

Timeline

Email Edition

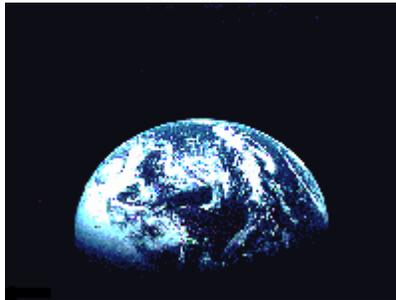
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Polishing the Soul: Generativity, Intimacy, and Creativity

**Excerpts from a talk
by Angeles Arrien**

Angeles Arrien is an anthropologist, educator, author, and corporate consultant. She lectures internationally and conducts workshops bridging cultural anthropology, psychology, and comparative religion. She is the founder and president of the Angeles Arrien Foundation for Cross-Cultural Education and Research, a fellow of the Institute of Noetic Sciences, and author of The Four-Fold Way and Signs of Life.

We have a wonderful invitation in the 21st century that was aptly stated by the poet Mary Oliver: “Tell me, what is it you plan to do with your one wild and precious life?” To know that, we have to take time to come into our natural rhythm, which is medium to slow. There is nothing in Mother Nature that works in the fast lane unless it’s in danger; then it will move as fast as it can for 15 or 20 minutes. Outside of that, everything in nature’s natural rhythm is medium to slow.

What is exciting about the 21st century is that we are moving into a “both/and” world. We’ve been in an “either/or” world for a long, long time, a world in which it is easy to polarize, to move into opposition. It is a time to heal the artificial splits we have created between home and work, between mind and heart, between the professional and the personal, between the spiritual

world and the physical world. We have the opportunity to create a “braided way,” a way where the old, that which has worked for thousands of years, is not sacrificed for the new, the creative, the innovative—and the new is not sacrificed for the old. Those threads can continue forward. Both having their place creates a synergetic third option, an option that will always appear when we begin to create a foundation for a both/and world rather than continue to support the either/or.

At this time in history in order to be a change-master or a healing catalyst in our family lives, in our community lives and our organizational lives, there’s one question we’re going to be required to answer “yes” to every day: “Is my self-worth as strong as my self-critic?” The indigenous peoples of the world ask that same question when they say, “Is the good, true, and beautiful in my nature as strong as the whispers of the demons and the monsters?”

I also need to become a good tracker: What inspires me? What challenges me? What surprises me? What deeply touches and moves me? Because if I can still be inspired, if I can still be challenged, if I can still be delightfully surprised at the unexpected, and if I can be deeply touched and moved, I’m still alive, I am refusing to walk the procession of the living dead.

It’s so important that we all recognize we’re original medicine, nowhere else duplicated in the

world. It is awesome to think that no one else on this planet has our particular fingerprint, our particular voiceprint, nor the particular constellation of our life dream, gifts, and talents. No one else has the same arrangement of the iris of the eye which means that there's a different way of seeing that each person has, and a vision that must be given voice to.

The world at this time in history absolutely needs your voice. Every voice, every vision, every imprint is a creative solution. Every time we close to another's vision, close to another's imprint, close to another's voice, we close to the creative solutions that we were looking for. We make a huge difference, and when we don't come forward with our gifts and talents in the world, the Earth gets sicker.

Our opportunity is to create a blessing way, an opening where blessings once again return to the sweet face of Mother Nature. We must do three things every day in order to create a blessing way. First, we must pray every day. I love the definition of prayer as setting a sacred intention. So how do I set a sacred intention? Nelson Mandela set sacred intention for all of South Africa in the spirit of reconciliation when he asked every township to say these three lines every day: "Let us take care of the children, for they have a long way to go. Let us take care of the elders, for they have come a long way. Let us take care of those in between, for they are doing the work." It's a fabulous prayer.

When Grandma Moses was asked how she set sacred intention, she replied: "My day would be totally ruined if I didn't first pick a bouquet for my kitchen table." When she was asked, "Why did you start painting when you were 70?" she replied, "Well, you see, I couldn't garden any more. I just brought it into the canvas. All I've learned about color came from the garden."

One of the oldest ways we set sacred intention is how we prepare for the day through our dressing and bathing rituals. Or we might think about one-line sayings that create great comfort and solace, or lines of poetry, or lines from literature, or prayers we've loved from childhood.

What if I were to write a personal prayer, a vow that would keep me connected to the mystery, to my gifts and talents, to the capacity to generate, which would leave a legacy that would sustain itself for at least a hundred years? Will my work, my project, the quality of my loving sustain a hundred years? Whose hearts will I live in? Who will take some of the inspiration of my work further? Many traditional societies of the world believe that on the right side behind us stand all our male ancestors and on the left side behind us stand all our female ancestors, and they stand behind us saying, "Oh maybe *this one* will be the one to bring forward the good, true, and beautiful for all the past generations and all the generations to come. Maybe *this one* will be the one that will break the harmful

family patterns or the harmful cultural patterns. Oh maybe *this one* will be the one.” And we are the one. We are the one.

To create that blessing way, the second thing is to give gratitude. The practice of gratitude will always keep our hearts open. It’s absolutely impossible to give gratitude from a closed heart. And third, we must take a life-affirming action every day. Life-affirming actions can be anonymous acts of kindness. In my own Basque heritage, we have a saying that you know you have led a good life if every day you take an action that will support your life dream, your life calling; an action that will support your heart and your expression of love; and an action that will support your integrity, honesty, and authenticity.

The Nobel Prize winner in literature, Octavio Paz, who wrote *The Labyrinth of Silence*, woke up one morning with a thought that put him into three weeks of despair. The thought was: I cannot believe how much of my creativity I have used to push life and people away. And after three weeks, he wrote a poem called “After,” which became his personal, life-affirming vow that he would never, ever again do these things that would push life and people away.

After

After I cut off all the arms that reached out to me

And after I boarded up all the windows and doors

And after I filled my pit with poisonous waters

And after I built my house on a “no,” inaccessible by flattery or fear

And after I forgot my name and the name of my race and my birthplace

And after I hurled pockets of silence and monosyllables of scorn at all my loves

And after I judged myself and sentenced myself to perpetual waiting and perpetual loneliness

I heard on the stones of my dungeon of syllogisms the sweet tender sensitive sounds of the onset of spring and the return of spirit

I love that poem because I love the relentless power of the human spirit that says, “Oh yoo-hoo! Nice try! It didn’t work! Oh yoo-hoo, even after you did all that, I’m still here.”

At this time in history, there’s a great knocking at our door. It’s time for us to become shape-shifters, to shift the shape of our experience. The amazing way we can begin to do that is to collectively, in groupings of three or more—which is the definition of community and collective work—begin to re-dream together. We face a global crisis, a crisis of the imagination, a crisis of where we’ve given over to apathy, malaise, and cynicism rather than returning to becoming great explorers and adventurers and discoverers—once again to be captivated with wonder and awe at the magnificent opportunity of how we can create a blessing way through setting sacred intention, giving gratitude, and committing to life-affirming action.

Many tribal peoples make their life-affirming action by placing in their ceremonial lodges two walking sticks, one that's crooked and one that's straight. It's a reminder that it's easy to walk the crooked road. It takes no courage to align with fear and pride, but it takes a lot of courage to walk the straight road, to choose love over fear, to stand behind my integrity and authenticity over my weak-heartedness or false self. It takes courage to tell the truth without blame or judgment. It takes courage to tell the difference between the words yes and no. Western culture is in the minority in understanding the difference. We believe that yes means I like you and I agree with you, and no means I don't like you and I disagree with you and I feel rejected. But the rest of the world understands that yes is an honoring and an acknowledgment of a viewpoint. It may not mean I like the viewpoint or I agree with it, but I honor it. "Oh that's how you're looking at this issue." "Oh that's how you're seeing it from your perspective." And no is an honoring of a limit and a boundary, an honoring of my not wanting to exceed your limit.

The two most healing experiences that any human being can have on this planet are the ability of truly being seen and of being heard. We can create conditions where we can be open, vulnerable, trusting, honest and respectful of each other so we can create mutual gain and foster win-win situations. We can redream together so that we can come together in our common work

and begin to consider creating a wisdom society.

A great vision to hold is what a wisdom society would look like, and how we could dream that. Author Paulo Coelho says, "The universe conspires to support the dreamer." So it's in our longing to find what it is we're dreaming about. It's also in the daydream that we're constantly creating. I need to track what it is that I'm creating in the daydream as I'm driving, or as I'm cooking, or as I'm fussing in the garage, or I'm standing in the shower.

Wilma Mankiller, a past chief of the Plains Indians, wore on her throat a two-headed abalone wolf, a beautiful ceremonial object passed down to each chief. Someone asked her what it stood for and she said one head stands for the forces of good and the other stands for the forces of evil. Another person asked, "Which one do you think is going to win?" After a long pause, she replied, "The one I feed the most." In Africa, after a positive daydream, they would say, "And that's a healing story." And after a negative daydream, they'd say, "And that's a story that doesn't need to happen." Daydreams set up the matrix for the self-fulfilling prophecy.

When we create blessing ways, we're creating a world where we consider the common good and mutual gain. We're moving beyond the journey of the hero and the heroine into the journey of partnership. It is the journey of collaboration and cooperation, a

preparation for the global community which is the journey of the tribe. To remember how to work in community together, how to work in the spirit of collaboration and cooperation, how to create a braided way, we have to dream again together.

In his book, *The Pilgrimage*, Coelho writes: “We must never stop dreaming. Dreams provide nourishment for the soul, just as a meal does for the body.” Many times in our lives our dreams are shattered and our desires frustrated, but we have to continue dreaming. If we don’t, our soul dies and love cannot be expressed. Today the good fight has shifted from the battlefield to the field within ourselves. When we’re young and our dreams first explode inside us with all their force, we’re courageous, but we haven’t yet learned how to fight. With great effort we learn how to fight, but by then we no longer have the courage to go back into combat. So we turn against ourselves and do battle within. We become our own worst enemy. We say that our dreams are childish or too difficult to realize or the result of our not knowing enough about life. We kill our dreams because we’re afraid to fight the good fight.

The first symptom of killing our dreams is to say that we don’t have enough time. But the busiest people who have fought the good fight for their dreams have always had enough time for what had heart and meaning.

The second symptom of killing our dreams lies in our certainty. Because we don’t want to see life as a grand adventure anymore, we begin to think of ourselves as wise and fair and correct in asking so little of life, and we begin to settle for less. We look beyond the walls of our day-to-day existence, and we can hear the sounds of lances breaking, and we smell the dust and the sweat and we see the great defeats and the fire in the eyes of the warriors, but we never see the delight, the immense delight in the hearts of those who are engaged in the battle of fighting the good fight for their dreams. For them, neither victory nor defeat is important. What’s important is only that they’re fighting the good fight.

The third symptom of passing up our dream is to settle for an illusory tranquil peace. Life becomes a Sunday afternoon. We ask for nothing grand, and we cease to demand anything more than we are willing to give. We begin to settle for less in relationships, less in our work, less in our life. And in that state, we think of ourselves as being mature. We put aside our fantasies of our youth, and we seek only personal and professional achievement that is sanctioned by family and culture. We are surprised when people our age say that they still want to do this or that in life. But deep in our hearts we know what has happened. We know that we have renounced the battle for our dreams, that we have refused to fight the good fight for what is really important to us. And

when we renounce our dreams and we settle for that illusory tranquil peace, we go through a short period of contentment. But the dead dreams begin to rot within us and infect our entire being. We become cruel to those around us, and especially those who are still fighting the good fight. Then we begin to direct this cruelty against ourselves, and that's when illness and psychosis may arise. What we thought to avoid in combat—disappointment and defeat—come upon us because of our weak-heartedness and cowardice.

One day the dead, spoiled, rotting dreams make it difficult to breathe, and we actually settle for a living death. It's death that frees us from our certainty, from our work, and from those terrible illusionary Sunday afternoons, when we know that we've renounced the good fight. I think our invitation in the 21st century is to dream again and to give our dreams the good fight.

There is a wonderful quote that I found on the door of a coffee shop. It was written by a little old lady who comes in every Monday morning for her Vienna Roast coffee. She believes that if everyone followed this it would be the world that we all want to live in. It's called "Anyway."

Anyway

People are unreasonable, illogical, and self-centered. Love them anyway.

If you do good, people will accuse you of ulterior motives. Do good anyway.

If you are successful, you win false friends and true enemies. Succeed anyway.

The good you do today will be forgotten tomorrow. Do good anyway.

Honesty and frankness make you vulnerable. Be honest and frank anyway.

People favor underdogs but follow only top dogs. Fight for some underdogs anyway.

What you spend years building may be destroyed overnight. Build anyway.

People really need help but may attack you if you help them. Help people anyway.

Give the world the best you've got and you may get kicked in the teeth. Give the world the best you've got anyway.

Polishing the soul and entering the doorways of creativity and intimacy and generativity and generosity require that we love them anyway, that we do good anyway, that we succeed anyway, that we are honest and frank anyway, that we fight for some underdogs anyway, that we build anyway, that we help people anyway, and most of all that we give the world the best we've got anyway.



New Weapons: A Study in Waste

by Mac Lawrence

No matter whether one is for or against U.S. involvement in situations like Kosovo, the 1999 military budget is a study in wasteful spending.

Why would we spend \$63 billion to buy 30 new attack submarines—whose sole purpose is to find and destroy Russian submarines—when we already have 65 attack submarines that serve the same purpose? Why would we spend \$35 billion to build 339 F-22 fighter jets when we already have 1,049 F-15 fighters that are the best in the world?

Yet that's what's in store for the American taxpayer. The 1999 military budget is \$271 billion—without the added billions appropriated for Kosovo. For 2000, even before Kosovo, President Clinton proposed to add \$12 billion in new military spending, and \$110 billion over the next six years. Now add the expenses of Kosovo. Then realize that Congress over the last four years has added \$30 billion more to the Pentagon's budget than the Administration asked for, and that "rebuilding" the military is high on the Republicans' list of goals. Obviously, great years lie ahead for military contractors.

Critics of current military spending include the group of retired admirals and generals at the Center for Defense Information (CDI), who point out the folly of continuing to spend billions on more sophisticated weapons to wipe out the Russians, and who question the wisdom of developing more complex, more expensive weapons that we don't

need. "Without a thorough re-examination of our national security interests," they say, "the U.S. will be ill-prepared to face the actual challenges of the 21st century. More weapons to prepare for WW III will not make Americans more secure."

A voice who spoke out recently, and from within the Pentagon itself, was that of Franklin Spinney. Mr. Spinney, who spent eight years in the Air Force before joining the Pentagon, first broke ranks in the 1980s saying that President Reagan's defense spending would not make the military any stronger. Recently, *The New York Times* quotes Spinney as saying our current plan is "a horrible thing....All it's going to do is reward the pathological behavior that's creating the problem."

Explaining what they refer to as "Mr. Spinney's apostasy," the *Times* writes: "The Pentagon plans to spend billions of dollars to build new weapons that have become so costly that it cannot buy enough of them to replace today's arsenal. That means tomorrow's military will have to get by with fewer new weapons, while relying on older weapons to last longer. Meanwhile, the cost of operating the advanced weapons keeps rising. He [Spinney] calls this the 'defense death spiral.'" In effect, we're in an expensive technological arms race against ourselves.

In his new book, *Fortress America: The American Military and the Consequences of Peace*, William Greider describes the development of increasingly sophisticated weapons as a form of cannibalism. What happens, he observes, is that the newer weapons make obsolete the weapons we already have that are highly advanced, and which are then sold

on the cheap to other countries who we hope are—and still will be in the future—our friends. The reality exists, however, that our cast-off weapons could end up in the wrong hands, even used against us. He cites Afghanistan as an example.

In an editorial, “Seven Costly Myths about National Defense,” which appeared recently in the *San Jose Mercury*, Lawrence Korb, director of studies at the Council on Foreign Relations and former assistant secretary of defense under President Reagan, says that President Clinton and his national security advisors have accepted uncritically seven assumptions that could waste \$100 billion over the next five years. One of the myths he debunks is that defense spending is too low. In real terms, Korb notes, defense spending during Clinton’s first term averaged 88 percent of what we spent from the end of Vietnam to the end of the Cold War. Another myth he debunks is the Joint Chiefs of Staff’s claim of a \$150 billion gap between what the military is asked to do and the resources to do it. “Since the end of WW II,” he points out, “the Joint Chiefs have always claimed that there was a gap. In fact, by historical standards, a \$150 billion gap is comparatively small. Even in the halcyon days of the Reagan buildup, the military leaders complained about a gap, which they estimated to be about \$500 billion. Had we listened to them during the Cold War, we would have spent several trillion dollars more to prevail in that conflict.”

In debunking the remaining myths, Korb maintains that we are spending enough on operations and maintenance and our readiness is not declining; the armed services have not lowered the quality

standards for recruits, nor do they have a personnel retention problem; and we can be a great power and protect our world-wide interests without being able to fight two major theater wars simultaneously.

CDI’s new director, Dale Bumpers, a former U.S. senator from Arkansas, has harsh words for another pet Congressional project—Star Wars, the national missile defense system. Writing in *The Los Angeles Times*, Bumpers notes: “Perhaps no single program provides a clearer, more powerful illustration of huge sums of money being wasted [in President Clinton’s] proposal than [this system] to which he proposes to add \$6.6 billion. In Cold War language reminiscent of ‘bomber gaps,’ ‘missile gaps,’ and ‘windows of vulnerability,’ we are being told that it is necessary to prepare defenses against a handful of missile warheads fired at America by a rogue state or terrorist group. In truth, this is the least likely threat of attack on the United States.”

It’s highly unlikely, Bumpers believes, that any of the countries the Pentagon designates as rogue states could develop a reliable intercontinental range ballistic missile. Even if they could, they would have a very difficult time fitting the missile with a proper warhead. And even if they could do that, there are cheaper, easier ways for them to set off a nuclear device in the U.S. Bumpers also points out the technical problems the U.S. faces in designing a workable Star Wars system, noting that we’ve tried to produce one for 15 years with little success.

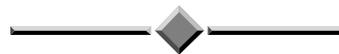
Finally, Bumpers says, our Star Wars system would violate the U.S.-Russian Antiballistic Missile Treaty of 1972

which, he notes, “has been the solid foundation of all arms-control efforts for the past 27 years. If we violate it, in spite of strong Russian objections, we virtually assure not only the end of arms reduction efforts but we jeopardize the very positive progress of the U.S. Russia Cooperative Threat Reduction program. Funded by Congress through the Nunn-Lugar Act, it is our best hope to deal with the ‘loose nuke’ problem in Russia.” Russia, he says, is now weak but it will be a great global power again one day, so why take the chance of rekindling the Cold War with a hostile nation; rather, produce a constructive relationship with a cooperative Russia.

Gary Chapman, director of the 21st Century Project at the University of Texas at Austin, looks at new weaponry from a moral standpoint. Writing in *The Los Angeles Times*, he observes that each of the past centuries has “been defined by singular and historic moral projects that affected the world’s entire population. In the 20th century, the universal moral project has been expanding civil and human rights and ending racism.” Chapman says a worthy candidate for the 21st century would be “severing the relationship between scientific-technological progress and the means of war.

“If the 20th century is remembered for anything, it will certainly be for the introduction of vast advances in the ways we kill one another—for nuclear weapons, mass-produced biological and chemical weapons, bombers, tanks, machine guns, ad infinitum. This is the historical blight that must be corrected, and this will require jettisoning the stubbornly held idea that people and

nations will always seek better and more deadly weapons.”



Thoughts on Attending A Forum on Sustainability

by Mac Lawrence

One trouble with popularizing sustainability,” Walter Cronkite observed, “is the word itself. ‘Sustainability’ doesn’t have any oomph. You need to come up with a more exciting name.” Also, as I discovered at the 1999 CEO Forum on Sustainable Business, where Mr. Cronkite was the luncheon keynoter, “sustainability” can mean different things to different people.

The Forum, held earlier this year in San Jose, California, was for business CEOs to share what they and others were doing about “enhancing profit through sustainability” and how to get more business leaders involved. Amory Lovins of the Rocky Mountain Institute (*Timeline*, January/February 1999) was there, and it was clear from his presentation that in his form of sustainability, nothing would go to waste, and “natural capital” would be sustained or improved. He noted that companies like Ray Anderson’s Interface, which makes floor coverings, are getting closer and closer to that very goal.

Seemingly at the other end of the scale was the concept (which on first hearing sounds slightly oxymoronic) of “sustainable development,” heralded at

the Forum by companies like Saturn, British Petroleum, the mining company Placer Dome, and Monsanto. In Saturn's case, sustainability means that most everything in their cars is recyclable and the various parts and panels and padding are designed to be easy to remove. Also their cars are made up of 35 percent recycled materials, and are painted with water-based paints to reduce air emissions.

Placer Dome admits that mining uses a nonrenewable resource, and that it "leaves a footprint on the Earth." So to them, sustainable development means working with local people to minimize the impact of their mining operations on the environment and on the local culture and quality of life, while "providing sustainable improvements in people's lives" where their mining takes place.

Monsanto's presentation also emphasized their focus on sustainability. Yet, the magazine *Tomorrow* in its January/February 1999 issue on the state of green business, gives Monsanto its "Most Controversial Company" award, and asks, "Is Monsanto sustainable or not?" While recognizing that it was one of the first companies to take sustainability seriously, *Tomorrow* points out that Monsanto continues to draw worldwide ire from environmentalists—particularly in Europe—for its methods and for products such as genetically modified organisms.

Nonetheless, anything business can do to minimize its impact on the environment and society—reducing waste streams, emitting fewer pollutants to the air, using fewer raw materials and less water—is to be commended. Such steps also may mean real profit opportunities, enhancing

a company's competitive position. Several speakers at the Forum went so far as to say that companies who don't take sustainability seriously won't be around in the future. Moreover, they pointed out that efforts toward sustainability improve the public's image of business which, one speaker said, is at an all-time low. "Corporations are realizing that their customers and consumers are beginning to make buying decisions that favor companies practicing sustainable business," notes Jessica Fullmer, founder and executive director of the Forum. She adds: "Many businesses, especially overseas, are reconfiguring their mission statements to integrate sustainability. In Europe, they see us as quite backward. America's lack of understanding about sustainability is already impacting its ability to compete globally."

Whether it's profitable or just the altruistic thing to do, sustainability is all too often a casualty of the immediate bottom line. As one speaker observed, a CEO may enthusiastically announce a sustainability program one day, and scuttle it a month later when things get tight. "What would you do," he asked, "if you had to choose between a 50 percent reduction in a waste stream and a 10 percent reduction in manufacturing costs?"

A lawyer who works with corporations on compliance issues talked about how regulations and regulators impact sustainability efforts. Regulators want data, he said, which is often difficult to get. Projects which are obviously beneficial can take years to work their way through the approval system. Many current practices don't make sense, he added, such as dumping toxic wastes into

lined pits, which eventually leak, then moving the wastes to another pit with a more resistant lining, which also eventually leaks.

In the global economy, business is the new power player. So hats off to those companies who align themselves with sustainability, however they define it, and think farther ahead than the next quarterly report. And hats off to those, like the sponsors of the Forum, who keep the kettle boiling.



Firsthand Experience of America's Last Temperate Rainforest

by Donella Meadows

There's such a difference between knowing something in your head and experiencing it with your whole self.

I've known about the Tongass National Forest for years. To anyone who follows environmental news, it's legendary. America's last temperate rainforest. Eagles and wolves and grizzlies. Massive clear-cuts, crooked deals with pulp companies. The federal forest that loses more taxpayer money than any other.

Knowing all that, seeing pictures of the intact forest and the cruel clear-cuts, made me a crusader for the Tongass. Then last summer I went to southeast Alaska and began to know what I was talking about.

The Tongass pretty much is southeast Alaska, that long chain of coast and

islands that reaches nearly halfway down the Canadian province of British Columbia toward Washington state. There is private land there, especially around the few towns—Sitka, Haines, Skagway, Ketchikan. Most towns, including Juneau, the state capital, can be reached only by boat or plane. There are also native reservations and Tlingit towns—Angoon, Hoonah, Kake. But most of southeast Alaska belongs to you and me and the other 270 million of us, in the form of Glacier Bay National Park, Admiral and Misty Fjords national monuments, and the Tongass National Forest.

From a boat threading the inland channels, the land looks both dramatic and monotonous. Steep slopes plunging down into dark water. Gray sky dripping mist (an average of 100 inches of precipitation a year). Sitka spruce and eastern hemlock sending tall trunks straight up to the clouds. You can understand why the Tlingits developed totem poles as an art form.

The only excitement, from a boat in the middle of a channel, comes from feeding, frolicking humpback whales. If you're in a boat that stops for whales, you can drift quietly, hear them grunt and sing and blow all around you, watch them leap and see their flukes sink gracefully back down below the surface. When they find a surface school, you can look right down their gullets as they open their jaws and scoop along like huge baskets, panicked silvery fish leaping out of their way.

Whales aren't the only creatures that chase those fish. This is a fishing economy more than it ever has been or will be a logging economy. Salmon and crab and halibut supply hundreds of

commercial fishing operations and subsistence for most of the full-time residents, human and otherwise.

The “otherwise” residents become obvious if you get into a small boat that can go near shore. Eagles are everywhere. Gulls, puffins, seals, sea lions, and black bears come down to the beach at low tide to scarf up mussels. These and other creatures feed on the incredible abundance of marine life and deposit the nutrients back up on land, where they nourish the forest.

The champions of the uphill nutrient pump are the salmon. Six kinds of salmon surge up the clear streams of the Tongass at six different times of year to spawn and die and fatten bears and eagles and Tlingits. There used to be salmon runs like that all along the East Coast where I live, but I had never seen one till I went to the Tongass. It brought tears to my eyes, a stream so full of fish I could hardly see the water, an intense, purposeful backward-flowing fish-river, lifting nutrients from the sea high up onto the land to renew the cycle of life.

Southeast Alaska is one of the few places where we haven't yet extinguished that salmon flow by clear-cutting forests, paving land, damming and polluting rivers. But the U.S. Forest Service, which manages this treasure for you and me, has already permitted more than half a million acres of clear-cuts and has earmarked 670,000 more acres for the loggers.

Inside the forest, the apparent sameness disappears. You walk along streams, struggle up steep slopes, happen upon open bogs. There are blueberries, salmonberries, nangoonberries, watermelonberries, bog orchids, coral-

root orchids, devil's club, skunk cabbage. Above all there is moss.

Walking in the Tongass is like walking on deer sponge. Moss hangs in festoons from tree branches and pads the sides of standing trunks. Fallen trees become moss gardens, out of which sprout neat lines of new trees. I dutifully looked up in awe at the soaring old-growth trunks, but then I spent the rest of the time looking down at the lush recycling system on the forest floor. I will leave to your imagination—no, better, go see for yourself—what happens to this intricate system and to the deer and bears and orchids when you clear-cut this forest.

For decades we taxpayers subsidized the cutting of the Tongass at a rate of about \$40 million a year. Two huge pulp companies, one owned by Louisiana-Pacific Corp. and one by Japanese investors, had sweetheart deals giving them Tongass trees for roughly 10 percent of their market value.

Both those pulp mills are now shut down. There is an opportunity to manage the Tongass right, doing selective cuts that allow all species to prosper while still feeding sawmills and small wood-products companies. But Alaska's congressional delegation, Senators Frank Murkowski and Ted Stevens and Representative Don Young, keep shoving through legislation ordering the Forest Service to pull more trees from the Tongass.

No words can give you the actual experience of this forest. The best I can do is to convince you that we own some magnificent real estate there. We need to insist that those we have employed to manage it see it and treat it as much,

much more than raw material for paper towels and toilet paper.

Donella H. Meadows, a systems analyst, author, director of the Sustainability Institute, and adjunct professor of environmental studies at Dartmouth College, writes a syndicated article each week to “present a global view, a connected view, a long-term view, an environmental and compassionate view.” Meadows can be reached at Sustainability Institute, Box 58, Plainfield, NH 03781.



Strange Attractors, Paradigm Shifts, and Y2K

By David La Chapelle

David La Chapelle is a writer, artist, and wilderness retreat guide who lives in Juneau, Alaska. He has written seven books. This article was excerpted from his latest book, Navigating the Tides of Change.

On Christmas night in 1642, a newborn child was struggling for his life. Isaac Newton, who was not expected to survive, went on to live past eighty and usher into the western world a fundamental shift in how the universe was perceived. At a critical point in his life, the plague broke out in London and he fled to the countryside to escape disorder and death. The subsequent two years of enforced idleness provided him with the opportunity to develop proof for his determined view that the orbit of celestial objects obeyed strict laws of motion and were not influenced by some mysterious heavenly force. As a result,

he was able to present a coherent view of how the universe worked, based on causality. His discoveries helped to transform the science of his time and to propel the Western world toward a mechanistic model of universal functioning which offered the tantalizing hope that, with enough effort, an unruly world could be tamed.

Isaac Newton's father had died three months before he was born. His mother left him with his grandparents when he was three. Apparently she did not want the burden of raising him. It is widely agreed that this abandonment led to an extremely difficult life for Isaac Newton. He was secretive, suspicious, and prone to wage vindictive battles against those who he perceived had wronged him. This propensity for paranoid behavior locked him into a battle with Gottfried Wilhelm Leibniz over who was the true originator of calculus. In retrospect, it appears that calculus appeared nearly simultaneously to both of the men independently.

Leibniz was additionally crucial in founding binary mathematics, the tool that has given us modern computer science; and he also made the first working calculating machine in the western world. He was a true godfather of computing. In one of the great ironies of history, the machine which Isaac Newton's arch-rival Leibniz helped bring into the world has opened the door to a paradigm shift which is changing the face of Newtonian determinism.

To understand how the great-grandchildren of Leibniz's machine now threaten to unseat the paradigm of determinism and predictability which Newton set in motion, it is necessary to understand how, through a bit of

inattention, a meteorologist in the 1960s changed the way causality is perceived.

Edward Lorenz had created a computer program to simulate weather change. Lorenz was on the cusp of taking the Newtonian dream of predictability into one of the most notoriously unpredictable realms: the weather. His machine was unwieldy, but it worked; he was able to create his own, simulated weather from a handful of mathematical formulations. One fateful day, he decided to use a shortcut. He wanted to examine a particular sequence in greater detail and instead of starting the computational run over again, he began the procedure in mid-sequence. He typed in the values from an earlier printout and then went down the hall to get a cup of coffee while the vacuum tubes and wires crunched the numbers. When he returned, he discovered that the new printout of the weather was completely different.

Lorenz was mystified. After considerable effort, he discovered the “problem.” He had inadvertently changed one of the numbers in the equation—the original number was .506127 and he had typed .506 because in the old printout, to save space the shorter number was given. The computer had .506127 in its memory, but the new weather run was launched on the shortened value.

A thousandth of a difference in value would not be expected to make a dramatic difference in outcome, but it did. The result was so different that Lorenz was forced out of his familiar world and into what would later become the strange world of Chaos Theory—in a few short years, he helped to launch a new science.

In the world described by Chaos Theory, change and turbulence are constantly dancing around the edges of reality. The hard and fast determinism that Newton struggled so hard to bring to the world is now showing signs of being only one, limited way of viewing the world.

In a compound twist of irony, the same trick of shortening numbers which brought Lorenz to his discovery of Chaos Theory is now poised to create havoc in the world’s computer grid through what is known as the millennium bug. Date fields which were shortened won’t roll over as the year 2000 comes. Without changing each date field in every computer on the planet that is programmed with the bug, information, energy, food, fuel, and money may not move as it customarily has. January 1, 2000, will bring a vastly uncertain outcome, a world perhaps on the edge of chaos.

In view of this, it may be helpful to understand some of what this paradigm shift may be telling us. Here are a few principles from Chaos Theory, with interpretation by the author:

As change accelerates, the possible outcomes reach a point where normal cause and effect break down.
Translation: Old patterns of control and dominance will fail.

Certainty and control become unstable in a developing field of chaos. Translation: If we rely on certainty, we will have a very hard time when chaos looms.

Multiple realities, simultaneous points of view, and different worlds all may exist within the same time and space.
Translation: There will be many

“solutions” and many “failures” generated by the same global transition.

Strange attractors draw events into a basin of relative stability. Crisis is the change in an attractor when its basin boundary is destroyed. At a certain stage of bifurcation, new attractors and event basins appear which are the domains of outcome. Translation: When the predictable world begins to change, there are distinct areas of possible outcomes. It is worth considering that each of us will be guided into these “domains” by the quality of our intention. If you collapse into fear, you will land in a fearful event basin. If you call upon your creative capacity, then you will join a basin of possible futures.

Systems in a state of disequilibrium can become highly sensitive to new information, experiment profusely, and adapt quickly. Translation: Evolution and growth occur most rapidly at the edge of chaos.

A system on the edge of chaos is sensitively dependent on initial conditions. Translation: This means that the actions we take now, even small ones, can have huge effects downstream. This also means that small, seemingly inconsequential actions could affect global changes in ways that are hard to visualize. (The classic image in Chaos Theory is that of a butterfly shifting its wing. This small change creates a minor turbulence which escalates across scale boundaries in unpredictable ways and is part of the transformation of weather that leads to a hurricane.)

In chaos diagrams, no point or patterns of points ever recur in exactly the same

way, and yet there is a new kind of order which can be seen if the scale of observation is large enough. Translation: What may appear as chaos in the upcoming period may in fact be evidence of a larger order, a grander sweep of history at work.

There is an adage in many healing disciplines which states that where the symptom lies, the cure is to be found. I believe that this is compellingly true in regards to Y2K. And so, we should gather our courage and migrate toward the edge of chaos where small acts can change possible futures. Our basin boundary may be about to undergo a large-scale shock. If the computer grid of the planet is not resilient enough, then the attractor which has held our modern world together is about to change, big time. Viewed locally this can be perceived as catastrophic, but if a longer view is taken, the resulting chaos actually has implicit within it the hint of a larger order.

Anyone who has had the occasion to live through a crisis may have discovered a curious fact: In the face of crisis, the best of humanity and the worst in humanity come out. We can contract in fear and try to exert control over forces we do not understand, or we can hold to the philosopher’s stone in the middle of change. In the heart of chaos is new possibility, unheralded opportunity, and the capacity to transcend our small and petty self-interest. There are domain basins of magnificence lurking just beyond our sense of global unease. New networks of cooperation, fertile new ideas and technologies, more compassionate action, a revolution in political power, new business paradigms, and a more livable planet may be just on

the edge of chaos. And a minor little date change may be the butterfly wing which brings it all about.

Navigating the Tides of Change by David La Chapelle is available in spiral bound form and can be ordered through Gateway Productions, P.O.Box 21592, Juneau, AK 99802.



Splits in the Y2K Debate

by **Robert Theobald**

How do you see Y2K? Is it simply a computer bug that needs to be fixed? Or does it portend global disasters of biblical proportions? Or should we use possible disruptions in services as a chance to strengthen relationships within our neighborhoods and communities? Or should we take Y2K as a warning about the high-tech way we live our lives?

One of the proponents of that latter view is Robert Theobald, author of 25 books on such subjects as futurism, economics, and social change. "The group to which I belong," Theobald says, "argues that Y2K must be used as an early warning of profound dangers ahead. It is like the canary in the mine which warns of deadly gases before they could be perceived by miners. Y2K should serve as a wake-up call so that we become aware of the fragility of the technological systems we have created in the second half of the 20th century, their unsustainability, and their lack of resilience. There are large numbers of people who share this view

although they are divided into various movements: peace, environmental, common ground, right livelihood, and many others.

"This group also argues that the dilemmas of Y2K cannot be dealt with using current patterns of organization and consciousness. We quote Einstein who said that problems could not be solved with the same level of consciousness which created them. Y2K calls out for cooperation across boundaries, a recognition that we need to hang together for otherwise we shall hang separately.

"In addition, this group argues that development of creative energy is far more likely using a broad canvas than with a narrow emphasis on the Y2K issue. It believes that people are already suffering from Y2K fatigue and that only a broader vision can provide the scope for the large-scale shifts which must take place in the near future to avoid major breakdowns around the world.

"Y2K is not an isolated phenomenon. It is part of a mindset which sets human beings against each other and against nature. It is a symptom of a world which emphasizes economics over society and the environment. It is part of the short-run thinking of the industrial world.

"I have been intensively involved in the Y2K issue for a year. I have come to realize that it is too narrow a container for the work we have to do. It is no more than a warning sign showing the major changes in thinking that are required as we learn to live in a world where we must cooperate if we are to survive. We must also stop organizing to achieve a machine-like socioeconomic system and

learn to operate together as fallible human beings.

“To do this, we must realize that our real needs are spiritual rather than materialistic. The most wonderful surprise is how many people share this understanding. They may express it in different ways: from a religious perspective, or a desire to revive traditional values, or from the vantage point of an ever-growing number of spiritual traditions. But the recognition is there. It is our challenge to give people an opportunity to express it.

“If we succeed, we shall look back at the end of the 20th century as the end of the world as we knew it and rejoice.”



When Anger Flares

by Amy Beare

The other day, I had a humbling parenting experience (is that a redundant phrase?) and it got me thinking about anger and society and the future of our planet.

I was reading to my six-year-old son at bedtime. My 12-year-old son called to me from the kitchen saying he needed me to sign something for school. I called out that I was busy and would do it later. There ensued one of those yelling-from-room-to-room conversations with relentless whining from the kitchen and mounting irritation from the bedroom. Finally, I stormed out of the room,

ranting at my son about being inconsiderate. I concluded my tantrum with an exasperated, “What do you need me to sign?”

You won’t believe what he handed me. As a response to the high school shootings in Colorado, the students had been given an assignment to come up with creative ways to deal with anger. My son had written a thoughtful piece, stressing the importance of taking responsibility for your anger and how it really got in the way when you insulted the person you were angry with. The teacher thought that having parents read what their children wrote about the subject would increase the impact of the lesson. She had no idea!

As I read my son’s paper, I could feel my anger slipping away and a rush of remorse filling me. With a lump in my throat, I put my arms around my son, apologized to him and told him I admired his wisdom. As I spoke, I silently prayed that the apology, the hug, the affirmation would be the part that his character and self-esteem would remember, rather than the anger and attack.

I’ve thought about that incident ever since. Anger seems inevitable in human interaction. In a world of stress and uncertainty about the future, anger is bound to explode all around us. But while we can accept anger as a part of life, I know for myself that I need to get creative about what I do when anger enters my life. That interaction with my son the other night helped me see clearly that when anger flares up in me it is like a fire, burning indiscriminately, leaving a trail of destruction. The other night I could extinguish the fire and rebuild, but what about when I get mad at another driver on El Camino Real? Or on the

phone with my insurance company? Or at a neighbor for letting his dog go in my yard?

And what about another level of anger—at the politician who betrays the public trust? At the corporations whose executives are paid millions and who dump pollutants into our streams, air, and soil? At the tyrannical foreign leader whose idea of leadership is to kill everyone who doesn't agree with him? At injustice and selfishness, at greed and stupidity, at ugliness? I get mad at all these things. How does my anger affect the planet, the future?

Sensitized as I was by my experience with my son, I see myself reflected in the world around me. People flaring up at each other over parking spaces, angry neighbors in a city council meeting, those kids in Colorado who'd had it with being the school scapegoats. I see myself in all these places.

Perhaps most vividly, I see myself storming into that kitchen again as I see images of bombers storming into Kosovo. I am not hopeful about that war. I do not believe that our righteous indignation there will be any more effective than it was for me the other night.

I also do not believe that the world has to be an angry place. Anger has power, but, because it is harder and requires more creativity to express an alternative to anger, the alternative is even more powerful. When we express an alternative, we create possibility, even a new reality. I have learned and relearned this truth as a mother. I believe it is true at all levels of human interaction.



An Invitation to the International Nordhelle Peace Forum

“Welt ohne Krieg.” World without War.

This spring, as they have for almost 20 years, a dozen dedicated people from Germany and Switzerland met for a weekend to continue the work they began as the German chapter of the Beyond War movement, predecessor to the Foundation for Global Community.

The Welt ohne Krieg coordinators meet in a beautifully restored old mill in Weikersheim, in the center of Germany, to exchange ideas and plan for the future. The weekend is an opportunity for inspiration and encouragement, needed particularly this year, they noted, given what they termed “the incomprehensible ethnic cleansing in Kosovo. In the face of the continuous horror in the tragic Balkan region, it takes a strong conviction to maintain our fundamental belief that violence will always create new violence, and war is really obsolete.”

This year, a focus of the weekend was the upcoming International Peace Forum that Welt ohne Krieg is organizing. The three-day conference, to be held September 17-19, 1999, in Haus Nordhelle (near Cologne), is designed to bring together people who share the four agreements that formed the basis of the Beyond War movement: take responsibility for one's personal decisions and act on them; resolve conflicts without violence; not preoccupy

one's self with an enemy; work together with others for a world beyond war.

The Forum is open to anyone from any country, and families are welcome. The cost is 90 DM, about U.S. \$50, with even lower prices for teens and children. Up to a total of 120 participants can be accommodated. Both English and German will be used, though a good command of German is highly recommended.

For registration information, contact Arno Lohmann at Haus Nordhelle. Phone: 49-2358-80090; e-mail: A.Lohmann@t-online.de; web: www.Haus-Nordhelle.de

For further questions, you may also call Adelgund Heinemann at (408) 730-9136, or by e-mail at AdelgundH@aol.com.



Avoiding Future Wars

In June, in response to the war in Yugoslavia, we mailed *Timeline* subscribers an editorial by President Jimmy Carter, "Have We Forgotten the Path to Peace?" which appeared in *The New York Times*. We also included a cover letter from the *Timeline* staff outlining possible steps to resolve the conflict over Kosovo.

In a recent publication by the Worldwatch Institute, titled *Ending Violent Conflict*, author Michael Renner notes that internal conflicts like Kosovo are likely to increase in the future and have the potential for devastating entire countries, and even re-igniting big-power confrontations. Renner stresses that, to

avoid being overwhelmed by such conflicts, the international community must devote as much energy and enthusiasm to the infrastructure of peace as it has devoted to building military muscle. Human security can only be achieved through a multi-layered approach, Renner concludes, and suggests what steps are needed.

Ending Violent Conflict is available for \$5 from the Worldwatch Institute, 1776 Massachusetts Ave. NW, Washington, D.C. 20036. Also see www.worldwatch.org for their publications which can be downloaded from the web.



Blips on the Timeline

The term "blip" is often used to describe a point of light on a radar screen. Gathered with the assistance of Research Director Jackie Mathes, here are some recent blips which indicate positive changes toward a global community.

Resolving an Internal War

The people of Bougainville, an island province of New Guinea, have lived through the South Pacific's bloodiest conflict since World War II. About 20,000 people, an eighth of Bougainville's population, died in a nine-year war between the Bougainville Revolutionary Army and the New Guinea central government forces. A copper mine sparked the conflict. Bougainvilleans protested for 16 years, but could not stop a hole six kilometers wide and four kilometers deep being bored into their central mountains. War

broke out in 1988 and continued until 1997, when the Papua New Guinea government signed a \$31 million contract with hired mercenaries. This prompted mass protests by disgusted citizens, and a military rebellion. As a result, the prime minister stood down and was replaced by opposition leader Bill Skate, who sent the mercenaries home and addressed Bougainvilleans, saying: “I feel compelled by the grace of God that the time has come to say sorry and ask for your forgiveness.” In January 1998, all sides signed an agreement for “a permanent and irrevocable cease-fire.” When asked how the peace came about and why it seems to be holding, one Bougainvillean summed it up: “We were tired of war and tired of killing. The government couldn’t win because those men were our brothers. We cannot keep killing our brothers and they do not want to kill us.”

Gifts That Keep Giving

Alternative Gifts International (AGI) offers charitable gift-giving that remembers the less fortunate. One example: Over the past three years, AGI donors have contributed 1,886 solar cookers via Solar Cookers International for refugee families in East Africa, almost 15% of the total number of stoves distributed. Donors select recipients from a free catalog available by calling (800) 842-2243 or writing AGI, PO Box 2267, Lucerne Valley, CA 92356-2267. AGI’s web page: www.altgifts.org.

Happy Birthday ESA

“It’s a miracle that the Endangered Species Act (ESA) has survived for 25

years this year. No other environmental statute has had to persevere against such aggressive attacks,” said Heather Weiner, policy analyst for the EarthJustice Legal Defense Fund. The fact that the ESA protects wildlife but does not aim to protect human health or commercial resources directly makes it the most vulnerable of the environmental laws. Fortunately, poll after poll reports that Americans love wildlife and want to maintain or even strengthen the Act. Nonetheless, as Weiner notes, in countless court cases EarthJustice lawyers are having to defend salmon, grizzly bears, Hawaiian plants, sturgeon, and beach mice against overwhelming odds as industry and property rights groups intervene in hopes of setting legal precedents under-mining the ESA and other environmental laws. Concludes Weiner: “What happens to the ESA in the next few years is a harbinger for all environmental laws, making the 25th anniversary even more worthy of celebration.”

A Softer, Gentler Cotton

Cotton has been cultivated for thousands of years but in the past half-century, many cotton fields have become virtual pesticide sinks. Cotton farmers use 25 percent of all insecticides sprayed worldwide. After touring several cotton farms in California, Yvon Chouinard, founder of the sportswear company, Patagonia, said he was “so appalled at what I saw I didn’t want to be in business if I had to use this fiber—it would be like making landmines.” Since then, Patagonia has used only organically grown cotton, giving a boost to the fledgling organic-cotton industry which currently cultivates about 10,000 acres,

less than 1 percent of the domestic cotton crop. Patagonia is the only major company to go organic, but more than 100 smaller companies are now manufacturing and selling organic-cotton products.

Suggestions Invited

Thanks to Sally Richardson-Walker for sending in "Happy Birthday, ESA." We are always on the lookout for interesting subjects for Blips on the Timeline. Readers are invited to send articles or clippings indicating positive change to Jackie Mathes at the Foundation. If we use your suggestion, we'll automatically extend your subscription for a year.



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