

Timeline

Email Edition

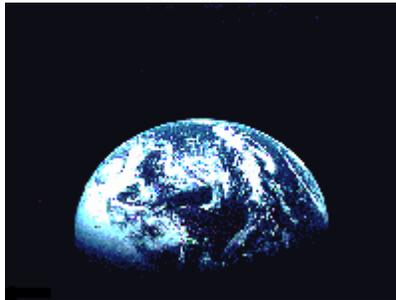
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What does it mean to be human?

Frederick Franck, a writer and artist of international note, has gathered in a new book the responses to this question by more than a hundred thoughtful people—from the famous to the not-so-famous.

Many of the responses are based on a pivotal, perhaps life-changing experience the writer had. Some focus on a subject dear to the writer's heart. Some are short, some fairly lengthy; a few are in the form of poems. The most moving are from writers who searched their souls and offered a personal, deeply felt response.

One such deep response, reprinted here was by Franck himself. Born in Holland, Franck has written several books and numerous articles, and his artwork is part of permanent collections in more than 20 museums in the U.S., Europe, and Japan. He holds doctorates in Medicine, Dentistry, and Fine Arts, and has been knighted by Queen Beatrix of the Netherlands.

Another was by Donella Meadows, whose essays grace each issue of our publication. Her response is also reprinted here.



What does it mean

to be human?

To be human or not be at all is the question at this millennial shift.

by Frederick Franck

It was only in my seventh decade that I realized that the question “What does it mean to be human?” is the vital, the central one to which all our other questions and problems, spiritual, ethical, economic, and political are secondary. “To be human or not be at all” is the question at this millennial shift. It first struck me when my seeing underwent a kind of mutation. “The Meaning of Life is to see,” said the 7th century sage Hui Neng.

I have been drawing—which is an intensification of seeing—all my life. A year ago or so, as I was drawing people in downtown New York—crowds and individuals in Canal Street and thereabouts—it suddenly dawned on me that what my eye perceived and what my pen was registering were not so much faces and bodies, not even “people,” but life cycles, each one caught at this fleeting moment on its way from birth to death. It filled me with awe, for all at once, regardless of age and gender, each one of these disclosed itself as one — begotten, unrepeatable, at once utterly precious and pitiful. It was not an “expansion of consciousness.” It was simply its intensification, a kind of metanoia that brought me in direct touch with the Real. Each one of these life cycles had a kind of inviolate sanctity. It was not just this man, that woman, but that once-occurring life cycle. It made me look back at my own, now speeding to its end, and made me see the

years past as a lifelong, some-times excruciating process that led to this point at which tolerance became a bit more than that—an intense awareness of the mystery, the miracle of being here at all in Canal Street together with those others, of Existence as such. I had the feeling that at last I could be at the very least harmless to other creatures, no longer their competitor, red in claw and fang, not even their “brother,” for brothers and sisters are rarely free of sibling rivalry, but somehow self-identical with all these life cycles in their infinite diversity, synchronized with them.

Schweitzer’s life motto of “Reverence for Life” says in simple, contemporary words what is implied in the Gospels and the summits of Old Testament wisdom in its theistic language, that Great Compassion/Wisdom that in nontheistic terms is proclaimed by the Buddha, Lao Tzu, Chuang Tzu, Hui Neng—the answer to the question of what it means to be really, fully human, an answer that does not separate East from West but in which the twain meet, and quite intimately.

It became clear that what through the years had fascinated me in Shakespeare, touched me so deeply from Rilke’s *Book of Hours*, had moved me to tears in the *Agnus Dei* of Bach’s *B Minor Mass*, in the *Adagio* of Schubert’s *Two-Cello Quintet in C Major*, in Gregorian and Tibetan chant, was the celebration of life’s fullness and its transiency, its timelessness in time. It must be the ingredient that elevates art to the status of High Art as it is manifest in Egyptian, Assyrian, and Medieval sculptures, in the sayings of Zen and Sufi masters, in Fra Angelico and Piero della Francesca, in

Vermeer and in the smallest of Rembrandt’s landscape drawings, in Mucho’s “Persimmons” and Sesshu’s angularities. But it is far from confined to High Art, for it strikes the awakened eye wherever it turns—in the glance exchanged by an old couple, in the nurse’s face bent over me as I woke up from anesthesia, in the handshake of two men on a street corner, a child stroking its kitten—the Human.

It is precisely this ingredient of the Human that is so totally absent in the hearty voices of radio commercials, whether they speak English, French or Japanese, in the newscasts on TV, in the deafening rock of the supermarket, the muzak in your cardiologist’s waiting room. It is not only absent, this ingredient, it is denied, mocked, by those ads for five-thousand-dollar watches, for Armani and Gucci finery, juxtaposed with, on the opposite page, the pictures of massacres in Algiers, Congo, Bosnia—cynical, nihilistic antithesis of the lifelong process to reach that which alone is worth knowing before the end—what it means to be fully human.

The more than one hundred spontaneous responses that constitute this book—they are not to be the end of a chain reaction but its First Phase—justify hope and trust that humanness will yet prevail over the cynicism and nihilism that prepare our species’ demise.

*What Does It Mean To Be Human?
Reverence for Life Reaffirmed by Responses
from Around the World*

gathered by Frederick Franck, Janis Roze, and Richard Connolly, Circumstantial Productions Publishing, Six South Broadway, Nyack, New York, 1998. \$14.95.

What Does It Mean To Be Human?

by Donella Meadows

To be human is to be born with an enormous package of potentials for hatred and suspicion, for love and trust, for greed, generosity, passion, apathy — and a long list of other positive and negative traits. I guess all those traits can be found in many mixtures inside each of us. I sure can find them all in me.

To be human is to be born into a world that pulls out and pushes back the potentials inside us. I push and pull back, trying to find or shape a part of the world (including other people) that supports my inborn potential. We do a dance, the world and I. Sometimes the world supports part of me. Sometimes it crushes part of me. Some-times I learn something that seems to change me entirely—but more likely just brings out a part of me I didn't know was there.

Being human, I am blessed with remarkable organs of perception that bring millions of messages from the world—and I can be so dazzled by my own constant barrage of experience that I take it for the whole world. But I've learned, the hard way, that my experience isn't the world. It's only a tiny sample.

So I need other people, who have sampled other parts of the world. Together we can make a more complete picture. I need to report my piece of reality honestly, listen to others, and to remember that the bit of truth I know is not anywhere near all the truth there is.

There's a part of me—it feels as if it's buried deep—that shines. It literally shines, or so it seems to me, with a warm and steady glow. It's where my deepest wisdom and best instincts come from. That part of me seems, in a way I can't explain (and I was trained as a scientist; I squirm at things I can't explain), to be simultaneously inside me and beyond me. It's connected to the whole universe. It's ancient, loving, noble. I think it's what other people mean when they use words like “conscience” or “soul” or “God.”

Most of the time I keep it well buried under a sludge of busyness, complaints, schemes, worries, fantasies, and fears.

I can only suppose that all of us have that glowing spot of wisdom within us. I think we differ greatly in our ability to contact it. Different inner potentials and different outer experiences must generate different amounts of sludge. And we live in cultures, created collectively by ourselves, that can encourage sludge—or encourage ready access to the inner shining.

Since I experience my culture and myself shaping each other in a dance, I find myself unable to put blame or credit for human actions fully on either the individual or the culture. I know from the nightly news that when dictators put guns in the hands of young men and women and tell them to shoot certain kinds of persons, a lot of those young women and young men—but not all—will shoot. If their culture had encouraged them from birth to be guided by their own internal nobility, most of them—but not all—would not shoot. I

think so anyway. I've never known a culture like that.

The culture I live in powerfully encourages sludge and shooting. It does not lead people to experience the shining place inside themselves. My sorrow about this is so deep that I can't begin to express it. I see the news, the ads, the politics, the pop songs, the malls, the movies, the dope, the blight, the organized injustice, and I weep inside.

What kind of dance can I do with a culture that loads me with sludge and does not recognize my inner shine? All I can think to do is to tune into whatever I can know of the light and love of the universe, without denying the existence of my faults and failures. I guess both are intrinsic parts of my humanity. I can respect myself and others for the moments of nobility we do manage to produce out of the incredible mix of potential and experience, shine and sludge, that we carry around with us. We do, with astonishing frequency, produce moments of nobility. Our culture just doesn't choose to feature them on the nightly news.

I weep for the culture, but when I think about who I am, who we all are, we humans, I have to laugh—laugh as I would laugh at a child or a puppy, humbling and self-centered, a still-unrealized being, but wonderfully endearing, infinitely lovable, full of potential.

Donella H. Meadows, a systems analyst, author, 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."

Timeline readers who feel that these articles deserve the widest possible distribution are encouraged to contact their local newspaper editor and suggest the paper carry them. Meadows can be reached at The Global Citizen, Box 58, Plainfield, NH 03781.



The School of Last Resort

An Interview with Charlie and Diane Ross

What happens to people when they are constantly shamed and humiliated was made clear in the book Violence, Reflections on a National Epidemic reviewed in the July/August 1998 issue of Timeline. That book concentrated on adults caught in the cycle of crime and imprisonment.

Teachers Charlie and Diane Ross see the results of shamed and humiliated teenagers every day in their "school of last resort." Their students at Calero Community School in California's Santa Clara county are the kids nobody wants, "kids who have been kicked out of their regular schools either because they didn't attend, they got into a fight, they're on probation, they brought a weapon on campus, or they were using or selling drugs on campus." Some of the students also have to deal with being parents themselves.

A teacher for 27 years, Charlie has worked with children of migrant workers, including training teachers and aides; worked with kids from abusive

families who are in children's shelters; and worked in juvenile hall helping kids in crisis.

Diane taught music for a number of years, including a year in Germany, then worked for 11 years at juvenile hall and various alternative community schools. Four years ago, she joined husband Charlie at Calero School, teaching 11th and 12th graders, with Charlie teaching those in 9th and 10th grades.

Charlie: I have my students write about occasions when they were humiliated and discounted in the regular school — perhaps when they were asked a question and were made to feel stupid. They all have long stories to tell of being shamed and punished. First of all, their appearance might be objectionable, or their language, or their attitude, then of course they bring down all of this negativity in the school system. It's the way their life is: our kids have been shamed every way you can describe it. They've been ignored, they've been abandoned, they've been punished.

Punishment and shaming have three consequences: The student is angry; respect and trust are damaged; and the student wants to retaliate, either actively or passively.

Diane: You might think it is becoming more and more obvious that shaming and humiliation and lack of respect exacerbate the problem. But it's not. Recently, we did a workshop for teachers. The purpose of the workshop was to bring to light what exactly we teachers are modeling for our students and what strategies we can use to teach our students how to model positive

social skills so that when they become parents they will not continue the punishment/shame cycle.

Though students know what they want for their own kids, they don't think of themselves as being models for their kids to follow. It never occurs to them. They're going to punish their kids: "Boy if he says this, I'll jump on him." That's the violent part. They think that's how you get results— you beat their asses— that's the current language. It's obvious that it hasn't worked. When I ask those who are already parents if it works, they say no. When I ask, do you still do that? they say, yes. Most have no other experience, nor do many of the teachers who are teaching them.

Charlie: We're trying to teach other teachers not to shame their students so that the shaming cycle won't continue when their students have children. The context of our teachers' workshop is that it's never appropriate to punish a kid—in the sense of trying to make them feel bad, or to make them regret something they did, or teach them a lesson. Any time you want to teach the kid a lesson that way, you're off base. And, unfortunately, we're in the deep end of the pool because there's not much understanding of that concept.

At the workshop we clarify the difference between consequences and punishment. Consequences should always be made very clear to the kids ahead of time whether you're a teacher or a parent. That way the consequences are fair and respectful, the kids are never surprised, and there's no argument if the kid comes in after curfew. The consequences are posted right there on the refrigerator

door: “You lost your privileges for next weekend.” Though it sounds so everyday and understandable to us, that kind of neutral enforcement is revolutionary. Good resources are Jane Nelsen and Steven Glenn’s books on positive discipline: they’re the most clear, proactive parent education people I’ve seen. It’s the opposite of: “I’ve had enough of your crap,” or “Don’t you speak to me in that tone of voice” — familiar examples of poor modeling.

If the kids are going to get out of the cycle, they have to latch on to an adult model who has the pro-social skills. It doesn’t have to be a parent; it can be an uncle or a coach. Typically, our kids have criminal models in the family. Most of the violence, 80 percent of it, takes place within the family or with friends. They’re more likely to suffer violence from their own gang members than from the opposing gang.

Diane: The primary thing is that you model the behavior you want them to show. When kids say, “F— this, f— that,” how do you respond? I share with our students that my first response is still to hit because I was spanked. I talk really clearly about where that comes from. I tell them my second response is to say something really hurtful and that I used to be the queen of hurtful. In high school I thought it was really cool to put people down.

So I share that that response still comes up for me and that’s what they see constantly in their own lives. Then I say I’m not going to do that to you. It’s not right. You don’t need it. We’re going to do something else. There’s another way to respond that is respectful, that is

appropriate.” Often, they’ll insult each other and I’ll say, “That’s not appropriate; no put-downs.” And they’ll say, “No, he’s my friend, and I can do that.” And I say, “No, that’s not the way it goes—not in this schoolroom.” That’s the only way they know how to relate—to insult.

The best thing is when I go into Charlie’s class to ask him something and he’ll respond respectfully to me and the kids will say later, “Wow, are you the perfect couple or something? Don’t you ever argue?” And then we get to talk about it and I say, “Yeah, we do argue, and I don’t call him names.”

Charlie: I can’t remember a time when a kid has been disrespectful to me. It just doesn’t happen because I greet every kid every day with a smile, a hello, a how’s it going? They’ve probably never had that before. And nearly all the kids will respond. They walk into the classroom and say, “Hi, Diane,” and she’ll get six hugs before the class starts. Fifteen kids will say “Hi” to me just walking around campus or through other classrooms, “Give me five,” that kind of thing.

The most bitter, most hostile, most anti-social kids are the ones you really reach out to and are the warmest to and they’ll often stay in the school. They say, “Damn, I’ve never been to school eight months in a row.” They’re kicked out of four schools before they get to us and they like it here because they’re treated right—and they’re graded on their courtesy towards others, their work habits, keeping their agreements, and their participation. Academic work is only one third of their grade.

Regular high schools are not meeting the needs of our at-risk students. Individual teachers have 32 kids coming in every 50 minutes. What are they going to do in terms of responding to an individual kid's inner needs, or talking about how upset she is with her boyfriend because he lied to her? That's the only issue in her life right now. In a high school setting, you can't deal with that.

I have 18 kids for three hours a day, after they have one hour of elective, such as computers, PE, an art class, or driver's ed. I nominally have English, world cultures, math, and PE. We always have one "group" hour. I have eight kids living not in their own homes, but in group homes because they've broken the law, been involved in violence, car theft, things like that. Frequently they've been blown out of the water by the group home counselors who are unconscious and punitive with them. Oftentimes they come into class and they're wired because they've been punished excessively by a counselor, and I have to process some of the resentment they carry into class when they walk in. Most group homes have a very punitive mindset. So dealing with that is a real problem.

In group hour, I'll have them write about and describe an incident that happened to them that week: who was involved, what was said, what tone of voice was used. There are several issues that always come up with our kids. One is being falsely accused. So I ask, when were you falsely accused of something, what were you accused of, who did it, how did they talk to you, how did you react? Usually, the kids will blow up and they'll be locked up because of the way they

responded to the officer who is falsely accusing them. The kid gets the cuffs put on him, the officer frequently tries to abuse him as much as he can in the limited time he is exposed to the kid. So that is the basis of the whole discussion for that hour: what was the officer thinking, why did he think you needed to suffer, why did he think inflicting pain on you and humiliating you was going to make you a person who would respect the law, respect police officers, and become a more honest and upstanding citizen? Because the officer is reflecting exactly the type of thinking the students have. If students were cops they would abuse authority in the same way. After discussing the contradiction, I ask, "Is this making sense?" and they often say, "Yeah."

I also do role playing with one student playing the mother and the other the kid who comes in late. When they get to a crisis stage, where the only options are name calling or hitting, I say, "Stop. Cut. What else could we do here?" And then we talk about making consequences neutral and how to avoid this whole thing to begin with.

Diane: I constantly go back to what you can do when kids are younger, because everybody keeps thinking about handling a 12-year old. I say, "How about a 2-year old? 8 months? If you can respond differently when that child is 8 months, one year, a year and a half, there's going to be a different attitude." I know that within five years, our kids are going to have children of their own, if they don't already. That's the biggest reward, seeing our kids as parents.

Charlie: We run into them in the mall or someplace later on and they have their own kids in tow. One student I had for two years was so obnoxious and abrasive the other kids were ready to kill her. She is 20 now and we ran into her recently with a darling little 14-month old child. I picked him up and he was happy to be in my arms, very curious, and obviously in good shape. She said, “You know, I’ve been doing what you told me.” I said, “What?” And she said, “You know, how you treat kids, picking them up when they cry and talking to them and dancing with them and singing with them.”

I tell the kids that going to the grocery store is not to pick up groceries, but is a field trip for your child, and incidentally, you fill up your cart with groceries. You show them the bananas and the pineapples and the doggies and the kitties. She had taken this all in; I wouldn’t have bet a dime that she’d taken anything in. So sometimes it comes back obliquely like that, and you say, it was worth all the trouble.

There is a common perception even amongst those of us in the alternative schools, that somehow our curriculum should be running parallel to the district’s so that our kids will be kept up to speed in terms of their writing skills, math, and science. The reality is that if you increase their reading level from 5th grade to 10th grade, you’ve done a wonderful service for the student. However, you will not solve their primary problem. That’s not the solution to the issues they’re facing. Teachers often don’t get that. They think that somehow the state-adopted curriculum is the solution to all problems because they don’t know anything else, and they think that in a period of

indecision, you can always go back to state guidelines which, when you think of the context our kids are coming from, are often absurd. But who in any junior high would say that we’re going to devote the semester to parenting skills, conflict resolution, communication skills, and violence prevention? What board would approve that? Very few.

But look at the economics of what we’re doing. If you save four kids a year from \$40,000 a year incarceration, then you can justify the cost of your whole program. It seems to me that fiscal conservatives would look at that and say, “Wow, prevention is cost effective, it would work.” We could devote a lot of time to these behavior-disordered kids because we can see them coming in kindergarten—the kindergarten teachers tell me they know who will be in my class in nine or ten years.

Diane: No student in my class has dinner with their family—ever. In their family, at Christmas time, the men are together and they drink and get into fights, and the women all stay in the kitchen and talk about how lousy the men are. That’s what they do for the holidays. The kids usually retreat into their rooms, get high, put on their headphones, and listen to their stereo. That’s a family get together.

So in our school at Thanksgiving, we’ll bring in food and we’ll all sit around the table, and they feel uncomfortable eating this close to another person. I bring in food every time we have a reward. I add up all the minutes of good behavior and when we get to 25 hours, we bring in a pizza. It’s a really positive thing, but they often don’t have this kind of positive experience with their family.

Another highlight is with the kids in our chorus. When we go to sing for a convalescent home, I say, “When you’re done, I want you to go greet the people. They’re glad you’re here—you don’t have any wrinkles.” They’ll go greet them and later say, “They were so happy I came to see them that some were actually crying.” For someone even to smile at these kids is really cool.

Another thing that works is to have them write about whom they respect and why, and when they feel loved. Usually it’s a grandmother, an aunt, or an uncle, maybe a mother. It’s somebody who will accept them as they are, and doesn’t have a barrier because of their looks, their language, their lack of performance in school, or the fact that they’ve been in jail. They all want the same thing, so we bring out and clarify what makes relationships work such as acceptance, positive interaction, honesty.

The idea of respect is so big because they don’t have any self-respect, and they just get violent when somebody disrespects them. The whole idea is that respect, your own inner respect is the issue.



Determining the Future of Life

A Book Review by Sandra Mardigian

Life in the Balance is the fourth book on the subject of evolution by Niles Eldredge, curator in the Department of Invertebrates at the American Museum of Natural History. Short (194 pages), and wonderfully readable, the book propels the reader across 3.6 billion years of creative evolution, turning biological history into a tale of wonder. We find out how life began, how sponges got their holes, elephants their trunks, owls their spots, and how humans got into the predicament in which we find ourselves today.

As we sample the evidence of evolution’s historic creativity, flexibility, and agility, we come to understand why it is diversity that has kept evolution steadily on the path of sustainability for 3.6 billion years. This was the way of the living world until the invention of agriculture only 10,000 years ago. Despite all its benefits, that momentous human innovation proved to be pivotal, initiating a destabilization of self-balancing ecosystems that has stripped the world of its “true assets.”

Today, at ever-increasing rates, we continue to turn terrestrial ecosystems into farmland, as well as into suburban housing developments, shopping malls, highways, and expanding cities. We overharvest fish, forests, and other resources. We introduce alien species which disrupt local systems. “Our impact has been exacerbated by the Industrial Revolution and, above all, by the twin phenomena of runaway population

growth and the unequal distribution of wealth and consumption patterns.

“In other words, we have a problem. So what are we going to do about it?” says Eldredge. His final chapter, “Striking a Balance,” addresses this question. A reviewer in *New Science* magazine wrote, “I beg every board member of every company in the world to read this section at least.” The chapter begins with the story of the Panama Canal, “an engineering marvel,” but, as it turns out, a supreme example of causes and effects, losses and trade-offs in sustainability. Noting that the world is full of such examples and is in the midst of a new surge of extinction that is taking some 27,000 species a year from the planet’s store of diversity, Eldredge lists his “agenda”:

“We must acknowledge the problem; we must stabilize human population; we must rewrite economics texts and fine-tune the notion of sustainability; we must utilize our existing expertise in conservation; we must strike a balance between human economic needs and the continued healthy existence of ecosystems and species; we must develop a political will and agenda.” He includes some ideas, examples and models to carry these agenda items forward.

A primary theme of the book is the sobering new perspective on the role of our singular species in the 3.6 billion-year evolutionary scheme of things that biologists have only recently been able to perceive. Certain historical patterns of speciation, adaptation, and extinction lead to implications about a power that we humans, unaware, are appropriating from nature. To briefly summarize:

For many decades after Darwin, most biologists saw evolution as natural selection and adaptation “tracking” environmental change. The presumption was that when the environment changes, adaptations will gradually emerge to fit the new conditions. During periods when the environment remains more or less constant, natural selection works to hone the adaptations, perfecting them still further.

In fact, however, when faced with changes in their environment, the species themselves do the tracking, by moving to regions for which their existing set of adaptations is still suited. Biologists now realize that the typical outcome of most environmental change is not significant adaptive evolution, but species relocation, or, if change comes too quickly, extinction.

Contrary to past belief, in the absence of disruption, ecosystems and the species whose populations inhabit them are remarkably stable entities. University of Rochester paleontologist Carlton Brett and his colleagues have defined a succession of some thirteen Paleozoic communities in eastern and central North America that each lasted about 5 or 6 million years. Anywhere from a few dozen to several hundred marine invertebrate species are known from each interval, and few if any of those species show any appreciable evolutionary change for millions of years.

However, in each case, an average of only 20 percent of the species survived upheaval to make it through to the next era of stable ecosystems and stable species. Throughout biological history,

sudden ecosystem disruptions (for the most part, rapid climate change) have been the cause of the loss of most species. But these destabilized periods have also provided the opening for the appearance of new ones. Mammals, for example, began to diversify appreciably only after terrestrial dinosaurs finally succumbed to extinction. And two-and-a-half-million years ago, when average global temperature went down by 10 to 15 degrees and only a few of the older species hung on to take up residence in the adjusted ecosystems, one of the new species that arrived on the scene after the shock was our ancestor *Homo habilis*.

Historically, changes have been abrupt and severe, and then ecosystems and surviving species, along with new species that arise, have settled down for another long period of stability. The reality is that many speciation events, taking place in a variety of different lineages all living in the same general area, have occurred nearly simultaneously, as an evolutionary reaction to extreme environmental change. It is the physical environment, meaning for the most part climate, especially marked and rapid changes in global temperatures, that seems to have driven the entire system.

Until now.

In the current wave of mass extinctions, the driving force is biological. A single species, our own, is disrupting ecosystems and driving plant and animal species extinct all around the world. Yet some might ask, "Given what we now know about the role of disturbance in the evolution of new species, why not just let this mass extinction run its course?" The answer is simple: new species can evolve,

and ecosystems can be reassembled, but only after the cause of disruption and extinction is removed or stabilized. For recovery to begin, we humans will have to cease acting as the cause.

It is certain that, eventually, we will. But through determined action, or through our own demise? Evolutionary history shows that our ultimate fate is inextricably linked to the fate of Earth's other species and ecosystems.

Life in the Balance: Humanity and the Biodiversity Crisis by Niles Eldredge. Princeton University Press, New Jersey. 1998. \$24.95.



Blips on the Timeline

The term "blip" is most 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.

Spirituality in the Workplace

As we muddle toward the millennium, American business is being forced to address one of the great mysteries of the human condition—spirituality—says an article in the *Los Angeles Times*. American workers are asking for prayer groups in company conference rooms, studying the Bible, the Torah, or the Koran on lunch hour, and demanding the right to wear turbans and head scarves and to have work schedules that honor the Sabbath or allow for midday prayer

breaks. The marketplace is flooded with popular books such as *True Work: The Sacred Dimension of Earning a Living and Redefining Corporate Soul*. The spiritual trend is seen in management, too. Robert Nordlund, Chief Executive of Association Reserves, Inc., said spirituality is a quest for meaning in a sea of confusion. A former Rockwell engineer, he now owns his own business and has evolved into viewing his company as a ministry. "At first, you're just a businessman, and business is neutral. Then you realize. "I have more people looking at me than my pastor does on a Sunday morning. I'm a missionary, whether I want to be or not." Dorothy Marcic, author of *Managing with the Wisdom of Love: Uncovering Virtue in People and Organizations*, has plumbed world religions and found five virtues common across all religions and present in most ethical companies: trustworthiness, unity, respect, justice, and service. To avoid denominational friction, she suggests that management can encompass the beliefs of all employees by basing company practices on these nondenominational spiritual themes.

Digital Democracy I

The Digital Freedom Network, a human rights organization, publishes the work of political dissidents repressed in their own countries, circumventing government censorship through the international forum of the World Wide Web. Currently the site includes journalists and activists from China, Algeria, Cuba, Cameroon, and Kenya. Digital Freedom Network works in partnership with such organizations as Index on Censorship, Committee to Protect Journalists, and

Reporters Without Borders.
(<http://www.dfn.org>)

Digital Democracy II

A new Web Site called @risk reports, county by county and school by school, all toxic pesticides used within 1.5 miles of California schools in 1995, the latest year for which data is available. With a few clicks of a mouse, @risk shows the amount of toxic pesticides applied near any school in California, the crops the pesticides were used on, and adverse health effects of exposure to the chemicals. Based on a computer analysis of state pesticides use data, it also tells where a school ranks in its home county as well as statewide in terms of nearby use of pesticides. In the future, @risk will be expanded to include information about other toxic air pollutants emitted near California schools.
(<http://www.ewg.org/@risk>)

Water Disclosure

Water utilities will have to report regularly to their customers on the quality of their water under a new EPA rule. The new regulation, in the works since Congress included it in 1996 amendments to the Safe Drinking Water Act, requires water companies for the first time to tell customers—via bills, the Internet, or other means—both the origins of water and details about its quality, including contaminants.

Suggestions Invited

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.



The New Synergy from Science and Religion

By Brian Swimme

*Physicist Brian Swimme prefers to be called a mathematical cosmologist. Author of *The Hidden Heart of the Cosmos*, and co-author with Thomas Berry of *The Universe Story*, he was featured in the BBC production "Soul of the Universe," along with Stephen Hawking, Ilya Prigogine, and Alan Guth. Dr. Swimme is the producer of the video series "Canticle to the Cosmos," and "The Epic of Evolution." He currently teaches in the Philosophy, Cosmology and Consciousness program at the California Institute of Integral Studies in San Francisco. In a recent talk at the Foundation for Global Community's Center for the Evolution of Culture, these were his closing thoughts:*

I would say that the central spiritual task of our time is to establish an intimate relationship with the more than human world. Intimate with the Universe. Intimate with nature. Intimate with the entire Earth community—with individual beings, individual animals, individual formations. This intimacy is a prerequisite for developing a sensitivity that can absorb the glory that emanates from the Universe.

For anyone who wants to enter this task, I think it involves a kind of withdrawal. It is something on the order of a religious conversion. But the conversion, at least at first, isn't into joy, the conversion first of all is out of illusion.

A primary source of illusion, in my own thinking, is the way in which our culture has created exquisite psychic techniques for drawing us into consumerism. Our children most of all. Our corporations—we, ourselves, in our corporate form—are swooping in on the children before they are even in school. The smartest humans are devising psychic techniques for drawing people into consumerism, even when they are young children. Just to walk away from that is a massive move. Our garages are stuffed, our attics are stuffed, our basements are stuffed. Our world is set up so that, while we're sleeping at night, the people back in New York are up late thinking of ways to get us fascinated with stuff they can bring to us. I wonder, what if it's like it is with a star? You see, if you throw some matter at a star, it sucks it in. If it gets too much, it becomes a black hole—it implodes on itself.

I would like to suggest a few examples that we could provide for our children.

When we look at the Universe as a whole it can be overwhelming. There are 100 billion galaxies! But there are only 10 million super clusters—that's getting more manageable, isn't it? So, for instance, we could assign two Super Clusters to each person. There's Mike's, there's Jan's, there's mine, there's yours, and so forth. This way we'd have a sense of relating to them. And we can tell them

that when we look at the super clusters, they're expanding. But they're expanding at a very particular rate. This is the part that is overwhelming. It's not just the expansion. It's that the expansion is delicate. I am talking about the Universe as a whole. I am talking about 50 billion galaxies and using the word delicate. Delicate. Because if the expansion had been slightly slower, the Universe would have just expanded out and then collapsed back into a black hole. And if it had been slightly faster, the Universe would have expanded out into dust. Even if you altered the expansion by a trillionth of a trillionth of one percent.

That, to me, is astounding. It means that the Universe expands at the exact and perfect rate to enable beauty to blossom. You see, if you altered the origin of the Universe even just slightly, none of us would be here! That means, then, that our existence is implicit. We don't only stand on our feet. We stand on the original fireball; we stand on the expansion of the Universe as a whole; it is as much a part of our being as our liver and our blood. If it were otherwise, we would not be here at all.

The vastness of the Universe couldn't have been otherwise. We fit into the Universe just like a hand into a glove. Some physicists say it this way: This Universe, which is 30 billion light years across, is the smallest Universe we could fit into. It's the smallest Universe we could fit into because the Universe had to expand at this rate to enable our existence.

This is a realization that we belong here. This is home. This has been our home for 15 billion years!

And furthermore, the fire from the beginning, that same fire, the same energy, is what is coursing through our veins now. In a sense, our blood flow began 15 billion years ago. I think that is another major discovery.

Another revelation in terms of the Universe: Look at anything; look at a flower—it's made of various organic compounds. Go down into the compounds and look at the various elements, and then go down into the atoms and look at the various particles—protons and neutrons, quarks. Go all the way down and you'll find out that you never arrive at an inert place. You'll find a place where particles themselves are generated. You'll find that the root of the Universe isn't an empty cup. It is not an empty field. The root of the Universe, the root of every molecule in the Universe, is the quantum vacuum, which is a realm of generativity. Each moment, out of the quantum vacuum, particles are emanating forth. The current theory about the birth of the Universe is that the Universe itself is a vast quantum fluctuation out of this ground.

What this tells me is that, just like the Universe, we are here to be generative. Everything in the Universe shares its selfsame nature. Our fundamental nature is more quantum vacuum than it is organic molecules!

One last example that I have special fondness for: the sun. Establish a personal relationship with the sun. The trouble is, the sun looks small. Bright—but small. We know better, but that's how we experience it. The sun is a million times larger than the Earth! It's a

vast entity. Each second, 596 million tons of helium are created out of 600 million tons of hydrogen. Each second, 4 million tons of the sun are being transformed into energy. This second, this second, this second—4 million tons of itself. And everything that has happened in human history has happened because of this. In opening ourselves up to the Universe, we find that at the center of our solar system is a font of energy, and our existence is only possible because of this outpouring.

I think that at the source of the solar system is a cosmic generosity. We exist because of it. And our challenge, then, is also to become generosity, in a new form—the human form.

To my way of thinking, the origin of order comes from the future. The point of view I am trying to suggest here is that the deep future touches the present via the imagination. That's where we are able to sense what the Universe is brewing now. Westerners have a habitual way of thinking about space, life, and time as a timeline, but in fact, the deep future in a certain sense is here—but it's also not here. The imagination is a way in which unborn divinity reaches into the present from deep in the future and participates in the unfolding of reality. And I have just a few images that many of us hold in our imaginations—the way in which the future is reaching to us:

Image• A time when the militaries of the world have to hold big sales! That's an image of the future I am moved by. The militaries holding big sales, and all the energy that's wrapped up in the militaries is poured instead into guaranteeing an education for every child on the planet.

It's the Not Yet! But it is already reaching into the present because we can imagine it.

Image• A time when we take the sermons for consumerism off TV and replace them with ennobling works of art.

Image• A time when Northerners stop fighting to fill the garages with junk and allow the Southerners to provide themselves with basic nourishment. (The two go together.)

Image• A time when humans come to recognize each species as a divine voice, with its own sacred right to its habitat.

Image• A time when the presence of a single starving child is of central concern for every government of every state and for every corporation.

We've become a planetary power. The human, with the birth of conscious self-awareness, has unleashed all sorts of energies from the Universe to further the human agenda. The human agenda tells us: Increase and multiply. Get lots of food. Fill up the garages. Take over the planet. As long as we're cut off from the Universe, we cannot respond to the future. But deepening our relationship enables us to feel the images coming from the deep future of the Universe. These images often come to us especially powerfully when they are amplified by artists who enable us to feel them more deeply. They bring to us the fire that gave birth to the Universe and is attempting to awaken our hearts, to inflame our love. Now. With the aim of

giving birth to a vibrant Earth community.



The Bestseller We Keep Rewriting

by Chet Raymo

“When the pulse of the first day carried it to the rim of night, First Woman said to First Man, ‘The people need to know the laws. To help them we must write the laws for all to see’. And so she began, slowly, first one and then the next, placing her jewels across the dome of night, carefully designing her pattern so all could read it.”

But Coyote grew bored watching First Woman carefully arranging the stars in the sky: “Impatiently he gathered two corners of First Woman’s blanket, and before she could stop him he flung the remaining stars out into the night, spilling them in wild disarray, shattering First Woman’s careful patterns.”

These episodes from the Navajo story of creation are from *How the Stars Fell Into the Sky*, a lyrical children’s book by Jerrie Oughton.

It is a lovely story, full of ancient wisdom. For centuries, Navajo children heard the story at an elder’s knee. The story was taken literally, or at least accepted with a willing suspension of disbelief.

I heard a similar creation story in my youth—of Adam and Eve and the

Garden of Eden, the Tree of Knowledge of Good and Evil, and the Serpent. I accepted the story with a willing suspension of disbelief.

All cultures, everywhere on Earth, have stories, passed down in scriptures, tradition, or tribal myths, that answer the questions: Where did the world come from? What is our place in it? What is the source of order and disorder? What will be the fate of the world? Of ourselves?

No people can live without a community story.

Today, a New Story exists for those who choose to accept it. It is the product of thousands of years of human curiosity, observation, experimentation, and creativity. It is an evolving story, not yet finished. Perhaps it will never be finished.

It is a story that begins with an explosion from a seed of infinite energy. The seed expands and cools. Particles form, then atoms of hydrogen and helium. Stars and galaxies coalesce from swirling gas. Stars burn and explode, forging heavy elements—carbon, nitrogen, oxygen—and hurling them into space. New stars are born, with planets made of heavy elements.

On one planet near a typical star in a typical galaxy life appears in the form of microscopic self-replicating, carbon-based ensembles of atoms. Life evolves, over billions of years, resulting in ever more complex organisms.

Continents move. Seas rise and fall. The atmosphere changes. Millions of species of life appear and become extinct. Others adapt, survive, and spill out progeny.

At last consciousness appears. One of the millions of species on the planet looks into the night sky and wonders what it means. Feels the spark of love, tenderness, responsibility. Makes up stories—of First Woman and Coyote, of Adam, Eve, and the Serpent—eventually making up the New Story.

The New Story has three important advantages over all the stories that have gone before.

It works. It works so well that it has become the irreplaceable basis of technological civilization.

We test the New Story in every way we can devise, in its particulars, and in its totality. For example, we build giant particle-accelerating machines to see what happened in the first hot moments of the Big Bang. We put telescopes into space to look for the radiation of the primeval explosion. With spectroscopes and radiation detectors we analyze the composition of stars and galaxies and compare them to our theories for the origin of the world.

Always and in every way we try to prove the story wrong. When the story fails, we change it.

It is a universal story. Although originally a product of Western culture, it has become the story of all educated peoples throughout the world. There is no such thing as European science, Chinese science, Navajo science; scientists of all cultures, religions, and political persuasions exchange ideas freely and apply the same criteria of verification and falsification.

Like most children, I was taught that my story was the “true story” and that all others were false, or at best (like the Navajo tale of how the stars fell into the sky) sweet fairy tales. Sometimes our so-called true stories gave us permission to hurt those who lived by other stories.

In a world of international air travel, instant exchange of information, and weapons of mass destruction, we can no longer afford to squabble over which of our many traditional stories is true. The New Story, by its universality, helps put the old animosities behind us.

It is a story that emphasizes the connectedness of all people and all things.

Some of the old stories, such as the one I was taught as a child, placed humankind outside of space and time, gifted us with unworldly spirit, and gave us dominion over the millions of other creatures of the Earth.

The New Story places us squarely in a cosmic unfolding of space and time, and teaches our biological affinity to all humanity. We are inextricably related to all of life, to the planet itself, and even to the lives of stars.

We should treasure the ancient stories for the wisdom and values they teach us. We should praise the creation in whatever poetic languages and rituals our traditional cultures have taught us.

But only the New Story has the global authority to help us navigate the future. Of all the stories, it is certainly the truest.

It is the only one whose feet have been held to the fire of exacting experience.

Chet Raymo is a professor of physics at Stonehill College in Massachusetts and the author of several books on science. This article first appeared in the Boston Globe, July 27, 1998.

An Ideal Holiday Gift

Just published by John Wiley & Sons, *A Walk Through Time*'s 224 pages are lavishly filled with illustrations and inspirational writing celebrating the story of life on Earth—the New Story described in the preceding article. What better gift to honor the Holiday Season!

A Walk Through Time is available directly from the Foundation by phone (1-800-707-7932), by fax (650-328-7785), by e-mail (distribution@globalcommunity.org), or by snail mail (222 High Street, Palo Alto, CA 94301). Single copies ordered through the Foundation are \$25.00 (versus the list price of \$29.95), two to five copies are \$23.50 each, and 6 or more are \$22.00 each; taxes and shipping in the U.S. included.* For an order form and to see just how glorious the book is, check our Web Site for sample pages in full color.

*For international destinations, books will be shipped as surface printed matter; please add \$10 to Europe and \$15 to Asia per book.

What Does It Mean To Be Human?

*The ability to show tolerance in the face of bigotry,
compassion in the face of indifference,
moral fortitude in the face of complex decisions
is one way of expressing our humanness.
As we approach the dawn of a new millennium,
we must remember that our ability to reason, reflect, and undertake conscientious decisions will mark the posterity of our race.
Thus the art of being humane will be the artistry of maintaining our future.*

— Oscar Arias, from the book *What Does It Mean To Be Human?*

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Palo Alto, California
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