Megan Dobrodt

The World Is Vastly Underpopulated

This is the edited transcript of the presentation of Megan Dobrodt to Panel 2 of the Schiller Institute's Oct. 15, 2022 Youth Conference, "Build the New Paradigm: Defeat Green Fascism." Mrs. Dobrodt is the President of the Schiller Institute, U.S.A. The title and subheads have been added.

The video of this presentation is available here.

Schiller Institute

Megan Dobrodt

Hello, everyone! The world is vastly underpopulated. That is not my opinion; that is proven by rigorous study of the development of our planet, of the biosphere, and by the discoveries in physical economy of Lyndon LaRouche. But, though I know those of you in this room agree with that, all of us have heard nothing but the opposite: "The world is overpopulated. We humans, by our existence, by our activity, are destroying the planet, destroying bio-diversity. The more people, the faster we kill Mother Nature." It's pervasive; it's everywhere. And it's completely unscientific.

The biggest, most pervasive mental illness in society is a deliberately crafted mentality that is anti-growth, anti-progress, and anti-development. To win the political fight in the West to join the New Paradigm, we have to overturn that false idea, and replace it with one that coheres with the real world. The fact is, if we merely applied the technology currently within our capability in every country of the world, we would, and we should have, billions and billions more people alive today. Those people are *needed*. We as a species have a lot to accomplish over the next few generations both on Earth, and beyond.

Let's get concrete. Today, the world population is just under 8 billion. How many people *should* it have? What's the optimal human population? How many people *could* we have?

Audience member: 50 billion!

Dobrodt: That's a thought. In December of 1988, Lyndon LaRouche gave an incredible speech in Chicago, just weeks before his unjust sentencing and incarceration, in which he said the following:

Lyndon LaRouche (video): [I]f we were to take the attitude which the United States had under the Kennedy space program, or actually the Eisenhower-Kennedy space program, from around 1958, the post-Sputnik program, to about 1965: If we maintained that, combined with policies of investment tax credits for investment of a suitable kind; with a science enrichment program in our schools, and similar kinds of things; and we did that, nothing more than that, I can assure you, that knowing what we know is important to work upon in science, in technology; knowing the kinds of projects which are the best way to express these technological improvements; I assure you, that if mankind on this planet had the political will to do that, we would increase the potential population density of this planet, at a higher standard of living, by a factor of as much as forty, over today, and over the next three generations, by a factor of 10.

We could sustain, by the end of two generations, a potential population in the order of magnitude of 100 billion people—more comfortably, much better fed, much more secure, much freer, much less crowded than today….

Dobrodt: So is 100 billion too many people?

Audience member: 200 billion.

Dobrodt: I'm going to top that. In the 1930s, the Russian scientist Vladimir Vernadsky, whose work we'll touch on in a minute, said with absolute scientific certainty that the upper limit of the human population on Earth was probably in the range of 3 trillion people. But, he said, with the advent of nuclear technology, it would likely become many times higher.

So, is 3 trillion too many people? Where did the idea of "too many people" even come from? Why do we even consider that question today?

Audience member: Malthus!

Dobrodt: Ahh! Let's take a look. Does anyone know what the British Empire's biggest problem was at the end of World War II? They were most afraid of the legacy of Franklin Roosevelt; that after the war, the United States would not permit the reinstatement of the 18th Century empires; and instead, the formerly colonized nations would be allowed to use their own resources to develop their own people as free, modern, independent nations. So, to the British then—as today—this was quite unacceptable. So, they got to work.

The Eugenics/Conservation/ Ecology Movement

Leading into the two world wars, the British were premier in cultivating the eugenics movement—so-called "race science." Culling the human herd to produce the master race. Now, as you might imagine, the actions of Nazi Germany created some problems for the image of eugenics on the world stage, sullying its image a little bit. So, the British got to work rebranding eugenics as "conservationism," "ecology." One of the founders of the ecology movement, Sir Julian Huxley, left his position as the Vice President of the British Eugenics Society—to which he would later return as President—to become the first head of UNESCO, the United Nations Educational, Scientific, and Cultural Organization. In its 1946 founding documents, Huxley wrote this:

> Thus, even though it is quite true that any radical eugenic policy will be for many years politically and psychologically impossible, it will be important for UNESCO to see that the eugenic problem is examined with the greatest care, and that the public mind is informed of the issues at stake, so that much that what now is unthinkable may at least become thinkable.

Now, lest we be unclear about what Huxley meant by the "unthinkable," in 1941, *in the middle of the war*, he said:

> [W]e must plan our eugenic policy along some such lines as the following: … The lowest strata, allegedly less well-endowed genetically, are reproducing relatively too fast. Therefore, birth-control methods must be taught them; they must not have too easy access to relief or hospital treatment lest the removal of the last check on natural selection should make it too easy for children to be produced or to survive….
>
> [L]ong unemployment should be a ground for sterilization, or at least relief should be contingent upon no further children being brought into the world, and so on.

British Picture Post/Thurston Hopkins

Sir Julian Huxley

Another luminary of the ecology movement, just to reference, is our friend, Lord Bertrand Russell, who recommended that a black plague be spread throughout the world once a generation to cull the herd.

In 1960, Julian Huxley travels throughout Africa. He comes back to Britain, and writes a series of articles pushing the idea that the newly-independent African nations cannot possibly be trusted to protect their natural spaces and their endangered species. So, he recommended that an international body take stewardship of these lands. People have heard that term, "stewardship"; it kind of gives you the willies, right?

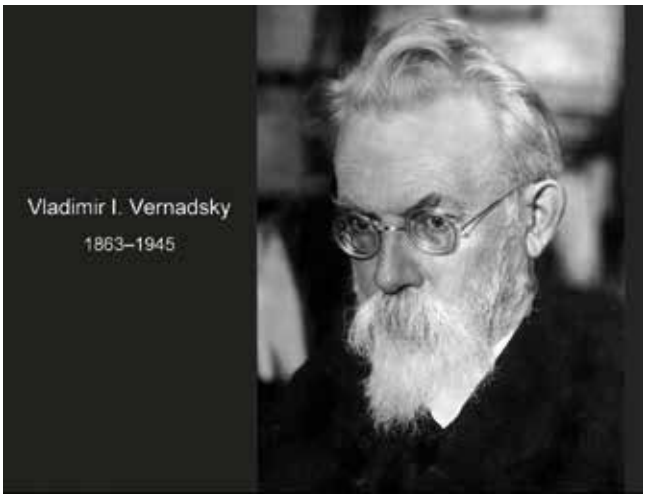
The next year, in 1961, Huxley, Prince Philip (the Queen's consort), and Max Nicholson (the head of the Queen's Privy Council), found the World Wildlife Fund. They appropriately choose a former card-carrying Nazi as its first head, Prince Bernhard of the Netherlands. By the mid-1990s, the World Wildlife Fund had gained control of 2 million square kilometers, which is about 8% of the land of the African continent.

There is much, much more to this history, including how this grouping created the Intergovernmental Panel on Climate Change (IPCC) and the Great Reset / Green New Deal policy that we're fighting today. But suffice it to say that the modern environmentalist movement—and I don't think this is a surprise to most of you in this room—is nothing but the creation of a racist, anti-human empire: the cause that so many thousands of

largely misled young people are marching for.

The idea that human population growth and activity is destroying the planet, it's disrupting the balance of nature—this is an imperial lie. What we have to get to, and be able to organize people around, is: What's true? If that's a lie, what's the truth?

What's true is that the history of our planet, of the biosphere, shows the total opposite. There is no natural stasis; there is no "Earth in the balance." Instead, what we see is a process of unceasing, anti-entropic change, of intensifying transformation of nature, which, over time, created the conditions of the appearance of cognitive life.



Vladimir Vernadsky's Contribution

To get an insight into this, we're going to look very briefly at the work of Vladimir Vernadsky (1863-1945). Vernadsky was an extremely important thinker. He was a Russian-Ukrainian scientist who founded the field of biogeochemistry, which is the study of the impact of living processes on the Earth's chemical make-up.

The fascinating thing about living beings—and this became central to Vernadsky's work—is that living beings are not the stuff that makes them up. We tend to think of living things as being solid. You can touch them, you can hold some of them; some of them you don't want to. But all living things, including all of you, are constantly in a state of flux. In fact, five years from now, none of the "stuff" that makes up your body will still be part of your body. Every single atom in your biological system by that time will have been replaced. So, if we reassembled this audience in this room, it will be a completely different collection of matter. None of the stuff is the same.

Living things are in a constant process of exchanging material with the surrounding environment—through respiration, nutrition, and reproduction. Vernadsky cited the scientist Georges Cuvier, who compared a living thing to a whirlpool, which is an organized structure made up of a constant flow of material. It comes into the whirlpool or into the living body from the surrounding environment, and returns there; transformed by being part of the living system. Living things synthesize new molecules within them, new chemical combinations, new isotopic mixtures. And when they die, they leave concentrations of this transformed chemistry behind them as new mineral chemical deposits.

It's through that process over 3-4 billion years, that life on Earth has *radically* altered the chemistry of our planet. Life took over places that were formerly the domain of non-living processes and changed them. It's changed our atmosphere; it's changed every aspect of our environment; it's changed *everything*.

My favorite example of this—partly because it's so seemingly catastrophic—is the Great Oxygenation Event, which is something that occurred somewhere between 2 and 2.4 billion years ago. That was a time when a new technology had recently appeared in the biosphere called photosynthesis, a way in which life can take extraterrestrial energy—sunlight—and convert it into terrestrial chemical energy. About 2.4 billion years ago, these little micro-organisms—cyano-bacteria—started photosynthesizing. And they started pumping out enormous quantities of oxygen. You might say, "Great! I like oxygen." At the time, it wouldn't have been so great, because oxygen was toxic to most life on the planet. So toxic, that 99% of all living matter on Earth was wiped out in the biggest mass extinction event in history. So, if you want to talk about a species that's threatening bio-diversity, we got nothing on these cyano-bacteria. [laughter]

What fascinates me about this extinction event, is what came out of it. A more primitive biosphere was wiped out. But what survived? What survived and what emerged was a higher-order biosphere, characterized by organisms that could metabolize oxygen. This increased the free energy in the biosphere available for work, for change. It allowed the development of mitochondria and multi-cellular life, and is the reason that we're all sitting here today.

Similar changeovers, similar up-shifts of species in the biosphere can be seen in each of the extinction events in our planet's history. It's from evidence like this that Vernadsky concluded that evolution in the bio-

sphere was not random. And in a speech in 1928 on that topic, Vernadsky said this:

> Taken together, the annals of paleontology do not show the character of a chaotic upheaval, sometimes in one direction, sometimes in another; but of phenomena, for which the development is carried out in a determined manner, always in the same direction: in that of the increasing of consciousness, of thought, and of the creation of forms augmenting the action of life on the ambient environment.

In other words, through evolution, living matter's power to change the environment has increased over time at an accelerating rate toward what Vernadsky called its "maximum manifestation." And it did that in such a way that the next phase, what survives, what emerges, is more capable of future change. That's natural; that's the natural world. That natural process has culminated in the creation of us—a cognitive species. We humans obviously participate in the biosphere; we have a biotic component. But unlike all life before us, we are not *merely* biological.

The Evolution of Ideas via Science and Technology

For example, we obviously pass material through our body, through our biotic processes. But that amount of material is completely insignificant compared to the kind of material that we move via technology, through processes outside of our body through technology. For example, last year in 2021, human beings created 2 billion tons of steel. I can't even comprehend that number—2 billion tons—which required the mining and transportation of between 2.5 and 3 billion tons of iron ore.

Another example: The Chinese project, the South-North Water Transfer Project, which is not complete. But when it is complete, it will divert 44.8 billion cubic meters of water per year from the southern part of China, up north. It will do this by reshaping the environment, reshaping the terrain with dams, canals, aqueducts, pumps, pumping stations. Think of the mining, manufacturing, the electricity, the transportation, everything involved in that to create this project.

In addition to the sheer quantity of material that we move, that we effect, humans also manipulate the chemical and atomic properties of matter to create new materials that could never and would never exist on Earth without us. We create these materials; we give them carefully crafted properties like high heat resistance, high tensile strength, specific optical, magnetic properties, and so on. We control energies and states of matter that don't occur on Earth without us.

For example, in 2021, the magnetic fusion reactor in Hefei, China [EAST, the Experimental Advanced Superconducting Tokamak], created and confined a plasma of 120 million degrees on Earth. That's eight times hotter than the center of the Sun. At temperatures like that, you can shock-vaporize any material down to its elements.

We're incredible! What's the effect of all of that? And here's where we get to LaRouche's discoveries in economics—a metric that he called "potential relative population density." When we act human, behave like human beings in that way, we revolutionize our productive powers of labor. We're able to support more people at a higher standard of living, living longer lives, who have more free time to dedicate to scientific research, cultural pursuits, literature, other things that foster genius. That's the outcome of economic activity—more people who are happier geniuses.

Those changes are not the result of biological evolution, but of an *evolution of ideas*. We make new discoveries of principle that *overturn* the previous system of beliefs—kind of an extinction event. These allow us to change the physical world in unimaginable ways.

It's through that process that we come to one other difference between human beings, and animals [of] the biosphere. In the biosphere, the individual is insignificant in terms of its measurable effect on geo-chemistry. Not so with human beings. One individual—through their discoveries and their change of the organization of human society—one individual can have a great geological effect.

Humans Have a Great Deal To Accomplish

Speaking of geological effects, over the next few decades, we have a lot of work to do as a species. We have to build a World Land-Bridge. We have to work together to rapidly help every nation on Earth develop to the most modern level of industry, infrastructure, science, standard of living. We have to finally rid humanity of the effects of colonialism, for good. Doing that is going to require the labor and the leadership of billions and billions of thinking people.

Our work is not just geological, though. For five decades, human beings have been able to reach the surfaces of other worlds. We walked on the Moon. We're no longer merely Earthlings. We have the potential

to shape the destiny of other planets. That's going to require a New Paradigm of economic, scientific, and cultural collaboration for which 8 billion people is not enough. We need more people. We need to create more creative geniuses.

That is a beautiful mission assignment. Progress; grow; discover. That's the task I give to all of you in this room, all of you watching. And for that, I'd ask you to consider that we may just need 3 trillion people. Thank you.

William Happer
CO_2: The Stuff of Life

This is an edited transcript of the presentation of William Happer, delivered via pre-recorded video to Panel 2 of the Schiller Institute's Oct. 15, 2022 Youth Conference, "Build the New Paradigm: Defeat Green Fascism." Dr. Happer is the Cyrus Fogg Brackett Professor of Physics emeritus at Princeton University. The title has been added.

The video of this presentation is available here.

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Dr. William Happer

I'm Will Happer. I'm a physicist: I taught for many years at Princeton, and before that at Columbia. I've also spent some time in Washington, so I've had a varied career.

What I want to say, now, is just a few words about carbon dioxide (CO_2), which is at the center of many really stupid policies that are being espoused by governments around the world, especially in the West and Europe, and in the United States.

Carbon dioxide is not a pollutant at all! It's actually a benefit, and it's really the stuff of life. We wouldn't exist without CO_2. By the standards of geological history, CO_2 levels now are much *lower* than they ought to be, and plants are struggling, actually, to grow. They grow much better if you double or triple the amount of CO_2 in the air. Commercial greenhouse operators routinely double or triple the amount of CO_2 in the greenhouse, because even though you have to pay for the CO_2—it's not cheap—you get such better products from your plants, better flowers, better fruits, that it's worth the extra expense from the CO_2.

You can see that happening on a large scale, from satellites. If you look down at the Earth, it's clear the Earth is getting slowly greener over the past 50 years, and if you analyze that, it's not because there's more rainfall or more fertilizer, it's because there's more CO_2. So, there's nothing but good news from increasing levels of CO_2 in the atmosphere.

Now, CO_2 is a greenhouse gas, and it does affect the climate, but not very much. If you were to double CO_2 levels, and that would take a long time—over a century, at the rates of increase that we're seeing today—you would only decrease the radiation to space that is controlled by CO_2, by 1%. So this 100% increase in CO_2, which will be hard to attain, only makes a 1% difference in the cooling radiation to space, and that can easily be made up by a very small warming of the Earth: The Earth's surface would have to warm by about 1° Centigrade. The exact number nobody really knows for sure; it depends on various feedbacks. But I would be very surprised, and most other knowledgeable people very surprised, if it exceeds about 1° Centigrade.

We're Made of Carbon

The most generous thing I can say about people who go around talking about "carbon pollution" and "carbon footprint," and this sort of thing, is that they have a very poor education in science. If they knew more about science, they wouldn't say that. And this, unfortunately, includes a lot of scientists, who like to pontificate on things that they don't really understand. It's a disease that goes with being in academia.

We're made of carbon. Human beings are bags of protein and fat, and other materials that are all based on carbon. The amino acids that are the building stones of our proteins have a carbon atom in the center and lots of carbon surrounding them and the other parts of the molecule. The sugars and the fats that provide energy