

# The Great Simplification

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[00:00:00] Nate Hagens: Greetings! Welcome to this week's Frankly. Frank, say hi to everyone. Happy Earth Day, everyone! Frank is one of Earth's creatures, just the same as I. But Frank, if you're going to be licking me the whole time, I'm not going to be able to do my little reflection on Earth Day. Today is Earth Day. This would be the 16th year in a row that I have an Earth Day presentation, but I'm not ready.

[00:00:31] So I need a little bit more time because I have podcasts and presentations and other things, but given that it's Earth Day, and that Earth Day is almost as important as the solstice is to me and way more important than 4th of July or Halloween. I figured I would do a little reflection to make us think and reflect on the day and the time that we're alive on this planet.

[00:00:56] I'm going to come up with seven hypothetical thought experiments. And when we do thought experiments, it allows us to maybe think about a problem or an issue or a value or a circumstance differently. So today, seven thought experiments. Roughly pertaining to Earth Day.

[00:01:30] First thought experiment and I've mentioned this in the past. What if solar panels were free? What would that change about our planetary circumstances? My belief is not much. First of all, solar panels themselves, at least in the United States, are around 10 percent of the cost of putting up a solar installation, at least for a house.

[00:01:56] There's labor, there's permitting, there's regulations, there's transmission and all kinds of other things. But when we ask the question, what if solar panels are free, what do we really mean by free? They mean dollar cost, energy cost, ecological cost. They're free because a billionaire gave them away or because some aliens materialize them.

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[00:02:21] So the main point is that both solar panels and nuclear fusion or artificial intelligence are all subservient to economic growth as our cultural aspiration. And if we made solar panels free, it would just add to the metabolism of the system unless those other things were changed. The main points are solar panels themselves, their creation, haven't.

[00:02:46] ecological costs, though it's lower in carbon. They have a limited lifetime and need to be taken down and repaired and replaced. And they only make intermittent electricity and our system is run on a 24 seven metabolism. So, what if solar panels were free, something to consider.

[00:03:05] Question number two, what if aliens or mole people gave us a machine where we could directly trade living species on Earth for barrels of oil, like 100,000 barrels a day per species? Would we do this? Where would it stop? Would democracies and autocracies worry about species that they didn't see, that were out of sight, out of mind, or species that they didn't like?

[00:03:43] We have 2 million species that are known. It's estimated there are probably 10 million species on the planet. What if we could specify the species that we were willing to trade for oil? And it was like one we didn't care about anyways. And maybe these species didn't die immediately or were moved immediately, but it took a hundred years.

[00:04:05] Is there any chance that humans would not take this deal? And the trick in this question is the math is roughly about what we're doing today. We're using a hundred million barrels a day and we're losing around a thousand species per year. So this is the trade that we're doing right now, but put in these terms makes it more of a thought experiment.

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[00:04:27] Number three, would you like to get down? Okay, why don't you get down? Number three, what if instead of humans, causing climate change. Climate change caused humans. So as a anatomic species, we have around a 300, 000 year history. For around 290,000 of those years, we roamed in hunter gatherer bands mostly around Africa.

[00:05:01] And the climate variability and volatility was extreme. We had five to eight degrees Celsius swings in not too long of a period. And then around 30 to 20,000 years ago, temperature was very cold, but stable. And around 15,000 years ago, there was a gradual, but consistent warming until the Holocene around 10 or 12,000 years ago.

[00:05:32] Temperature, unbelievably relative to the past, warmed and stabilized. And this is when we expanded outward from the cradle of Africa and changed our technologies and our routines and eventually our hierarchies and our values. And it was not long after that, the agricultural revolution was set in motion, followed by the industrial revolution, followed by the monetary and AI revolutions, and humans went from 100,000 pairs to 8 billion of us.

[00:06:10] So what if climate change was the actual driver of humans, which then in turn caused climate change? So maybe climate warming was the CO<sub>2</sub> part of the equation and humans were the methane part of the equation. As we know, prior mass extinctions, the late Permian, it's now concluded that methane played a huge role because it was a hugely more warming effect than CO<sub>2</sub>.

[00:06:42] What if climate change caused humans? Okay. So another thought experiment. What if we were somehow able, like in my podcast, I talk about a magic wand. Yeah, this is a magic wand sort of thing. What if we were able to put almost all of humanity in a state of suspended animation, say for 10 or 15 years, and a certain percentage

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of people the technocrats, I don't know who, but those who would have the skills to do this, stayed awake to change and build out our infrastructure for the, when the rest of humanity woke up, given what we know about the system science of the human predicament?

[00:07:27] So, if we froze ourselves in suspended animation, what sort of infrastructure commensurate for the post peak carbon pulse, commensurate for a world with deteriorating ecological baselines from our ancestral past, what sort of an infrastructure and systems would be built? Next question, related thought experiment question is what if humanity was put into a state of suspended animation for 10 years or so and a certain percentage of people stayed awake to work on systems of governance?

[00:08:05] What sort of institutions, what sort of incentives, what sort of prices would the rest of the world wake up to see? And that would be fitting for the world we're headed towards. That is an interesting question. And number six, a related question. What if humanity were put into a state of suspended animation,

[00:08:32] and during that time we were all magically imbued with a life ethic? I think it was in a 2021 Earth Day talk where I outlined a life ethic and I will repeat it here. There are nine points. One, life existing is preferable to no life existing. Two, more kinds of life existing is preferable to fewer.

[00:08:59] Three, vibrant complex ecosystems are preferable to small fragmented brittle ecosystems. Number four, ecosystems with large complex life are preferable to ecosystems with only microscopic life. Number five, ecosystems supporting conscious minds, like virtual worlds, are preferable to ecosystems without them. Six, it is preferable to maximize existence, happiness, love, and understanding, and minimize the suffering of minds in the universe.

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[00:09:35] Number seven, the future, both near and far, is real in the same sense that now is real, and via causality is determined by what is done now. Things which are preferable by this definition may be considered good. Things which are less preferable may be considered evil. Number nine, we should maximize good and minimize evil, since the universe is evil.

[00:10:03] does not. If 8 billion humans woke up and they somehow had an expansion of their definition of self and their value and consciousness had shifted to be imbued with such a life ethic, once we woke up, what sort of behaviors would we start doing? What would we stop doing? What would change? Would anything change?

[00:10:29] Thought experiment. Number seven, the carbon pulse is an accident of geological time on planet earth. If a couple hundred years ago the limiter for humans was trees to burn, there would have been no Green Revolution, human population would have peaked under two billion people, probably, and most of the destructive mischief unfolding couldn't have happened.

[00:10:57] Our current feeding frenzy is like that movie Cocaine Bear or something like that. It isn't destiny, it's only temporary, and this is one reason that the Kardashev scale of measuring how much exosomatic energy a culture can appropriate like a hundred thousand times what we have today is just ridiculous.

[00:11:18] The geological monkey trap that is the carbon pulse is just an accident of history like the La Brea tar pits trapping saber toothed tigers and sloths, because it looked like a pond. This is kind of what happened on a meta look back in time. So, existential question. What if we could send back a hundred humans today, 250 years ago, in the past, knowing what we know now?

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[00:11:48] Would those people who seemingly would have superhuman knowledge relative to the people alive at the time, would they be able to change things and leave the majority of the carbon in the ground? Or change anything else important or would they be powerless against the early mitochondria of the energy hungry Superorganism of the, what was started as the global economy?

[00:12:14] Or could small changes in initial conditions back in the day change the entire outcome? Oh, this is kind of fun. I actually could think of like 20 more of these existential questions but I'll leave one that is not so hypothetical. We should consider the system synthesis of modern science,

[00:12:37] the new knowledge that we're integrating, like a time machine. We know that if we could go back in time, we could change huge events with small perturbations to initial conditions. But we, to quote a Jeff Bridges movie title, we are now living in the future's past. And if we're clever enough, we can figure out a lot of what to do without time traveling.

[00:13:07] Our actions today are no less profound or consequential. On this Earth Day 2024, I offer to you that we are time travelers. That is the nature of a science synthesis and understanding now. Think about it. That's it for this week. I am working on a longer Earth Day presentation give me 10 days or so.

[00:13:33] It will be the dissection of the Superorganism, kind of a new thing. Hope you're all well. Happy Earth Day. Cheers.