

Chapter 16

Human/Earth Balance

The shift from All-out Use of the Earth to Human/Earth Balance (from Human-centered Exploitation to Mutually Enhancing Support)

Economic structures relate us to our planet. Often we think of economics as having to do with money, labor, management, goods, services, supply and demand, and other such human-centered functions. These functions are important, but such human-to-human relations take place in the wider context of human-to-Earth relations.

By “all-out use of the Earth” I am referring to a human-to-Earth relation that has characterized all civilizations and reached its zenith in industrial civilization. I prefer the concept of “Earth-use” to the more common concept of “resources.” The term “resources” tends to imply that the Earth is a big grab bag of stuff that we humans can reach into in accordance with our humanly conceived needs assessments. Each “resource” becomes valuable or valueless according to the human demand for it. Petroleum, for example, was an inconvenient goo of no or little value until it was discovered that it could be useful to humans as a fuel. Trees are likewise given their value in terms of human need – needs like building houses and boats. The function of trees in producing oxygen, cycling water, or sheltering and feeding animal life has been typically ignored by early ship builders or modern logging companies and most governments. But trees are not just “resources” for some profit-making company or for some eager customers. Trees are part of the vast and wondrous Earth which humans must use with thoughtfulness and discretion.

All living forms use other living forms for their food, to spread their seeds, to sustain their soils, to provide their environmental homes, and so on. Humans, like all life forms, have a place in this Earth-use drama. Our economic maladies do not arise from our necessity to use the Earth; they arise from our neglect to carefully think through how we balance human use of the Earth with assisting or allowing the Earth to generate its riches. Perhaps even the word “use” has unfortunate overtones. “A mutually enhancing relationship” might be a better phrase for communicating this fresh and viable human attitude toward the Earth. In all stable, long-standing ecosystems, the various life forms are mutually enhancing. Unless humans create mutually enhancing relations with the entire biomass of this planet, human life and many other forms of life will confront disasters that most of us, if not all of us, will find untenable.

This mutually enhancing relationship is more than an attitude of will and mind; it includes the entire range of human economic practices – all our taking from and giving to the Earth. As a specific example, when a region of the planet is chosen for human food production, a mutually enhancing relationship would include consideration for the soils of this region and the total biomass that can be produced from those soils and can be used to sustain those soils. The practice of extracting food and food profits at the expense of soil erosion and perhaps the desertification of an entire region would be unthinkable if we lived within an appropriate Earth-use relationship. Everyone who wishes to eat and have their grandchildren eat needs to be concerned to ensure that plants are grown and animals are raised in whatever fashion enhances the food production of this region for generations to come. This is clearly the sensible direction, but it is not now the practice in most societies. For thousands of years agricultural civilizations have been mining the soils without ample consideration for the long-term care of these soils. Something like eight feet of top soil on the mid-America prairies has been reduced to inches.

And food is not the only factor. The air we breathe and the water we drink are equally critical. The extent to which human beings (both managerial and working classes) are willing to

trade breathable air and drinkable water for business profits and jobs is appalling from the progressive perspective I am attempting to describe. Making money from my business or earning money from my job is a worms-eye view of the overall economic situation. Worms don't have to have an inclusive view; they can just eat what they find in front of their faces. But human beings are so powerful in their Earth impacts that they must step back and look at the whole picture or perish following their individualistic noses.

Therefore, envisioning a realistic and viable future for human society cannot focus on human structures alone. A viable vision of a sustainable society includes the entire geological and biological processes of the planet.

The Objective Facts

The overall conclusions I have just described are founded on facts. I will begin my more specific factual analysis with a few facts from human history. In the time of pre-civilization, the Earth's powers of recovery was large in relation to human impact. Furthermore, most tribal societies revered the natural Earth. Yet even in the early migrations of humans across the planet, whole species fell to the human spear. The human presence has always been a powerful force, and that power has grown exponentially in recent centuries. We no longer have the luxury of allowing the Earth to take care of itself.

During the last 6000 years, agrarian civilizations have focused on taking from the Earth far more than they have given in care and restoration. Many early civilizations misused their surroundings to such an extent that their great buildings were abandoned as people simply walked away into simpler forms of living. The industrial form of civilization is the grand champion at mining the planet without giving back. In the industrial era the impact of humanity has become so large that it must be counted as a major geological factor. The atmosphere, the rivers, the oceans, the water cycles, the soils, the total biomass, the rich diversity of living beings, all depend on human social decisions for the preservation and/or enrichment of their basic capabilities. Lester Brown, former director of the Worldwatch Institute, published an essay at the beginning of this century entitled "Challenges of the New Century" in which he listed the following trends that are shaping the new century: "population growth, rising temperature, falling water tables, shrinking cropland per person, collapsing fisheries, shrinking forests, and the loss of plant and animal species."¹

To understand the grim nature of each of these trends we must get a picture of their extent. For example, concerning the loss of plant and animal species, we need to understand the distinction between *extinctions and extinction spasms*. In his book *The Sixth Extinction*, anthropologist and paleontologist Richard Leakey made the case that we are now involved in the sixth great extinction spasm of life on this planet. The fifth extinction spasm took place 65 million years ago when the dinosaurs died off. It appears that all of the first five extinction spasms took place as a result of some object from outer space crashing into our planet. But the sixth spasm, currently taking place, is caused by one of the species of life on Earth, namely us. This spasm has an even more deadly potential than a comet or meteor, for humanity is not a one time hit but a continuing presence. Unless our destructive action is halted, all complex life forms includes our own species can be forced into extinction.²

The facts in many other arenas are equally grim. Here is a sample of some of them:

1. We are pulling **fresh water** out of our aquifers and rivers at a larger rate than they can

¹ Brown, Lester ; *State of the World 2000* (W. W. Norton and Company: 2000) page 5.

² Leakey, Richard; *The Sixth Extinction* (Doubleday: 1995)

replenish. China and India are already facing serious water shortages. Dry areas like southern California are approaching water war with the wetter mountain states. Alien trees in South Africa are destroying the water systems of that dry area. Fresh water may turn out to be our most limiting commodity for handling the growing population.

2. **Forest cover** is another planetary resource being overwhelmed by human demands. Logging companies unless restrained will cut the last 5 percent of North America's old growth forests for short-term profit. We face the prospect of forever losing the majesty and nurture of these natural sanctuaries.

And the tropical rain forests not only house the most diverse array of life species; they are also the most important oxygen replenishment organs on our planet. Forest cover is a fraction of what it once was, and it is still shrinking about 1000 acres per day.³

3. We also continue to destroy **croplands** through extractive agricultural methods and uncontrolled erosion. More than 11 percent of the world's cropland was identified in 1989 as severely eroded. And this process continues on 75 percent of the land in some regions. Lester Brown says, "Since the mid-twentieth century, grainland area per person has fallen in half, from 0.6 acres to 0.3 acres."⁴ By 2050 it can be projected to be 0.2 acres per person – about the size of a city lot. In the most populous places it could be half of that, an area the size of a tennis court.

4. We are **over-fishing** the oceans. "From 1950 to 1997 oceanic fish catch expanded from 19 million tons to more than 90 million tons." "Most marine biologists believe the oceans cannot sustain an annual catch of more than 95 millions tons."⁵ This means that the marine food per person is shrinking. Some populations of once abundant species of fish have already become almost extinct through our technological wizardry.

Furthermore, many other types of problems reinforce and aggravate these ecological challenges. Vast poverty and the increasing gap between rich and poor are a horror on their own terms. And poverty breeds still other problems. Disease epidemics that break out in one section of the planet now threaten all of us. Terrorism can seem a meaningful option to people who are impoverished, disrespected, and hopeless. As we have seen, there is no absolute defense against terrorists who are willing to expend their very lives in making their statements. Horrific chaos in any part of the world is a problem in our own neighborhood.

There are hundreds of other topics on which scientific research has already produced clear and frightening conclusions. Further understanding of all of this can be easily acquired from many available sources. The annual reports on The State of the World by the WorldWatch Institute is a good place to begin.

A factual understanding of human population growth is of special importance. Biologically speaking, the human species is small compared to the whole planet, but the footprint that this one species makes on the planet is enormous and growing more enormous as this species grows in numbers and in the amount of impact each member makes. A sustainable society for 6 billion people may be possible; 4 billion would be easier. But the 12 billion that some project would make an equitable and sustainable society impossible. It would very likely mean 6 billion people fighting to survive and the other six billion becoming increasingly paranoid about protecting their fragile hold on life from the ever increasing threat of theft and violence.

Population growth is not inevitable. Wherever both women and men are well educated and where a population is assured that a large number of children are not needed for old age care,

³Brown, Lester; op. cit., page 8

⁴Brown, Lester; op. cit., page 7

⁵Brown, Lester; op. cit., page 8

population growth drops. But there is a time lag; a population momentum has been established. Nevertheless, the population challenge is not hopeless, unless we are counting on assistance from religious communities that only want to increase their constituencies or business executives who only want cheap labor and more customers.

Yet even with a population of 4 to 6 billion, systemic changes will be needed to build a sustainable, equitable, planet-wide society. For example, it will not be possible for 4 billion people to each own an automobile, even if that vehicle gets 60 miles per gallon of gasoline. So we have to imagine transportation solutions that include vastly improved public transportation systems, systems that go to most local communities and that include provision for folding bicycles and battery powered wheel chairs. We need to imagine non-fossil fuel lightweight automobiles that are used mostly to access remote locations. In other words, we need to carefully construct some factual projections on how many automobiles and trucks a sustainable planetary system can stand and then plan the whole transportation system in that light. The current planning of the typical automobile company to expand sales by two and a half percent per year forever is preposterous. This amounts to doubling the number of automobiles every 35 years. Transportation designs for the entire world population need to be viewed from an inclusive point of view constructed by the entire human populous rather than by profit hungry corporations who build the transportation pieces or sell them fuel.

Transportation is only one of a hundred such planet-wide plans that wait to be devised and implemented. I will mention a few other areas: everything having to do with energy; everything having to do with fresh water; ocean fish protection; corral reefs; appropriate management of forest cover and habitat; protection and proper use of agricultural land; recycling of all metals, papers, plastics toxic substances, and compostable matter; air quality and climate stabilization; and the list goes on and on. All these grim facts and combined factors require a far-reaching and fresh response from humanity.

The Spirit Challenge

As we contemplate the horrific facts of the ecological crisis, each of us tend to feel deep guilt for being part of such a destructive species. We may also feel a certain level of hopelessness as we view the momentum that human societies have achieved in their current destructive directions. Many handle this guilt and hopelessness by minimizing the facts or in some other way justifying the "status quo." This particular "status quo" is not like an immovable rock; it is a society in motion at breakneck speed. We call this status quo "economic growth" rather than "the pell mell trend toward ecological doom." This trend has to be slowed down and eventually stopped. We cannot avoid this challenge by saying there are no viable alternatives. When the current direction is doom, almost any alternative is viable.

The core of the Spirit challenge that each of us knows or can know in the depth of our being is that humanity is being called to repent of its conscious and unconscious lordship over nature. Humans must come to terms with their dependence on nature and their helplessness before a Mighty Mother Nature who if further mistreated will withhold from us not only the fuels for our bold enterprises but our very food and water. If in these times of relative abundance we do not learn profound respect for nature's rich capacities and severe limitations, we will be taught respect while starving in her burning deserts. The Spirit challenge is to let such grim prospects into our consciousness.

Most modern humans have been captivated by a delusion of all-powerfulness or by a false hope for material immortality. What else motivates a billionaire in search of his or her second billion? And even the poor can dream of boundless riches and power. As these delusions

evaporate in the face of the possible death of our entire species. We are challenged to become more humble, to revere that generous but also severe Awesome Majesty that is clearly manifest in the vast cosmos and in our immediate surroundings. This Majesty sustains us, but it can also destroy us. Respect for this Majesty (a Majesty that the Bible recommends for our ultimate devotion) includes both gratitude and realistic dread.

Such ecological repentance is a return to respect for the biblical God. It is also a return to our essential human nature of Trust, Love, and Freedom. We are also being challenged to repent of our cynical individualism which strives to “get mine while the majority perish.” We are being challenged to work together, seeing the entire human species and the entire evolution of life on this planet as our larger body. This biological body, this body of finite creatures capable of death, is the body in which Jesus dwelled. As the Awed One, Jesus still dwells, and will continue to dwell in this biological body. Our ecological repentance is a rejoining of the body of the Awed One, the body Christ.

Within this master challenge we are confronted with challenges to change our ways of thinking and decision making on virtually every topic. No longer can we merely ask how our human goals and whims can be realized through our technological wizardry and innovative actions. We must ask about the whole planet and what makes for its well-being, its sustaining force, its total living reality. Unless we begin our thinking with the whole planet of which we are one small part, we will not make the appropriate decisions about what we need to do to survive, to thrive, and to realize our deepest potentials. We can either accept such challenges as the call to becoming a deeper and more mature humanity, or we can suppress these challenges and thereby perish in the arrogance and rebelliousness of a foolish industrial adolescence. This ecological doom will not be the rapture for which some deluded Christian-identified people long. It will more appropriately be described as the final audit of a wayward species.

The Needed Consensus

Once we open ourselves to the grim facts on how the Earth is being devastated and how human population growth and the practices of those huge populations are related to this devastation, we have some huge decisions to face. How extensive is the needed overhaul of human societies? Will minor repairs in our current social practices suffice? No, is the simple answer to that. Will some major reforms of industrial civilization be required? Yes, but that will not be enough. Here is the consensus humanity needs to embrace: the mode of society we call “civilization” needs to be phased out and a new mode of social organization invented and realized. This is the overhaul that is needed to establish a sustainable human society, one which embodies a mutually enhancing relationship between humanity and planet Earth.

Central to that social overhaul is establishing and reestablishing democratic governments that do not allow business institutions to do whatever makes them money. This overhaul includes denying huge transnational corporations the political power to gain unwarranted subsidies and permission to do increasingly destructive damages to human health and planetary functioning. This need for general governmental oversight need not mean the doing away with free-market mechanisms or the micromanaging of the whole economy by governmental bureaucrats. It does mean, however, providing firmly enforced governmental plans, designs, and rules that provide a strict refereeing of the economic playing fields. This direction need not be called “capitalism” or “communism.” It is a demand to invent a third sort of economy that actually handles the challenges that our factual data illuminates.

If in the major decision making circles of human life, we shift our major context from the perpetual growth of industrial anarchy to the inclusive well-being of the planet as a whole, many new and exciting decisions will arise within that new context. Humans, trees, oceans, and frogs

are all sub-contexts within the overall context of well-being for the entire planet. Humans are constructing these sub-contexts, so the life of humans is our deepest issue for assuring the well-being of the planet. We are not envisioning a planet without humans, but one in which humans play a mutually enhancing role among all the life forms and geological processes that comprise this cosmic home. The vision of a viable future that grows from this basic premise is foggy in many of its details but extremely clear in its general outlines.

This new mode of social organization will emphasize grassroots democracy and be especially attentive to local geographical regions within which are constructed mutually enhancing relations among all the plants and animals and humans that live there. And each of these local regions cannot be isolated, but must cooperate in a planet-wide network of mutual respect, protection, and enhancement.

An ecological movement called bioregionalism has formulated a simple but profound notion called "reinhabitation." "Reinhabitation" means transforming our sense of "home." Reinhabitation does not involve movement to some other place. It means a whole new perspective on the place we already occupy. It is like leaping up in the air and coming back down on the same place but finding that everything has been transformed. It is leaping out of our nations, states, provinces, counties, zip code districts, and other human-made districts and landing on our natural planet, on one of its continents, in one of its biomes, in one of its regions, a region fashioned not by human hands but discerned by humans as a gift from the planet. This region of geographical features, flora, fauna, and humans becomes our fresh awareness of home. Perhaps we have known all along that this was our home, but have been confused by neighbors who told us that we were Texans or Canadians or Mexicans or Southerners or New Englanders or some other name that speaks of human occupancy of a natural geography rather than of a natural geography of which we humans are one responsible member. All along we may have felt bonded with a particular set of animals, trees, grasses, flowers, birds, geographical features, weather patterns, seasons, and other humans who notice and revere these special gifts. But until we make the reinhabitation leap, we may not see clearly that this region of natural reality is our home.

We may, of course, move to another place, another region; but if we have made the reinhabitation leap we now see that new place differently. We now look to see where on this planet we are actually residing. We abandon our older views that we are basically homeless, without any particular place, irresponsible nomads who take and take from specific places but give nothing back. Even if we are a modern nomad who travels widely, we now realize that we travel from region to region of a planet that is our home, and we know that we have no other planet, no other nest of regional homes in which to dwell. Even if we journey into outer space we must take our planetary home with us in order to survive. All this is core wisdom for the visionary consensus we need to build.

As we consider actually sharing this vision with the general populations of our era, we need to understand how alternative this vision is to the vision that is consciously or unconsciously held by the vast majority of people. The beauty, glory, and necessity of the alternative vision is eclipsed in the minds of those who still cling to the now-obsolete vision that in its beginnings was called the "Enlightenment." The Enlightenment in its glory days was a needed deliverance from the "endarkenment" of a stodgy, decayed medieval Europe. But in its current worn out form, this once enlightening vision might be characterized as the belief that perpetual economic growth driven by the free enterprise of technologically inventive humans will make kings and queens of all people. Those who rock along in this now popular delusion must be told that making six billion people kings and queens in accord with the middle-class standards of developed industrial society would take the resources of several planets (at least 3, perhaps 20). Lucid members of the well-to-do have already ceased to speak of "raising all boats." Many will

settle for keeping their own boat afloat while knowing full well that the put-through of resources corralled by each millionaire results in pushing a host of others to the brink of survival. This current trend of history is much worse than unsustainable; it is vicious, deadly, demoralizing, and ugly.

It is understandable that human beings have delayed facing up to the choices that must be made, but delay means opting for the existing trajectory. The alternative vision will require the pain of vast changes in every area of human life, but it does hold the promise for a few billion people living in relative peace and safety and health on a planet that is capable of sustaining human life. The most pressing question that an awake and serious social transformation movement now confronts is how we lead our human companions toward making this basic choice and thus turn historical developments in this more positive direction. All of this becomes more clear as we consider other major components of this overall transition.