

Dancing Star Foundation President Michael Charles Tobias, in a Discussion About the Fate of the Earth

Geoffrey Holland and Michael Charles Tobias

This is a personal dialogue between Emmy Award writer/producer and author of *The Hydrogen Age*, Geoffrey Holland, and Michael Charles Tobias, PhD, one of the world's most influential ecologists. He is a prolific author, filmmaker, and lecturer. In a career to date spanning 45 years, and as President of Dancing Star Foundation for 16 of those years, Tobias' work has taken him to nearly 100 countries, where his field research has resulted in some 50 books and 150 films that have been read or viewed throughout the world. He was the 62nd recipient of the Courage of Conscience Award, and is an honorary Member of the Club of Budapest. Tobias is best known for such works as his massive tome, *World War III: Population and the Biosphere at the End of the Millennium*, and with his partner Jane Gray Morrison, the ten hour dramatic mini-series, *Voice of the Planet*.

Geoffrey Holland - When I was born, there were about 2.5 billion humans on Earth. In just over six decades, that number has tripled to nearly 7.3 billion. Humans have always been a rapacious species, using the planet's resources as if without consequence. Up until the late 20th century, we pretty much got away with it, because the Earth's bounty was so vast. It's clear now that our indiscriminate hubris has caught up with us. The sheer weight of humanity is driving unprecedented levels of ocean depletion, deforestation, the loss of critical top soils, the squandering of fresh water resources, the dangerous warming of our atmosphere, and perhaps most significant, the devastating loss of biodiversity. In the face of all this, the response of our political leaders has been tepid at best. There do seem to be some encouraging signs, with humanity beginning to give some attention to the reckless course we've set for ourselves. What is your assessment of the prospects for human civilization, given our deeply destructive life choices?

Michael Tobias - Good question, not easily answered. *Homo sapiens* has never been at such a crossroad, where in we are responsible for the future of life on Earth. It is a catastrophic position to be in, unless, presumably, you are God. Barring any God-like interventions, we are left with a chilling predicament that indicts our nearly every activity.

For example, seize the news from any single morning, and you come up with such statistics as follows, today, May 6, 2015. You have a senior biologist, Dr. Haakon Hop, with an expedition called the [Norwegian Young Sea ICE: Cruise](#), who - as reported by science editor David Shukam for the BBC News - declares, "So, what has been around the Arctic is these animals that live underneath the ice - crustaceans, amphipods, and copepods - the biodiversity has gone down, and their abundance and biomass have also gone down in the areas that have been measured" ("[Climate Drives 'New Era' in Arctic Ocean.](#)"). This expedition has noted a terrifying

truth about the rapidity of Arctic sea ice melt, and the impacts upon every ecosystem there. Moreover, other BBC news this morning suggest findings from the Antarctic citing that when the Arctic weather changes, ice core samples now unambiguously show that within 200 year the Antarctic begins to melt rapidly. The trouble is these trends are not happening 200 years apart, as was the case for many millennia. They are happening simultaneously, as the oceanic currents in both the northern and southern hemisphere warm up at the same time. Every country is feeling the wrath and blow-back of our collective emissions.

Then, there is the grim headline in today's Los Angeles Times, "Millions of 'Red Trees' - National forests across California are turning brown from lack of water, raising concerns about wildfires," by Veronica Rocha and Hailey Branson-Ports (pp, B1, B5) pertaining to the fact that "Instead of the typical deep green color, large swaths of pine trees now don hues of death, their dehydrated needles turning brown and burnt-red because of the state of worsening drought." "The situation is incendiary," William Palzert of JPL (California Institute of Technology's NASA Jet Propulsion Laboratory) is quoted. "The national forest is stressed out."

And on the very cover, today's L.A. Times is writ front and center and bold, "A STATE OF DENIAL - Data suggest the need to slash water use hasn't sunk in," by Monte Morin, Matt Stevens, and Chris Megerian (pp: A1, A11).

Also on the cover of today's L.A. Times, Chris Kraul's piece entitled "Chile's Race to Save its Mummies," (pp A1, A4). Because of climate change, the oldest mummies in the world are melting, turning into a mysterious black ooze.

Again, in the same L.A. Times, today. Pat Morrison speaks with Stanford University professor, Jon A. Krosnick about his two decades of looking at public opinion regarding climate change. Krosnick speaks to the fact that "...we've started looking at states and haven't found a single state where a majority of residents are skeptical, but legislators think they are." (p.A.15)



Egyptian Vulture on the Island of Socotra, Yemen© M.C. Tobias

But, then people, even serious students of the environment, read a piece like that by Jason G. Goldman, writing in the May 1st, 2015 issue of Conservation, in an article entitled "[National Park Visitors Inject billions into the US Economy,](#)" and they see that there were "292 million" visits to America's 401 national parks in 2014, generating income exceeding "\$16 billion" in park gateway regions (not even including money spent inside the parks) and creating cumulatively, as of 2014, 277,000 jobs." And the temptation is to feel better about things, almost as if to nullify in one's mind the truth of what is happening all around us.

It's called, of course, the Anthropocene. We've known about it for decades, despite huge biological gap analyses. We're losing species at a rate that goes well beyond our comprehension. Out of the possible 100 million or so species, if one includes all lifeforms, we may well be losing thousands of species every day. More than half of all life is headed toward extinction - we know that, particularly all large vertebrates (those animals over 100 kilograms) are threatened. Herbivores like mountain gorillas and rhinos, elephants, giraffes, are particularly in trouble. But so are all charismatic carnivores, like tigers, wolves and grizzly bears. Among reptiles and amphibians, and the parrot groups of birds, the crisis is overwhelming. And this doesn't begin to factor in overall loss of habitat, key nurseries of the planet, like the neo-tropics and coral reefs.



Critically Endangered Arabian Leopard © M.C. Tobias

Nor does it touch upon the most enormous area of all in which human cruelty is meted out in lethal forms to animals used for food, leather, fur, and a number of other material goods (a very dubious phrase: indeed, 'material goods' since there is nothing good about dead animal hides, or palm oil, whose origins coincided with the human destruction of tropical peat swamps and the orangutans, for example, that depend solely on such habitat for their waning survival).

Some three trillion animals killed last year, including cows, chickens, fish, turkeys, dogs, horses, pigs, sheep, and so on, for human consumption.

We are in a colossal mess like never before. So, my "assessment for the prospects of human civilization" as you ask? Not good.

Geoffrey Holland - I share your skepticism about the future of humanity. It appears we are on a course that will result in a catastrophic alteration of our biosphere, and a great deal of human suffering. On the other hand, there are signs of hope. Energy, the primary driver of human advancement, is on an accelerating green trajectory. Clean, renewable energy sources, particularly solar PV and wind, are already cheaper in many places than fossil fuels or nuclear power. Many who study global trends see the world running almost entirely on clean, renewables by as soon as 2050. That translates to less warming stress on our atmosphere, icecaps, and oceans. Good news, yes, but there is the matter of the still growing human population, which is currently 7.3 billion, on the way to 11 or 12 billion. That simply doesn't compute. We are already overstressing the planet's shrinking resources, driving a rapid collapse of the planet's biodiversity. You always point to biodiversity as the loss that cannot be redeemed. Why is habitat loss and species extinction bad for the planet, and bad for humanity?

Michael Tobias - As you know, the [48th Session of the United Nations Population Commission](http://www.un.org/en/development/desa/pd/2015/04/2015-04-27-un-population-commission-48th-session.html) was unable, for the first time in 20 years, to adopt any concluding resolution. This was first described as a last minute procedural 'Anomaly', but it may go much deeper than that. I suspect it concerns the vast, unmanageable array of 'wish lists', a welter of wildfires amid too many imperatives, and a world of complexities - with 237,211 new people to feed every day, 180 per minute, nearly 82 million more per year - (<http://www.populationmedia.org/issue/population/>)

Indeed, this is the penultimate enshrining of the famed I=PAT equation x The Tragedy of the Commons.

In other words, a biological calamity that has few anodynes beyond the basic human rights doctrines, which are not even universally adhered to, as radicalized groups like ISIS and Boko Haram have to our horror, more than proved. We are a mixed species, a decidedly schizophrenic species, and this attends upon every collective decision. In other words, our doom is decreed by the masses, whereas our liberation appears destined to emerge from individualism.

Since the time of Pericles of Athens there has never been a more contradictory political crisis than that currently at large amongst our kin: we cannot even agree on the word "genocide," or "cruelty" or "animal" or "evolution." We are utterly and ecologically illiterate, and the lack of contact with nature is spreading.

Meanwhile, nearly 50% of all nations remain above a Total Fertility Rate of 3 children per couple. This is insanity. Why? Because at that rate, we will likely exceed ten billion by the end of this century. We might even hit 12, even 13 billion. There will, of course, be demographers who say, "Nonsense! All the signs suggest stabilization at 9.5 billion." But they don't. There is no one who can, with a sane mind, conclude that we are shrinking in numbers. When, in the early 1990s I finished writing my book and preparing the film adaptation of World War III, we were adding well over 92 million per year. We have come down by ten million, and that is good news. But we are not even close to the stabilization quotient, which would be no children per

couple for at least two generations, then one per couple for two generations, or there about. That is the elixir for limiting our unabashed and dreadful impact on habitat.

You ask why habitat loss and species extinction matters? Which is like, in my mind, the equivalent of wondering whether or not we should care about Hitler or Stalin. Their evil doing is all part of the evolutionary game plan: that whatever people do is okay because it somehow fits in God's greater picture; or, from even the atheist position, that this vast and tragic loss of biodiversity might somehow be viewed as a mechanical kind of necessity within the overall productivity - millennium after millennium - of the biosphere.

But that is sheer lunacy. We know from clear and abundant data that every species is a link in a vulnerable chain of being; that each individual is equally critical to that chain. While we might not be prone to believe that every individual counts, we know from experience this to be false; that every individual is equal to every other individual. That the loss of one child matters, not just to the child, but to those left behind.

And it is no different with every other child of every species, and if readers might find that a tad sentimental, let them. It was Albert Schweitzer who regarded sentimentality as one of the most crucial ingredients of human nature. Should we lose the ability to shed a tear, to be euphoric over beauty, to celebrate nature, art, and our convictions, then we will perish, and so will other species - given our albeit ungainly but critical role, these days, as stewards of Creation. And, not to repeat the broken record, should we go on to lose pollinators, and all of the nurseries on earth - the rainforests and wetlands, etc., then we will lose our lives to the stupidity of human indifference. I know no one who can survive without food, or water, or air for a week, let alone an hour (in the case of air). And so I must conclude that those who advocate for blind progress are simply, tragically uneducated idiots; village idiots in search of a village.

Without biodiversity, we do not exist. Without habitat, biodiversity does not exist, the Earth as we know it does not exist. End of story.

Geoffrey Holland - Unfortunately, as you point out, despite some encouraging trends, the damage to the planet's living habitat and its biodiversity are unprecedented and getting worse every day.

Indifference, ignorance, and deeply misguided dogma do seem to be at the root of humanity's inability to adequately engage this very troubling inertia. Too many of us are blindly caught up in an entrenched cultural model that discounts compassion in favor of mindless consumption and a toxic disconnect with nature. How do we begin to marshal the global cultural commitment and focus required to survive the monumental reckoning in which we find ourselves?

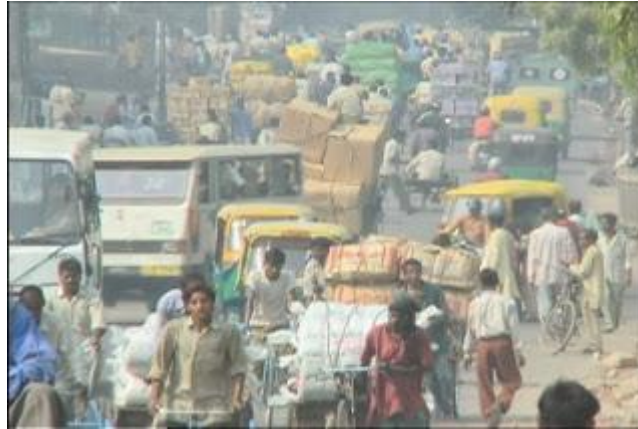
Michael Tobias - It's too glib to suggest we all must do this or do that. Clearly, the only driver of such unison has, in past years and centuries been predicated upon disaster, like the legendary

fact of how the Japanese have always come together as communities during times of great crisis and mass sorrow (e.g., Fukushima). We see it in the current natural disasters in Nepal and Vanuatu. But for the two civilizations that we know have gone extinct during several millennia, vast deforestation (Rapa Nui), rampant drought (Mesa Verde, Canyon de Chelley), Black Plagues, or a Hundred Years War, or four Crusades, the Spanish Inquisition, etc. did not seem to phase most locals across the world. It killed or didn't kill them. So I must adduce that these community revivifications in the spirit of camaraderie might be viewed as the exceptions.



On Rapa Nui (Easter Island), Chile © M.C. Tobias

So, then, where does that leave us? If we cede our individualism and, in many respects, our underlying biological interdependency to a faith in total invasion of privacy by technology, government, and law enforcement (which is increasingly outsourced to private for-profits) we can expect to see a devastating toll upon the privacy needed by other species. Every square inch of the planet has been monitored, photographed and stored continually by satellite data in image banks. It is much more than human imagination that has invaded every quadrant of the world. The contradiction hangs upon the electrical grid and what it means to people's livelihoods, happiness and health, as measured in [gigawatts](#) (GW). These grids devour vast resources needlessly. You are right to argue that we are seeing a massive change in the energy consuming modalities, towards far more benign technical tactics, with respect to emissions and other problems. No one has yet come up with a high probability equation for computing the absolute impact of current, or near future technologies as deployed amid a burgeoning human population (e.g., 10 billion), although there have been many [fine attempts](#). But, I see no obvious route towards a mollifying of the carnage occurring in that short or mid-term range, in terms of biological fall-out. It may well be that we will just have to live with it (an ironic expression).



Old Delhi, India © M.C. Tobias

On the other hand, one could "put on a happy face" and embrace everything that remains that is fine, and good and elegant and harmonious and compassionate, and let those guises be our guide.

Indeed, that is the least we must do. Other areas of consideration, of course, concern personal diet, consumption habits, our moral compasses - internal thoughts and willpower, outward expression and demeanor; setting an example of constant kindness for our friends and loved ones and those who meet us through our deeds. The example of compassion can indeed strike the match of contagion and lead to ramping-up towards that critical mass of positive emotion amid large numbers of people; a steep escalation of that biophilia propensity we all genetically probably share.

The question is to what extent do we share it? How does kin altruism actually work in terms of long-term genetic ramifications of ours and other species? This has long been a raging debate amongst biologists and neuro-physiologists. Whether, for example, that predilection towards generosity and unstinting philanthropy, kindness, unconditional love, is stifled or liberated, exhausted or rejuvenated, suppressed or set free by continuing evolution, which, by many accounts is rapidly accelerating. A "new nature" is upon us. This might be a good thing, or not.

I have no doubt that young people today throughout the world are abundantly in tune with a more virtuous and rigorous approach to the world than perhaps ever before. This is great news. They have access like never before to information. The big questions are: Can they sort through the proliferation of data in order to decipher and embrace ethical choices? Can they align themselves politically with real-time decisions that are not forced upon them, or subtly infused into their curricula, their viewing of advertisements, their reading of the world through all of the daily onslaught of media? Will knowledge gleaned on the internet suffice as a surrogate for the experience that has been gained by arduous trial and error over tens-of-thousands of years in the service of a higher and higher calling towards that murky realm we name compassion toward others?



In Rajasthan, India © M.C. Tobias

And finally, when push comes to shove, will this new generation of technologically advantaged young people (some two billion youths approaching their child-bearing years at present who are the lucky ones) have the courage of their convictions when it comes to the big picture - Nature - which they know is in a process of severe and rapid fragmentation and ruination?

My fear is we are in an age of the biological asymptote. By that I refer to the two learning curves that may not ever be able (mathematically speaking) to meet. The first is that irrefutable truth that people are becoming less violent towards one another, and more violent towards animals and animal products (the vegan's version of the aforementioned IPAT equation). People who are ecologically illiterate, or, who simply are too stretched, poverty stricken, trapped by the major inequality gaps around the world to even consider the humane alternatives to all those cheap calorie expedients targeting them. This is an environmental social justice issue totally out of sync with all of the ecological green alternatives narrative that might too easily calm people into thinking that the learning curve is working. Or that we are headed towards some big happy human zero emissions party that will solve everything. It won't. It can't.

The second, and equally atrocious line on that asymptotic equation is the grossest numeric reality of the Anthropocene. If we consider the much debated Toba Supervolcano approximately 70,000 years ago, that may well have hurtled the human species into a genetic squeeze in just a matter of a few years, resulting in no more than 15,000 individuals, it is clear that the 19th so called Dansgaard-Oeschger event (D-O), that is, dramatic overnight meteorological oscillations, play a critical role in the Earth's biological systems. As one more player, our species could easily be wiped, even with 7.35 billion of us on the Earth. Not by a volcano, but by our own indifference to ecosystems and the approximately 44,000 populations of species we are exterminating every day. This is colossally significant. Yet, we have it in our heads that we are somehow here forever and a day. It is at the heart of our ridiculous sense of superiority over other species. This is what worries me most: that our species' very existence

hinges, in my opinion, on our humility; that that humility is a crucial factor in the meeting of two learning curves - the first, our penchant for meting out mayhem to other species and their habitat, and second, our inability, it would appear, to grasp our own vulnerability in this planetary high stakes game of life. Arrogance is a disease, in biological terms. It is especially dangerous when the bearer of that attitude is blind to the predicament.

If, somehow, we can abolish the asymptotic irreconcilability elaborated above, and replace it with a rapid calming of our behavioral frissons; our frantic consumption; our continuing high Total Fertility Rates; and our destruction of the natural world in all her guises; if we can do that, and teach that, and get everyone, or nearly everyone on board rapidly (by which I mean five, ten years), then yes, perhaps we can make it.

Geoffrey Holland - A very sobering assessment to be sure. It's clear, as a human species, before we can adequately respond to our collective dilemma, we must reach a tipping point in understanding, and find a common commitment beyond that. The key is education, but the current political climate favors rote learning and 'one size fits all' standardized testing over the fostering of creativity and critical thinking. Television programming, particularly in recent decades, is less about being informative and more about programming that amounts to mind numbing empty calories. The mass media - newspapers, magazines, television broadcasters, and radio - has been captured and largely made feckless by a handful of conglomerates that put the interests of their advertisers ahead of their viewers. At the root of this is the sell out of our political system to Wall Street bankers, self absorbed billionaires, and gigantic, profit obsessed transnational businesses. Their game is denial, obfuscation, and the blunting of reality in favor of big profits and 'business as usual'. Any solution to the unprecedented, global scale, cultural maelstrom in which we are trapped must start with a reordering of our economic and political systems, so that they serve the common good. Would you agree with this, and if so, what is the best course for us to follow to remake our cultural institutions so they reflect political transparency, economic fairness, and proper stewardship of the biosphere?

Michael Tobias - That is an ambitious new order of thinking and action you are calling for. Indeed, several new constitutional amendments and/or rewrites. You are essentially taking on the circumstances of the Declaration of Independence, and the frailties of the Continental Congress and asking for all of us to press the "refresher button," so to speak.

And not just the U.S. Constitution, obviously. Anyone familiar with America's 27 Amendments, especially the first ten of them from September 25th, 1789, knows that our politics are essentially focused on procedural matters; matters of freedom, of voting, of who gets what within the system, up until the most recent Amendment, number 27, which, to quote, "Delays laws affecting Congressional salary from taking effect until after the next election of representatives." (Ratified May 7, 1992). Proposed 203 years earlier, in essence this amendment - given as much importance as, say, the abolition of slavery - prohibits the Congress from giving out raises mid-term. I imagine most Americans were more interested in the maiden voyage of the Space Shuttle Endeavor on that day. My point is, the Constitution may have obviously helped concretize our revolution under George III. But was it a document

for all time? Probably not. The 40 male signatories representing Thirteen colonies, 23 of those men veterans of the Revolutionary War, some of them quite possibly in the throes of likely post-traumatic stress syndrome from the punishing war, with not a clue just how large North America was, only scanty population or biodiversity data; these forbears of our political system had no idea whatsoever how many rivers flowed, how many lakes and mountain ranges there were across the land they proposed to legislate. Nor the extent of animal abuse and poaching occurring right under their noses, which was no priority on their part. Not to mention the whole debacle of divided states and slavery.

It was not much better when Jefferson acquired the Louisiana Purchase, although he had some idea that a veritable land-grab was in progress and the U.S. Government had better start engendering the geographical preconditions to serve a demographic avalanche. But today, as with every other nation, democratic, non-democratic (roughly half of the nations are democracies at this time), there is no simple formula, to be sure, for re-constituting economic and political realities. The Saudi King can dole out billions of dollars to undermine criticism of human rights abuses. North Korean leadership simply has those who fall out of favor, or doze off during meetings, executed. Indeed, there are different approaches to governing the masses. But until there is true chaos, as occurred during the French Revolution, we are unlikely to recognize new shapes and forms of viable governance. It is as if until the forensic teams arrive on scene, we don't know what we're dealing with. But this matter of justice is more than a series of splashes on a Jackson Pollock canvas. We cannot experiment with the future of life when it is so clearly vested in our hands, right now, as environmental citizens with the power of a vote; the megatonnage lodged in each and every conscience.

Whilst the political lead-up to November 2016 promises to be amusing, given the chaos within the GOP, that said, there is nothing humorous about what is at stake in the world. News junkies, many of whom are friends of mine, get all agitated over 30 minutes of incendiary coverage, while another hundred species have gone extinct. As I type out these words, the same is occurring. And by tomorrow morning (it is late at night, presently) another approximately 115,000 people will be born, mostly into poverty; and by this time tomorrow night, eight billion 219 million + vertebrates (mostly marine creatures - fish, but also well over 2.7 billion terrestrial vertebrates) will have been killed by our species, in addition to another 200,000 acres of rain forest destroyed. These are broad statistical aggregates drawn from several dozen up-to-date, scientific and government websites that track such specifics and pack within their data crunching, varying levels of confidence, but ascertainable trends, make no mistake. What such statistics must necessarily teach us is that we cannot rely on our economists or politicians to change systems that are feeble and defiant at all costs. [Einstein said it more eloquently](#): We cannot solve our problems with the same thinking we used when we created them.

That's why the first Rio summit in 1992 was really more about NGO's and NGI's (Non-Governmental Individuals) than it was about governments. Thoreau said, in so many words, that his parents - while sending him to study economics at Harvard - drove themselves into irretrievable debt. Thoreau, who would sell pencils part-time for a threadbare living, while

spending those two+ years at Walden Pond, in Concord, Massachusetts, saw America with astonishingly clear eyes.



Henry David Thoreau

Now remember, while Thoreau was busy observing nature and writing **The Highland Light** and the famed **Maine Woods**, just ten years after his glorious **Walden**, the Sand Creek massacre by 700 U.S. Government militia of 70-163 Cheyenne and Arapaho Indians in Colorado Territory, two-thirds women and children, the whole village described by posterity as "peaceful" took place. At that very moment of infamy in November of 1864, the [13th Amendment to the U.S. Constitution](#) was being drafted, and would soon be ratified, only to leave out any rights for Native Americans. It would take much more than Abraham Lincoln to do right by those millions of individuals and their tens-of-thousands of years of sublime culture, and those lands they called their ancestral and spiritual homes.

Rather, it was the photographic Rembrandt of his era, Native American ethnographer Edward Curtis who, with the publication of his twenty-volume **The North American Indian** (1906-1930) would finally see justice from Washington, DC aimed at the 80+ tribes [Curtis photographed](#). In other words, it took an artist and a President working in tandem - and eventually Congress - that would ultimately help save indigenous peoples from extinction in this country.

We cannot re-order our economic and political systems until those two interdependent engines of illimitable pain and distress are humbled - economics and politics. Out of ruins has always arisen something at least partly new, though even this notion is prone to a word you trenchantly employed, namely, "obfuscation," given how clearly history demonstrates the maxim that old habits die grudgingly.

Despite the fact so many philosophical adages remind us that those who ignore history are doomed to repeat it, genocides and ecocides that call upon the human conscience to demand, as in the case of the Holocaust, "Never Again," "We will never forget," the unbelievable truth is that violence continues. Perhaps violence that cannot be compared with Auschwitz and the many other "camps" - a more grotesque and unimaginable saga of evil in modern history than words can possibly hope to describe. Indeed, never has a cluster of nations ever plunged willingly into such depravity. But a terrible evil, nevertheless, namely, our slaughter of other animals, populations, and habitat.



A Bovine singing © J.G. Morrison

When we calculate, even in broadest strokes, the concurrent cruelty that has become the modus operandi of human societies, all those facts and figures corresponding to the human induced Anthropocene, in addition to the probably three trillion vertebrates humans kill every year, it is quite difficult to fathom what geo-political and economic systems might work - so that they are working *with*, not *against*, nature - amid a human population heading rapidly towards 8, 9+ billion of us. This is, as I have indicated earlier, a totally unprecedented madness.

Certainly, there has been no lack of efforts to achieve greater fairness for all, whether in the work of the philosopher Jeremy Bentham, or of the anti-war reformer John Wilkes, who endeavored at great personal sacrifice, for the "natural reason" movement and the Society for the Defense of the Bill of Rights (1769). From the Luddites to Move to Amend, we have seen good people and whole communities of like-minded individuals trying hard to find methods, popular votes, actionable causes and steady-of-hand research in order to better break down the barriers that exclude and/or divide the 99% of people from all those life-lines and essentials that have been consolidated in the form of power and privilege for the few. In some countries, it comes down to a few families, royal dynasties, or percentage, as you rightly indicated, of billionaires. These imbalances represent ecological perturbations, given how vast and grossly inordinate the influence of our one species in the natural order.

Post-Apocalyptic drama has been the stock-in-trade of that feverish collective imagination that sees no end to this continuing pattern of inequality, inequity and economic disarray. Our additional burden, certainly since the earliest indications of the Industrial Revolution, is

what Marxist ideology also came to recognize with respect to the imbalanced ownership - ownership of any kind - of private property and the ravages of materialism. I would recommend John Bellamy Foster's [Marx's Ecology, Materialism, and Nature](#) (2000), among many other works that have sought to pry open the dysfunctional ties between human need and human greed, as recorded in the ideologies of the last 175 years or so. Gandhi, Thoreau, so many in their path, have attempted to make sense, at their moments in time, of the complex and too frequent grievous crises all around them that pivoted upon the fundamental lack of fairness between most people, not to mention people and other species.



Orangutan, Borneo © J.G. Morrison

Today, we are indeed distracted by a mob of media. There is the compounding sense that too much is happening too fast for even the most sanguine, multi-tasking level of brilliance to encompass it all with nobility, whilst setting a fine, sustainable example *and* maintaining some sense of humor. The rash of second-by-second news absorbs our cravings in a very sick manner, it seems to me. We are overwhelmed by bad news, obviously, and good news is increasingly difficult to ensure. Yet, we are looking for examples that can liberate humanity from its appalling and escalating impact on the planet. In this conundrum we are as in a dark tunnel, but also enjoy the endless possibilities that are real, in the many templates of dramatic new discoveries in science, engineering, and technology. Such developments are vastly outpacing the evolution of new political and economic systems. This represents a peculiar, and possibly unstoppable dilemma.

In the democratic nation of Bhutan, Gross National Happiness, as opposed to Gross National Product has been developed in government circles at a level that is far greater than a mere lovely-sounding mantra, and it has caught on with increasing traction throughout the world. But, if you place Bhutan under a microscope, there are issues (See, for example, the essay, ["Animal Rights in Bhutan."](#) , or, "The Last Shangri-La?")



In A Moss Garden, Kyoto Greenbelt, Japan © J.G. Morrison

In nation after nation, there are similar contradictory situations, as with Bhutan, from Suriname, or Denmark, to "clean green" New Zealand, to little San Marino or [Andorra](#). Wherever there are people, there is human nature, which translates into some level of conflict. Yet, in those aforementioned six countries are spectacular examples of ecological governance from which the rest of all nations can take away some valuable lessons, whether in the realm of family planning, animal and habitat protections, or the distributions of goods and services and social welfare nets at various levels.

So, I can only conclude by suggesting we keep trying, with vigilance, and a sense of faith in the genuine possibilities of humanity. We do have what it takes, in my opinion, to ultimately get it right. But time is of the essence.

This dialogue first appeared May, 2015 in three parts in Geoffrey Holland's blog - <http://www.ecstatictruthpdx.blogspot.com>.