

A House on Shaky Ground: Eight Structural Flaws of the Western Worldview

By Jeremy Lent. Originally published in *Tikkun*, May 19, 2017



Imagine living in a home with structural flaws in the foundations. At first, you might not notice too much. Every now and then, some cracks might appear in the walls. If they got too bad, you might apply a new coat of paint, and things would seem fine again—for a while.

But suppose your house were in an earthquake zone? Some of us who live in California know what it's like to call in a structural engineer and be told the foundations need to be retrofitted if the house is to survive the Big One. Sometimes foundation work is necessary if there are hidden flaws that our home is built on.

We can think of our civilization's worldview as a cognitive home that we all live in—an edifice of ideas that's arisen layer by layer over older constructions put together by generations past. Our global civilization is facing the threat of its own Big One in the form of climate change, resource depletion, and species extinction. If our worldview is built on shaky foundations, we need to know about it: we need to find the cracks and repair them before it's too late.

Our worldview is the set of assumptions we hold about how things work: how society functions, its relationship with the natural world, what's valuable and what's possible. It often remains unquestioned and unstated but is deeply felt and underlies many of the choices we make in our lives.

We form our worldview implicitly as we grow up, from family, friends, and culture, and once it's set, we're barely aware of it unless we're presented with a different worldview for comparison. The unconscious origin of our worldview makes it quite inflexible. That's fine when it's working for us. But

suppose our worldview is causing us to act collectively in ways that could undermine humanity's future? Then it would be valuable to become more conscious of it.

In researching my book, *The Patterning Instinct: A Cultural History of Humanity's Search for Meaning*, I excavated the hidden layers of our modern worldview and found that many of the ideas we hold sacrosanct are based on flawed foundations. They are myths that emerged from erroneous assumptions made at different times and places in history. They've been repeated so frequently that, for many people, it may never occur to question them. But we need to do so, because the foundations of our civilization's worldview are structurally unsound.

The good news is that, for each structural flaw, there is an alternative principle that offers a solid basis for long-term, sustainable flourishing. Our best hope for civilization to survive the Big One is to recognize these underlying defects, and work together to reconstruct a worldview with more secure underpinnings. Here are eight deep flaws I found, along with alternative principles that, together, could create a foundation for a flourishing civilization for future generations.

Structural flaw #1: Humans are fundamentally selfish

Modern economics is based on an assumption—backed by outmoded biological theories—that human beings are motivated predominantly by their own self-interest, and their collective self-serving actions result in the best outcome for society. In the words of old-school biologist Richard Alexander, “ethics, morality, human conduct, and the human psyche are to be understood only if societies are seen as collections of individuals seeking their own self-interest.” The geopolitical history of the 20th century is demonstrated as proof of this philosophy: Communism failed, we are told, because it was founded on an unrealistic view of human nature, whereas capitalism succeeded because it's based on harnessing the selfish nature of each individual for the ultimate good of society.

New foundation: Humans are fundamentally cooperative

In fact, modern anthropology and neuroscience show that cooperation, group identity, and a sense of fair play are defining features of humanity. In contrast to chimpanzees, who are obsessed with competing against each other, humans evolved to become the most cooperative of primates through our ability to share intentions with each other, while recognizing that others see the world from different perspectives. This enabled early humans to work collaboratively on complex tasks, creating communities with shared values and practices that became the basis for culture and civilization.

An essential element in the ability of humans to work together is an evolved sense of fairness. We feel this so strongly that we would rather walk away with nothing than permit someone else to take unfair advantage of us. This intrinsic sense of fairness is, in the view of prominent evolutionary psychologists, the extra ingredient that led to the evolutionary success of our species and created the cognitive foundation for crucial values of our modern world such as freedom, equality, and representative government.

For 99 per cent of human history, we lived together in bands of hunter-gatherers, where an egalitarian ethos predominated. If a successful hunter began getting too socially dominant, the rest of the band would join together to keep his ego under control. A sharing ethic pervaded all aspects of life. When a hunter-gatherer in the remote Amazon was asked by an anthropologist why his band didn't smoke or

dry their meat for storage, even though they knew how, he responded: “I store my meat in the belly of my brother.”

Structural flaw #2: Genes are fundamentally selfish

At a deeper level, the idea that genes themselves are selfish has permeated the collective consciousness. Since Richard Dawkins’s 1976 publication of *The Selfish Gene*, people have come to believe that evolution is the result of genes competing against other in a remorseless drive to replicate themselves. Ruthless competition is seen as the force that separates evolution’s winners from losers.

Even altruism is interpreted as a sophisticated form of selfish behavior used by an organism to propagate its own genes more effectively. Biologist Robert Trivers established a notion of what he called “reciprocal altruism” as an ancient evolutionary strategy that could be seen in the behavior of fish and birds, and interpreted human altruism in the same way. “Under certain circumstances,” he wrote, “natural selection favors these altruistic behaviors because in the long run they benefit the organism performing them.”

New foundation: Nature is a network

This has been extensively discredited as a simplistic interpretation of evolution. In its place, biologists are developing a more sophisticated view of evolution as a series of complex, interlocking systems, where the gene, organism, community, species, and environment all interact with each other, both competitively and cooperatively, in a network extending over both time and space. Ecosystems rely for their health on the tightly synchronized interaction of many different species. Trees in a forest have been discovered to communicate with each other in a complex network that maintains their collective health—sometimes referred to as the “wood wide web.”

Rather than a battleground of “selfish genes” competing to outperform one another, modern biologists offer a new view of nature as a web of networked systems, dynamically optimizing at different levels of evolutionary selection. This recognition that cooperative networking is an essential part of sustainable ecosystems can inspire new ways to structure human technology and social organization for future flourishing.

Structural flaw #3: Humans are separate from nature

Underlying these structural flaws is an even deeper one—the implicit belief that humans are separate from nature. The source of this idea can be traced back to the ancient Greeks. Plato saw a human being as a split entity, comprised of an eternal soul locked in a mortal body. The ultimate goal of philosophy was to leave the body behind and identify only with the soul that linked us to divinity. Plato’s speculations became the foundation of Western thought. Two and half millennia later, Descartes updated Plato’s myth with his idea that a person’s true essence is their thoughts, while their bodies were mere matter with no intrinsic value.

The implication of this Cartesian split is that the rest of nature—animals, plants, and everything else—has no value because it doesn’t think like a human. With nothing sacred about nature, it became available for humans to use remorselessly for their own purposes. The Old Testament provided further

theological justification to this myth, with God's command to Adam and Eve that they should "subdue" the earth and "have dominion" over every living thing on it.

The scientific project, just getting off the ground in the 17th century, would henceforth view every aspect of the material world as free game for inquiry, investigation, and exploitation. Francis Bacon inspired generations of scientists with his call to "conquer nature." He galvanized them to "unite forces against the nature of things, to storm and occupy her castles and strongholds and extend the bounds of human empire."

New foundation: Humans are an integral part of nature

These ideas are so ingrained in the modern psyche that it is easy to forget they are unique to the European worldview. Other cultures throughout history saw humans as sharing the world equally with all other creatures. The earth was their mother; the heavens their father. Those who wished to harmonize with nature, in the words of the *Tao Te Ching*, should be "reverent, like guests."

The findings of modern biology and neuroscience validate the implicit wisdom of earlier traditions. Humans are in fact integrated mind-body organisms, containing ecosystems within them as well as participating in the broader ecosystems of nature. When we destroy the complexity of the natural world, we undermine the well-being of all organisms including ourselves. In the profound words of a slogan at COP21 in Paris, "We are not defending nature. We are nature defending itself."

Structural flaw #4: Nature is a machine

Along with the separation of humans from nature, another uniquely European cultural myth proclaims that nature is a machine. Since the 17th century Scientific Revolution, the view of nature as a complicated machine has spread worldwide, leading even some of today's most brilliant minds to lose sight of it as a metaphor and wrongly believe that nature actually *is* a machine.

Back in 1605, Kepler framed his life's work on this idea, writing: "My aim is to show that the celestial machine is to be likened not to a divine organism but to a clockwork." Likewise, Descartes declared: "I do not recognize any difference between the machines made by craftsmen and the various bodies that nature alone composes."

In recent decades, Richard Dawkins has spread an updated version of that Cartesian myth, writing famously that "life is just bytes and bytes and bytes of digital information," adding: "That is not a metaphor, it is the plain truth. It couldn't be any plainer if it were raining floppy discs." Open any science magazine, and you'll see genes described like programmers that "code" for certain traits, while the mind is discussed as "software" for the "hardware" of the body that is "wired" in certain ways. This machine delusion is ubiquitous, beguiling techno-visionaries seeking immortality by downloading their minds, as well as technocrats hoping to solve climate change through geoengineering.

New foundation: Nature is a self-regenerating fractal

Biologists point out principles intrinsic to life that categorically differentiate it from even the most complicated machine. Living organisms cannot be split, like a computer, between hardware and software. A neuron's biophysical makeup is intrinsically linked to its computations: the information doesn't exist separately from its material construction.

In recent decades, systems thinkers have transformed our understanding of life, showing it to be a self-organized, self-regenerating complex that extends like a fractal at ever-increasing scale, from a single cell to the global system of life on Earth. Everything in the natural world is dynamic rather than static, and biological phenomena can't be predicted with precision: instead of fixed laws, we need to search for the underlying organizing principles of nature.

This new conception of life leads us to recognize the intrinsic interdependency of all living systems, including humans. It offers us the underpinnings for a sustainable future where technology is used, not to conquer nature or re-engineer it, but to harmonize with it and thus make life more meaningful and flourishing.

Structural flaw #5: GDP is a good measure of prosperity

We continually hear Gross Domestic Product discussed as if it is a scorecard of a country's success. Yet all GDP measures is the rate at which we are transforming nature and human activities into the monetary economy, no matter how beneficial or harmful. The basic fault with GDP as a measure of a country's performance is that it fails to distinguish between activities that promote welfare and those that reduce it. Anything that causes economic activity of any kind, whether good or bad, adds to GDP.

When someone picks vegetables from their garden and cooks them for a friend, this has no impact on GDP; however, buying a similar meal from the frozen food section of a supermarket involves an exchange of money, and therefore adds to GDP. In this bizarre accounting system, toxic pollution can be triply beneficial for GDP: once when a chemical company produces hazardous byproducts; twice when the pollutants need to be cleaned up; and a third time if they cause harm to people requiring medical treatment.

The measure of GDP is not merely bizarre but dangerous for humanity's future because metrics have a profound impact on what society tries to achieve. National leaders get voted in and out of office based on their country's GDP growth. Recognizing this, various groups, including the UN and the European Union, are exploring alternative ways to measure society's true performance. The state of Bhutan broke new ground by creating a "Gross National Happiness" index, incorporating values such as spiritual wellbeing, health, and biodiversity.

New foundation: Measure a country's genuine progress

These alternative measures offer a very different story of the human experience over the last fifty years than the one presented by GDP. Researchers have developed a measure known as the Genuine Progress Indicator (GPI) that factors negative aspects such as income inequality, environmental pollution, and crime, as well as positive aspects such as volunteer activities and household work, into national accounts. When they applied this to seventeen countries around the world, they discovered that, although GDP has continually increased since 1950, worldwide GPI reached its peak in 1978 and has been declining ever since.

Once we begin measuring our politicians' success on GPI, rather than GDP, it becomes more feasible that the world can move toward a more sustainable way of life before it gets too late.

Structural flaw #6: The earth can support limitless growth

The world's financial markets are based on the belief that the global economy will keep growing indefinitely, yet that is impossible. When modern economic theory was developed in the 18th century, it seemed reasonable to view natural resources as unlimited because, for all intents and purposes, they were. However, both the number of humans and the rate of our consumption has exploded so dramatically in the past fifty years that this assumption is now woefully wrong.

At the current growth rate of 77 million people per year—equivalent to a new city of a million inhabitants every five days—demographers forecast a world with nearly 10 billion human occupants by 2050. People around the globe, bombarded with images of living standards from affluent countries, understandably aspire to the same level of comfort for themselves. Bolstered by this unremitting appetite for growth, the world economy is projected to quadruple by 2050.

Scientists have calculated that humans now appropriate about 40% of the total energy available to sustain life on Earth—called net primary productivity—for our own consumption. Humans use more than half the world's freshwater and have transformed 43% of the earth into agricultural or urban landscapes. To sustain our current rate of expansion, human appropriation of net primary productivity might need to double or triple by mid-century. Do the math—it can't be done on one earth. In the words of systems theorist Kenneth Boulding: “Anyone who believes exponential growth can go on forever in a finite world is either a madman or an economist.”

New foundation: Grow quality, not consumption

The solution is to transform our underlying culture—to stop seeking growth in consumption and instead seek growth in the quality of our lives. We can choose to participate in a circular economy, where we borrow, share, reuse, and recycle—and when we do have to purchase something new, make sure it's sourced from a sustainable process.

But just like changing lightbulbs won't stop climate change, so going circular alone won't prevent civilization from collapsing under its own weight. We need to engage actively at the source of this frenzied rush for perpetual growth: the domination of our economy by global corporations impelled by the mandate of maximizing shareholder returns above all other considerations. Raising public awareness of how these nonhuman forces are driving humanity to catastrophe is one of the most important tasks for anyone who cares about the flourishing of future generations.

Structural flaw #7: Technology has the solution

Techno-optimists frequently ridicule Thomas Malthus, an 18th century English cleric who was the first to warn of the dangers of exponential growth. For every problem that emerges, they claim, technology offers a solution. However, solutions based purely on technology tend to miss deeper structural issues, often creating even bigger problems down the road.

An example is the “Green Revolution” of the late 1960s, which is credited with saving over a billion people from starvation by exporting high-tech industrial agriculture to the developing world. Its unintended consequences now threaten humanity's future. Ubiquitous use of artificial fertilizer has led to massive ocean “dead zones” from nitrogen runoff and severe reduction in topsoil across the world;

indiscriminate application of chemical pesticides has disrupted ecosystems; and industrial agriculture now contributes one-third of the greenhouse gases causing climate change.

One reason we're facing a worldwide crisis of sustainability is that our culture encourages destructive attitudes to the earth. While technology has brought a plethora of improvements to the human experience, it has also bolstered the underlying Western belief that "conquering nature" is the primary vehicle for progress. Nature, however, is not an enemy to conquer, and each step we take in that direction further destabilizes the intricate relationship between humans and our sole source of life and future flourishing—the earth.

New foundation: Systemic change, not techno-fix

Rather than relying purely on technology, truly effective solutions tackle the systemic underpinnings of our crises, transforming practices that caused the problem in the first place. Agroecology, for example, an approach to agriculture based on principles of ecology, views the earth as a deeply interconnected system, recognizing that the health of humans and nature are interdependent. Agroecology designs and manages food systems to be sustainable, enhancing soil fertility, recycling nutrients, and increasing energy and water efficiency.

Already widely practiced in Latin America, it is rapidly gaining acceptance in the US and Europe, and has the capacity to replace the agro-industrial complex. Agroecology could even help sequester excess carbon in the atmosphere. The Rodale Institute has calculated that regenerative organic practices of agroecology—such as composting, no-tillage, and use of cover crops—could sequester more than 100% of current annual CO₂ emissions if practiced worldwide.

Structural flaw #8: The universe is essentially meaningless

Most science works through a reductionist approach: viewing the world as an assemblage of parts that can each be analyzed separately. This method has led to enormous progress in many fields, but its very success has caused many scientists to see nature as nothing more than a collection of parts, a viewpoint that leads inevitably to spiritual nihilism. In the words of Nobel Prize-winning physicist Steven Weinberg, "the more we know of the universe, the more meaningless it appears." Ultimately, the modern mainstream worldview is based on disconnection: separation of mind from body, individual from community, and human from nature.

New foundation: The universe as a web of meaning

However, in recent decades, insights from complexity theory and systems biology point the way to a new conception of a connected universe that is both scientifically rigorous and spiritually meaningful. In this understanding, the connections between things are frequently more important than the things themselves. By emphasizing the underlying principles that apply to all living things, this understanding helps us realize our intrinsic interdependence with all of nature.

In place of the structural cognitive flaws that have led humanity to the precipice, the systems worldview invites a new understanding of nature as a "web of meaning," where the very interconnectedness of all life gives both meaning and resonance to our individual and collective behavior. When we apply this framework to our lives, meaning arises from the way in which we're related to everything around us.

Meaning thus becomes a function of connectedness—and the meaning of life an emergent property of the network of connectivity that is the universe. Living with this deep realization, we are truly “at home in the universe.”

Setting the foundations for flourishing

It’s not necessarily easy work: restructuring foundations to prepare for the Big One, while so many others are blithely choosing new colors to paint over the cracks appearing in the walls. However, once we become aware of the structural flaws in the dominant culture, they can’t be ignored. We begin to see their manifestations all around us.

Not easy work, perhaps, but it can be deeply transformative. It’s an ongoing inquiry, a reconstruction of our value system, that can lead to the possibility of finding meaning ultimately through connectedness within ourselves, with each other, and with the natural world. These new foundations, based on seeing the cosmos ultimately as a web of meaning, have the potential to offer a sustainable future of shared human dignity and flourishing of the natural world.