

## The Great Work: Adapting to the Earth

*If we don't change direction, we'll end up where we're headed.*  
~ John Gibbons

### Reading:

The Millennium Ecosystem Assessment was a massive four-year effort involving 1360 scientists and other experts worldwide to assess conditions and trends regarding the world's ecosystems. At the conclusion of effort in 2005, the governing board issued the following statement:

“Nearly two-thirds of the services provided by nature to humankind are found to be in decline worldwide. In effect, the benefits reaped from our engineering of the planet have been achieved by running down natural capital assets.

“In many cases, it is literally a matter of living on borrowed time. By using up supplies of fresh groundwater faster than they can be recharged, for example, we are depleting assets at the expense of our children.

“Unless we acknowledge the debt, and prevent it from growing, we place in jeopardy the dreams of citizens everywhere to rid the world of hunger, extreme poverty, and avoidable disease—as well as increasing the risk of sudden changes on the planet's life support systems from which even the wealthiest may not be shielded.

– From *The Bridge at the End of the World* by Gustave Speth.

For Vaclav Havel the environmental crisis is a crisis of the spirit. He writes:

“It's fascinating to me how preoccupied people are today with catastrophic prognoses, how books containing evidence of impending crises become bestsellers, but how little account we take of these threats in our everyday activities.... What could change the direction of today's civilization? It is my deep conviction that the only option is a change in the sphere of the spirit, in the sphere of human conscience. It is not enough to invent new machines, new regulations, new institutions. We must develop a new understanding of the *true purpose of our existence on this Earth. (italics mine)* Only by making such a fundamental shift will we be able to create new models of behavior and a new set of values for the planet.

– From *The Bridge at the End of the World* by Gustave Speth.

---

### Presentation:

The End is Near-- The meek are waiting...to inherit the Earth. What should we do? Today's talk is not about 2012 or the Rapture—that's for another day. It's about adapting to the earth.

Thomas Berry, a priest and cultural historian, wrote a book called *The Great Work*. He believed that in this moment in history the earth itself calls out to us to stop being a disrupting, destructive force of nature, and to become a supportive and benign presence. That is the Great Work. To

make this change, this transition, in human consciousness. To figure out how to live in a new way, so that the Earth will survive, and we along with it. He felt it would take a change in the way we perceive nature and ourselves.

Berry thinks we can do it—we have made great transitions in the past, from the brutal dark ages to the more protected, cosmopolitan Middle Ages. And later Copernicus, Bacon, Galileo and Newton laid the intellectual foundation of the modern world and the modern mind. Humans are capable of big changes.

Why is this great work necessary? Gus Speth, just retired dean of Yale's School of Forestry and Environmental Studies puts it this way in his book *Bridge at the End of the World*:

“If we could speed up time it would seem as if the global economy is crashing against the earth in the Great Collision. And like the crash of an asteroid, the damage is enormous. For all the material blessings economic progress has provided... . the costs to the natural world, to the glories of nature, have been huge and must be counted as a tragic loss.”

We are destroying the earth at a rapid rate. And yet, as Vaclav Havel says we're not doing much about it. Why?

Is it so difficult for us to believe that Western civilization could be the cause of such extensive damage to the planet – are we in a state of shock and denial that this can possibly true? With all that science and technology has delivered, how can it be that we are also destroying the earth? But we are.

Brian Swimme, the mathematical cosmologist, considered Thomas Berry his mentor. They wrote a book together: *The Universe Story*. Swimme thinks the fastest way to for us wake up is to think about the mass extinctions. Over the last half-billion years, there have been five moments like this. The last one took out the dinosaurs 65 million years ago.

“Now we're discovering we're in the middle of a mass extinction, the worst thing that's happened to the earth in sixty-five million years. That's number one. Number two, *we* are causing it. Number three, we're not aware of it. Every year at least twenty-five thousand species are going extinct. If humans weren't here, one species would go extinct every five years. We've raised the extinction rate a hundred thousand times.”

“We have taken over such extensive control or disruption of the Earth's life systems that the future of many will be dependent on human decision to an extent never dreamed of. We are deciding what species will live or perish; the chemical structure of the soil, air and water; and we are mapping out areas of wilderness that will be allowed to function in its own natural way.” That's a big responsibility. Are we up to the challenge?

Maybe we think our governments will solve the problem. Mr. Speth doesn't think so. There's too much pressure on politicians to keep things as they are.

How did we arrive at this point? We have a value system in the West that says that the human is the only creature of importance. All other living and non-living things are important to the degree to which they serve us.

Some blame Descartes, who divided mind from the physical world and did away with the longstanding sense of soul in nature. For Descartes, science was concerned with matter and its interactions. Math was beautiful, life was vulgar stuff.

Earth became an impersonal object, rather than a sacred community of subjects. The work of the Enlightenment reinforced this view. Self-interest would create the best of all possible worlds through the invisible hand of the free market, as Steven Colbert would say. Malthus' concern that population growth would outrun the planet's ability to support it was postponed for at least 200 years by technology. However, it is becoming apparent that how humans operate has become massively dysfunctional for the planet.

People feel separated from nature and alienated from one another. No wonder. "Shop till you drop" is far less engaging than a felt participation with the creative activity of the universe. We need to initiate our young into the joy of the world around us. Take them camping.

Religions are losing their power to inspire us; their stories are too parochial to contain the images taken by the astronauts of our beautiful blue earth. Most religions teach the relationships between man and man and that to the Divine. However, that is not how it always was. For the ancients, the role of the universe was primary. We have lost our sense of the sacredness of the universe. The challenge today is uniting the cosmos with the human.

What to do? Email from my classmates at the Bronx HS of Science say that science will save us. I'll bet Ray Kurzweill when he visits next spring will agree. And they may be right. But it will be science and technology applied to the problems that plague us.

Science has given us wonders and beauty and new ways to see. Darwin's evolution showed that all of life is related. Life is an ongoing, emerging, creative and intelligent process. You can go to the Museum of Natural History in New York and see cases of bones testifying to the evolutionary transformations from one creature to another over eons. We can observe evolution, but we still don't know how it works. Genetic research shows there's some mystery at work when genes move among chromosomes, as plants evolve from one generation to the next. We still don't understand what's at work that allows plants, unable to move, to develop defenses against their predators. It's still a mystery.

Before, the universe was thought to be stable, not that it was evolving in a sequence of irreversible transformations. Now we've learned about the self-organizing nature of the universe, its tending to increased complexity—the holographic nature of it – its characteristic everywhere—what's true for the large is true for the small, down to the quantum. As Brian Swimme says: "Here's the whole story in one line. This is the greatest discovery of the scientific enterprise: You take hydrogen gas, and you leave it alone, and it turns into rosebushes, giraffes, and humans." As we learn that the universe is expanding, we are expanding too.

We've learned that mind affects the body. Teilhard de Chardin saw the universe as suffused with psychic or spiritual energy. Chinese practitioners of chi gung have been connecting with this vital energy to promote health and healing for over 2400 years. Evolution is physical, psychic and spiritual and tending toward greater complexity.

We are the dream of the universe. Creation, through us, is now looking back on itself and asking "what are you up to?"

But Swimme says: "At the same time, we don't control it; the universe does. The *universe* is carrying this out. But we get to participate in it consciously. And in a real sense, it's very important that we participate...."

"...the universe has been working on this for a long time, and right now, it's exploding within human consciousness. But we're not in charge of it. So I haven't got the *slightest* idea if we have enough time. That's almost a secondary question to me. It just seems so *deeply* right that we be thinking about this and working on this. But I think all of the spiritual traditions are going to be accelerated as they learn about this new cosmology and this moment that we face as a human species... So, it could go very quickly. Or it might take thousands of years."

So what needs to change?

Government for one. Gustave Speth thinks democracy in America today is in deep trouble. American politics as we know it will never deliver the changes needed. My friend Paul looks at the political spectacle and calls it dumb-ocracy.

Speth suggests we focus on direct local democracy and sustainability. "Build small-scale counter-models in society... Build a new politics to revitalize democracy at the local level—citizens debating the options, learning together, overcoming their differences, and coming to decision..." That's a good way to figure out how to do the Great Work. In New England we call it the Representative Town Meeting, and it's working today. It is far from today's interest-group, representational democracy.

Sometimes I think of the Noah story and how he gathered two of every species on to the ark to save them from the Flood. Lately it seems that we are on that ark, our beautiful blue boat, and we're throwing the creatures off. How profligate! What do we think will sustain us? To paraphrase Woody Allen, we seem to be saying: "I'm not afraid of the end of the world; I just don't want to be there when it happens."

But let's not be discouraged: Here's some good news: Government is waking up: The *Times* reports that the world's 17 largest economies soon to meet in Copenhagen are working on halving global greenhouse gas emissions by 2050.

People are waking up. Al Gore's documentary *An Inconvenient Truth* had a lot to do with this. We've just heard of an anti-garbage strategy known as "[zero waste](#)" that is moving from the fringes to the mainstream, taking hold in school cafeterias, national parks, restaurants, and corporations.

And remember Jane Goodall's visit here almost two years ago? She appeared on Jon Stewart's show this week and told how people saved the California condor. Once there were just 12 birds left; now there are more than 300.

In 1966 people in the town of Brookhaven, Long Island brought suit against the Suffolk County Mosquito Control Commission to stop them from irresponsible spraying of DDT, which was proven scientifically to be killing the local ospreys. (from *Margins* by Mary Parker Buckles, p.88.)

New York State's Adirondack Park, whose forests were clear-cut twice since colonial times, was created in the 1880s and the declaration that it was to be "forever wild" was put into the State's constitution so that it would remain so.

And here's something darker: The Economist wrote recently that the world fertility rate is dropping and by 2050 will be below the replacement rate. We'll reach our peak population in this century.

### *Beat*

Thomas Berry believes we can find guidance for the Great Work in four wisdom traditions: "The first is that of the indigenous people.. who live close with the natural world and the spirit presence that permeates the universe. "

The second is the wisdom of women "to join the knowing of the body to that of the mind, soul to spirit, intuition to reasoning, and feeling to intellect.... The human project belongs to both women and to men, and we must recognize our mutual dependence."

The third is wisdom of the classical spiritual and intellectual traditions;" the teaching of compassion,...living with the rhythms of the Tao...unity with the universe,... and the western emphasis on human intelligence."

The fourth wisdom is of science—its discovery "that the universe has come into being through a series of transformations over an immense period of time, which led to an awareness of the unity of the universe within itself. Human intelligence is an integral part of the universe." Let us use it wisely and not selfishly.

Others point to the inward journey as a way of deepening our understanding and compassion. Mystics and meditators have long known that what is found in the depth of silence is the ground of being and unity with "the One".

A frustrated Albert Einstein once wrote to Sigmund Freud to ask if he could offer any answers to the problems of armament, aggression and war. Freud replied that humans are divided between instincts of aggression and love. Peace would require the development of ties of sentiment among people. "The love of country has succeeded in binding people at the national level. The great new historical challenge is to develop love among all earth inhabitants, and for the earth

itself.” (*From Education and Ecology: Earth Literacy and the Technological Trance* by Mary Evelyn Tucker, Teilhard Studies Number 26, Spring 1993.)

So take your pick; love, compassion, meditation, females and indigenous wisdom, science, social action, government planning. There are many ways to engage in the Great Work. I hope you do. Just think, the baby boomers are retiring—there’ll be a ton of them free to work on this issue. The flower children of the 60s are in their 60s. I think a good motto would be: “Question the status quo.”

Come to the Social Justice Committee’s First Sunday film series, run by Nancy Stiefel. The films are excellent and you’ll meet many like-minded people.

As Brian Swimme says: “The Earth is a one-time endowment; an ever renewing planet, but within limits. Waking up, enlightenment, *can* save our world, *can* save the planet....

“...The first step is just paying attention. We can pay attention to whales or to the hummingbirds and just become fascinated by them... It's noticing in a deep way, or contemplating, and my intuition is that as humans allow themselves to be fascinated by the other creatures, these species will awaken the psychic depths in the human that respond to their beauty. And then we become convinced that in some amazing way, they are essential to us.”

I was fishing for bluefish one summer in Narragansett Bay. Blues drive baitfish to the surface when they frenzy-feed and the water boils with them and the air is filled with terns darting and whirling and diving to get some fish, too. As I cast, instead of a fish, I caught a tern. They were creatures I’d watched from a distance, and I was worried as I gently reeled it in—would it attack me? Would it bite? As I carefully picked it out of the water, it sat calmly in my hands and let me unwind the line from its wings. I was struck by how light it was, and how white and soft. And how trusting. I felt love and admiration for this gallant little bird—for its beauty, and for the brave life it led. And for the grace with which it accepted my help. I untangled it and watched it fly away. The experience took just a moment but the memory lives on.

Brian Swimme again: “Chief Seattle said that if the animals were not here, we would die of loneliness. If we would attend to them, we would see their colossal grandeur and after awhile you're sunk into contemplation of ultimacy. This is what I think is the first step toward compassion.”

I hope you’ve seen some of that colossal grandeur in Frans Lanting’s slides today.  
([www.lanting.com](http://www.lanting.com))

Quoting Swimme again: “People are suffering. Animals are suffering. So how can I interact in a way that would be helpful? That's my focus. All that I think about is somehow related to that. Just to be responsible and to participate in a process that will deepen joy.”

Wendell Berry, the Kentucky farmer-poet wrote: “...there is in the lives of the animals and birds great peacefulness. It is not all fear and flight, pursuit and killing... These are the times when the creature rests, communes with himself or with his kind and takes pleasure in being alive... But

there is not only peacefulness, there is joy...I sat one summer evening and watched a great blue heron make his descent from the top of the hill into the valley. He came down at a measured deliberate pace, stately as always, like a dignitary going down a stair. And then...without at all varying his wing beat he did a backward turn in the air, a loop-the-loop. It could only have been a gesture of pure exuberance, of joy—a speaking of his sense of the evening, the day's fulfillment, his descent homeward. He made just the one slow turn, and then flew on out of sight... The movement was incredibly beautiful, at once exultant and stately, a benediction on the evening and on the river and on me. It seemed to perfectly confirm the presence of a free nonhuman joy in the world—a joy I feel a great need to believe in... It is ...a sign of the presence of something heavenly in earth. And then one evening a year later I saw it again.”  
(From *Education and Ecology: Earth Literacy and the Technological Trance* by Mary Evelyn Tucker, *Teilhard Studies* Number 26, Spring 1993, p. 15.)

May it be so for us, too.

Closing words: “***In the immense story of the universe, that so many dangerous moments have been navigated successfully is one indication that the universe is for us rather than against us. We need only summon these forces to our support in order to succeed.***”