

The Big Picture; or

The Larger Context for All Human Activities

by

Michael Dowd

All professions, all work, all activity in the human world finds its essential meaning in the context of a people's cosmic story. - Brian Swimme

Stories Within Stories

Each of us is a story within stories. My daughter's life story is part of both my story and my wife's story. The story of our family is likewise part of other stories larger than our own: the story of our town, our state, our nation, Western civilization, humanity, planet Earth, and the story of the Universe itself. Each of us is a story within stories within stories.

There is a dynamic relationship between every story, the larger stories it is part of, and the smaller stories that are a part of it. Larger stories influence and add meaning to the stories that are nestled within them. For example, if my wife and I were to move across the country, my daughter's story would be affected. Similarly, if my nation goes through a severe economic depression, experiences prolonged drought, or undergoes a major spiritual awakening, my community's story, my story, and my daughter's story will each be affected. The destiny of every story is affected by the larger stories of which it is a part.

Importance or significance, of course, is relative. An important event in one story will be an important event in all the stories that are nestled within it, but may be relatively insignificant for the larger stories in which it itself is nestled. For example, if the major employer in my town, a factory where I have worked for the past twenty-five years, closes permanently, this would be a significant event in the story of my community, as well as in my story, and in my daughter's story. But it would not be particularly significant within the story of Western civilization. Something significant in the story of Western civilization, however, like an economic and ecological collapse, or a nuclear war, would also be significant for each of the smaller stories that are a part of the story of Western civilization, such as the story of my community, my story and my daughter's story.

When we ask the question, "Why?", we ask about the meaning or context of something. We can understand personal meaning by using the metaphor that we are each a story within stories. *The meaning of some thing or event is apparent in its larger context.* A tragedy has meaning in terms of the bigger picture, or larger story. An elderly

woman who dies while saving a young child's life can be said to have died a tragic, yet meaningful, death. The question, "Why did she have to die?" may be answered meaningfully by looking at the larger perspective.

When we want to know the meaning of something we are asking, "How does this fit into the bigger picture? How does this make sense in terms of the larger story? The larger the context, generally the deeper the meaning.

Science without religion is lame. Religion without science is blind. - Albert Einstein

Sacred Story: The Largest Context

Every transformation of humanity has rested upon deep stirrings of the intuition, whose rationalized expression amounts to a new vision of the cosmos and the nature of the human. - Lewis Mumford

In every human society, the largest of all contexts is the story of how everything began, how things came to be as they are, and where everything is going. This story, a people's Sacred Story, or cosmology, as the big picture, gives meaning to our existence in every area of life. It helps us understand the mysteries of life and death. It shapes our understanding and experience of the divine. It is the soil out of which all of our beliefs, customs, behavior, traditions and institutions grow. A people's cosmology crystallizes into a set of unquestioned assumptions and beliefs about life in that culture. Like sunglasses with colored lenses, our Sacred Story colors everything we see. It determines the way we perceive things, what we perceive, what we can and can't see as possible, and what we can't see at all. Its rules and boundaries are generally transparent. It is our reality.

Anthropologist Margaret Mead remarked that every culture she ever encountered had an account of how things came to be the way they are. Every human society developed a story or set of stories that revealed "the truth," as revealed by observation and intuition, of the origin and nature of the world, why things are as they are, and our role in the destiny of things. Such an account helped people in each culture decide what was good and bad, what was to be avoided, and what was to be pursued. Written down, it often became scripture.

The Sacred Story of the Bible has had a great effect on the thinking and institutions of the West, and on our understanding of our relationship to the rest of nature. Our law, medicine, religion, politics, economics, and education have each been shaped extensively by biblical cosmology. For

centuries we imagined that God was a Supreme Landlord who resided off the planet, separate from and superior to nature. We thought of ourselves as separate from and superior to nature also, because we were created in the image of God. Nature, in our view, was corrupt, due to the fall of Adam and Eve. Thus, "progress" became equated with exercising increasing control *over* nature for the benefit of humans. Until recently these beliefs were taken for granted and rarely discussed. They were inherited and unconscious assumptions and beliefs about reality.

While these beliefs may be directly or indirectly responsible for much of the ecological devastation taking place on the planet today, they have also made possible enormous scientific and technological breakthroughs. Ironically, some of these scientific breakthroughs are now the foundation of an eco-spiritual awakening that may usher us into the only viable future for humans; an age characterized by a mutually enhancing relationship between humanity and the rest of the community of life.

Recent discoveries in biology, geology, chemistry, physics, and astronomy indicate that the Universe is nothing at all like the "Great Machine" Western science assumed it was for the past three hundred years. A growing number of scientists now suggest that the Universe is more like an evolving, maturing, organism - a living system - which has been developing for 15 billion years. It has become increasingly complex and diversified, beginning with hydrogen, then forming galaxies, stars and planets, and evolving more complex life-forms over time. The Universe, in us, *as us*, can now consciously reflect on itself, its meaning, what it is, and how it developed. "The human person is the sum total of 15 billion years of unbroken evolution now thinking about itself," Teilhard de Chardin noted a half century ago.

The Universe shivers with wonder in the depths of the human. - Brian Swimme

Heaven is my father and Earth is my mother and even such a small creature as I finds an intimate place in their midst. That which extends throughout the Universe, I regard as my body, and that which directs the Universe, I regard as my nature. All people are my brothers and sisters and all things are my companions. - Chang Tsai

The astronomer or hobbyist looking through a telescope is literally the Universe looking at itself. The child entranced by the immensity of the ocean is Earth enraptured by itself. The student learning biology is the planet learning in consciousness, with awareness, how it functioned instinctively and unconsciously for billions of years. The

worshiper singing praises is the Universe celebrating the wonder of the divine Mystery from whence it came, and in which it exists. We humans are a means by which the Universe can perceive its beauty and feel its depths with conscious awareness. We are not separate beings *in* the Universe, who live *on* Earth, we are a mode of being *of* the Universe, an expression *of* Earth. We did not come into this world, we grew out from it - in the same way that an apple grows out from an apple tree.

Every cell of every organ in my body is part of a larger living system that is me. Similarly, each of us, with all life, is part of a larger living planetary system. Earth is our larger self, our larger body. As physicist Brian Swimme is fond of saying, "The planet Earth, once molten rock, now sings opera."

Our planet and its creatures constitute a single self-regulating system that is in fact a great living being, or organism.

- Elisabet Sahtouris

On the return trip home, gazing toward the stars and the planet from which I had come, I suddenly experienced the universe as intelligent, loving, harmonious.

- Edgar D. Mitchell, astronaut

It is a peculiar fact that all the great astronomers of the 15th and 16th centuries were deeply convinced that the whole universe was a huge living being. Even during the height of western culture, the Greeks thought of the Living Planet organism as a fact of life. - Eugene Kolisko

Viewed from the moon, the most astonishing thing about the Earth is that it is alive... Beneath the moist, gleaming membrane of bright blue sky, it has the self-contained look of a live creature full of information, marvelously skilled in handling the sun. - Lewis Thomas

Earth is not a planet with life *on* it; rather it is a living planet. The physical structure of the planet - its core, mantle, and mountain ranges - acts as the skeleton or frame of its existence. The soil that covers its grasslands and forests is like a mammoth digestive system. In it all things are broken down, absorbed, and recycled into new growth. The oceans, waterways, and rain function as a circulatory system that moves life-giving "blood," purifying and revitalizing the body. The bacteria, algae, plants, and trees provide the planet's lungs, constantly regenerating the entire atmosphere. The animal kingdom provides the functions of a nervous system, a finely tuned and diversified series of organisms sensitized to environmental change. Each species is a unique expression of Life, with its own unique consciousness and its own unique gifts to the body. Humanity allows the planet to exercise self-conscious awareness, or

reflexive thought. That is, the human enables Earth to reflect on itself and on the divine Mystery out of which it has come and in which it exists. We are a means by which nature can appreciate its own beauty and feel its own splendor, or destroy itself.

This shift, from seeing ourselves as separate beings placed *on* Earth ("the world was made for us") to seeing ourselves as a self-reflexive expression *of* Earth ("we were made for the world"), is a major shift in our understanding of who and what we are. It is a shift at the deepest possible level: our identity, or sense of self.

The Earth belongs not to us, we belong to the Earth.

- Black Elk

Indeed, this shift [to seeing ourselves a part of a living planet which is our larger self] is essential to our survival because it can serve in lieu of morality. Moralizing is ineffective. Sermons don't hinder us from pursuing our self-interest. Therefore, we need to be a little more enlightened about what our self-interest is. It would not occur to me, for example, to exhort you to refrain from cutting off your leg. That wouldn't occur to me or to you because your leg is part of you. Well, so are the trees in the Amazon Basin; they are our external lungs. We are just beginning to wake up to that. We are gradually discovering that we are our world.

- Joanna Macy

The Great Sacred Story of Life

Everything begins with a story. - Joseph Campbell

The universe is the primary revelation of the divine, the primary scripture, the primary locus of divine-human communion. - Thomas Berry

Our most powerful story, equivalent in its way to a universal myth, is evolution. - Lewis Thomas

It's tough to get a handle on concepts like millions and billions of years. They are too large to conceptualize so they tend to remain abstractions. To help us see our story as a whole, from the "big bang" to the present, imagine our 15 billion year history compressed into one hundred years. At this timescale:

Each decade = 1 billion, 500 million years
Each year = 150 million years
Each month = 12 million, 500 thousand years
Each day = 425,000 years
Each hour = 18,000 years
Each minute = 300 years
Each second = 5 years

If we put the fireball, or "big bang," at one second after midnight on January 1st, Year 1, with

today being midnight on December 31st of the 99th year, then the first atomic elements, hydrogen and helium, formed two days after the beginning of the Universe. The galaxies formed by the hundred billions when the Universe was about 7 or 8 years old. The Milky Way galaxy, of which we are a part, is a spiral galaxy. It is 100,000 light-years side-to-side and 16,000 light-years thick at the central bulge. (A light year is how long it takes light, which travels at 12 million miles per minute, to travel in one year.) The Milky Way spirals and makes one complete rotation every 200 million years. As it turns, stars are coming into and going out of existence. Stars generally have a lifespan of between 100 million years and 10,000 million (10 billion) years or more, depending upon their size and composition.

Stars are formed from the accretion of hydrogen atoms, due to strong gravitational attraction. Under pressure, hydrogen atoms combine, four at a time, to become helium. This process, known as fusion, is what makes a star burn and give off tremendous amounts of light, heat and radiation. The heat and pressure of especially large stars also produce heavier elements than helium, including carbon, oxygen, nitrogen, sulphur, and iron. As these stars burn up the last of their hydrogen, they collapse inward, imploding under the pressure of gravity. Under this extreme heat and pressure most of the other atoms that make up our periodic table of elements are formed (i.e., copper, tin, uranium, etc.). Gold is created at the very center. The star then explodes in what is known as its supernova phase. When a supernova explodes, it generously shares with its local region of the galaxy the ninety or more different kinds of atoms it has created. Within a relatively short period of time (500 million years or so) much of this metal-rich stardust swirls back together, like a whirlpool, gathering with it enormous amounts of free hydrogen. When a density wave sweeping through the galaxy shocks the cloud of hydrogen, it squeezes tightly together, and a second generation star is born. Our Sun is one such star. Our solar system formed from the elemental stardust of a previously exploded supernova when the Universe, according to our 100-year cosmic calendar, was 70.

The third planet out from the Sun, Earth, was at the right distance to allow liquid water to exist, and had the right amount of gravity to allow atoms to form communities of molecules. As Earth cooled, it formed a crust around its molten core, like a film on cooling pudding. The vapor from its boiling interior rose upward, cooled, and formed clouds. When the surface temperature dropped below the boiling point of water, it rained for aeons, and formed a planetary womb, the oceans. The

Universe was 72. The planet achieved the complexity we call "life" - it came alive - in the spring of 73, with bacteria. Bacteria are the most important expression of planetary life. All other forms of life are totally dependent upon them. Bacteria would do just fine without us; we would not last one day without them.

Planet Earth learned to consume the Sun, by way of photosynthesis, by the Universe's 74th birthday. Things went smoothly until the great pollution crisis of 88, when oxygen, a gas deadly to anaerobic bacteria, poisoned the atmosphere and threatened the continued existence of life. This first environmental crisis was solved by way of a process of cooperation and mutual benefit, or symbiosis. The first plants achieved multicellularity in March of 91. As cells gathered together and committed themselves to one another, they found, in community, that their own survival and development was enhanced. The innovation of sexual reproduction two years later, in March of 93, made possible an enormous leap in planetary creativity. With sexuality, however, death also came into existence. For the early bacterium, death was not an inevitability. Some of the earliest bacteria may still be with us today. For life forms that are sexual, however, death is an integral part of their existence. Sexuality and death are intertwined. Death eliminates biological forms and cleans the slate for new genetic forms.

In September of 94, some creatures began consuming other creatures instead of feeding directly off the Sun. This practice made it possible to have an ecosystem, a biological community. The development of the nervous system and brain, in worms, happened in July of 95. Backbones appeared a year later. Living beings came ashore, for the first time, in February, 97. The plants were first, followed soon by the insects. The first amphibians emerged four months later. Reptiles and the first trees both came into existence in December of 97. The dinosaurs appeared in May of 98. They became extinct a year later when planet Earth was hit by a comet off the coast of what is today Mexico. Mammals began to nurse their young in August of 98. The first birds diverged from the dinosaurs four months later, a year ago, during the last week of December in the Universe's 98th year.

During the first week of April, 99, 8 months ago, the planet exploded with color due to the ecstatic celebration of flowering plants. Our ancestors, the primates, began monkeying around only a few months ago. The earliest ape/humans, walking upright, appeared less than two weeks ago, on December 20th. The first species to get classified as fully human, *Homo habilis*, appeared

in Africa on December 26th. Human beings domesticated fire during the early morning hours of December 29th. Our species, *Homo sapiens*, is a very recent expression of the Milky Way galaxy - emerging from the life of the planet only twenty-four hours ago, at the beginning of the 365th day of the Universe's 99th year of existence.

It is important to note here that at no point in time during the past four and a half billion years, the age of our solar system, did anyone come from the outside and put anything *on* the planet. "God" is the inner Life, the Reality, the incomprehensible Love at the heart of the process; the Great Mystery revealed in and through the Universe. When Genesis 2:7 speaks anthropomorphically of God forming us from the dust of the ground and breathing into us the breath of life, this is a poetic or mythological way of describing the evolutionary process I am outlining here.

The story is far from over; it did not end with us. The process of evolution continues. Polar bears originated only three hours ago. We humans are an expression of Life, but we are by no means its crowning achievement. Indeed, from the planet's perspective, as evidenced by our industrial plundering of the air, water, and soil, and our wholesale slaughter of millions of other species, reflexive consciousness may be more of a planetary liability than an asset. Only time will tell. It may be true that humanity has gifts and abilities that other species lack. It is equally true that other species have gifts and abilities that we lack. It is a good spiritual practice to remind ourselves that we are totally dependent upon bacteria for our very lives and sustenance. Also, the fact that dolphins and some whales have a larger neo-cortex brain than our own suggests that they may be more intelligent than we can possibly know. In any event, humility is certainly preferable to ignorant arrogance.

How will those living ten thousand years in the future, a half-hour from now on our timescale, tell the story of our times? Will there even be a human expression of Earth in ten thousand years? The answer depends in large part on how humans deal with each other and the natural world over the next two generations or so. Assuming that we do not suffer the same fate as the dinosaurs (i.e., something colliding with the planet), if we survive it will be because we made large and creative strides in cooperation, community, and love.

The new cosmic story emerging into human awareness overwhelms all previous conceptions of the universe for the simple reason that it draws them all into its comprehensive fullness... Who can learn what this means and remain calm? - Brian Swimme

Deep Ecology

From the point of view of deep ecology, what is wrong with our culture is that it offers us an inaccurate description of the self. It depicts the personal self in competition with and in opposition to nature... But if we destroy our environment, we are destroying what is in fact our larger self.

- Freya Matthews

Deep Ecology is an integrated world view and an associated way of life grounded in Earth's Sacred Story. It branches out of the awareness that the environment is not "out there," separate from us, but that we are part of vast cosmological, geological, and biological cycles which are concentric and interrelated. My own body, for example, is constantly exchanging matter, energy, and information with my "environment." The atoms and molecules of my body now, what I collectively call "me," are not the same ones that made up my body a year ago. Every five days I have a new stomach lining. I get a new liver every two months. My skin is replaced every six weeks. Every year, 98% of my body is replaced. The molecules that are continually becoming "me" come from the air I breathe and the food I eat. Before that they were part of fish and snakes, birds and trees, other humans, and all that we eat. I give out as I get. It makes little sense, then, to overly identify with my "ego" self, for that is only a very small part of "me." My larger body is the body of Life itself. Earth is my larger self. This is the essence of deep ecology.

If the Rhine, the Yellow, the Mississippi rivers are changed to poison, so too are the rivers in the trees, in the birds, and in the humans changed to poison, almost simultaneously. There is only one river on the planet Earth and it has multiple tributaries, many of which flow through the veins of sentient creatures. - Thomas Berry

A living body is not a fixed thing but a flowing event, like a flame or a whirlpool: the shape alone is stable. The substance is a stream of energy going in at one end and out at the other. We are temporarily identifiable wiggles in a stream that enters us in the form of light, heat, air, water, milk... It goes out as gas and excrement - and also as semen, babies, talk, politics, war, poetry and music. - Alan Watts

Through the lenses of deep ecology we can begin to see clearly the nature and serious magnitude of our global ecological crisis. Consider the following parable:

Once upon a time, a group of brain cells debated the relative importance of the rest of the body. Some suggested that the body was dispensable. "After all," said one, "we are the only cells in the body that know that we know things." "Only we can reflect on our dreams," said another, "so we must be the only part of

the body that is spiritual, right?" "Why just think of the awesome accomplishments we are capable of!" And they all thought... thinking that they were separate from and superior to the rest of body.

Occasionally a brain cell would realize that it was one with the entire body; but it was usually martyred trying to tell the others about this good news. You see, the brain cells had convinced themselves that the Great Life and Love lived outside the body and could be known only through their dreams. They believed that they were destined to leave the body and dwell in a place called heaven. They also assumed that the rest of the body was not really alive at all, that it was an inexhaustible supply of "resources" for the benefit of the brain. Needless to say, the health of *all* the organs, including the brain, worsened by the day, and the body was soon on the verge of death.

A cancer cell is a normal cell disconnected from its genetic memory, cut off from the wisdom of millions of years of evolutionary development. It doesn't cooperate in harmony with the rest of the body. It experiences itself as separate from the body, overpopulates, and consumes the organism which supports it. Cancer eventually kills itself by consuming its own environment. - Brian Patrick

The message of deep ecology is timely news for humanity, and for the planet as a whole. It offers reconnection to our genetic memory and billions of years of evolutionary wisdom. Its application can empower us to live in cooperation and harmony with the rest of the body of Life. We can begin to experience a harmonious connection alien to us when we thought of ourselves as separate from and superior to our larger body. We can begin to experience a consciousness of heavenly rapport with all of life.

Timely as it may be, the message of deep ecology must be taught and integrated into our society on a massive scale if our grandchildren and theirs are to be saved from a toxic and literal hell on Earth. It must be put into fervent daily practice in every area of our lives. The planet is calling us to create communities that live and love ecologically. This is essential for the salvation of millions of species, especially our own.

To be a philosopher is not merely to have subtle thoughts, nor even to found a school, but to so love wisdom as to live according to its dictates, a life of simplicity, magnanimity and trust. It is to solve some of the problems of life, not only theoretically, but practically. - Henry David Thoreau

The main task of the immediate future is to assist in activating the inter-communion of all living and non-living beings in the emerging Ecozoic era of Earth development. What is most needed in order to accomplish this task is the great art of intimacy and distance: the capacity of beings to be totally present to each other while further affirming and enhancing the differences and identities of each.

- Thomas Berry

A human being is part of the whole, called by us "universe," a part limited in time and space. He experiences himself, his thoughts and feelings, as something separated from the rest - a kind of delusion of his consciousness. This delusion is a prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. - Albert Einstein

Human Destiny

Our present situation, I think, can be summarized by the following three sentences:

- 1. The glory of the human has become the desolation of the Earth.*
- 2. The desolation of the Earth is becoming the destiny of the human.*
- 3. Therefore, all human activities, professions, programs and institutions must henceforth be judged primarily by the extent to which they inhibit, ignore or foster a mutually enhancing human/Earth relationship. - Thomas Berry*

A thing is right when it tends to preserve the diversity, stability, and beauty of the life community. It is wrong when it tends to do otherwise. - Aldo Leopold

Recalling our 100-year cosmic calendar, in this last day that the Universe has reflected on itself in and through *Homo sapiens*, for nearly 23 and a half of the past 24 hours we were in the tribal-shamanic period of Earth's cultural development; as hunter-gatherers. This is also known as the paleolithic era, or Stone Age. From 11:20pm to 11:40pm, we went through the neolithic village era. Writing developed at the end of this period and, with it, the beginnings of "recorded history." The next nineteen minutes, to 11:59pm, is the period of the classical civilizations, or the age of the classical religious cultures. This also marks the beginning of patriarchy, characterized by the oppression of women by men. For the last sixty seconds we have been in the scientific-technological-industrial period. During this last minute we have so toxified the air, water and soil upon which all life depends that we are now faced with the possibility of a collapse of the planetary life-support systems, or ecocide.

The human is an expression of Earth. We are totally dependent upon the health of the community of Life for our own health. Our own healing and destiny, as individuals or as a species, depends entirely upon our relationship to the land, air, water and life of Earth. What we do to the planet, we do to ourselves.

It is, of course, possible that the destiny of Life may not include a human expression much longer. Whether or not our species survives, however,

Earth will continue to evolve, eventually healing the damage done by us. The Milky Way galaxy will continue to spiral, with countless new solar systems being born, living and dying. And the Universe will continue to expand and grow more complex for billions of years after our solar system is but a distant cosmic memory. We are part of an awesome and divine Universe. We are also only a very small part of it. We must keep this perspective in mind when discussing "human destiny." Humility may be the single most important attitude of the heart we will need if we are to continue into the future. Humility and survival go hand in hand. Pride goes before a fall.

We are now at what may be the most significant turning point in Earth's Sacred Story since the 185 million year Mesozoic era, the age of the dinosaurs, came crashing to a close some 65 million years ago. That was when the dinosaurs all died out. The last 65 million years have been called the Cenozoic era, the age of the mammals and the flowering plants. As a direct result of human activity over the past two *hundred* years, we are now bringing to an end this 65 *million* year age! It is important to see things from this larger perspective.

Today, species are being eliminated at a rate faster than perhaps any other time in history. Biologist Norman Myers, a specialist in the rainforests and vegetation of the world, says that we are bringing about an "extinction spasm" that is likely to produce "the greatest setback to life's abundance and diversity since the first flickerings of life almost four billion years ago." Thanks to our addictive industrial culture, we are altering the geological structure, the chemistry, and the biological systems of the planet on a scale that would normally have taken millions of years. We are accomplishing this feat in a few short decades.

As the Cenozoic era collapses around us, the logical question becomes, "What's next?" Geologist Thomas Berry suggests two possibilities. The first possibility he calls the Technozoic era. In the Technozoic, humanity would continue to understand "progress" in terms of increasing mechanistic control over the forces of nature for its own superficial, short-term benefit. Through continued scientific innovation and technological cunning, we could create delimited artificial environments to "protect" us in isolation from our despoiled and dying world. The Technozoic would be an isolated hell of existence. Humanity would become ever more alienated from the rest of Life. In the long run, of course, it could not even hope to last. Without spirit, matter decays. The Technozoic could never be sustainable.

Another possibility, perhaps the only viable option for humans, is what Berry calls the Ecozoic era. The primary aspect of the Ecozoic would be the deep somatic awareness of the natural world as our larger body, as our larger self. All species would be granted their habitat, their freedom, and their range of life expression. The Ecozoic would further be characterized by our harmonious alignment with, rather than domination over, the biological processes of the planet. This would require abandoning many of our destructive mechanistic technologies. The natural world itself would be taken as the primary referent for all that we do, and the primary model for all our technologies. In the Ecozoic, all of our activities, professions, programs, and institutions will be judged primarily by the extent to which they inhibit, ignore, or foster a mutually enhancing relationship between humanity and the body of Life upon which humanity depends. *This* is the way of human destiny!

When we see things from a larger perspective, it becomes clear that something more is needed to "save the Earth" than recycling our paper and glass, not using styrofoam, and driving our cars less. Specifically, two things are absolutely necessary if the human expression of Earth is to continue into the future.

As a species, we must make a profound shift in consciousness in the direction of deep ecology if we are to survive. We must grow from seeing ourselves as discrete, separate beings that walk around *on* Earth, to feeling and knowing ourselves as an expression *of* Earth. Our thinking and behavior must align with, and flow out of, the reality of our situation: the planet is our larger body, our larger self. We are dependent upon the community of life, air, water and soil in every conceivable way. Unless we make this shift in consciousness, we will continue to be a "cancer," a parasite, consuming its own host environment. We will survive only with the spiritual guidance and awareness of the body of Life as a whole with its billions of years of evolutionary wisdom.

The second thing necessary for the human expression of Earth to survive is for human beings to live in ecologically sustainable communities. We must live our lives in deep communion with each other and with our bioregion: sharing possessions and dwelling space, growing food together in a way that enhances our lives and the soil; laughing, working, playing and celebrating together; and, in short, living in love with each other and with all of Life. We must create ecological communities where we can be most truly ourselves, where we can experience loving physical touch, where we can share our finitude and brokenness and feel

loved unconditionally, and where we are both supported and challenged to be all that we can be, especially for future generations.

None of us asked to be alive at this moment in Earth's history. We did not choose to be born at this juncture in the Story. We were chosen. Each of us has been chosen by the Universe to be alive and to participate in the most significant geological and biological transformation in 65 million years. This is a fact! Can you feel the sense of personal destiny, or a sense of mission or purpose, that such an awareness awakens within you? Thomas Berry calls this awareness "the grace of the present moment."

(If you want to, take a few moments and allow yourself to *feel* your connectedness to the larger body of Life, and your place in the Great Sacred Story of Life.)

The degree that we live the values of the Ecozoic era now will be the degree to which we participate in its inauguration. Love and Truth must be our guiding realities. As we love Life with all our heart, mind, soul and strength, we will quite naturally love our human and non-human neighbor, and our planet, as our self. That is the true state of affairs. Living the values of the Ecozoic requires being lovingly truthful and gently honest with ourselves and with each other. It means being real and open with the Life that is our Source, Body, and Destiny.

We are all stories within stories within stories, as we discussed at the start. The Great Sacred Story of Life is the biggest story. This story, the Universe story, provides the context for, adds meaning to, and affects the destiny of every other story in existence. That is why everything in human affairs must now be seen in light of this "big picture" in order to have any lasting meaning for present and future generations.

For peoples, generally, their story of the universe and the human role within the universe is their primary source of intelligibility and value. Only through this story of how the universe came to be in the beginning and how it came to be as it is does a person come to appreciate the meaning of life or to derive the psychic energy needed to deal effectively with those crisis moments that occur in the life of the individual and in the life of the society. Such a story... communicates the most sacred of mysteries... and not only interprets the past, it also guides and inspires our shaping of the future.

- Thomas Berry

Important "Big Picture" Resources

- Andruss, Van, Christopher Plant, et. al. *Home! A Bioregional Reader*. Philadelphia: New Society Publishers, 1990. An excellent introduction to bioregionalism, which is the North American equivalent to the Green movement in Europe. Presents an exciting vision and strategy for creating sustainable communities and cultures in harmony with the the limits and regenerative powers of Earth.
- Berry, Thomas. *The Dream of the Earth*. San Francisco: Sierra Club Books, 1988. An enlightening and empowering presentation of our modern cosmology. Berry explores the implications of our common Sacred Story with regards to energy, technology, ecology, economics, education, spirituality, patriarchy, bioregionalism, Christianity, and more. He also includes a very helpful annotated bibliography. A good introduction to the most prominent eco-theologian (or "geologian") alive today.
- Bateson, Gregory. *Steps to an Ecology of Mind*. New York: Ballantine Books, 1972. *Mind and Nature: A Necessary Unity*. New York: Bantam Books, 1980. Bateson shows how we must think if we are to be reconciled to our true nature - how to "think as nature thinks," and regain our place in the natural world. Weighty reading, but well worth the effort.
- Capra, Fritjof. *The Turning Point: Science, Society, and the Rising Culture*. New York: Bantam Books, 1983. A fascinating look at how discoveries in the sciences over the last century are ushering in a whole new way of being human. Capra, a physicist, compellingly shows how we have reached a time of dramatic change, a turning point for the planet as a whole.
- Cogito. Alfred B. Starratt, Box 65190, Baltimore, MD 21209. Published twice a month, subtitled "A Journal Promoting the Healthy Human Spirit; Inspired by Love - Guided by Reason," Cogito is consistently excellent.
- Devall, Bill, and George Sessions. *Deep Ecology: Living as if Nature Mattered*. Salt Lake City: Peregrine Smith, 1985. A fundamental exposition of the philosophy of deep ecology.
- Devall, Bill. *Simple in Means, Rich in Ends: Practicing Deep Ecology*. Salt Lake City: Peregrine Smith, 1988. A good guide to embodying the deep ecology perspective in everyday life.
- Dowd, Michael. *Earthspirit: A Handbook for Nurturing an Ecological Christianity*. Mystic, Connecticut: Twenty-Third Publications, 1991. A resource for individual and group study. Thomas Berry says of this book, "A clear, delightful presentation of a Christianity that is alive, guides us, and evokes within us those spiritual energies that we need to assume our religious responsibilities for the fate of the Earth... Truly a handbook worthy of its subject, a guidebook for those who teach, a textbook for all of us who are learning."
- Eisler, Riane. *The Chalice and the Blade: Our History, Our Future*. San Francisco: Harper & Row, 1987. A synthesis of feminist scholarship, archaeological research, and dynamic systems theory, this book draws heavily on what has been learned during this century about the neolithic cultures of Old Europe. Eisler insists that we must replace our present dominator model of human relationships with a partnership model, if we are to survive into the future.
- Ferris, Timothy. "The Creation of the Universe" (90 minute videotape). PBS Home Video, 50 N. La Cienega Blvd., Beverly Hills, CA 90211; (800) 776-8300. Communicates what we know scientifically about the origin and nature of the universe in an exciting and understandable way.
- Fox, Matthew. *Creation Spirituality*. San Francisco: Harper Collins, 1990. *The Coming of the Cosmic Christ*. San Francisco: Harper & Row, 1988. *Original Blessing: A Primer in Creation Spirituality*. Santa Fe, NM: Bear & Company, 1983. *A Spirituality Named Compassion*. San Francisco: Harper & Row, 1981. Fox, a controversial Roman Catholic theologian, explores the riches of the Christian tradition from the perspective of our new scientific cosmology. He breaks a lot of new ground.
- Fox, Warwick. *Toward a Transpersonal Ecology: Developing New Foundations for Environmentalism*. Boston: Shambhala, 1990. An academic history and analysis of the deep ecology movement, with an exhaustive bibliography. Fox suggests that the distinctive feature of deep ecology is the idea of an expansive identification with the natural world: Earth as our larger self.
- In Context: A Quarterly Of Sustainable Culture*. Context Institute, P.O. Box 11470, Bainbridge Island, WA 98110. A first-rate journal about thinking and living in harmony with nature. Highly recommended.
- Jantsch, Erich. *The Self-Organizing Universe: Scientific and Human Implications of the Emerging Paradigm of Evolution*. New York: Pergamon Press, 1980. This significant work examines the inner dynamism of the Universe from its origin through the development of humanity, and within human social systems. By "self-organizing" Jantsch is referring to the fact that the entire Universe, at all levels, can be understood as an organic, developing whole; a living system.
- LaChance, Albert. *Greenspirit: Twelve Steps in Ecological Spirituality*. Rockport, MA: Element Books, 1991. A practical guide to withdrawing from addictive consumerism and living a profoundly down-to-earth lifestyle. This book is a powerful synthesis of the new cosmology and a twelve-step recovery process.

LaChapelle, Dolores. *Sacred Land Sacred Sex - Rapture of the Deep: Concerning Deep Ecology and Celebrating Life*. Durango, CO: Kivaki Press, 1988. LaChapelle looks at how our Industrial Growth Society has brought the world to the brink of ecocide and points in the direction we must move to be saved from this fate. Perhaps the most provocative and comprehensive treatment of the topic anywhere. Highly recommended.

Laszlo, Ervin. *Evolution: The Grand Synthesis*. Boston: Shambhala, New Science Library, 1987. A very readable synthesis of new natural and social scientific perspectives on the nature of change within a self-organizing Universe.

Lovelock, James E. *The Ages of Gaia: A Biography of Our Living Earth*. New York: W.W. Norton & Company, 1988. *Healing Gaia: Practical Medicine for the Planet*. New York: Harmony Books, 1991. Lovelock, in 1972, was the originator of the Gaia hypothesis: the scientific understanding that the planet can best be understood as a living, self-regulating organism. These books include the latest findings of scientists concerning Gaia, and point in the direction of planetary health.

Macy, Joanna. *Despair and Personal Power in the Nuclear Age*. Philadelphia: New Society Publishers, 1983. *World as Lover, World as Self*. Berkeley: Parallax Press, 1991. Macy's work is a wonderful synthesis of experiential deep ecology, despairwork, general systems theory, and engaged Buddhism. Both of these books contain a wealth of wisdom and compassion essential for the healing of our world.

MacGillis, Miriam Therese. "Earth Learning and Spirituality" (5 hr. video), "New Earth Education" (3 hr. video), and "The Fate of the Earth" (90 min. audio). Global Perspectives, P.O. Box 925, Sonoma, CA 95476; (800) 221-8897. Each of these is an excellent popularization of the work of Thomas Berry.

Mander, Jerry. *In the Absence of the Sacred: The Failure of Technology and the Survival of the Indian Nations*. San Francisco: Sierra Club Books, 1991. A hard hitting critique of our modern technological society and the direction it is taking us, contrasted with the ongoing struggle for survival of the native traditions. A disturbing, enlightening, and immensely important book.

Mills, Stephanie, ed. *In Praise of Nature*. Washington, D.C.: Island Press, 1990. A collection of essays, book reviews, and quotes from some of the leading nature writers of this century. A good bibliographic source.

Plant, Christopher and Judith. *Turtle Talk: Voices for a Sustainable Future*. Philadelphia: New Society Publishers, 1990. A collection of interviews with some of the leading bioregionalists of our time.

Quinn, Daniel. *Ishmael*. New York: Bantam/Turner, 1992. A delightful philosophical novel; winner of the \$500,000 Turner Tomorrow Fellowship. Must reading!

Rifkin, Jeremy. *Biosphere Politics: A Cultural Odyssey from the Middle Ages to the New Age*. San Francisco: HarperCollins, 1992. A fascinating and most important look at how our changing notions of "security" have led us to the brink of ecological apocalypse. Rifkin also shows us how we must think and live if we are to survive into the future. A good companion volume to LaChapelle's *Sacred Land Sacred Sex*.

Sahtouris, Elisabet. *Gaia: The Human Journey from Chaos to Cosmos*. New York: Pocket Books, 1989. A superb introduction to the Gaia theory - the scientific understanding that Earth is itself alive, rather than being merely a planet with life on it.

Seed, John, Joanna Macy, Arne Naess, et. al. *Thinking Like a Mountain: Towards a Council of All Beings*. Philadelphia: New Society Publishers, 1988. This collection of essays, group exercises, and poetry is an invaluable aid to personally experiencing the planet as one's larger self.

Shepard, Paul. *The Tender Carnivore and the Sacred Game*. New York: Scribner, 1973. *Thinking Animals*. New York: Viking Press, 1978. *Nature and Madness*. San Francisco: Sierra Club Books, 1982. Shepard's work is important in understanding the historic and paleohistoric causes of our estrangement from nature. His writings are forceful and insightful.

Snyder, Gary. *The Old Ways*. San Francisco: City Light Books, 1977. *Turtle Island*. New York: New Directions, 1974. *The Practice of the Wild*. San Francisco: North Point Press, 1990. In both his essays and his poetry, Gary Snyder provides deep insight and inspiration regarding "living in place."

Spretnak, Charlene. *States of Grace: The Recovery of Meaning in the Postmodern Age*. This book is about reclaiming the core teachings and practices of Buddhism, Native American spirituality, Goddess spirituality, and the Semitic traditions (Judaism, Christianity, and Islam) for the well-being of the Life community as a whole. Focuses on the wisdom of each of these traditions in light of Earth's Sacred Story.

Swimme, Brian. *The Universe is a Green Dragon: A Cosmic Creation Story*. Santa Fe: Bear & Company, 1984. "Canticle to the Cosmos." Tides Foundation, NewStory Project, 134 Colleen St., Livermore, CA 94550. *The Universe is a Green Dragon* is an alluring introduction to the new cosmology. "Canticle to the Cosmos" is an excellent 12-part video lecture series!

Swimme, Brian and Thomas Berry. *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era*. San Francisco: HarperCollins, 1992. Will be seen as one of the most significant works of the twentieth century. Integrating the sciences and the humanities, Swimme and Berry tell the story of the Universe with a feel for its spiritual dimensions, and clearly indicate the role of the human in this Great Sacred Story of Life.

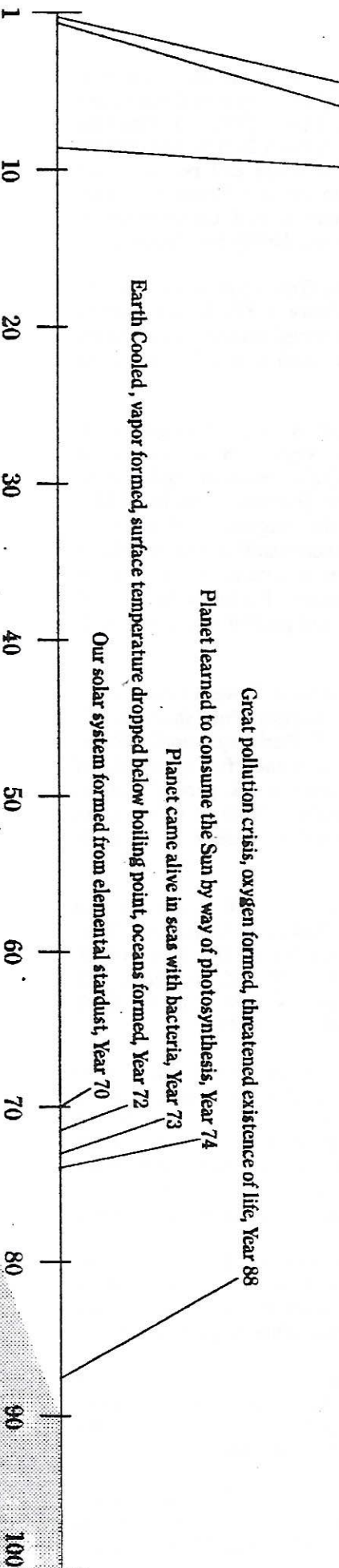
Universal Life Compressed into 100 years

15 Billion years of life in 100 years

BIG BANG - 1 second after midnight January 1st, Year 1

Elements hydrogen and helium form 1 1/2 days into Year 1

Galaxies Formed (Milky Way part of that) Year 7/8



Living beings came ashore first time, February Year 97

Year 90 - 100 Expanded

Ecosystem and biological community start, creatures began consuming other creatures, Year 94

Sexual reproduction starts, Year 93

First plants achieved multicellularity, March Year 91

Reptiles and coniferous trees came into existence, December Year 97

Dinosaurs appeared, May Year 98

Mammals began to nurse their young, August Year 98

First birds diverged from dinosaurs, last day of December Year 98

Planet exploded with color from flowering plants, April Year 99

Dinosaurs disappeared, May Year 99

Human beings, our species, emerged from life of planet twenty-four hours ago at beginning of the 365th day Year 99

Last Day of the Universe reflected in lives of Homo Sapiens

Midnight - 11:20pm.

11:20 - 11:40pm.

11:40 - 11:59pm.

Last sixty seconds:

We lived in tribal-shamanic period as hunter-gatherers (known as the paleolithic era or Stone Age) Moved through the neolithic-village era. Beginnings of "recorded history" started at end of this time. Period of classical civilizations, or the age of the classical religious cultures. Old Testament written between 1150 and 1152pm. The New Testament written around 1153pm. We have been in the scientific-technological-industrial period. During this last minute we have toxified the air, water, and soil upon which all life depends.