

Chapter 16

Four Leverage Points

When I asked Stephan Schwartz about the four most important things we can do to save our planet and ourselves, here was his response:

Hi Bob,

On the basis of factual data, there are four leverage points that stand out for me where citizen involvement and funding could produce significant benefits from additional rigorous attention. As I have already noted, all of these arise from a change in consciousness, and so I will begin with that.

1. Integrating Consciousness into Science and the Failure of Materialism

At present, models of consciousness can essentially be subdivided into two distinct broad categories. Models of the first type include physicalist models holding all consciousness as being contained within an organism's neuroanatomy.

Some of the hallmarks of materialism are:

The physicalist/materialist model (P/MM)

- 1.) The mind is solely the result of physiologic processes
- 2.) Each consciousness is a discreet entity, unconnected and independent of other consciousnesses
- 3.) No communication is possible except through the defined physiologic senses
- 4.) Consciousness dwells entirely within the time/space continuum; death ends consciousness.

A corollary to materialism is dominionism, the idea that humanity has dominion over the earth and can exploit whatever it wishes. One could make the case that most of the crises facing humanity today arise from that materialist dominionist worldview.

Models of the second type include nonlocal consciousness, distinguished by the assumption that a significant aspect of consciousness is not limited to the neuroanatomy and is therefore is nonlocal. This was the view articulated by the father of quantum mechanics, Max Planck, when he said, "Consciousness is fundamental and causal, space-time arises from consciousness, not consciousness from space-time."

The interdependent interconnected consciousness model MODEL (IICM)

- 1) Only certain aspects of the mind are the result of physiologic processes
- 2) Consciousness is causal, and physical reality is its manifestation
- 3) All consciousnesses, regardless of their physical manifestations, are part of a matrix of life which they both inform and influence and are informed and influenced by; there is a passage back and forth between the individual and the collective
- 4) Some aspects of consciousness are not limited by the space-time continuum.

Today, in fields as diverse as physics and medicine, the peer-reviewed literature that is science's benchmark is filling with papers on nonlocal mind, distant mental influence, interactions between lifeforms that do not involve standard sense perception, and the efficacy of prayer. Taken one by one, these studies are often impressive; in aggregate they present a compelling argument that materialism is no longer a fully adequate explanation of how our world works.

This presents a leverage point. It is not the purview of this presentation to outline what might be done but simply to point out that consciousness research, once the poor cousin of science, actually offers the way to gain the insight essential to developing an effective response to the second leverage point.

2. The Devastation of the Environment

This leverage point comes with great urgency. Any future predicated on wellbeing must be created on the basis of facts, not philosophies or theories. But perhaps the first question to be asked is, why does such a future need to be created? To answer that, let's start with the reality of facts, not political partisanship and bloviation.

Two hundred and seventy-five studies published in the last nine years have all found that greenhouse gases, most notably carbon dioxide, are changing the earth's environment and constitute a real threat to human civilization. The Environmental Protection Agency (EPA) in 2009 issued a report stating that these gases constitute a threat to human health and wellbeing. "There's absolutely no scientific basis for questioning the Endangerment Finding," review lead researcher Philip Duffy, president and executive director of the Woods Hole Research Center in Falmouth, Massachusetts, told *Live Science*. "The case for endangerment is stronger than ever." Francisco Sanchez-Bayo of the School of Life & Environmental Sciences, Sydney Institute of Agriculture, The University of Sydney, led a team that looked at the state of insect life on the planet. They found that "Over 40% of insect species are threatened with extinction." The main reason for this, they report, is "habitat loss by conversion to intensive agriculture, involving using agrochemical pollutants, invasive species are the main reason for the failure of the insect ecosystem" plus, of course, the climate change being brought on by greenhouse gases. Similarly, dozens of studies show changes in the ocean ecosystems at a scale never before seen in recorded history. The Intergovernmental Panel on Climate Change (IPCC) in its 2018 report warned of far greater ocean warming than had been previously thought that would result in massive disruption of ocean ecosystems. A year later, a multi-institute and university research team led by L. Resplandy of the Department of Geosciences and Princeton Environmental Institute at Princeton University reexamined and extended the data and reported that the IPCC had underestimated these trends by 40%.

This illustrates the two constants about the changes the earth is undergoing as a result of human activity: since climate change became a subject of scientific study, at every step the timeline has collapsed, and the outcome projections have become worse. That is important to keep in mind because the 2018 IPCC report's leading conclusion, the one that got the most media attention, was that humanity had only twelve years to act if global warming is to be kept to a maximum of 1.5C. "It's a line in the sand and what it says to our species is that this is the moment and we must act now," said Debra Roberts, the cochair of the working group that focused on the impact on human civilization of the changes predicted, in an interview with the British newspaper *The Guardian*. "This is the largest clarion bell from the science community, and I hope it mobilizes people and dents the mood of complacency," she added.

We could go on and on in this vein, listing the failure of Himalayan hydrology, the coming water wars, large areas of the earth becoming uninhabitable because of the elevated temperature; several books have been written doing just that. What we have been calling climate change really should now be called environmental devastation. It is quite reasonable to say human civilization is in danger of violent collapse. Given that at this point massive change is coming, hundreds of millions of environmental devastation migrants will be moving across the earth bringing massive social instability, and many of the earth's ecosystems will undergo violent transition, isn't it time to mount what amounts to a war-level effort to respond to these changes and to ask what will it take to create a future based on wellbeing?

That leads me to the third leverage point.

3. The Failure of Neoliberalism and the Success of the Theorem of Wellbeing

One of the fastest growing trends in the world is the rise of neo-feudalism as a result of neoliberal economic policies. The world's richest five hundred people got \$1 *trillion* richer in 2017 alone. That is such a large number that it is hard to conceptualize it, so try this: it is just shy of the collective entire Gross Domestic Product (GDP) of Sweden (\$551 billion), Norway (\$370 billion), and Finland (\$273 billion). We now have five hundred people with collective wealth at the multinational level—and I don't mean impoverished, developing nations. I mean three of the happiest, most successful, and richest democracies in the world.

In the United States, Jeff Bezos, Bill Gates, and Warren Buffett own more wealth than the entire bottom half of the American population combined, a total of 160 million people or 63 million households. In contrast 40% of Americans could not write a \$400 check if pressed to do so by an emergency, and Americans are falling behind on car loan payments in record numbers. More than 7 million car loans were past due by at least ninety days in the fourth quarter of 2018, according to the New York Federal Reserve. Sixty-two percent of bankruptcies that occur each year are a result of medical bills. In fact, America does not have a health-care system, it has an illness profit system and spends orders of magnitude more of its GDP than any other developed nation in the world: \$10,739 per capita compared with \$4,708 in Australia and \$4,033 in Finland. And what does the U.S. get for that? The World Health Organization ranks the U.S. as 37th in health-care quality and outcomes. I could go on and on with this kind of social outcome data, but the point is the same in all cases. The neoliberal economics that has dominated not just America but most of the non-Nordic countries and Holland is a disaster unless you happen to be one of the rich.

In contrast, social policies that are based on fostering wellbeing from the individual, to the family, community, state or province, nation, and the earth itself, consistently, based on social data, are more effective, more productive, more efficient, easier to implement, nicer to live under, and much, much cheaper. The evidence for this is incontrovertible.

That is but one example. You could pick any social policy you like, and the comparison would be the same, so let this example stand for the whole. The critical leverage point here is how to develop social policies that foster wellbeing as the first social priority while still allowing profit and entrepreneurship. That will be influenced by the fourth leverage point.

4. The Oncoming Challenge of Homo Superior

For most of our history as a species, we sapiens of the genus Homo have shared the planet with other hominid species. Most people don't realize that. We know it because genetic science, by extracting DNA from ancient bone fragments, has transformed paleo archaeology from speculation to certainty. This new research, which is amended and extended almost weekly, tells us that we still retain—you retain—genes resulting from encounters Homo sapiens had in deep time with Denisovans and Neanderthals. In historical terms, there being only a single hominid species is an anomaly, one that is ending almost without public awareness, not because of normal evolutionary processes, but because of what we are doing to ourselves. We are about to face a world in which there are two species in the genus Homo—Homo sapiens, and Homo superior.

It is a world not imposed but being created as the result of CRISPR, a new genetic technology formally known as Crispr-Cas9, that allows scientists to edit genomes, including those of humans, with a precision

unimaginable just a few years ago. *The Guardian*, describes it this way, and I can't improve on it: "Crispr, or to give it its full name, Crispr-Cas9, allows scientists to precisely target and edit pieces of the genome. Crispr is a guide molecule made of RNA that allows a specific site of interest on the DNA double helix to be targeted. The RNA molecule is attached to Cas9, a bacterial enzyme that works as a pair of 'molecular scissors' to cut the DNA at the exact point required. This allows scientists to cut, paste and delete single letters of genetic code."

CRISPR is the lever; it is with this technology that we have begun to create Homo superior, although for most researchers that is not the immediate goal. Most but not all are trying to eliminate systemic chronic inherited diseases. But CRISPR has a shadow, the ethical challenge of creating Homo superior without any real consideration as to what that means. But let's start with the easy part, the end of hereditary disease, because that's what motivated most researchers. The Homo superior issue was mostly a concern of medical ethicists. The big issue was adding human genes to animals, and the following question: how many human genes does it take to make a being human?

Because of neoliberalism and the rise of neo-feudalism, I think it is safe to presume that this new technology will be expensive, and it will be the rich who will be the ones to first avail themselves of its benefits. And because it includes germ-lining, all their children will share those benefits of health and intelligence. This in turn will further exacerbate the growing neo-feudalism trend in which there is a tiny uber-rich cohort, a small middle class—mostly professional people such as lawyers, doctors, and engineers—and a vast, wage-dependent peasantry. The evidence also suggests that because of differing cultural views, the rich of Asia will have access to these technologies first. The implications of this fork in humanity are barely discussed but will soon be upon us.

We're going into a territory where a lot of the ways in which we have organized our societies will suddenly look a bit redundant. In liberal democracies, we have this idea that human beings are basically equal in some very fundamental ways. We're coming close to the point where we can, objectively in some sense, create people who are superior to others.

And it's not just brains. Using CRISPR, Chinese researchers are also interested in genetically engineering physical prowess and have already produced a line of super dogs. David King, director of Human Genetics Alert (HGA), went on record saying, "It's true that the more and more animals that are genetically engineered using these techniques brings us closer to the possibility of genetic engineering of humans."

Don't you think it would be a good idea to think about this, hold conferences, and talk about it to reach not just social understanding but consensus before the only option is the choice of reaction to an established reality?

I'm going to address Stephan's comments in an actionable way. How do we face these risks, and what risks are we taking by acting or not acting? What do you do for yourself, your family, your community, and your world?