mean matriarchy rather than patriarchy, both terms that keep us trapped in thinking that our only
alternative is either dominating or being dominated. The real alternative is partnership.” – Riane Eisler, Author, *The Chalice and the Blade* 

Other parts of the natural constituency for transforming the human condition include people of color, immigrants, and the LGBTQ community. There are also many men who recognize our planet-scale troubles, and have chosen to embrace gender equality along with a commitment to responsible stewardship of the biosphere.

When young people, women, people of color, immigrants, the LGBTQ community, and enlightened men stand together, we have achieved a massive natural constituency that cannot be ignored. In total, this constituency translates to more than enough votes to sideline the old ways, which have long served the few at the expense of the many, and sweep in a new green, life-affirming paradigm, which will stand for nature, people, and planet.

Without question, as the natural constituency comes together and demands cultural transformation, the entrenched powers-that-be will direct more and more money and political leverage to maintain the old order; the one that is destroying the Earth, to the benefit of the one percent, who own most all of the world’s wealth.

“During times of universal deceit, telling the truth becomes a revolutionary act.” *George Orwell*

To a large degree, the media is already intensely focused on protecting the status quo, while resisting anything that encourages people to choose active planetary citizenship. The old guard’s efforts to disrupt, confuse, and mislead must be met vigorously with a brand of truth that supports human survival.

When life on Earth is facing the possibility of a methane gun, a runaway greenhouse phenomenon that could push planetary temperatures well beyond anything humans can survive, is there any choice other than to stand together and fight for transformative change?

The biosphere we all depend on is increasingly under assault by our own kind. The climate emergency declaration just issued by more than 11,000 scientists worldwide warns that we are immersed in a struggle for survival. The time for change is now. We must save ourselves from ourselves. We need to do it now.

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Where do we start?

**The Green New Deal is a Crucial Step Forward.**

More than anything, people need to be motivated by a tangible vision that launches the human culture toward a transformation that will restore our biosphere and give us the best chance to bridge the terrible inertia we ourselves have initiated.

The Green New Deal is not a catalogue of detailed policy to be codified as law. It functions more as an American manifesto, a guideline designed to encourage change on a planetary scale. The best thing about the Green New Deal is its excellent fit as a rallying point for the world-wide natural constituency, for which the teenaged activist Greta Thunberg has become a powerful icon.

Here are the primary elements in the Green New Deal…

- Delivering 100% of the power demands of the United States with clean, renewable energy resources within ten years.
- Guaranteeing a job with a family-sustaining wage, adequate family and medical leave, paid vacations, and retirement security for all people of the United States.
- Providing all people of the United States with high quality healthcare, affordable housing, economic security, access to clean water, clean air, and healthy and affordable food.
- Providing resources, training, and high-quality education, including higher education to all the people of the United States.
- Repairing and Upgrading the infrastructure in the United States, eliminating pollution and greenhouse gases as much as technically feasible.

To be sure, the Green New Deal is massively ambitious. It will take a cultural commitment at least on the scale of the mobilization for World War Two to realize its potential.

“**We are building an army of young people to stop climate change and create millions of good jobs in the process.**” - *Sunrise Movement*

Republicans claim a cost figure of $93 trillion over ten years as part of their drive to discredit the Green New Deal ambition. In fact, the cost cannot be calculated without legislation that

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16 [https://www.sunrisemovement.org/](https://www.sunrisemovement.org/)
reveals how public policy would be shaped to achieve the Green New Deal promise. The final price-tag, whatever it turns out to be, cannot be a sticking point when the cost of inaction might be human extinction.

“Even now, when the crisis is nothing short of the very survival of life on Earth, the naysayers are apt to argue that we can’t afford it, as if the issue of potential extinction is merely a line item to dispose of among the many other weighty government priorities…”

Jeremy Rifkin, Foundation on Economic Trends

Politically, the Green New Deal has considerable support among Democrats in the US Senate and in the House of Representatives.

Public support for a Green New Deal also appears to be high across the political spectrum. A poll released in December, 2018, by the Yale Program on Climate Communication, found that 92 percent of Democrats, 88 percent of independent voters, and 64 percent of Republicans back a Green New Deal agenda.

Reality Check: we still have a craven, climate denier in the White House. There will be no Green New Deal as long as he is President.

The Task at Hand

For Americans, a turning point arrives in November, 2020. The coming US election may be the last chance to alter course and turn away from a certain, planetary-scale reckoning.

We must repudiate the climate denier Donald Trump in the strongest way possible. He must be replaced by a new President, who not only backs a Green New Deal Agenda, but is eager to lead assertively. That is job one.

In the Senate and in the House of Representatives, we must vote out climate deniers, in favor of candidates that embrace the Green New Deal mandate. That is essential.

On the state and local level, we must support political candidates, who will implement Green New Deal action at the grass roots. That is also essential.

As we move toward the election, the opposition that represents denial and inaction will use its wealth and media power to sew doubt, confusion, and discord, all designed to derail meaningful

19 https://www.huffpost.com/entry/green-new-deal-poll_n_5c169f2ae4b05d7e5d8332a5
momentum on the existential threats looming over us. We must be alert for deceit and recognize it when we see it. We must not allow slick manipulation to dissuade us from voting as if our lives depend on it. A vote thoughtfully cast is the best way each of us, as individuals, can contribute to a future that is life-affirming and sustainable.

Embracing Our Common Humanity

When viewed from space, the Earth appears alive. As it rotates on its axis, we see rich blue oceans and green landscapes beneath white clouded, weather systems gracefully making their way over the planet’s surface. We see no boundaries between nation-states. What we do see are dynamic natural systems interlaced in wonderful, complex ways.

Saving ourselves from ourselves is a planetary endeavor. Solutions must be implemented on a whole Earth scale. We are in big trouble; vastly beyond anything ever seen previously through all of human history. We are all in this together. Ultimately, to survive, we will need to embrace common purpose. We must choose survival with assertive action. We must do it now. That is the best way, maybe the only way, to save ourselves from ourselves.

“The Earth is the only world known so far to harbor life. There is nowhere else, at least in the near future, to which our species could migrate. Visit? Yes. Settle? Not yet. Like it or not, for the moment, the Earth is where we make our stand… To me, it underscores our responsibility to deal more kindly with one another and to preserve, and cherish, the pale blue dot; the only home we've ever known.” – Carl Sagan, Astrophysicist; Voice of the Cosmos
Geoffrey Holland is an Emmy Award winning writer/producer, the author of *The Hydrogen Age*, and Coordinator of the Stanford University MAHB Dialogues.