

# Democracy, the Earth, and You

## Presentation One: Master Pictures of the Ecological Era

(Approximately 40 minutes)

*This opening presentation needs to begin with some informal words of welcome. Then hand out the outline of the day and walk through it briefly and read aloud the contextual paragraph.*

*If the group is small (25 or less), the presenter might lead a fast go-round—sharing names and a single phrase. If the group is larger than 25, then two or more workshop groups should be organized after the presentation and the go-round activities done in those smaller groups.*

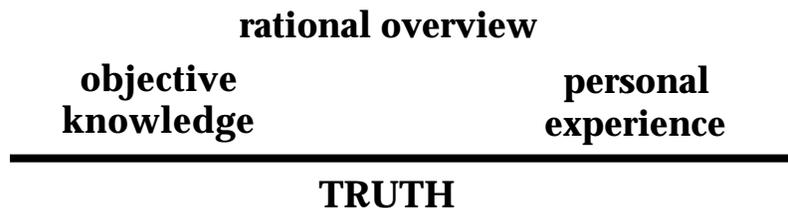
*The following write-up contains recommended content for the first presentation. Obviously, each presenter must make this presentation his or her own. The write-up speaks from the first person “I” in order to indicate the sort of ownership needed. This write-up may be more thorough than some presentations need to be. The presentation can be simplified or expanded to fit each group. Also, note that the titles are not part of the script.*

*The basic intent of this presentation is to signal what it means to think for ourselves in broad overviews about the ecological era.*

### I. Thinking for Ourselves about Reality

This course is about the major challenges of the 21st Century. It is also about thinking for ourselves about these challenges. What does thinking for ourselves mean? I suggest there are three ways that we approach the truth about our lives. Objective or scientific knowledge is one. Inward personal experience is another. And then we also create rational overviews of our objective knowledge and our personal experience.

Here is a diagram illustrating these insights. (Draw this chart on the board, display it on a large cardboard, or project it on a screen.)



Notice that objective knowledge and personal experience are our direct approaches to TRUTH. Our rational overviews are constructed out of our objective knowledge and personal experience. Too often we simply take our overviews from our culture rather than developing them for ourselves.

#### Objective Knowledge

By “**objective knowledge**” I mean to indicate the scientific approach to truth. Here is a simple illustration of the scientific method. Let us say that you have the hypothesis that you can fly by jumping off a building and flapping your arms. So you test that hypothesis. If you crash into the ground, that hypothesis is not true. If you soar through the air, it is true. That is how we arrive at objective knowledge. All scientific research is a sophisticated version of this way of approaching truth: you guess, you create a test for your guess, and then you test your guess. The results of the test give you objective feedback that enables you to guess better the next time.

#### Personal Experience

By “**personal experience**” I mean what you know within your own interior world through the experience of living your own life. For example, the statement “I love my cat” cannot be explored by

the scientific method. You have to look inside your own life and see what you mean by “my cat” and by “love” and then discern whether you really do love this particular cat. Perhaps you only tolerate this cat. Something is true, but this truth is not objective knowledge.

#### Construction of Rational Overviews

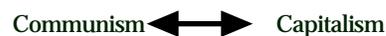
By “**rational overviews**” I mean the thinking we do in order to pull together into useful overviews what we know scientifically and what we know personally. If I use the illustrations above, a useful overview would be: if I love my cat, I should not throw her out of a ten-story window.

We have rational overviews for everything in our lives. We can all become skilled in searching for the truth through learning **objective knowledge** and reporting **personal experience** rather than leaning on the **rational overviews given to us by others**. We can learn to create **our own rational overviews** based on our own experience and our own objective knowledge. Sometimes our rational overviews have been passed along to us from others: we have not thought them through for ourselves.

So what does thinking through for ourselves mean? It means checking out our overviews against our own personal experience and our own knowledge of the facts. Thinking for ourselves includes listening to the overviews of other people, but it also includes building our own overviews on the basis of our own objective knowledge and our own personal experience. In this course we will be working on wider overviews for our whole planet

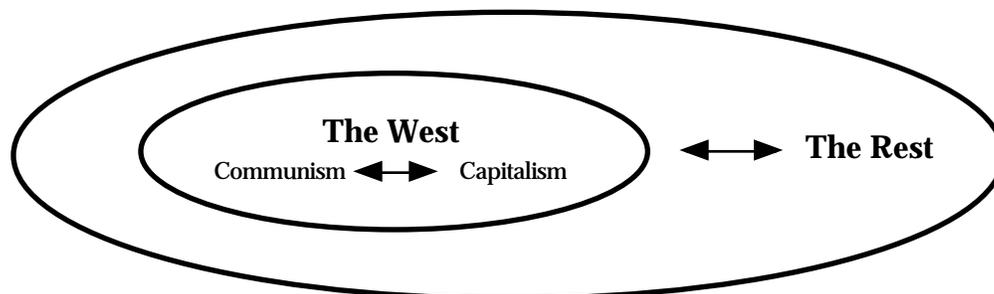
#### Our Need for Wider Vision

When I was growing up, the overview of the world that I absorbed from my culture was this: a master conflict is going on—a cold war between these two options: communism and capitalism. Everything else was related to this grand conflict. *(Put this diagram on the board.)*



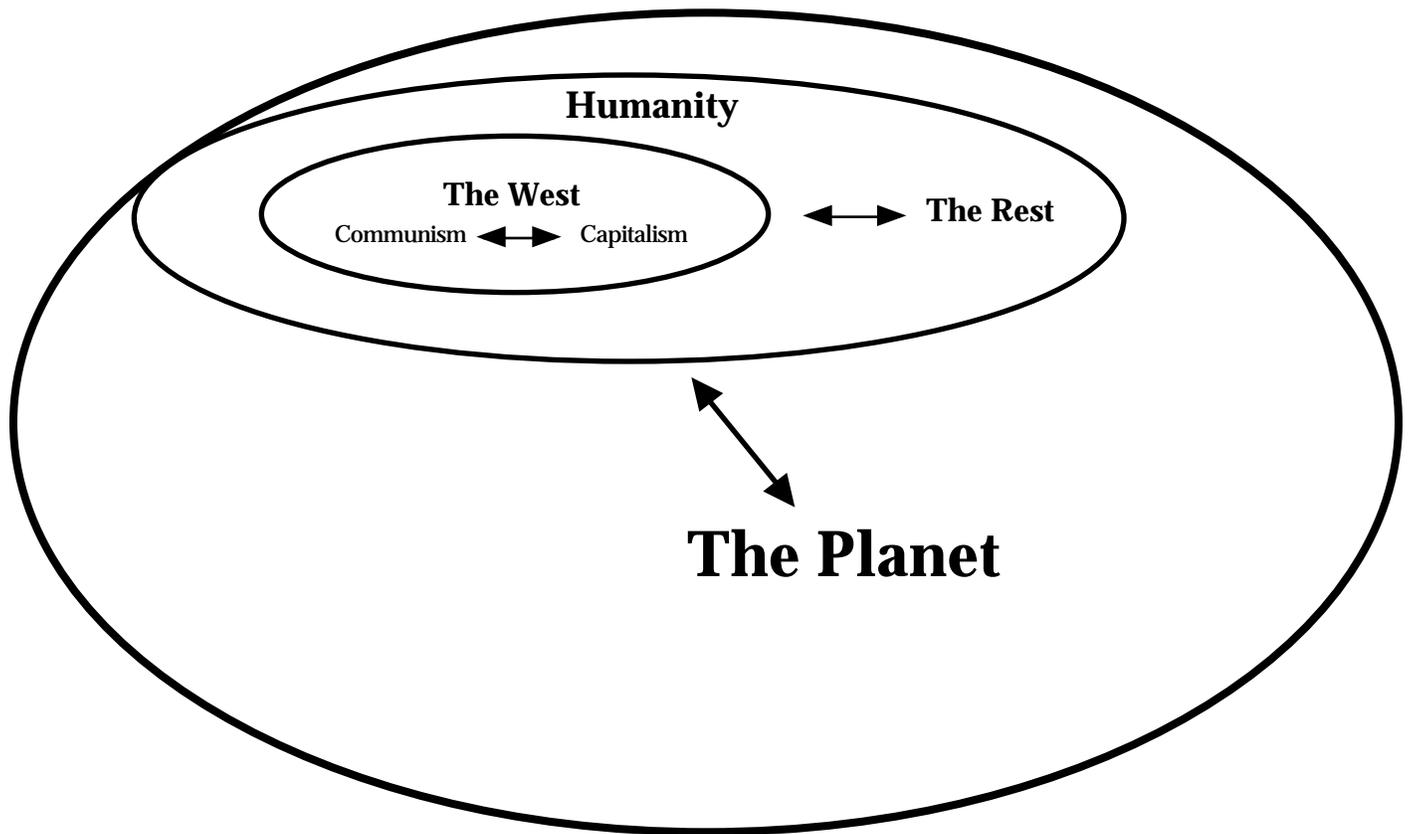
Even before the demise of the USSR, I began to doubt the validity of that picture of the world. First of all, the entire Southern part of the planet was being left out of serious consideration. These places were seen as mere resources for either communist industrialism or capitalist industrialism. Being merely resources for one or the other of two Western economic systems did not please many Africans or Latin Americans, as well as many Asians and others. Many of these non-Western parts of the world had their own ideas about developing and their own cultural heritages to manifest in that development. Being pawns or victims of the will of the already developed world did not suit them. In agreeing with them, I widened my picture of what was going on in my world.

*(Add to the above picture the following.)*



I now saw that the major drama of my era was a tension between the **West** and the **Rest** of humanity. And this was not to be the last widening of my perspective. When I began to get clear about the ecological crisis, I began to see my world as a tension between humanity and the natural life of the entire planet.

*(Add to the above picture the following.)*



This is a very wide picture compared to one that focuses solely on humanity and considers the planet just something for human use. You and I resent being used by others. We consider it an insult. We might be willing to give ourselves to others, even sacrifice ourselves for others, but we don't want to be used by others. I began to think about the planet in a similar way. The planet is an honorable reality, greater and grander than something to be merely used by human beings. Speaking metaphorically, we might say that the trees and the squirrels resent being used. Not all cultures have used nature in this disrespectful sense. In some Native American cultures, ritual permission was asked of the deer species to take one of its deer for food. These cultures may speak of "all their relations" meaning not only grandmothers and cousins but also the animals, plants, and stars. This is different from the attitude commonly assumed by industrial civilization.

A mutually enhancing relationship between humanity and the rest of the planet is not a radical idea: it is just as sensible as taking care of the house in which you live. If you stack trash and garbage and spread sewage all over the floors of your house, your own life is degraded. The same is true of the planet and each region of it. The planet is our home, yet the idea that we have to take care of this home has not reached all the players in our historical drama. In standard business school teaching, the wellbeing of the planet does not appear in the economic equations.

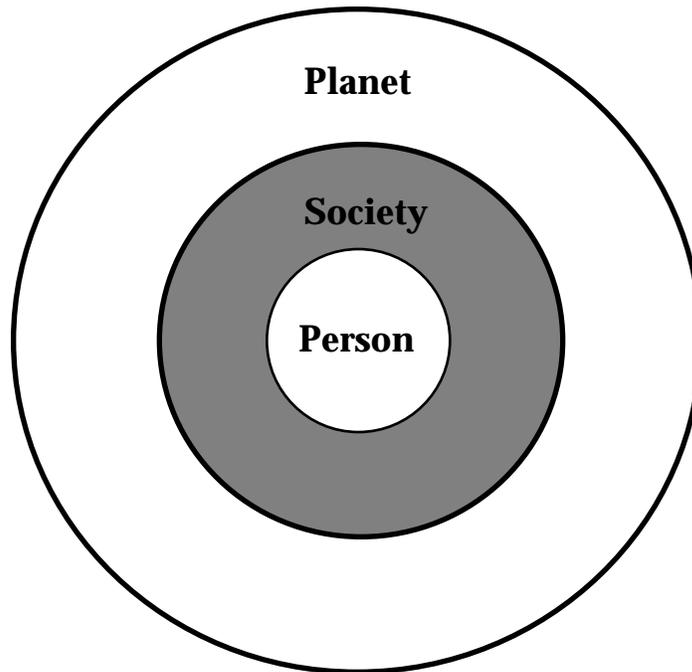
***This thoughtless attitude and pattern of operation are the root causes of what we usually call "the ecological crisis."*** So what is the ecological crisis and why do we call it a crisis?

## II. Society out of Balance with Person and Planet

Let us look at another picture, one that was given to me by Theodore Roszak in his book *Person/Planet*.<sup>1</sup> Roszak insisted that the wellbeing of the planet and the wellbeing of the individual person were both being undermined by the same foe, a social practice we call "industrial civilization." In other words, those of us who see the need for a new honoring of the individual person and those of us who see the need for a new honoring of the planet are, according to Roszak, on the same side

<sup>1</sup> Roszak, Theodore, *Person/Planet* (Anchor Press/Doubleday: 1978)

fighting the same foe. That foe is oppressing the poor and women and racial groups and religious groups and cultural groups and turning humans into appendages of industrial machinery. That same foe is oppressing the natural world, the planet as a whole. That foe is our current human society, industrial civilization. (Put up the following chart as a poster or overhead projection.)



The shaded ring in this picture stands for **human society**. The space inside this ring is the natural **person**. The space outside this ring is the natural **planet**.

By “**human society**” I mean everything about our lives that is human-made—our technologies, our economic systems, our political establishments, and all our cultural fabrics. By “cultural fabrics” I mean our scientific knowledge, contemplative wisdom, useful skills, educational systems, customary roles and modes of association, moralities, etiquettes, languages, arts, and religions. All these things are human-made. And these human-made things operate like a separate world set down on top of the natural world.

Individual **human beings** are not human-made. Our flesh and blood and spirit are part of natural reality. We are just as natural as any wild animal or wild plant or wild planet or wild sun or wild galaxy.

The **planet Earth** provides our immediate participation in the entire natural world. The planet is wild, not human-made. Person and planet are both parts of an overall wildness that can never be fully domesticated by our human-made human societies.

#### The World of Born and the World of Made

This does not mean that having a human society is itself unnatural. Without our societies we would not be human beings. But human societies are like vast substitute worlds set down upon the natural world. Human societies can be in tune with nature or they can be out of tune with nature. Our social creativity can go astray. And it has!

Our current industrial civilization is very much out of tune with the natural world. Such open conflict with nature was not true of primitive human societies. Even five hundred years ago, our societies were not as out of tune with nature as they are today. Industrial civilization, for all its benefits and grandeurs, has this devastating downside. It is greatly diminishing the natural planet.

And it is also diminishing the natural person. Those of us who are concerned about the person and those of us who are concerned about the planet have the very same foe: industrial civilization.

#### Progress as a Comfortable Disease

E. E. Cummings use the phrases “world of born” and “world of made” in one of his colorful poems. He likens industrial progress to a disease, turning the planet and human beings into something unnatural, something sick and inhuman.

Pity this busy monster, manunkind,  
not. Progress is a comfortable disease:  
your victim (death and life safely beyond)

plays with the bigness of his littleness  
–electrons deify one razorblade  
into a mountainrange;lenses extend

unwish through curving wherewhen till unwish  
returns on its unself.

A world of made  
is not a world of born–pity poor flesh

and trees, poor stars and stones, but never this  
fine specimen of hypermagical

ultraomnipotence. We doctors know

a hopeless case if–listen:there’s a hell  
of a good universe next door;let’s go<sup>2</sup>

But there is no good universe next door. We just have this planet—a planet upon which lives a humanity which is lost in “hypermagical ultraomnipotence.” We have to deal right here and right now with transforming industrial society into a society that works.

We made this industrial society; so we can remake it.

#### The Domestication of Wildness

“Wilderness,” “wildness,” “wild animals,” and “the wild” have become important words for ecological reflection. Nature is wild. It has wild animals, wild plants, wild weather, wild stars, wild galaxies and wild combinations of all these wildnesses. Even we humans are wild and remain wild no matter how thoroughly we are civilized.

Wildness is experienced in our very aliveness and in our spirit depths. Every time we make a difficult decision, we are thrust up against the wildness of our own creativity. Every time we reach out in ambiguity and uncertainty to point the way of the “not yet,” we experience the wild winds of history blowing through the corridors of time. Every time we experience the call to leave a comfortableness, an habitual security, or an ingrained stasis, we are hearing the call of the wild, beckoning us to new creation, and to new being.

A good society expresses this wildness rather than strives to get rid of it. A good society recognizes that society-building is itself a wild process. Society building is wild action done by wild human beings. With our human intelligence we often attempt to tame everything, to civilize everything, to make everything conform to some humanly invented order. But the human brain is itself part of our wild biological being. Thinking is a wild process. There is no way to civilize our thinking process.

<sup>2</sup> e.e. cummings: e. e. cummings a selection of poems (Harcourt, Brace & World Inc, New York: 1965) page 125

In contemporary Western culture, we often associate the word “wild” with chaotic or irresponsible or unlimited or given to debauchery, but a wild wolf is an ordered being. A wolf pack is sexually disciplined, cooperative, and obedient to the limitations of its environment. Wild creatures are cooperative as well as competitive, obedient as well as creative, self limiting as well as aggressive. Wild nature is not chaotic; it is a combination of remarkable orderliness and equally remarkable innovative power. So for human beings to be wild does not mean being undisciplined. It just means recovering our natural creativity and freedom. It means being authentic rather than socially conditioned robots of our particular society.

Industrial civilization has strongly emphasized the human-made over the wild natural world. We are addicted to artificiality– to the human-made. We give our children plastic play-toys and protect them from interesting fellow creatures like beetles, crawdads, and grasshoppers. We drive fancy cars to shopping malls on concrete highways and spend less and less time noticing the birds, the animals, the grasses, and the trees that surround and penetrate all our social inventions. We marvel over the so-called “artificial intelligence” of a fancy robot while we neglect to stand in awe of our own even more wondrous “natural intelligence.” Compared to the natural intelligence of a dog or a cat or a human being, our most advanced “artificial intelligence” is not worthy of the name “intelligence.”

We often praise our domesticated animals for all the improvements we humans have made on them. But compared to the wild animals with which we started, almost all domesticated animals are inferior. Take the domesticated sheep, for example. It may be splendid in its wool production, but in every other way the domesticated sheep is not an improvement on the wild sheep. The wild sheep was a vital part of a natural ecosystem, but the domesticated sheep is often destructive of its own grazing areas. The domestic sheep is incapable of survival in the wild unaided by humans. Most domesticated animals are weakened versions of their wild forms.

John Livingston in his book *Rogue Primate* spells out in detail what happens to animals in the process of being domesticated by humans.<sup>3</sup> He also suggests that humans have domesticated themselves and have thereby inflicted upon themselves many of the same weaknesses that characterize domesticated animals.

Domesticated animals, Livingston says, lose their **ecological place** and become placeless beings who quite often destroy environments because they now have no place. Domesticated human beings also become placeless. Recovering our wildness means recovering our sense of place, our ecological, planetary place.

Domesticated animals lose their sense of **independence** and become dependent upon their domesticators. Domesticated human beings also become dependent upon the particular social systems that have domesticated them. True human community is a wild thing composed of strongly independent beings in extensive interaction. In industrial civilization we have lost much of our independence to corporations, governments, and religious groups which promote human-made customs that are not natural to us and not appropriate to the present needs of our society.

Wild animals have a **vibrant presence** to the events taking place in the moment by moment environment. Their domesticated counterparts tend to become autistic, inattentive to the natural world. Domesticated human beings also become inattentive to the natural world. We tend not to see or hear the sights and sounds of nature; our senses are tuned to shopping malls and automobiles, to busy schedules, and to the racket of our own minds.

Wild animals tend to be **highly communal** within their own species and even with other species. Domesticated animals tend to be individualistic with little or no group feeling. Domesticated human beings also become individualistic, thinking only of their own small lives and ignoring the planet and the glorious communal wholes of which they are a part.

---

<sup>3</sup> Livingston, John; *Rogue Primate* (Roberts Rinehart Publishers: 1994)

Consider this poem about losing our wildness to the shackles of social domestication:

Domestication hurts!

A wild creature follows its inner being.  
A domesticated creature follows the voice of its domesticator.

There is something wondrous about a snake,  
it is never really domesticated, I think.  
Alligators too, are never tame;  
they seem to move with a determination all their own.  
Even cats domesticate on their own terms;  
a grudging and strategic adaptation seems to speak their  
ever present wildness.  
Dogs, best friends, O yes, but they too  
reserve some rights:  
they bark at their own visions, I think.

But when humans domesticate humans,  
wildness hides in a dark cave.

So bring out the drum,  
and beckon wildness to return, because

Domestication hurts!<sup>4</sup>

Wild nature includes both life and death, both support and harm, but in a deeper way wild nature is not harmful. And wild nature is not chaotic. No part of nature is so chaotic that some order cannot be found. And no part of nature is so orderly that some chaos cannot be found. Wild nature is both orderly and chaotic. Our new societies need to mimic nature in this regard.

But as it stands now, our industrial societies are an alien order forced down upon nature and thereby oppressing its optimal operation. For the most part, the people in our culture believe that civilization is an improvement upon nature—that nature is something that needs to be tamed in order to be useful to humans—that humans themselves need to be tamed relative to their natural desires, emotions, and natural connections. We mistrust our own natural existence; we suppress our feelings; we don't express what we are really experiencing. We play it safe—that is, we accommodate to our cultural climate even when that cultural climate is killing us. We want to be civilized, rational, normal, well-adjusted, and well-accepted by other people. So we are willing to accommodate with people who see nature as basically alien to humanity. Instead of identifying with nature as our larger body or our larger self, we only use nature to serve whatever greedy purposes or whims occupy our powerful minds. Thus we don't really care if entire ecosystems are disrupted. We don't grieve these travesties. "Ecosystems are not me. I am a human being. Ecosystems exist for me. If I don't value them, they have no value; for I and my species are the center of all value." This anthropocentric way of thinking and valuing is as much a cultural malady as sexism and racism and every other form of oppression. Whatever language we use, we need to let some fresh biocentric air into this stuffy anthropocentric house.

#### The Diminishment of Inner Richness

Thomas Berry described very well how people in modern society have lost their inner richness through losing their contact with nature. Here is a quotation from the text of one of his recent speeches:

“What seems to be little understood is that our inner psychic-spiritual world can only be activated by experience of the wonder and beauty of the outer world. If this outer world is

---

<sup>4</sup> poem by Gene Marshall

damaged there is progressive diminishment of our own personal fulfillment. We depend on the natural world in all its radiant qualities to awaken in us our most precious intellectual, aesthetic and emotional experiences. As humans we could not have come into being until the natural world had achieved that brilliance of development that was achieved in the late Cenozoic period. We needed experience of a magnificent outer world to fulfill the needs of our inner world. To see the meadows in bloom with their vast array of flowers, the butterflies dancing across the meadow, to listen to the song of the mockingbird, these are all experiences needed by our inner world, our soul space.”<sup>5</sup>

Berry goes on to suggest that we are lucky to have come into being on the Earth rather than the moon. For on the moon our inner life would have been much more arid. This is his point: in order to fully be ourselves, we need to recover our wild nature right here on planet Earth. We need to rediscover how our own deep being is not a tame, civilized reality but a wild or chaotic, natural reality. Freedom is wild. Compassion is wild. Our deep spirit self is the wildest part of our wild nature. And the natural world around us is also wild. It can never be fully domesticated. And it should not be. Its wildness nurtures our wildness. The natural world communicates to us a deep wildness, a deep mystery—a mystery which will always be fully beyond human comprehension.

*(Return to the circular chart and point to the shaded ring and the inner circle.)*

So what is a good society?

A good human society is one that honors this wildness of our deep spirit and expresses it the best it can.

A good human society is one that honors our natural being and expresses and cares for it the best it can.

*(Then point to the outer ring of the circular chart.)*

A good human society is one that honors the natural planet and expresses and cares for it the best it can.

A good human society is one that honors the Ultimate Wholeness, the Final Mystery of it all and expresses it the best it can.

**Today we do not have a good society.** Even to envision that good society, we need some new stories about the whole sweep of history.

### III. From the Cenozoic to the Ecozoic Era

I am also indebted to Thomas Berry for this next master picture. The era of Earth history in which we have been living is called “the Cenozoic Era.” The Cenozoic Era is now coming to an end through the actions of human beings.<sup>6</sup>

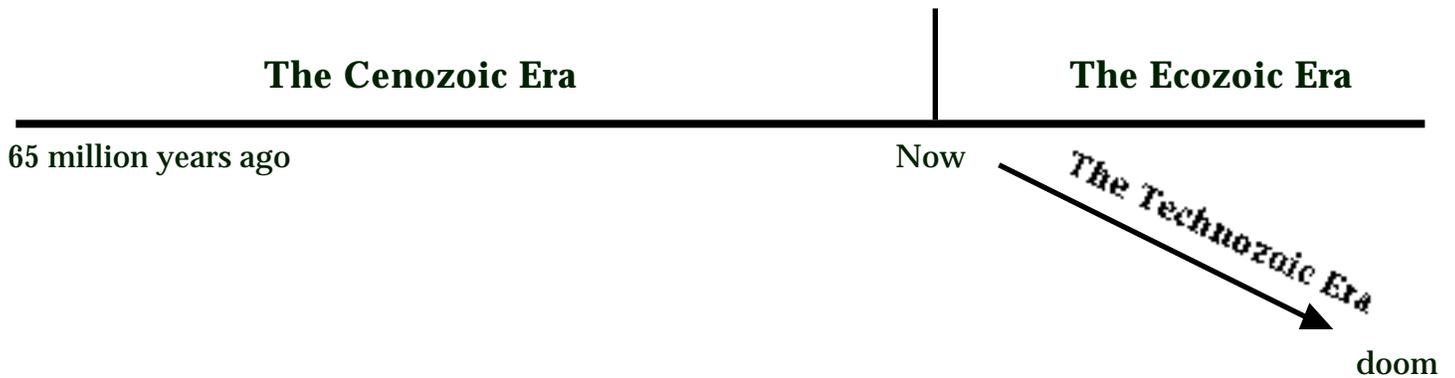
#### The Cenozoic Era

The Cenozoic Era is the era following the die-off of the dinosaurs, the era in which the glories of flowering plants, birds, mammals, and human beings have flourished. But now, human beings have become the destroyers of the Cenozoic Era of Earth history. Some sort of new era has already begun. The exact qualities of the next era of Earth history depend upon what we human beings do and do not do. This is an unprecedented moment. One of the species of this planet, humans, are choosing what the next era in Earth history is going to be.

<sup>5</sup> Berry, Thomas; a talk given November 2001 and earlier

<sup>6</sup> Berry, Thomas and Swimme, Brian; *The Universe Story* (HarperSanFrancisco: 1992)

(Put this chart on the board.)



#### Two Basic Options for our Future

Thomas Berry has suggested that we have two basic options. The current dream toward which we are heading he calls the Technozoic Era. A second dream which Berry feels we are beginning to dream, he calls the Ecozoic Era. Here is some of Berry's poetry on that topic: "The distorted dream of an industrial technological paradise is being replaced by the more viable dream of a mutually enhancing human presence within an ever-renewing organic-based Earth community."<sup>7</sup> Let me read that again: "The distorted dream of an industrial technological paradise is being replaced by the more viable dream of a mutually enhancing human presence within an ever-renewing organic-based Earth community." Berry calls this new dream "the Ecozoic Era." But this Ecozoic Era is a possibility, not a certainty.

#### Sliding toward Technozoic Doom

We are currently headed toward a much more tragic outcome, the one Berry calls "the Technozoic Era." If we allow our present dreams and practices to continue, then our basically unrefereed global economy will follow whatever options are made possible by technology and profit making. Such a direction cannot be counted upon to sustain our lives on this planet. Another flaw in the Technozoic dream is the notion that we can treat the Earth as if it were our spaceship—a world of our own making which we can completely control. The Earth is much more complex than that; its mysteries are extensively unknown to us. We cannot control the Earth. We have to work with the Earth. Failing to do so will mean unprecedented trouble. In medical thinking, the term "crisis" means turning point for better or worse in an acute disease or fever. So if we speak of an "ecological crisis" we mean a time ripe with possibilities for healing but also with possibilities for great danger.

#### Creating the Ecozoic Era

If we are to avoid Technozoic catastrophe and enjoy an Ecozoic Era, then the wise citizens in every region of the planet will have to take the initiative to change the way we are doing human society. We will have to take some big steps not now accepted by most politicians, news commentators, business schools, universities, seminaries, churches, and so forth.

***We must not underestimate the possibilities of human ingenuity for denying the need to meet these challenges. And we must not underestimate the possibility of human ingenuity for creating a whole new society that does work as a harmonious part of the natural planet.***

## IV. The Universe Story

Part of being that new expression of humanity is telling new stories about everything. We are living in a time in which a whole new story of the universe is possible. A fascinating story is being given to us by the discoveries of our empirical scientists.

<sup>7</sup> Thomas Berry, *The Great Work* (Bell Tower, New York: 1999) page 201

Let me begin with a personal story inspired by Brian Swimme.<sup>8</sup> This is a somewhat fictitious story, but it is also a true story. I am outside on a very dark, clear night lying on my back on a cot looking at the stars that fill the night sky. I realize that these stars were here long before I was born and will be still burning long after I am dead. I grip the sides of my cot as I contemplate the vastness of this scope of time. I also realize that what I am seeing is spatially vast. I am looking out into my galaxy of a hundred billion or more stars. I am on the surface of this big ball, Earth. “Up” means to me away from the center of the Earth. But I could just as well consider the direction I am looking as “down”—that I am being held up against the Earth by the glue of gravity and that I am swimming among the stars and planets of my home galaxy.

Some of those dim points of light that I see are whole galaxies like my own. There are billions of them. Some of them are so far away that it has taken the light many billions of years to reach me. Seeing those galaxies is like traveling back, back, back in time, 10 billion, 12 billion years. If I could continue traveling back I would finally come to that point in space/time where the entire cosmos began, the Big Bang. I am struck by the realization that all space and time, all the laws of physics, all energy and matter, the Earth, life, humanity, and I myself began with a trillion degree hot moment of flaring forth.

Using my always curious human imagination, I choose to push back one more step. What was before that Big Bang? What was before all time? What was before every before? And the answer that I hear is: “Infinite Silence.” All the noises, vibrations, and voices have emerged from this Infinite Silence.

And I am a relationship with this Infinite Silence. I am lying on my cot in my back yard looking out through this black night sky all the way to the Infinite Silence. My cat is lying on my lap and she does not see the Infinite Silence, or the galaxies for that matter. She is an amazingly capable and surprisingly conscious being, but she does not possess my capacity for consciousness of the cosmos or my powers of imagination that can envision and talk to myself about that Infinite Silence that fills me with wonder.

My cat does not care what is wondrous to me. I cannot share my wonder with my cat. But I can share my wonder with you, with those of you who are willing to be truthful about your own experience of human life. With my story, I am attempting to call your attention to what you already know or can easily know for yourself—can easily see with your own inward eyes.

### Cosmogenesis

We are part of a great process, an unfolding of reality. It is not a static cosmos. It is not a clock going round and round. Perhaps we should speak of it as a “**cosmogenesis**,” a process of emergence. “Cosmogenesis” means a “cosmos” in ongoing “genesis.” We did not just begin; we are becoming.

Insofar as I am an aware human being, I am aware of this ongoing cosmogenesis. And I am aware that I am aware. As a human being I am that part of the ongoing cosmos that is aware of the entire cosmos. ***I am the cosmos in its awareness of its own cosmogenesis.***

My cat is conscious of many things. She is a truly amazing being, but she is not conscious in the way that I am conscious. She feels no responsibility for the total life of my planet. She cannot know or do anything about the impending ecological crisis.

The story I have just told touches upon three aspects of cosmogenesis:

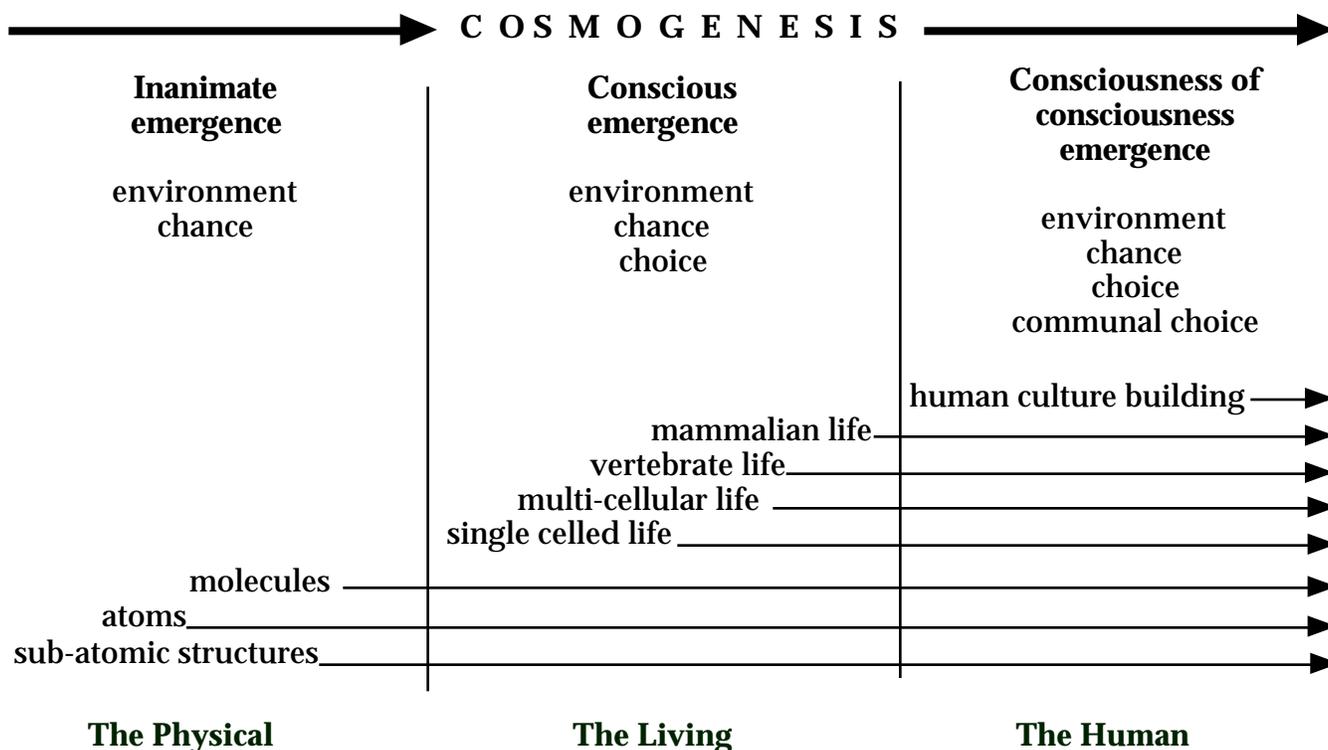
- (1) **the physical**—the Earth, the sun, the galaxies, my cat, and me
- (2) **the living**—my cat and me, and
- (3) **the human**—me.

---

<sup>8</sup> Brian Swimme, *The Hidden Heart of the Cosmos* (Orbis Books: 1996)

The following chart holds in visual imagery the story I have been painting in words.

(Display the chart as a large cardboard visual or project it on a screen, and/or pass out a copy of it.)



This chart shows us that cosmogenesis has had three forms of emergence:

- (1) The physical which I will call **inanimate emergence**,
- (2) The living which I will call **conscious emergence**, and
- (3) The human which I will call **consciousness of consciousness emergence**.

In other words, there have been three forms of cosmogenesis: the **physical**, the **living**, and the **human**. These are inseparable parts of the whole of cosmogenesis, but they need to be separated out for our understanding so that we do not reduce what we mean by “living” into what we mean by the more basic dynamics of matter and energy, space and time. Similarly the “human” is not only a form of being alive but also a mode of being alive that brings into play an entirely new mode of cosmogenesis.

Notice that each type of emergence can be characterized by types of interaction: *the physical* by **environment** and **chance**, *the living* by both of these plus **choice**, and *the human* by all three of these plus **communal choice**. Let us look at these interactions in more detail.

#### Environment and Chance

Atoms, molecules, galaxies, stars, and planets all come into being through a complex matrix of environmental causes and chance happenings. Each proton has options. Each atom has options. Each molecule has options. But these options are limited to set probabilities that happen within environments that occasion one of these options to happen.

#### Choice

With the dawn of life on planet Earth, a second mode of cosmic emergence dawned. A living cell can do something that no atom or molecule can do: a living cell can make **choices**. A living cell is not like an atom. A living cell does not respond in accord with set probabilities. A living cell is conscious. By “conscious” I mean capable of being sensitive to its environment and unpredictably responsive to

that environment. A living cell makes choices. All living beings make choices. My cat makes choices. My cat is conscious. My cat cannot be understood in the same way as a billiard ball or a rock. All living beings make choices. And this choice-making of living beings gives the evolution of life a dynamic not found in the physical world. Life is a new quality of cosmogenesis.

#### Communal Choice

With the dawn of humanity, making choices leaps into a whole new realm of choice making: **communal choice**. Human beings build cultures. They make choices together. The story of humanity is not the same as the story of physical emergence or the story of biological evolution. The human story is the story of choices that human beings make together through the gifts of language, the arts, the sciences, the humanities, religious expressions, and other symbol-using activities. This consciousness of consciousness brings into being a **new mode of emergence: the building of human cultures**. A human culture is a vast storehouse of memory held in common by whole societies of human beings. Culture-building introduces into the process of cosmogenesis a new mode of emergence. We usually call it "**human history**."

Through becoming culture-builders, humans have become a powerful force in the entire story of cosmic emergence. The dynamic of personal choice already operative in all animal species is, in humanity, intensified in the dynamic of communal choices made by entire societies of humans. These cultures then empower the effectiveness of the personal choices made by individual humans. Human individuals are the creative roots from which cultures emerge, and at the same time culture-building mightily enriches each individual human. These factors make humanity a third mode of emergence in the overall process of cosmogenesis.

This third form of emergence is now changing and threatening to vastly alter the entire life systems of this planet. The ecological crisis is a crisis brought about by humanity, by humanity in its industrial form of society.

***I, humanity, as industrial civilization, as this pattern of human choice, am the cause of the ecological crisis and I, humanity, am also the hope for a resolution for this planetary crisis by making new communal choices.***

***We cannot effectively deal with the ecological crisis as individuals only.*** The ecological crisis requires communal choices, new forms of human society, new basic attitudes, new cultural forms, new political forms, new economic forms. And all these things mean new forms of working together by those of us who are willing to be shapers of this immense human power of communal choice. Working together is hard—especially for people who have been trained to be isolated individuals related to huge corporations. Even thinking together is hard for us.

I have been sharing some master pictures that can help us to better understand the ecological era. (Visually refer to each of them while saying:) (1) I have suggested that a good society will honor both the wild natural planet and the wild natural person. (2) I have suggested that humanity must choose between ecological doom and an Ecozoic era which designs society in a new fashion. (3) I have suggested that corporate choice operating in human culture-building is a huge power is comic emergence: it is the power that has gotten us into this crisis and a power that can get us out of it.

You may have some improvements you want to make on these pictures or these stories. Certainly each of us has our own stories. We need to have our own stories. We need stories that make sense to us, that make sense of our own knowledge and our own personal experience.

And we need to share our stories with each other and come up with common stories that make us into the communities of people who are needed to resolve the ecological crisis.

**So let us to talk together about these matters.**