

A New Economics for a New Civilization

David Korten

Our most prestigious universities continue to teach economic principles that empower corporations in the service of money, destroy Earth's capacity to sustain life, leave the many in desperation, and drive humanity to self-extinction. An economics for the 21st century will guide us to an economy that empowers people in the service of life.

Humanity is awakening to a grim reality. We are on a path to self-extinction. This reality stems from the destructive impact of deeply flawed cultural, institutional, technological, and infrastructure choices. The remedy will not lie in marginal adjustments. Our common future depends on revisioning what we mean by civilization and finding our way to a future consistent with the distinctive creative potential we possess as a now global choice-making species.

Earth and all its beings represent our household. As the most dominant of all of Earth's species, we bear special responsibility for Earth's care and management. Success in fulfilling that responsibility requires the guidance of a new economics grounded in the truth that humans are living beings born of and nurtured by a living Earth.

As the profound implications of this epic challenge become clear, voices from every quarter—from student activists to the Vatican—are speaking out in a call for global action. Workers and their unions organize around the wrenching observation that “There are no good jobs on a dead planet.” Pope Francis condemns an economy devoted to the “[idolatry of money](#)” and calls us to embrace our responsibility to care for one another and Earth. A global alliance of citizen movements has banded together under the banner of [WEALL](#) to work for an economy devoted to the well-being of people and planet.

New Zealand has announced a new budget that shifts the focus from growing Gross Domestic Product (GDP) to growing well-being. A youth-led political movement in the United States calls for a Green New Deal. Rethinking Economics, a global student movement demands reform of economics seminars that rarely mention poverty, climate change, or inequality. The Club of Rome, a global alliance of new paradigm thought leaders, has launched initiatives on the climate emergency, a new civilization, a new economics, and a new finance.

As we confront the challenge of our self-created threat to human survival, it becomes apparent that the choices we now must make to survive are the same choices required to achieve a long-denied human dream of a world of peace, equality, material sufficiency, and spiritual abundance for all. It is within our means to address this existential challenge. There is nothing inevitable about the institutions that now so badly fail us. They are products of choices made over decades, centuries, and even millennia by ancestors who had never viewed Earth from space and who depended on sailing ships and beasts of burden to connect with anyone not an immediate neighbor.

We now have rapidly deepening knowledge of how life creates and maintains the conditions of its own existence on this extraordinary planet. We also have the means of communication at all levels of society required to apply that knowledge to envision and create a world that works for all the many members of living Earth's community of life with historically unimaginable speed—if we so choose.

The prospective outcome will be a new civilization dedicated to securing and sustaining healthy, materially frugal, and spiritually fulfilling lives for all consistent with the wisdom of indigenous people, the insights of the contemporary life sciences, and the moral principles outlined in documents such as the Earth Charter, the papal encyclical *Laudato Si'*, and the various declarations of the Parliament of the World's Religions, most particularly its declaration "A Call to Our Guiding Institutions" adopted at its 1999 meeting in Cape Town, South Africa.

Existential Opportunity Born of Existential Crisis

By the estimates of the Global Footprint Network, the human species currently [consumes at a rate 1.7 times](#) what Earth's regenerative systems can sustain. Any level of consumption over 1.0 means we are destroying Earth's capacity to sustain life—thus putting the human future in deepening peril. Yet billions of people face a daily struggle for survival that strips them of happiness and fulfillment of their human potential. Their struggles will intensify for so long as we continue to destroy the health of the living systems we depend on for the food we eat, the water we drink, the air we breathe, and the stability of the climate that shapes the daily life of every living being.

As the environmental crisis unfolds, a growing concentration of financial wealth puts ever more political power in the hands of fewer and fewer people for whom the institutional status quo serves their narrowly defined self-interests. According to Oxfam, [twenty-six billionaires](#) now hold personal financial assets greater than those of the poorest half of humanity (3.9 billion people). Their resulting control of politicians, media, education, research, and our means of living gives 26 individuals a greater say in economic policy making than all the rest of Earth's 7.7 billion humans—the substantial majority of whom are locked into a desperate daily struggle for survival.

Environmental breakdown renders ever more of Earth's surface uninhabitable and drives growing millions of displaced people to abandon their homes in search of refuge in the shrinking Earth spaces not rendered unlivable by environmental breakdown and/or social violence. The United States—a desired destination for many refugees—has its own livability problems created by a combination of the climate crisis and the fact that it has more billionaires than any other nation. Its richest 1 percent own substantially more wealth than the bottom 90%, who as a consequence, face a daily struggle to make ends meet. [Four out of 10 U.S. adults](#) don't have enough spare money to cover a \$400 emergency. [Six in ten would have difficulty with a \\$1,000 emergency](#).

As we awake to the reality that maintaining the status quo is not a viable option, we can also see that this crisis presents an unprecedented opportunity. We can rethink the choices we have made and commit to achieving a long denied human dream of a world of community-centric, ecologically balanced, and spiritually fulfilling ways of life. The Quechua peoples of the Andes call this way of life *sumac asway*. It translates into Spanish as *vivir bien* and English as *good living*. Bolivia and Ecuador have written this concept into their respective constitutions.

South Africans speak of *ubuntu* often translated as “I am because we are.”

The ruling party of China has built into its constitution a commitment to ecological civilization and declared that “nature should be respected, adapted to, and protected....” In 2015, the Parliament of the World’s Religions issued a Declaration on Climate Change that closed with these words:

“The future we embrace will be a new ecological civilization and a world of peace, justice and sustainability, with the flourishing of the diversity of life. We will build this future as one human family within the greater Earth community.”

Far from calling for sacrifice, it is a call to actualize the potentials of our human nature as manifest in the vast majority of the world’s people who daily demonstrate their capacity for deep caring for one another and nature.

Even the requirement to reduce total human consumption from 1.7 times what Earth can sustain to no more than 1.0 times can be embraced as an invitation to turn away from the enormous environmental and social burdens imposed by war, consumerism, planned obsolescence, and an urban infrastructure designed for cars rather than people.

Outing Neoliberal Economics as a Failed Ideology

A key source of the current misdirection of our humanity is the economic ideology known as neoliberalism that is currently taught as settled science in most of the world’s universities. It now poses a major barrier to navigating the global course change so needed at this time

Economics lost its way as an intellectual discipline in the mid-19th century when a group of influential economists sought to raise the field to a stature comparable to physics. To that end, [they borrowed a mathematical model](#) from physics as the foundation of future economic theorizing. They substituted economic variables for physical ones; chose money as the defining metric; and declared economics a science.

Mainstream economics has since evolved to embrace as foundational truths a host of false assumptions. For example:

- Humans are by nature individualistic;
- Money is wealth and a storehouse of value;
- Growing money creates wealth;
- Market price is an objective measure of true value;
- The interests of future generations should be discounted;
- Technological advances will overcome any limits to growth in human numbers and consumption on a finite Earth;
- If a natural resource is exhausted the market will find a substitute; and
- We all do best when we each seek to maximize our individual economic advantage without regard to the consequences for others.

This is ideology, not science. In the real world, most people are honest, caring, and eager to help others. Money is just a number and growing it only creates a larger number. Storing a growing number on a computer hard drive does nothing to assure that tomorrow’s air will be breathable, its soils will be fertile, or its climate will be stable. Earth is finite, as are the regenerative systems on which its well-being and ours depend. Markets can provide only

what is available for sale. Profits serve only those to whom they flow. And those who would discount the future must now face Greta Thunberg and the youth climate movement.

Schooled in the false assumption of neoliberalism, generations of business and governmental leaders have been taught to believe that financial assets can grow perpetually to the eternal benefit of all and that such growth should be a defining goal of public policy and business management.

By the mid-20th century, most public policy making embraced GDP growth as the principal measure of economic performance and embraced making money as the economy's defining purpose. In response, politicians, judges, and international trade negotiators crafted rules that give transnational corporations and financiers—believed to be the engines of growth—ever increasing control over the global economy, generously subsidized their operations, and secured their immunity from the discipline of market forces. As monopoly power grew, so did the fortunes of the billionaires these policies served.

The rules that consolidate the power of global corporations, strip people and communities of control of their local economies and environmental resources, rendering them unable to meet their own needs while maintaining the health of their air, soils, and waters for the benefit of present and future generations.

The Great Growth Scam

Neoliberal economics initially gained prominence in the economic development strategies advanced by the World Bank, IMF, and other international development agencies following World War II. As the peoples of Africa, Latin America and Asia were decolonized, the former colonizers immediately came forward with offers of development assistance, often in the form of loans. The premise was that growing their economies would end poverty and bring consumer affluence to all the world's people. With strong support from the U.S. government, a long-standing champion of global corporate rule, the newly created Breton Woods Institutions, the World Bank and the International Monetary Fund, led the way.

Most of the newly liberated nations were predominantly rural and their peoples depended on subsistence farming for their livelihoods. They therefore had little need for monetary incomes. Some suffered exploitation by ruthless landlords. But others enjoyed strong communities, had adequate, reasonably secure diets, and enjoyed beautifully rich cultures. There is much that the people of high-income countries nations might have learned from them about organizing to live well with minimal monetary income.

In many newly liberated countries initial development measures introduced modern public health measures such as immunizations and modern sanitation, water purification, and reproductive management. These steps resulted in significant reductions in infant and child mortality and increases in life expectancy. Some implemented land reform to place control of the land into the hands of those who farmed it and supported small-scale local entrepreneurship. Such measures generally built on and strengthened existing community structures and sustained or increased local well-being and control. If such approaches had been consistently and intelligently sustained, we would now have a far healthier and more peaceful world.

Local control and self-reliance, however, had no place in the vision of the neoliberal economists whose influence was growing. They came with a single-minded commitment to growing GDP and converting subsistence ways of life to dependence on paid employment. Households that met

their needs with their own labor with little dependence on money or markets contributed virtually nothing to GDP, which economists had embraced as their measure of national development. With little monetary income, such households experienced what economists defined as “absolute poverty” and their situations needed to be rectified.

The current number one goal of the United Nations Sustainable Development Goals is: “By 2030, eradicate extreme poverty for all people everywhere, [currently measured as people living on less than \\$1.25 a day](#).” The only people who could survive on less than \$1.25 a day in today’s world would be subsistence farmers and hunter gatherers who directly produce their own means of living with the support of a traditional community. But an enduring goal of neoliberal economists is to eliminate self-reliance options, consolidate rural farmland to increase farm efficiency, and push people into paid employment where they contribute to GDP and the profits of billionaires by strengthening corporate control of the lives of everyone.

The labor that “development” released from people growing their own food often flowed into production of goods—including food, for sale in global markets. This might seem odd, until we note that these same economists have long urged poor countries to finance their development with foreign loans. To replay these loans, countries had to orient their economies toward sale to global markets controlled by transnational corporations and bankers. It is of course no coincidence that these institutions are a major source of well-paid jobs and consultancies for neoliberal economists.

We have [well documented cases](#) of self-reliant rural peoples enjoying deeply satisfying family, community, and cultural lives with a healthy diet and virtually no need for money. But the economists’ view of progress required forcing them off the lands that had sustained them and their ancestors and into paid employment as plantation or sweatshop workers. Never mind that such workers often endure starvation diets with no home, family, community, or cultural life to support them. To this day, if the displaced earn as little as a \$1.25 a day, economists congratulate themselves for successfully these individuals them from “absolute poverty.” By keeping attention focused on trivial income gains at the bottom, they draw attention away from the imperative to confront growing extremes of inequality. UN Sustainable Development Goals lend credibility to and build support for this misdirection while keeping attention focused on symptoms rather than the causes of deep system failure.

From a World Divided to a World that Works for All

The perverse logic of neoliberal economics has led us to a world in which roughly 20 percent of people lead a comfortable life, roughly 0.1 percent indulge themselves with ostentatious displays of opulence, and roughly 80 percent endure a daily struggle to meet their essential daily needs.

The fortunate 20 percent are supported by an economic system that depends on the exploitation of billions of people, is obscenely inefficient in its use of environmental resources, and severely limits the ability of the individual to make socially and environmentally responsible choices.

Keeping public attention focused on daily reports of stock prices, GDP, and employment numbers, corporate media distract us from what is really happening. If those numbers are going up, corporate media assure us that the economy is healthy and getting greener. Never mind that the jobs are temporary and part-time with meager pay and no benefits—or that the greening is inconsequential relative to the scale of spreading environmental devastation. Nor is there mention that since around 1970, the main product of GDP growth has been increased

concentrations of wealth and power, violating foundational principles of justice, democracy, markets, and moral responsibility.

More than 50 years of public policymaking based on neoliberal assumptions have served well the interests of aspiring billionaires. But most people and the planet have suffered. Now we are confronted with daily reports of record-setting floods, fires, droughts, melting icecaps, violent storms, and massive displacements of people. Those reports make it ever more difficult to hide the reality of the deepening crisis and the tragic truth that there are no winners on a dead planet.

Hope for a viable future depends on our ability to learn from successful traditional communities that self-organized to meet their needs in balanced relationships with their natural systems and to join the lessons of their experience with the best of modern science and technology. That will require a new economics that makes well-being—not GDP growth—its defining goal.

The economics we need to guide our path in a 21st century world will remind us of our responsibility to care for one another and Earth. It will shine a light on what is most essential to our well-being and help us explore pathways to its achievement. It will challenge us to put cooperation before competition and community well-being before corporate profits. It will draw from every source of human knowledge and understanding to guide us to the culture, institutions, technology, and infrastructure of a new civilization. It will help us secure the well-being of people and Earth in spiritually fulfilling ways. It will recognize and honor the reality that labor is not only the source of value—it is the very foundation of life's existence.

No Life without Labor

Evolutionary biology is giving us a deepening understanding and appreciation of life and the symbiotic interdependence of living beings that gives new significance to the term *ubuntu*, “I am because we are.”

The neoliberal economics of the 20th century doesn't just ignore the interdependence of people with the flora and fauna of Earth's ecosystems, it aggressively denies it. That interdependence must be a defining foundation of 21st century economics.

Over billions of years, the ancestors of Earth's countless living species brought life to Earth and Earth to life. Life's evolutionary progress was achieved through the constant labor of Earth's many organisms in complex symbiotic relationships that together created and maintained the conditions essential to their mutual existence.

As we unpack Earth's history, we see the critical role of labor. Beyond the planet's original nonliving wealth, all subsequent wealth is the product of the labor of living organisms. Indeed, life exists only by dint of its constant labor to counter the forces of entropy and thus to create and maintain conditions favorable to life on planet Earth.

Our most immediate experience with life's symbiotic self-organization is with our own body—the vessel of our consciousness and the vehicle of our ability to choose. Our body's existence and well-being are a product of the labor of tens of trillions of individual cells and microorganisms. They work in complex symbiotic relationship with one another to create the superorganism we know as our body with abilities far beyond that of any individual member cell.

Through their labor, these cells and organisms manage the active exchange of nutrients, water, energy, and information essential to the life of all. Together they create and maintain the heart

that pumps blood throughout our body and the diaphragm that fills our lungs with air. Their labor is continuous, even as we sleep, constantly adapting to ever changing food and water intake and external temperatures, while simultaneously distinguishing between toxins and nutrients and between beneficial and invasive microorganisms. This constant management occurs with no known equivalent of money, markets, casting of ballots, or central authority. When the cells of the body no longer labor to the benefit of the whole, we declare the body dead.

When we look at a landscape, it may often appear to be silent and inactive. But here too the exchanges of nutrients, water, energy, and information are constant—much of it the work microorganisms we can see only with a microscope. We have barely begun to understand the details of how it all works. Clearly, however, it does—and life’s labor is at the heart of it.

In human society, we depend on human labor to acquire and process the products of nature to meet our basic needs. We gather from the fields and forests. We hunt. We sow. We harvest. We prepare, cook, and serve. We shape the stone and the timber. We mine, refine, and forge the metals. We manufacture, build, and construct. And all the while we care for ourselves, our young, our elderly, and our incapacitated. We increase the yield to our labor through our talent at learning new skills and inventing new tools.

Twentieth century economics assumes a division of society between those who labor and those who own the means of production. And it assigns most of the benefit of labor to those who claim ownership. Twenty-first century economics will recognize that the benefits of the products of labor should be shared by those who contribute to producing them and recommend measures to reassign ownership accordingly.

Money as a Sometimes-Useful Tool

We are easily seduced into embracing money as the defining measure of wealth and economic performance for the simple reason that in modern society our access to nearly every essential depends on it. We can all see the abundance enjoyed by those who have abundant money and the desperation of those who lack it. We raise our children to plan their lives around making it.

Twenty-first century economics will bring to light the reality behind the illusion. The value is not in the money, which is just a number. That number has value only because we accept it as a token of exchange for things of real value. It is a tool, not a purpose.

Creating more money creates more claims against whatever is available for sale. It does not increase the quantity of that which is needed or desired. Any country with its own currency can create money with a computer keystroke.

To the neoliberal economist, money is much more than a number, it is *capital*. Capital is an ambiguous word that is most useful when we want to sound sophisticated but have no idea what to do. The statement, “We need capital” most likely means, “I have no idea what we need, but I assume that with enough money we will be able to buy it.” This, of course, assumes that what we need exists and that if we have enough money, we can outbid our competition to obtain it.

Our individual dependence on money leaves us vulnerable to the illusion that societal well-being grows as financial assets grow. Take farmland as an example of the paradox. As the amount and fertility of farmland declines, scarcity increases the market value of what remains, giving its owners collateral to borrow to buy more land, which further drives up prices. Total Financial assets may grow as the society’s ability to meet people’s needs for food and water

declines.

Or take the case of urban housing. Here too, financial assets can grow as well-being declines. As housing prices rise, speculators step in to buy and hold often empty houses and luxury apartments as opportunities to store and grow their financial assets. This drives prices even higher, thus affirming the wisdom of their purchase. Meanwhile growing numbers of people are forced into homelessness, possibly living on streets next to vacant apartments. Financial assets have grown as relationships disintegrate and well-being declines.

Getting Our Stories Right

As with all living beings, humans are children of Earth. We are also a species that lives by stories that represent our collective understanding of creation, our human nature, and our human place in creation's continued unfolding. This gives us a capacity for choice far beyond that of any other species. And that capacity bestows on us a moral responsibility for the well-being of the whole. It may be the reason for our species existence.

A presumption that we were born to bear such responsibility may explain why mentally healthy humans experience a sense of spiritual fulfillment when caring for a garden, child, pet, neighbor, or stranger in need.

The dysfunctional consequences of our fealty to an economic ideology that instructs us to abandon these responsibilities are legion. We strip the living soil of the nutrients on which its health and ours depends. We subsidize profit-maximizing global corporations in ways that make it nearly impossible for more community-oriented businesses to survive. Our universities indoctrinate young people in the idolatry of money in preparation for lives in service to profit-maximizing corporations and to governments dedicated to growing GDP and the financial assets of the wealthiest among us.

We design our cities and towns in ways that make us dependent on cars to fulfill our daily routines. We divide our lands into discrete parcels that disrupt nature's cycles as the few take control of our access to food, water, and shelter and reduce the rest of us to serving ends detrimental to our own well-being.

The result is a society that strips us of the ability as individuals to make many of our preferred moral choices and assures that the moral choices we do make—like recycling or taking public transportation—are difficult and of little beneficial consequence. Recognizing the importance of moral choice, the new economics will guide us in making collective cultural, institutional, technology, and infrastructure choices that facilitate and reward those choices that serve the well-being of the whole.

Getting Our Institutions Right

As inherently social beings, our most important human choices are collective, shaped by the institutions we create to align our individual behaviors with our collective well-being. These institutions are in turn shaped by the stories by which we understand ourselves and our relationships with one another and nature. If we get our stories wrong, we get our institutions wrong. We then get our individual and collective choices wrong and bear the consequences, as we now experience.

Our stories and our institutions are purely products of the human mind. Nothing in nature can

recognize them. Yet they shape our individual and collective behavior in powerful ways. Given that human institutions are solely creations of our mind, we clearly have both the right and the means to change them—potentially very quickly—if they fail to serve.

Modern societies could not exist without the institutions that currently define us. Yet in their current form they threaten not only our well-being. They threaten our survival. Hope lies with our ability to shed or transform those that are dysfunctional, a process that begins by changing the narratives that shape the laws that define them.

Flawed narratives and the institutions that follow can hold sway long beyond their useful life. Yet seemingly invincible institutions can quickly crumble once the story that sustains them loses credibility. Think of the sudden collapse of the Marcos government in the Philippines, the fall of the Berlin Wall, the disintegration of the Soviet Union, and the end of apartheid in South Africa.

Replacing failed institutions with truly beneficial institutions is a far more difficult process than bringing the failed institutions down by exposing a false narrative. Success begins with a compelling new narrative that people recognize as conforming to their lived reality.

One component of the needed new narrative is the recognition that the health of living systems depends on their constant adaptation to local circumstances. Life's ability to create and maintain its own existence depends on its ability to self-organize from the bottom up.

Thus understood, healthy living systems show us a democratic ideal that goes far beyond elected representation. Self-organizing communities constantly adapting to their circumstances form the fundamental ground of a healthy human society. The proper role of elected representatives is not to control such processes but rather to facilitate their achieving beneficial outcomes.

Free market ideologues might say that this is the ultimate free market ideal. Yet a market without rules frees corporations to monopolize markets. The institutions of a democratic society must have rules that preclude any concentration of power not fully accountable to the community and its authentic needs.

Currently, ever more humans depend for their living on institutions of business and government that centralize power and monetize relationships. That reality severely constrains the local adaptation essential to healthy living organisms. Stripped of options, we turn to corporations for the housing, food, the child-care, the entertainment, the home care, and much else we once provided for ourselves. With each such act, we sacrifice control of our means of living.

Change will come only with broad public recognition that although the system is growing profits and GDP, it is undermining well-being to the point of threatening human self-extinction. To achieve the sustained well-being of all, power must reside with the institutions and people of community, not the institutions of global finance.

From Marginal Adjustments to Civilizational Transformation

Modest personal adjustments will not correct the failures of an inherently self-destructive cultural and institutional system. Our future depends on a unified human effort dedicated to driving deep system transformation. These are some key elements:

- Going beyond stopping the use of plastic bags, we can create an economy that produces

only wastes that are recycled by humans or nature.

- Going beyond buying organic, we can create a food system in which all food is produced in ways good for Earth and healthy for people.
- Going beyond asking corporations to be responsible, we can break up concentrations of corporate power and render the pieces accountable to the communities in which they do business by converting them to worker and community ownership.
- Going beyond resisting a current or proposed war, we can dismantle the apparatus of war and the military-industrial complex.
- Going beyond urging people to buy only electric cars, we can design neighborhoods and transportation networks to do away with most need for cars.
- Going beyond providing everyone a guaranteed income, we can provide everyone with work that meets their material needs with dignity and satisfaction while better serving community needs.
- Going beyond accepting all migrants fleeing social and environmental collapse, we can seek to assure that every place is livable and that every person has a livable place.

Finding our way to the future we seek will require a deep institutional transformation, guided by an economics devoted to securing the well-being of people born of and nurtured by a living Earth.

Eight Essential Principles of a 21st Century Economics

The essentials of a 21st century economics for a new civilization can be distilled into eight practical action principles.

Principle #1: Indicators. Evaluate economic performance by indicators of the well-being of people and planet; declare GDP an invalid indicator.

Be clear on the outcomes we want and choose our indicators accordingly. In the mid- to late-20th century, most nations made GDP growth the defining goal of economic policy. It was an act of faith that became a bold global experiment in testing a flawed theory.

The results of the experiment are now in. Growing GDP as an independent objective leads to the destruction of Earth's capacity to support life while growing the fortunes of billionaires and thus their ability to claim an ever-growing share of the remaining real wealth of a dying Earth. It leaves much of humanity without secure access to food, water, shelter, and other basics.

Managing an economy to maximize GDP is like flying an airplane in a dense fog with only an airspeed indicator and a goal to maximize airspeed. Without even knowing whether the plane is going in the desired direction, the pilot will put the plane into a steep dive and marvel at its growing speed—until it hits the ground.

Proponents of 20th century economics assure us that greening growth—which presumably means reducing the environmental impact of future growth—will solve the problem. That doesn't reduce the overall human impact on Earth's regenerative systems. It doesn't repair those systems or redistribute wealth. It doesn't assure the basic well-being of all in balanced relationship with Earth. And it doesn't explain why we should assume that growing GDP will improve well-being.

To meet the essential needs of all people while restoring the health of Earth's regenerative systems will require a dashboard of indicators of the well-being of people and planet. One example is Kate Raworth's [doughnut economics](#) proposal for an indicators dashboard that systematically links human and planetary well-being. Success will almost certainly shrink GDP.

Principle #2: Resources. Use available labor and natural resources only for purposes that enhance the well-being of people and Earth; eliminate uses that do not.

An obvious first step in reducing the human burden on Earth is to eliminate activities that may generate profits and grow GDP but make no net contribution to—or diminish—the well-being of people and Earth. Such wastes include most everything related to war, advertising, and financial speculation. They include shoddy products, planned obsolescence, most agricultural chemicals, and socially and environmentally destructive infrastructure.

We can also eliminate much of the social and environmental devastation wrought by designing cities for cars. The new economics will highlight the benefits of infrastructure that supports people living close to where they work, shop, and play.

Neoliberal economics favors trade with distant markets. Twenty-first century economics will favor minimizing the global movement of people and goods by keeping production and consumption local and reliant on recycled materials. We can eliminate much carbon-emitting air travel by using communications technologies to share ideas, technology, culture, and learning.

These steps would displace workers mainly in industries that make a zero or negative net contribution to well-being. Those displaced can be better employed caring for and educating our children, caring for the elderly, restoring the health and vitality of Earth's regenerative systems, and rebuilding infrastructure in ways that reduce dependence on fossil fuels and simultaneously strengthen our beneficial connections with one another and nature.

We have many win-win opportunities to reduce environmental burdens while strengthening family and community relationships. For example, the current trend toward single-person households isolates individuals from one another and eliminates opportunities for sharing shelter, tools, appliances, furniture, utilities, food preparation, and other essentials. At the same time, individual households are increasingly separated from one another. The related disruption of family and community self-care reduces well-being and increases the need for government-funded social safety nets. By reconnecting people with one another and nature, we can increase the sharing of resources, reduce work hours, increase free time, and improve the health and well-being of all.

Principle #3: Labor. Direct the rewards and assign the rights of ownership to those who provide beneficial labor in service to community well-being; reallocate the ownership rights held by those who use them to exploit the labor of others for personal gain.

Public discourse generally assumes that society's defining economic choice is between capitalism (ownership by transnational corporations), or socialism (ownership by national governments). Both centralize power and embrace GDP growth as the defining indicator of economic performance. Neither directly empowers those who provide the labor. Neither has demonstrated an ability to secure a good life for all people in balance with a healthy living Earth.

The solution is to transition to direct worker or community ownership combined with an ethical frame that recognizes our individual and collective responsibility for the well-being of the whole.

Such restructuring will end society's division between a privileged owning class and an indentured working class and assure that everyone who provides beneficial labor also shares in the ownership and rewards resulting from that labor.

Principle #4: Money. Make the creation of society's money supply a transparent, publicly accountable process that serves the common good; put strict limits on private currencies, financial speculation, and other schemes to extract unearned profits for purely private benefit.

Money is a useful accounting token. It can also be a powerful instrument of control and exploitation.

The ability to create money is the power to create unearned buying power. It defies reason to assume that society benefits from giving this power to for-profit banks dedicated to maximizing profits for the already richest among us. It makes even less sense to give this power to transnational banks with no loyalty or accountability to any country or community.

That power must reside with institutions that are public, transparent, and accountable—namely public banks, supplemented by locally owned cooperative banks that aggregate local savings of local cooperative owners to finance local businesses and home buyers. Every citizen needs to understand how the process works so they can participate in holding all financial institutions accountable to the public interest.

Combined with a transition to worker ownership, this system reform will address the structural flaw in our current debt-based private banking system. That system makes the economy prone to collapse if it is not growing fast enough to generate new borrowing to put new money in circulation to pay the interest due on already outstanding loans. This system flaw, created by the private banking system, creates pressure to keep both GDP and total debt growing. The only beneficiaries are the bankers who create the problem.

Principle #5: Education. Organize and manage education to support lifelong individual and societal learning in service to the well-being of people and planet; end the fragmentation of disciplines and the isolation of the classroom.

Much of modern education isolates knowledge into narrowly defined disciplines isolated from family and community life. That process suppresses students' ability to think systemically and act as responsible members of an evolving, interconnected Earth community.

Developing educational processes for a 21st century world begins with recognition that no one knows how to get where the human species now must go. Education cannot provide answers we do not have.

The first step is to recognize and confront the fact that many of our current textbook answers do not serve. We need generalists skilled in asking the right questions and working together to find, share, and weave together insights from many disciplines as they engage in an evolving process of learning through working on solutions to local, regional, and global scale problems.

We must become skilled in understanding and facilitating the social learning processes by which groups, nations, and our now global society advance their common understanding and ability to work together for the well-being of all. Social learning is itself a barely recognized area of study that merits priority attention, as do the life sciences more generally.

Economics as presently taught bears major responsibility for humanity's current misdirection and presents a significant barrier to the needed transformation. It is deeply troubling that, to this day, our most prestigious universities feature economics courses that advocate societal psychopathology as a human ideal, give legitimacy to institutions that deny responsibility to or for the common good, and consider knowledge from other disciplines to be irrelevant to economic decision making.

Twenty-first century economics should be an integral part of every educational curriculum. It must build on a moral foundation that recognizes our responsibility to and for one another and Earth, favors cooperation over competition, draws from all sources of human understanding, and prioritizes community well-being over corporate profits.

Principle #6: Technology. Create and apply technology only to enhance the well-being of people and planet; prohibit technologies that exploit, control, or displace people or nature.

Technology must be life's servant, not life's master. Most technologies have potential for varied applications, some being beneficial to life and others harmful to life. To choose applications based solely on which will produce the greatest financial return to those who control them is collective madness. To the extent that automation and artificial intelligence eliminate the need for human labor, humans will have no purpose except to consume in the eyes of society's masters. The technophile's drive to create an economy with no need for humans should qualify as a crime against humanity.

Humans have the right, the responsibility, and the means to favor the development and application of technology to reduce destructive environmental impacts, restore the regenerative capacity of Earth's living systems, and facilitate global understanding, cooperation, and learning across and among bioregional communities as we transition to a new civilization. The new economics will develop tools for identifying and facilitating the application of technologies that truly benefit people and planet and support us in fully realizing the potentials of our humanity.

Principle #7: Community. Organize economic life around self-organizing, self-reliant living communities and assure that all human institutions are accountable to and serve the well-being of the communities in which they are located; break up concentrations of corporate power and root ownership of each of the spin-off businesses in the people of the community in which it does business.

Government and business—indeed all institutions—must be accountable to the people of the communities they exist to serve. Businesses should be human scale and worker owned, as consistent with Principle 3.

The creation of a corporation depends on a government issuing a corporate charter. The only reason for government to issue such a charter is to serve the community to which that government is accountable. Any corporation that does not serve a community interest has no reason to exist and the community has every right to withdraw its charter and reallocate its assets.

Furthermore, there is no reason why any community should feel compelled to recognize a corporate charter issued by a government not accountable to the community in which the corporation seeks to do business.

Only by having reasonable control of its own economy can a community assure all its people a secure livelihood through useful and meaningful work; assure the education of all its

children; and provide for those who suffer disability from aging, accident, and illness.

Within a community economy framework, urban and rural dwellers can rediscover their interdependence. Cities can meet their needs for food, timber, fiber, and pulp from nearby rural areas, and rural areas can regenerate their soils with bio-wastes from nearby urban areas. Cities can provide cultural and educational opportunities for both urban and rural dwellers. Rural dwellers can provide urban dwellers with food, water, and nature immersion experiences, including agricultural work opportunities for students during summer vacation.

Suburbs that now occupy massive tracts of land for low-density, low-interaction, energy-inefficient living can convert either to high-density, high interaction, energy efficient urban habitats, or low-density, high-nature intensive rural habitats. This will improve resource efficiency and quality of life in both urban and rural areas while restoring natural regenerative capacity.

As cities restructure to eliminate dependence on cars, people will walk, cycle, and use public transportation, meeting and greeting on the streets, in sidewalk cafes, and in parks with beautiful gardens. The largely car-free cities of the new civilization will feature multi-generational, multi-family living units that function as vibrant eco-communities sharing facilities, tools, resources, and labor among residents who look out for one another and their children as most intact tribal communities still do.

Principle #8: Population. Seek a healthy balance between species consistent with the well-being of all; shed the conceit that Earth was created for humans to exploit.

Every species has its place, its role, and its needs. The health of every natural ecosystem depends on its ability to balance and serve the needs of its varied species.

Just as healthy bodies mobilize against invasive cancer cells, ecosystems mobilize against invasive species. This dynamic suggests that either humans will self-manage their reproduction and distribution to align with Earth's needs and capabilities in the place where they live, or Earth will define us as an invasive species and mobilize to expel us—as she may already be doing.

Ultimately, the people of each place must balance their own numbers with the regenerative capacities of their place. Voluntary limitation of our population numbers begins with providing educational and occupational opportunities for women and making reproductive management methods freely available.

Communities that wish to grow their numbers best achieve that by inviting in-migration from places seeking to adjust their population numbers downward. Population management involves complex moral issues and can be difficult to implement. We must acknowledge, however, that the larger the human population of each place on Earth, the lower the levels of per capita consumption each place can support.

Economist Kenneth Boulding once observed, “Anyone who believes that exponential growth can go on forever in a finite world is either a madman or an economist.” You might say the same for anyone who believes that society is best served when we each concentrate on maximizing the growth of our personal stash of money. Yet, for lack of an established alternative, we cling to a deeply flawed economics and continue to teach it to the youth who will be tomorrow's leaders.

Recognition that the current system leads to fatal consequences from which no human will escape is an essential starting point for civilizational transformation. That recognition, however, leads only to debilitating depression and resignation absent awareness that the crisis creates an opportunity to bring into being a future far more attractive than the fantasy future of mindless consumption that 20th century economics promised.

Framing a vision of opportunity and a path to its achievement is the work of the 21st century economics we are beginning to envision together. Twenty-first century economics will feature boldly transdisciplinary instruction in ethics, institutions, culture, biology, politics, and much more. It will seek fact-based objectivity while applying its knowledge and expertise to ethically grounded purpose-driven work to assist humanity in confronting its most essential and complex choices.

Transdisciplinary and inclusive of non-specialists, the new economics will welcome the engagement and contributions of all who embrace the goal of a society dedicated to the well-being of people and planet. We will learn to think and act as the people of a living Earth in every aspect of daily life.

No longer will we support those who promote policies based primarily on their positive financial return and contribution to GDP growth. We will immediately recognize that such proposals generally serve only the interests of the already privileged.

Our common goal will be to craft and defend initiatives that serve to restore the health of Earth's regenerative systems, advance an equitable distribution of power, and enable all of Earth's people to discover and express the fullness of their humanity.

As awareness of our common crisis spreads, a teachable moment emerges. We must embrace this opportunity to channel popular concerns into a powerful global movement that brings us together in common cause to create a future that works for all.

This working paper was written by [David Korten](https://davidkorten.org/), author, independent scholar, engaged citizen, and former Harvard Business School professor as a contribution to discussions framing a new economics for the 21st century. Dr. Korten is president of the Living Economies Forum, a member of the Club of Rome and a co-founder of YES! Magazine. His books include When Corporations Rule the World; The Great Turning: From Empire to Earth Community; Change the Story, Change the Future: A Living Economy for a Living Earth; Agenda for a New Economy: A Declaration of Independence from Wall Street; and The Post-Corporate World: Life After Capitalism. More information on Dr. Korten's work is available at <https://davidkorten.org/>.

It addresses the challenge of framing a new economics grounded in living system principles articulated in John Fullerton's [Regenerative Capitalism: How Universal Principles and Patterns Will Shape Our New Economy](#) and seeks to take to the next level Fullerton's suggested framing principles for an Earth centric regenerative economy. It also builds on Kate Raworth's Doughnut Economics: Seven Ways to Think Like a Twenty-First-Century Economist in addition to the important contributions of ecological economists Peter Brown, John Cobb, Jr., Herman Daly, Jon Ericksen, and Joshua Farley. It is undertaken as an input to the Club of Rome Reclaim Economics initiative and other related efforts.

The development of a 21st century economics is an ongoing process and this working paper may be updated from time to time, with new versions posted online at: <https://davidkorten.org/> It may be freely reproduced and shared in whole or in part.

The first version of this working paper was posted [May 23, 2019](#). Version 2 was posted [June 19, 2019](#). Version 3 was posted [July 2, 2019](#).

I am grateful for the editorial assistance of Fran Korten and conceptual input from Carlos Alvarez, Peter Brown, Sandrine Dixson-Declève, Jon Ericksen, Philip Favero, Herbert Girardet, Marjorie Kelly, Fran Korten, Thom Hartmann, Michael Pirson, Mamphela Ramphele, Brad Smith, Katherine Trebeck, and Chris Winters plus insights into the deepest nature of life from the many great teachers throughout my life on whose understanding this paper draws, most notably Janine Benyus, Thomas Berry, Duane Elgin, Matthew Fox, Willis Harman, Mae Wan Ho, Donella Meadows, Elisabeth Sahtouris, and Brian Swimme.