

The Ecozoic Reader

SHARED STORY AND DREAM EXPERIENCE OF AN ECOLOGICAL AGE



A publication of
the Center for Ecozoic Studies

Winter 2001
Volume 1, Number 2

The Great Work

We are about the Great Work.

*We all have our particular work—some of us are teachers,
some of us are healers, some of us in various professions,
some of us are farming.*

We have a variety of occupations.

*But beside the particular work we do
and the particular lives we lead,
we have a Great Work that everyone
is involved in and no one is exempt from.*

*That is the work of moving on from a terminal Cenozoic¹
to an emerging Ecozoic Era² in the story of the planet Earth...
which is the Great Work.*

- Thomas Berry

¹ Our current geo-biological era, the Cenozoic Era, began 65,000,000 years ago following the mass extinction of dinosaurs and many other species. Now Earth is undergoing a mass extinction of plant and animal species of similar magnitude, this time caused by the impact of human activity on the community of life systems. The Cenozoic Era is ending.

² That another geo-biological era will follow the Cenozoic Era is not in question. What is in question is whether humans and other forms of life as we know them will continue. Will we achieve a viable mode of human presence on the Earth? The “Ecozoic Era”—a time of a mutually enhancing relationship of humans and the larger community of life systems—represents the hope that we will.

After A Summer Rain

by Andrew Hawker, age 11

The leaves are bright and green
My senses are keen
The forest is ever clean

After a summer rain
The new roots feel its gain
It relaxes my strain, and dulls the pain

It smells like blooming flowers
As moss doth quickly gather
Reminding me of god's power

I hear the songbird sing
The shuffle of the leaves
And hear cicadas ring

I hear a large bird calling
While 2 squirrels are squalling
Beaver's will soon be hauling
Wood for their new den

The trail is heading downhill
I hear something high and shrill
The song of nature



Chaika

Learning from the Barred Owl

by *Betty Lou Chaika*

In early April I was climbing along a rocky slope above New Hope Creek in Duke Forest near my home in North Carolina. Pinxter azaleas were bursting open all around. Despite the beauty, I was feeling closed, distant. Realizing I could step out of this alienation, letting it drop from me like a piece of clothing, I began repeating to myself, almost chanting, “*I am* related to all this. *I am* a lover of all this.” I felt connected instantly. The words cut through a veil that had been keeping me separate from this place.

Just then a barred owl began calling — in broad daylight. It was as if my inner surrender had invited an outer response. I suddenly remembered other times when a barred owl called or appeared just when I had passed through a choice point, a crossroads. The owl seemed to say, “Yes, this *is* an emotional and spiritual decision point. Notice it. You’re headed in the right direction. I support you by calling attention to that.”

I experienced an expanded sense of meaning and connection, as often happens with such synchronicities. I felt the sense of kinship I have felt whenever a barred owl has spoken at precisely these kinds of turning points. The universe seemed to confirm that, yes, we *are* related to all of nature, and thinking, feeling, knowing so *is* the right attitude to take. This is the attitude vital to our health that, in turn, allows us to work for the health of nature.

When these direct, confirming experiences fade as cars and concrete replace their reality, I can easily lose the sense of being in intimate relationship to the nature I love. Nature is the medium through which I most often experience spirit. As my “church” is destroyed by development, it is harder and harder for me to access my spirituality. Our culture does not encourage keeping a sense of connection with nature or a sense of continuity with Earth-based spirituality. Sometimes I feel very lonely and find it hard to keep on track. I get easily lost. There are no agreed-upon outer signposts along the way, such as an organized religion would provide. For me encounters in nature are like markers along the path. Holding onto the experiences themselves is not the issue. What is important is that they signify



and confirm that we *are* related to nature, that spirit infuses nature, and that there is a dynamic, creative process linking spirit, nature, and human.

Several years ago I had an experience involving crows and an owl. In the morning we received a call telling us that my husband's mother had had a stroke, and her recovery was uncertain. As my husband began making his plans to fly cross-country the next morning, I realized I wanted to go with him to support him and his family. But my anxiety about flying arose and held me back. I couldn't make a decision about going without first dealing with this fear. It was clear to me I needed support to quickly work through this decision process. So I started calling friends and neighbors, but no one was home. I left messages. While waiting, I paced and paced, and other fears surfaced, such as anxiety about leaving our children at home and concern about imposing on my husband's family.

Suddenly some crows landed in our yard, and I wondered what was going on. Crows often hang out in the woods where we live, but never in our yard. Ten or twelve of them flew down and drank at the creek. Then they flew over and perched on a big pine and preened. I began to wonder if there might be a symbolic message in this event that could help me in my decision-making process. Having my attention caught by the crows and opening to the possibility of a larger message or a more inclusive thought process created a shift. I went from a sense of the *scared* to a sense of the *sacred*. (I like how making that little change, transposing those two letters, signifies a big change in perception.) I looked up the significance of crows in some animal symbolism books and found that crows symbolize the ability to shapeshift

I went from a sense
of the *scared* to
a sense of the *sacred*.

your old reality, old habits, fears, and own your ability to re-create your reality. People began calling back, offering their support and wisdom. We arranged for neighbors to take care of the kids. A friend came over and gave me a quick counseling session to deal with my old fears of flying. I felt clear and made my reservation to fly to Oregon in the morning.

Later that day I left for my office to see some clients. When I stopped at the end of our street before turning onto the road, I saw a very large bird swoop down. At first I thought it was an eagle. No, it was a barred owl. Broad daylight, and it landed there on the telephone wires right across the road, facing me squarely. I couldn't move. It didn't move.

Slowly it turned its head down to the right and watched a car go by, then looked straight at me with its enormous brown eyes. It slowly turned its head to look down on the ground below and back up at me. I watched as it gradually turned the whole feathered helmet of its head and neck seemingly all the way around to look behind and again back at me. Then it looked slowly to the left as another car went by and right back at me. The owl continued to look away at things and back at me as if it had all the time in the world. Finally I had to tear myself away to get to my office on time. What an amazing event--coming face to face with a barred owl while headed in the *right direction!*

I took this encounter as a confirmation to trust in connecting with higher life energies to help deal with urgent issues in a sacred manner. The image of the owl burned in my memory and continued to remind me to live in trust instead of fear. Crows, owl, lots of feathered friends were helping me with my fear of flying! Both crows and owls have traditionally been seen as harbingers of death, but for me their message was about how to deal with my fear of death.

Sadly, my mother-in-law died the night we arrived in Oregon. A few days later when I woke early to fly back home to the children, I caught the tail end of a dream about being a worker at a nature conference. In the dream a man came up to me wanting to know how to find the room where people were studying the owls. I went to help him find it. I took this dream as a flying-home message — remember to think about the owls!

On several other occasions a barred owl has begun calling just when I have been writing in my journal about having reached a challenging decision or an attitude change. Each time I've had a sudden feeling of confirmation that I was at a crossroads and I was crossing it in the right direction, in the direction of the sacred.

The barred owl's call is usually transliterated as, "Who cooks for you? Who cooks for you-all?" But this has never made any sense to me. I think the barred owl really calls out, "Who *looks* for you? Who *looks* for *who*? - ah!" Meister Eckhart said, "The eye with which I see God is the same eye with which God sees me." This reminds me of the chant, "All I ask of you is to remember me as loving you." Who is singing this to whom? I'm feeling lost, alone and searching, calling to God, "Help, come find me," when suddenly



God, in the form of the owl, appears saying, "I've been here all along, waiting for *you* to find *me*." I feel seen, known. Now I can even appreciate what I fancy is the deeper meaning of the seemingly trivial, "Who cooks for you?" It means: who are you all serving, anyway, the larger Self's spiritual purpose or merely the limited, small-self's secular agenda?

"I've been here all along, waiting for *you* to find *me*."

Immediately after writing about these owl encounters I ran into a friend, Dave, who is a wonderful teacher of nature programs for children and asked him about his animals. "Funny you should ask," he said. "I just got a call from someone offering me an injured barred owl, and I'm going to get him in the next day or two." I told him I might like to come over and see his owl, but I never made the time, and the idea slipped away.

Months later I realized I hadn't heard any owls in ages. I began wondering when I'd hear one again, wondering what I would be doing when I heard one again, wondering *what I would have to be doing in order to hear one* again. I realized I had gotten disconnected from my body, nature, creativity and spirituality, once again denying my soul needs. I felt that telltale sense of dis-ease. Shamanic healing is a powerful metaphor for me and calls me to learn how to retrieve soul through a re-joining of inner nature with outer nature. I renewed my commitment to practice the form of shamanism that my inner teacher teaches me, working with energy, breath, movement, meditation, ritual, focused intention, and alert attention to nature.

For two days I resumed my practice, and the second night a barred owl woke me up with a very loud and close, "Who, who, who, who, who-ah! Who, who, who, who, who-ah!" I went to the window and listened as its calls gradually moved further away. I laid back down to sleep when suddenly the owl was back, even closer, screaming, "Who-ah! Who-ah!" I thought about calling Dave and telling him I wanted to come over and sit with his barred owl. I fell back to sleep thinking about what the barred owl has symbolized for me: clear vision, seeing in the dark, seeing the hidden side of things, dreams, discernment, and being at a crossroads choosing the right direction.

I awoke with the following dream:

I come into a classroom late and sit in my seat. I'm trying to understand the project the teacher is assigning. He hands each of us a large-format booklet of poems and writings. We are to select a piece and somehow write about or present it. In the next row, a couple of seats back, sits Dave. We make eye contact, and energy flows between us. I go up to the teacher and ask questions to clarify the assignment.

Later I see Dave outside. He tells me there is a poem called Earth's Story in the booklet that he will work on, and he imagines I might like to write about that poem also. Yes, I would. I feel understood. I tell him I'd like to come sit with his owl. He hugs me and I feel full of a sensual, fertile, creative energy.

I awoke from this dream with a strong feeling of the presence of the archetypal Teacher, the Task, the Owl, and the Positive Masculine supporter of the Feminine instinctual energies.

The morning I was to go over to visit Dave's owl, I was doing my meditation practice at 5:00 a.m. when a barred owl called, "Who-ah, Who-ah, Who-ah, Who-ah!" Perhaps this was another confirmation of going in the right direction, calming my ego's fearful resistance and choosing to follow through on an impulse coming from my soul. I had imagined I would just sit with the owl and write whatever came to me. But, as I walked out the door I grabbed my sketchbook instead.

In Dave's backyard there is a shed, and in the shed there is a large cage, half of it inside the shed and half extending outside it. Christopher, the barred owl, an adolescent about four years old, was sitting on a perch up in the darkest corner. Entering the cage I was struck by his towering presence, the tilt of his head, and the look of compassion in his enormous liquid brown eyes, like dark pools. The size and power of his feet and claws! You never see such claws in those cutesy owl pictures on greeting cards. Fleshy pinkish tan, much like gnarled bony fingers, they looked almost as big as mine. Imagine your fingers on a one-year-old child to get an idea of the proportions! For two hours I drew pictures of him, and he never once took



his eyes off me.¹ I felt *seen*. Seeing and being seen, it was as if we crossed the boundary between species into a kind of co-perception, a co-seeing. I understood why the owl is associated with the crone, wisdom, in women's spiritual symbolism.

When I called Dave to tell him my experience of Christopher, our impressions of him were so similar that it felt like sharing loving observations of a mutual friend. Dave talked about the owl's presence and compassionate gaze as being "like a wise master or teacher." He told me the reason Christopher can't go back to the wild is because one eye is scratched and the other eye is blind, so he would not be able to judge distances. "Makes you think about *levels of seeing*," he said.

It is uncanny how many times I have felt seen by or confirmed by a barred owl. I understand the sense of mystery owls have evoked in people for ages. Being curious, I wanted to know the secrets of the barred owl's mysterious life. I've learned that barred owls are almost completely nocturnal. They live in large, unfragmented tracts of old deciduous forests and wooded river bottoms with mature trees large enough for nest cavities and perching cover and an open understory to fly through. Habitat loss through logging and development has greatly reduced the numbers of these birds. Where human populations rise, barred owl populations fall.

Barred owls feed mostly on small rodents such as mice, voles and even squirrels. They can locate prey by sound alone. Their ears are located far apart at the sides of their wide face disks, which collect and funnel sound to their ears. Their ear openings are larger than most birds', shaped differently from each other, and one is higher than the other. This asymmetry makes sounds register differently in each ear. They triangulate these readings to target their prey. Their very large eyes with oversize pupils and extra rods permit them to see in a tiny fraction of the light we would need. Human-like, their eyes are located close together facing forward permitting binocular, 3-D vision which makes prey stand out from the background, further sharpening their striking accuracy. They perch unmoving on a tree limb, then swoop down through the trees grabbing the prey in their huge talons. The feathers on their four-foot wings are frayed on the edges to deflect air silently. The prey doesn't even hear them coming. They swallow small prey whole, head

¹ *Editor's note:* The picture Ms. Chaika drew of this barred owl is on page 2.

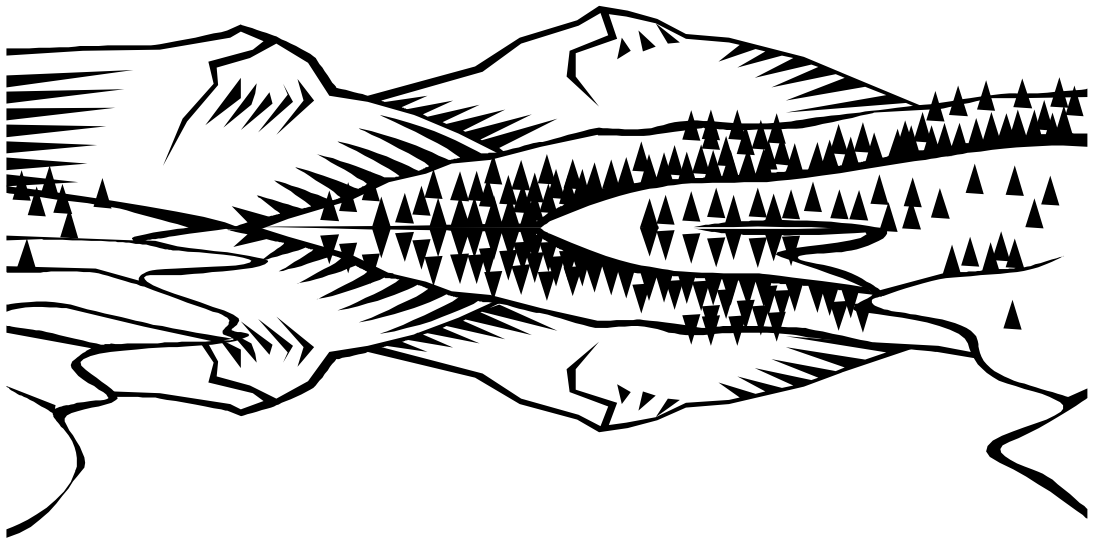
first, and regurgitate the indigestible parts such as bones, teeth, and fur wrapped in small packages called pellets.

We can learn *about* wild animals and we can learn *from* them. After entertaining the children in his audience with the hyperactive antics of a macaw, my friend Dave likes to end his show by bringing out the calm, still, yet powerful barred owl. He talks to the children about the advantages of being able to observe things silently and secretively, like an owl. He tells them we have to practice being very quiet and alert to observe animals in nature. Yes, I notice that it is when I'm practicing being centered, clear in my intention, and alert in my attention that I most often experience visitations from wildlife, in the wild and in dreams.

We can learn *about*
wild animals and we
can learn *from* them.

Barred owls are one more reason we must honor and protect the large, unfragmented forests we have left, for their sake and for ours. Following through on the assignment from the teacher in my dream, I make this presentation of my reading of the Earth's Story, the part about the psychological and spiritual intimacy we can experience with wild animals.

© Betty Lou Chaika, 2001



Modern Civilization and the Environment¹

by *E. Maynard Adams*

Human beings have two sets of needs: those which can be satisfied by manipulatory action on and utilization of the environment; and those which require an affectionate embrace of, acceptance by, cooperation with, and submission to our world in a symbiotic relationship. The first set, which we may call “materialistic,” generates the drive for power as a generalized means of action. When this set becomes dominant, our attitude toward the world is that of conqueror and master. From within this perspective, we recognize only factual limitations on our will. And so we seek to develop and to advance the kind of knowledge that will give us power to overcome or to push back such obstructions. The attitude engendered by the second set of needs, which we may call “humanistic,” is that of one who recognizes not only that one’s existence imposes requirements on one’s environment but also that one’s environment has its own inherent directedness and normative structure in which one is involved in such a way that it imposes not only factual limitations on one’s will, but also normative restraints and requirements as well. From within this perspective we experience our world as one in which we have a place, not just in the sense of a space-time location, but in a normative sense—a place where we belong, where we are at home, a place involving responsibilities, rights and privileges, a place in which we are nurtured and supported by our world. In this stance, one has a sense of not living by one’s will alone, not even in compromise with the wills of others, but with the support of and in cooperation with the socio-ecological system generated and sustained by the larger Universe.

Our modern culture and social institutions have been generated largely by the first set of needs, for they have become our dominant concerns. Modern people approach their world as conquerors and masters. The civilization we have built is an expression of this orientation. Even our conception of knowledge and our view of reality have been shaped by it.

¹ This is a revised version of a paper presented at a conference on the environment at Florida State University in the 1970s. Not previously published.

It was this new approach and conception of things that gave rise to the seventeenth and eighteenth century Enlightenment and our modern era of “progress.” It has produced marvelous advances in science and technology and improvements in the material conditions of our existence. The advancement of medical science and the improvement of economic conditions have greatly lowered the mortality rate. Scientific agriculture has made urbanization and industrialization possible. The harnessing of physical energy through science and technology has replaced muscle power and is now replacing mental power. We have exceeded even the fondest hopes of the Enlightenment apostles of progress. Yet we are becoming increasingly aware that what we have achieved is no Utopia.

In seeking to impose our will on our environment, we have recognized only its factual structures; indeed we have denied that others exist. Yet there is a sense in which the terrarium in which we live seems to have an inherent normative structure of its own. It can be said to be well and healthy, or sick and dying. There are natural processes that work to restore and to maintain its health. But exploitation of our environment for our own purposes without regard for the normative structure of the biosphere and the requirements and restraints that it imposes on us may result in the death of our blue planet, in the reduction of it to a purely physical system. Indeed, there are those who think that, with the impairment of the ozone layer, the poisoning of our land and waters, and the pollution and heating of the atmosphere, we may have already passed the critical point beyond which recovery is difficult, if not impossible. Certainly these are danger signals that we dare not ignore.

Certainly these are
danger signals that
we dare not ignore.

But there are two ways in which we can respond. One is our typically modern way of approaching any problem: We may see the dangers of which I speak as simply further factual limitations on our will to be overcome and mastered by still more advances in science and technology; or we may reorient ourselves toward the world in such a way that we recognize ourselves as having a normative place, according to which we must live in a continuing symbiotic relationship with other living things within the value structure of the terrarium. This, of course, would not exclude the advancement of science and technology, nor its desirability, but it would affect how we would use the manipulatory power they make available. We

would in some respects submit to and accept the requirements of our environment and cooperate in their fulfillment; in other respects, we would continue to overcome and to master the purely factual limitations on our will. But our basic relationship with and response to the world about us would be radically different.

This might prove to be of great significance for the spirit with which we live as well as for our continued biological existence, for our modern stance toward the world and the civilization it has generated not only threaten the biosphere but promise to destroy the conditions that support the human spirit even if the biosphere is saved.

Human beings live and have a place not only in the biosphere but also in a socio-cultural environment. A person has to be not only biologically generated and sustained but also culturally generated and nourished within a historical community. Otherwise one would never acquire the semantic and knowledge-yielding powers and the self-conception and understanding that make one a *human being*—that is, a social being who lives in an intersubjective world of shared experiences, thought, and actions; a being with a sense of history and foreknowledge of the future; a rational agent who acts under the guidance of knowledge; a moral agent with a sense of what is fitting and unfitting for one to be and to do as a human being; a being who expresses one's life and depicts one's world in works of art; and a religious being with an attitudinal response to oneself as a human being in the world.

Society and culture are as essential for personhood as the biosphere is for one's biological existence.

To be a human being, to be one with these powers (or with the potential for them, or to be one for whom the lack of such a potential is a privation or defect), one's natural semantic powers of experience, memory, and imagination must be extended (or subject to being extended, or defective if not subject to being extended) by the semantic tools of a language and other cultural symbols. Furthermore, to be a human being one must share (or be subject to sharing, or defective to the extent one is not subject to sharing) in the accumulated knowledge and wisdom of a

historical community. Society and culture are as essential for personhood as the biosphere is for one's biological existence.

Physical, organic, and social systems form a hierarchy of increasing categorial complexity. A physical system is categorially one-dimensional.² It has only a factual structure. It consists of things and the properties and relations existent in them. What distinguishes an organic system categorially from a purely physical one is an inherent value structure. There is the matter of what ought to be and the way things ought to be in an organism over and above what things there are in themselves and the way they are in themselves. We conceive the elements of an organism in terms of their functions, in terms of what they exist to do, and we think of their factual structures as fitted to their functions. So we have logical room to talk about health and disease, malfunction, and malformation of an organism. Of course, biologists, operating from within our modern stance toward the world, try to deny the categorial difference between the two kinds of systems; but they have, I think, a restricted perspective that brings into view only the factual structure of things.

A social system differs from an organic one in that the dimension of meaning is added. Here I am talking about semantic as distinct from existential presence. Something may be present in its factual existence, like the desk on which I wrote this paper; or it may be semantically present, like the desk's being in my view, in my dream, in this paper, or in your thought, now that I have mentioned it. A social position or role, like an organ in an organism, is constituted by a function, by something to be done. But the function has to be known by one or present in one's consciousness, and, thus, this function is a semantic presence. Furthermore, the function can be fulfilled only by action under the guidance of knowledge. It is thus that a function is transformed into a responsibility. So a social position or role is constituted by a responsibility or set of responsibilities and the correlative rights and privileges, those things one must be free to do and have the means to do if one is to have the opportunity to fulfill the responsibilities of the position.

A social system differs from an organic one in that the dimension of meaning is added.

² *Editor's Note:* In a conversation with the editor about this article, Dr. Adams noted that a purely physical system is an abstraction. All elements of the Universe exist in some organic relationship with each other and participate in, or have inherently in them, properties we associate with organisms.

A social system, then, consists of a set of interlocking positions, or we might say offices, constituted by accepted and recognized responsibilities and their correlative rights and privileges. The most basic position or office is that of personhood, but a group of persons would not constitute a society, to say nothing of a community. Each person has other positions. The society is the whole network of positions functioning together to meet the needs of the people. To the extent the social structure embodies the culture which structures the consciousness of the people, the people feel at home in the society and embrace and support the social structures. But there can be a gap between the emerging culture of a people and the existing social structures. If the gap is not closed by either social reforms or a redirection of the culture, the people will become alienated and a revolutionary situation is likely to develop.

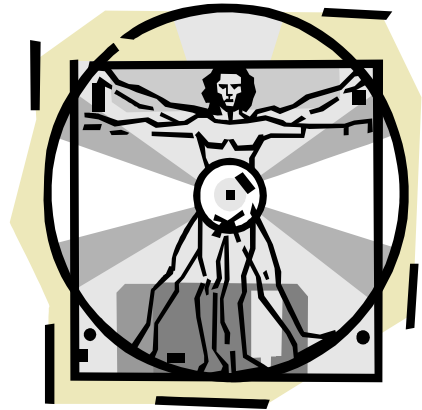
A community is a society in which the people share a common culture, live and work cooperatively within the social structure, and have a network of overlapping patches of intersubjective awareness and acceptance of one another's identities, interdependencies, and relationships.

As we have said, a person has to be culturally generated in and sustained by a historical community. One could no more be and survive as a person without a socio-cultural environment, than one could exist biologically without the biosphere. Yet, this dimension of our environment is also endangered by our modern orientation toward the world and the civilization it has generated.

Our concern with improving the material conditions of our existence has given rise to our technocratic, urban civilization. In America the majority of the people are concentrated in our great urban strips. With the refined division of labor for greater productivity, far too many workers, whether in an office or a factory, perform routinized tasks so minute in the overall operation that they cannot see nor appreciate the significance of their work. Each is one among so many, a cog in a machine, readily expendable or replaceable. Without expression of their personality in their work, they can have no identification with their jobs or sense of fulfillment in them. They work only for their paychecks, knowing that the institution for which they work is interested in only their productivity. Far too many live in an environment consisting largely of artifacts, with little sense of participation in the society, without community support or even a stable family. Many

executives and professionals who find some measure of self fulfillment in their work often find themselves rootless, without identification with place and neighborhood, without any real community, and with an unstable family situation. The social forces that work for ever-greater scientific and technological progress and economic prosperity tend to destroy the social environment that supports and nurtures the human spirit.

The impact on our culture of our dominant concern with getting what we want by manipulatory action has been perhaps the most devastating of all, especially for the human spirit. Science has been transformed from within this perspective to focus on the purely factual dimension of reality as semantically available to us through sensory perception and thought grounded in it. Value language and the language of meaning have been progressively eliminated from a descriptive/explanatory role in the empirical sciences, first in the physical sciences, then in the biological sciences, and lastly in the behavioral and social sciences. And as the reformed sciences have proven successful in our dominant enterprise of conquering and mastering our environment, we have come to take the empirical scientific method to be the only way of acquiring knowledge. This has reduced our humanistic view of the world, with its three categorial dimensions of fact, value, and meaning, to the naturalistic view with the one dimension of factuality. Value language and the language of meaning have to be either reduced to factual language or explained in a way that would be consistent with naturalistic metaphysics. Modern philosophers have made heroic efforts in this direction to accomplish this reductionistic effort. And naturalistic assumptions are pervasive in our culture and in the consciousness of the people, especially among the better educated.



This transformation of our conception of knowledge and categorial view of the world has undermined most of the intellectual and cultural supports of society and the human spirit. It has resulted in the loss of a transcendent dimension of knowledge, what Nietzsche has referred to as the death of God and is contributing to the collapse of the structure of authority, the reduction of social reality to groups of individuals with certain patterns of behavior,

and the abolition of human beings, at least as humanistically conceived. Under these conceptions, it seems appropriate, only there is no logical space left for it, to take a manipulatory approach to individual and group behavior and to develop a technology of behavior modification.

This modern view in its advanced stage, I submit is not an intellectual vision of humankind and the world that will support a great civilization and sustain the human spirit or the environment. In our preoccupation with that set of human needs which lend themselves to being satisfied by manipulatory action, we have over the past several hundred years developed a civilization that is not geared to and cannot satisfy that other set of human needs we distinguished in the beginning, those needs which can be satisfied only by understanding self and world in such a way that we can position ourselves in the world with both an affectionate embrace of it and submission to its requirements, with a sense of being at home in the world, having a purpose, and living and working in a cooperative relationship with our environment.

Solzhenitsyn, in his famous *Letter to the Soviet Leaders* in 1973, wrote: “All that endless progress [“dinned into our heads by the dreamers of the Enlightenment”] turned out to be an insane, ill-considered, furious dash into a blind alley.... [I]t is not ‘convergence’ that faces us and the Western World now, but total renewal and reconstruction in both East and West, for both are in the same impasse” (p. 21). “Bearing in mind,” he said, “the state of people’s morals, their spiritual condition and their relations with society, all the material achievements we trumpet so proudly are petty and worthless” (pp. 34-35).

“The urban life which, by now, as much as half our population is doomed to live,” he went on to say, “is utterly unnatural....and you are all old enough to remember our old towns—towns made for people, horses, dogs—and streetcars too; towns which were humane, friendly, cozy places, where the air was always clear, which were snow-clad in winter and in spring redolent with garden smells streaming through the fences in to the streets. There was a garden to almost every house and hardly a house more than two stories high—the pleasantest height for human habitation. The inhabitants of those towns were not nomads....An economy of non-gigantism with small-scale, though highly developed technology [which he proposes] will not only allow for but necessitate the building of *new* towns of the *old* type” (pp. 37-38).

We cannot, however, go back. Nor should we abandon our needs that lend themselves to being satisfied by manipulatory action. They are important, but it is a mistake to give them such priority that they distort our culture and social structures in such a way that our distinctively humanistic needs are starved. It would be equally wrong to allow our humanistic needs to dominate our culture and society so that we would be ravished by material poverty. What we need is the proper balance that will generate a civilization responsive to the full spectrum of human experience and its requirements.

What we need is the proper balance that will generate a civilization responsive to the full spectrum of human experience and its requirements.

For the present, however, we must give priority to our humanistic needs in order to shift the balance and to redirect our civilization. There is a growing concern about the quality of life in our society, especially by those who have known the best that our civilization offers. Our art and literature express the deep anguish of a troubled spirit. The vibrant confidence of our civilization when it was young and the inner strivings that quicken the spirit are ebbing. Maybe we are approaching the end of modern civilization and the time is ripe for a major cultural revolution that will give rise to a new civilization, one in which the humanistic perspective will dominate.

Above all we need to reshape our patterns of thought and achieve an intellectual vision of humankind, and the world that will be responsible to the full range of human experience and generate a civilization that will support and nurture a fully human life for all. We need to break the technological myth and free our minds from its tyranny. Its power over our imagination is revealed by the fact that where people in earlier cultures saw gods and angels in the sky, we see flying saucers. While philosophy can and should play a powerful role in cultural therapy by critically examining the intellectual vision of humankind and the world generated by the modern culture, it is now spending most of its energy trying to clarify and to validate the modern cultural vision. In the Christian era of the West, philosophy was the handmaiden of theology; in the modern era it has been largely antitheological and the handmaiden of science. It played its most significant role in the intellectual litigations occasioned by the great cultural revolution that gave rise to modern civilization. Philosophy, especially in the English-speaking world, is now in its scholastic phase. With the central issues in the great

revolution considered settled and no longer of interest to most people, philosophy is cloistered in the universities working out the fine print of the settlement. Any major reorientation of the civilization will require a shift in our priorities and in our intellectual vision that will render our present civilization dysfunctional or destructive for the new orientation of life. Only then will philosophy be shaken out of its naturalistic scholasticism and begin to play a major cultural role again. Of course, a few philosophers here and there may make a contribution toward a shift in our orientation toward the world, but unless there are other forces working in that direction they will be voices crying in the wilderness. The scholastic philosophers for the most part will be latecomers to the revolution. They will have to be shaken by the shift, rather than their being the shakers.



In reorienting ourselves toward the world and breaking the power of the technological myth on our minds, we need a greater biological and communal awareness; or rather we need for the biological and the communal to make a greater impact on our awareness, for this would tilt us away from the approach of the conqueror and master toward affectionate embrace of and cooperation with our environment. This is why the culture of a predominantly rural, agricultural civilization is so different from that of an urban, technological society. The difference in the ways of relating to the environment makes for a profound difference in how we semantically appropriate reality and therefore in the way in which our world is present to us in our thought and lived experience.

In our time, we have seen many young people drop out of our culture, rejecting its dominant values and institutions. Many have sought to return to the land and communal life. In doing so, they are following the well-beaten paths of romantics rebelling against Enlightenment civilization throughout the modern period. This is not surprising for nothing restores the human spirit more than the natural environment of plant and animal life and genuine human community. Even a few plants in an apartment or an office can make a difference. And even an episode that brings people together in a real sharing of a situation so that they experience a momentary community of mind and spirit has an elevating effect on the spirit of all. The combination of community with others and with nature has always been the romantic's antidote for our inhuman urban, technological civilizations.

Although most romantics, in so far as they have tried to do something to further their vision of a better life, have been mere ineffective, they have been telling us something important. They have been pointing to the kind of environmental relationships that are needed to correct the one-sidedness and distortions of our modern civilization. We must somehow, as they have insisted, reorient ourselves toward the world and regain a humanistic perspective.

But how can this be done? Perhaps the culture-generating stance of a people can be reoriented only in the decline of their civilization after it has spent itself. This seems to be the way other great cultural revolutions have occurred. Consider the decline of Rome and the rise of the Christian era; and the decline of Christian civilization and the rise of modern Western Civilization. But what emerges as a civilization wanes is a product of the creative forces at work for new directions. We all have the opportunity for creative responses and for critical evaluation of the creative forces at work in our culture and can thereby contribute to the direction in which the culture develops.

Once our attitude toward the world is tilted in favor of our humanistic needs, the needed cultural revolution will follow.³ The human enterprise will be redefined and a new intellectual vision of humankind and the world will gradually emerge. Philosophers will rise to articulate it, to clarify it, to defend it against the declining naturalistic dogmas, and to validate it in terms of a reassessment of the semantic and knowledge-yielding powers of the human mind. The institutions and social structures will be transformed to embody the new culture and way of life. And perhaps in the new age, at least until its inner flaws pervert it and bring about its decline, human beings will enjoy a more harmonious and happier relationship with their natural and socio-cultural environment.

© E. Maynard Adams, 2001

Books by E. Maynard Adams, for further reading:

A Society Fit for Human Beings (SUNY Press, 1997)

The Metaphysics of Self and World: Toward a Humanistic Philosophy (Temple University Press, 1991)



³ *Editors Note:* Thomas Berry has called for the re-invention of the human in an integral relation with the larger community of life systems. Dr. E. Adams' work may be thought of as providing the basis for understanding what is needed to take humanity beyond its modern cultural vision to a new or re-invented humanity.

Elaboration of the Initial Ideas for the Founding of the Center for Ecozoic Studies

by Herman F. Greene

The reason for the Center for Ecozoic Studies and its purposes and activities are based on certain key understandings or concepts and their implications for the human community. These key concepts, to be further elaborated in the work of the Center, are presented below.¹ They are discussed under the major headings of “Key Ideas,” “Sources of Thought,” “Relation of the Center to Other Groups,” and “Closing Thoughts on Forgiveness and Grace.”

I. Key Ideas

“Ecology” and the Related Concept of “Community” Are the Fundamental Contextual Concepts of the New Millennium; They Serve Similar Roles as “Progress” and “Freedom” in the Modern Period.

Ecology, the study of the interrelations of organisms and their environment, presents the fundamental context in the new millennium for the reformulation of human community, the achievement of social justice, the revitalization of human culture, and the healing of the biological and geological systems on which all life depends. The overarching lesson of ecology is that we live in an evolving community of interdependent relationships. There can be no health for the individual unless there is health for the community of beings on which the individual depends. The lessons of modernity, which emphasized the primacy of the well-being of the individual (including the importance of diversity and the self-organizing capacities of the individual) should not be forgotten, but a new emphasis on the well-being

¹ *Editor’s note:* This paper was first written in the summer of 1999, at the time the Center for Ecozoic Studies was first being conceived. The paper was originally called “Foundational Ideas” and has been renamed “Initial Ideas.” The second title is more apt because the paper doesn’t contain a comprehensive set of ideas to be developed by the Center. It is meant as a springboard to further reflection, a presentation of the initial ideas that gave rise to the Center.

of the community, which extends to all humans and to other-than-human nature, will be the guiding motif in the coming age.

The Challenge of Ecology; Need for Total Cultural Critique and Reconstruction

The challenge of ecology calls for the most fundamental changes in human community since the birth of civilization when our ancestors formed agricultural-based neolithic villages 10,000 years ago. Throughout human history, the Earth has been viewed as an almost limitless resource available for exploitation for the betterment of humans with little or no cost to its degradation or depletion. Yet, in the pre-modern period, humans viewed nature with a sense of reverence and humility as they recognized their dependence upon the life-giving capacities of Earth, their involvement with a larger community of beings, and their own limited capabilities in the face of the immense powers and tenacity of other-than-human nature. In the modern period, beginning in the fifteenth century, there has been a major shift in the way humans have viewed the Earth and the task of the human community. With the ascendance of science, nature became an objectified “other” to be manipulated and controlled, and the quest for wealth and power over the conditions of existence became the overriding concern of the human community. A materialistic culture has emerged which views nature as imposing only factual limits that can progressively be pushed back by advances in technology. Traditional humanistic and religious values have been subverted in favor of concern for economic well-being and military power. Ecology calls for a reexamination of the organizing and governing values and ways of thought in our way of life - a total cultural critique and reconstruction.

The Ecological Issue and the Ecozoic and Technozoic Alternatives

The ecological issue is presented because of the gravity of its implications for the health and survival of countless plant and animal species of Earth, including human beings. Human intrusion into Earth’s natural processes has become so great that we are now bringing to an end the way the geological and biological systems of Earth have functioned to create and sustain life in the Cenozoic Era of Earth’s history. The Cenozoic Era began 65,000,000 years ago following the mass extinctions of dinosaurs and other animals that brought the preceding era, the Mesozoic Era, to an end. We are now in a transition as great as that leading to the Cenozoic Era, and, like that transition, the present one is also heralded by mass extinctions of plant and

animal species, the greatest since the end of the Mesozoic Era. Biologists estimate that more than 10,000 species a year are becoming extinct (contrasting with a natural rate of less than one per year), and, given the continuation of present trends, within the next seventy-five years a third or more of the species on Earth will vanish.² (This is greater in scale than the extinctions at the close of the Mesozoic Era where it is estimated that a quarter of the species disappeared, and the time period of little more than a century is much shorter than the several thousand years of the last great mass extinction.) Left unchecked, the current causes of these extinctions, in particular the build up of toxins in the ecosystem, may potentially have a longer lasting and more severe effect on the functioning of Earth's systems than the catastrophic natural events that ended the Mesozoic Era.

In the near term, because of global directions in technology, cultural values, economic and political systems, population, and other factors, the situation is likely to become worse. While Earth has been able to restore itself in the past from environmental disasters, such as asteroid collisions, ice ages and immense volcanic eruptions, Earth cannot re-balance the environmental destruction occasioned by the activities of humans, only humans can do that. This is why the author Thomas Berry refers to the coming era, an era in which human and non-human nature live in a mutually enhancing relationship, as the "Ecozoic Era," because only conscious ecological awareness and activities of humans can bring it about.

The alternative to the Ecozoic Era would seem to be a suicidal extension of our present activity, what Thomas Berry calls "technozoic" activity (mindless application of technology in pursuit of a wonderland), into the future until environmental disasters devastate the human community and thus halt its cancerous intrusion into the ecological system. This result is almost unthinkable. It would be the negation of all we aspire to individually and collectively. The Earth that survived such disasters would be a greatly impoverished Earth. It would be one with depleted natural resources, with polluted land and water, with the voices and songs of thousands upon thousands of species silenced forever, and with a severely degraded human community, if there should be one at all.

² See John Harte, *The Green Fuse*, p. 85 (University of California Press, 1993); see also Edmund O. Wilson, *The Diversity of Life*, p. 274-280 (W.W. Norton, 1992), who estimates that extinctions are occurring at the rate of 27,000 species a year, 3 each hour, and that the total loss of biodiversity will be in the 20-50% range.

The Great Work

Definition

The Great Work, or epic task, of our time is to move from the terminal Cenozoic to an emerging Ecozoic Era in the story of the planet Earth. (See statement on “The Great Work” by Thomas Berry on the inside of the front cover of this Reader.)

The Terminal Cenozoic

The phrase “terminal Cenozoic” is not an inviting expression, nor does it, at first, seem like an artful one. Yet, it is an important one and is uniquely descriptive of the conditions that call for the human community to be about the Great Work. It has to be understood in the context of the transitions that occurred at the end of other geo-biologic periods. The point to be made is most easily illustrated with the transition from the Archean Eon to the Proterozoic Eon that occurred around two billion years ago. In the Archean Eon, the first period of life on Earth where life was restricted to microbial beings like bacteria, the atmosphere did not contain oxygen and the living organisms could not survive in its presence. Yet the activity of the early microbial beings built up oxygen in the atmosphere and caused a crisis that was only resolved when organisms came into being with respiratory systems that used this oxygen in their metabolic processes. So what was destroying the Archean Eon, the build up of oxygen in the atmosphere, called for a new way of doing things, and when that new way came into being it began the Proterozoic Eon, an eon that surpassed in its creativity and diversity the former one.

We are at a similar stage as at the end of the Archean Eon, only this time it is human activity that is building up toxic substances in the atmosphere (as well as the biosphere, the hydrosphere and the geosphere). As a new kind of life had to be invented to bring into being the Proterozoic, so a new kind of life now has to come into being to bring about the Ecozoic. Those many years ago, to continue in the terminal Archean was to live in the devastating chaos caused by the free radicals released by oxygen. Oxygen slid through cell membranes and took apart enzymes, leaving cells helpless to perform their life-sustaining tasks. Today the devastating free radicals are those released by human technology and they are destroying the capacity for life on Earth to function as it has throughout the last 65,000,000 years in the

Cenozoic Era. There is no invention in nature, as it as evolved from the beginning of time to the present, to enable life systems to deal with human activity in its current and rapidly accelerating technological mode of functioning. To simply continue in the terminal Cenozoic will leave (as continuing in the terminal Archean would have left) the life systems on Earth unable to perform their life-sustaining tasks.

This claim, that we are in the terminal Cenozoic, is one with which many will not agree. Yet the scientific evidence for it is becoming increasingly convincing, especially if current trends are projected into the future. That we are in the terminal Cenozoic is an extremely radical claim. It is one so huge in its implications that we have no precedent for dealing with it in human history. We have faced crises before, great crises like wars and pestilence, but nothing so immense as the ending of a geo-biologic era in the functioning of the Earth, namely our own Cenozoic Era.

The way from the terminal Cenozoic to the next era in the history of the planet Earth depends again on some creative force in nature, and it would seem at this juncture this must be the creativity of humans. This thought is an awesome and humbling one. What we are required to do in the human future is as different from the past as pre-oxygen based metabolism was from post-oxygen based metabolism. If evolution was ever only a series of random accidents and natural selection, this next evolution will not be. It will come about as the result of intentional and conscious action of the human community in a dynamic and evolving relationship and inter-relatedness with other-than-human nature.

The Ecozoic Era

The Ecozoic Era is not something to be arrived at. It is a process concept and refers to an era of continuously evolving novel relationships of humans with other-than-human nature, as well as necessarily continuously evolving novel relationships of humans with other humans. Just as the health of the individual has been described by Janet Michello in “Spiritual and Emotional Determinants of Health,” in the *Journal of Religion*, as the ability to adapt to ever-changing biological and social environments in a creative, life-enhancing fashion, so the existence of the Ecozoic Era, a term which

contains the normative concept of health of the ecosystem, must be described as a dynamic reality that will be constantly re-fashioned in a creatively adaptive manner to ever-changing biological and human social environments.

The implications of the term Ecozoic Era are difficult to grasp and profound. Here are some of the implications:

(i) By using the term “Era,” we are drawn us into dimensions of time that embrace millions of years (like the Cenozoic Era which is of 65,000,000 years duration), when we are accustomed to think of historical epochs as periods like the Reagan era, or the New Deal, or longer periods such as the Enlightenment or the Medieval period. The concept of the Ecozoic Era requires us to embed the human story in the story of Earth. This is necessary because Earth’s processes require great periods of time, and if we are to survive as humans we must see ourselves within the larger periods of geologic and biologic time that provide the setting for our existence. For example, it takes 1,000 years to build two inches of topsoil, yet our actions can destroy the activity of thousands of years of beneficial development in a day. The vision of the Ecozoic Era is that we may come to understand ourselves and our setting in a way in which our activities augment the beneficial, time-dependant activities of Earth.

(ii) By using the term “Ecozoic,” we refer, in part, to humans as being a major determinant of Earth’s future. One way of thinking of this is that humans are evolution becoming conscious of itself. In the future, even more than now, humans will be involved in the genetic structure of life, the flow of rivers, the topography of land, the chemistry of oceans, the climate of the Earth, and in all other activities extending at least from the Earth’s crust outward. New capacities will provide new opportunities for tragic destruction, but also for health and abundance. The exercise of these capacities will place unprecedented demands on human society. We will not need less science, we will need more and better science. Thus, to move into the Ecozoic is not to abandon the technologies and knowledge gained in the technozoic period, but to use these technologies (and new technologies) and this knowledge (and new knowledge) in more creatively adaptive and cautionary ways. Similarly, we will not need less economics or government, we will need more and better economics and government. There is no way back to a more primitive mode of being except, perhaps, as the tragic result of a persistent application of our present mode of being.

That humans will have such involvement does not seem to be in question. Whether human involvement will be mutually enhancing to the larger community of life systems is. Thus, the term “Ecozoic” is descriptive in that it refers to a coming age of essential human involvement in nature, but it is also prescriptive and normative in that it refers to the promise that this age will be one of a mutually enhancing relationship of humans and nature. For the Ecozoic Era to come into being, an ethic will have to emerge that both limits and guides human activity. Care for the Earth and all its beings will have to become the shared responsibility of all; and humans will have to develop a reverential and cooperative, as opposed to an exploitative and coercive, relationship to the larger community of life.

(iii) By using the two terms “Ecozoic” and “Era” together as “Ecozoic Era,” we are called to consider an age as different from our current age as the Paleozoic Era (mollusks, fish, conifers, insects, reptiles) was from the Mesozoic Era (dinosaurs, flowers, birds, first mammals), and as the Cenozoic Era (efflorescence of mammals, grass spreads across the land) is from the Mesozoic Era. In terms of human history, we are called to consider a period that will be as different from our current period as the Paleolithic (hunter gather period) was from the Neolithic Period (agricultural villages), as the Neolithic Period was from the period of the classical civilizations, and as the modern period is from the period of the classical civilizations.

The human communities of the Ecozoic Era will look no more like those of today, than our present cities look like those that existed at the end of the Medieval period. For example, our present communities are based on an extractive economy, one based on exploitation of fossil resources deposited over millions of years and on maximizing production and profits and consumption of goods without regard for long-term effects. The economy of the Ecozoic Era will have the health of Earth’s economy as its primary concern. It will be based on the four principles of the Natural Step, which paraphrased are that substances from the Earth’s crust may only be extracted at a pace at which they can be redeposited and replaced; human substances may only be produced at a rate at which they can be broken down and integrated into the cycles of nature; the ecosystem may only be harvested in a way that the productive capacity and diversity of life on Earth is not systematically diminished; and there must be a just, fair and efficient use and distribution of resources and goods within the human community. Adherence to these principles will change everything. Their adoption as guiding

principles must come about if we and Earth's life systems are to survive in a healthy manner. The adoption of these principles cannot come about without a profound cultural transformation. And thus it can be said that cultural transformation is the hallmark of the Ecozoic Era.

Reinventing the Human

Humans are half biology and half symbol or culture. Thus, humans are not only a biological species they are a cultural invention. Put another way, when a human is born, he or she is only half human. There is no instinctual basis for the survival of humans. For a human to survive (for a human to become fully human) years of instruction and acculturation are required. The relationship of humans to nature in part results from biological necessity, but even more so from acculturation (for example, only a small portion of what we consume is done so to meet biological necessity). Thus as a species, we are what we are biologically and we are what we are culturally.

Given this understanding of the human species (that it is a biological species and a cultural invention), Thomas Berry has proposed that what is primarily at issue in the Great Work is "re-inventing the human." He puts it this way: "We might describe the challenge before us by the following sentence composed of seven phrases: The Great Work of our time is to reinvent the human, at the species level, with critical reflection, within the community of life systems, in a time-developmental context, by means of story and shared dream experience."³ The exposition of the meaning of this sentence will be an important emphasis of the Center for Ecozoic Studies, and enabling the sharing of stories and dream experiences concerning the Ecozoic Era will be one of its most important activities.

Ecozoic Community

Moving into Ecozoic Era will require the conscious participation of people in all walks of life. Communities will need to arise in every sector of society to support individuals who are growing in their understanding of the transition to the Ecozoic Era and who wish to participate more fully in realizing its promise, both as an emerging present reality and a direction for

³ Thomas Berry explains this sentence in the chapter on "Re-Inventing the Human," in *The Great Work* (Bell Tower, 2000). See also, Herman F. Greene, "Thomas Berry's Great Work," *The Ecozoic Reader*, Vol. 1, No. 1, pp. 24-26 (Fall, 2000).

the future. In some way each of these communities would honor the commitments of the individuals in the group, foster their growth, deepen their awareness of and appreciation of their connection with other-than-human nature, provide a way for them to report on their journeys and obtain help, and assist them in fashioning their intentions and projects.

Some of these communities are natural communities, such as educational and religious groups, and these communities broadly need to bring into their lives this awareness of the promise of the Ecozoic Era and of the calling to move in this direction. Yet, within these communities, and in all other sectors of society, whether law or architecture, building trades or medicine, government or economics, entertainment or agriculture, there needs to come into being intentional communities that have a purpose of nurturing the growth of their members toward the Ecozoic. Today these communities often go under the name of “green” groups, or “ecological” or “environmental” groups. These groups do provide this kind of support, but an understanding is needed that this is a concern not only for the “greens” or the “environmentalists,” this is a concern for everyone who is concerned about the human future and the health of the Earth community. Accordingly groups that would never entertain the idea of using green or environmental in their name, also need to give intentional attention to our common journey into the Ecozoic Era.

An important role of the Center will be to provide materials to individuals and groups to support their journeys toward the Ecozoic.

Twelve Understandings Concerning the Ecozoic Era

A broad framework is needed for understanding our way into the Ecozoic future. Twelve important understandings gleaned primarily from the work of Thomas Berry and Brian Swimme, but also that of Maynard Adams and Alfred North Whitehead, are set forth below and provide a part of that framework. Each of these understandings will be developed, discussed and expanded upon in the work of the Center.

The Nature of the Universe

1. *The Unity of the Universe.* The Universe as a whole is an interacting community of beings inseparably related in space and time. From its beginning the Universe has had a psychic-spiritual dimension. The Universe is a communion of subjects, not a collection of objects.
2. *Modes of Expression.* The Universe expresses itself at all levels of reality through differentiation (diversity), subjectivity (interiority, self-organization), and communion (intimacy, interrelatedness).
3. *Cosmogenesis.* The Universe is a creative, emergent, evolutionary reality that has developed from the time of the primordial flaring forth, and is still developing, through a sequence of irreversible transformations.

Earth and Its Current Dilemma

4. *Earth.* Earth is a one time endowment in the unfolding story of the Universe.
5. *The Current Dilemma.* The effects of human activity on the Earth have become so pervasive and invasive that the survival and health of the Earth community now rests on the decisions being made, and the actions being taken, by humans.
6. *Transition to the Ecozoic Era.* There is a need to move from the current technozoic period, where Earth is seen as resource for the benefit of humans, to an Ecozoic Era, where the well-being of the entire Earth community is the primary concern.

Three Key Building Blocks

7. *The New Story.* The New Story, the narrative of the evolutionary development of the Universe from the primordial flaring forth to the emergence of the Ecozoic Era, provides a unifying myth for all human cultures and a basis for common action in the realization of the Ecozoic Era.
8. *Bioregionalism.* Bioregionalism, care for Earth in its relatively self-sustaining geo-biological divisions, reorients human activity in developing sustainable modes of living, building inclusive human community, caring for the rights of other species, and preserving the health of the Earth on which all life depends.

9. *Ecological Spirituality*. Ecological spirituality, presence to the primal mystery and value of nature and to Earth as a single sacred community, provides a basis for revitalizing religious experience and healing the human psyche.

Special Contributors to the Ecozoic Era

10. *Women, Indigenous People, Humanistic and Religious Traditions*. The wisdom of women, indigenous people, and classical humanistic and religious traditions will have an important role to play in redefining concepts of value, meaning and fulfillment in human culture, and in setting norms of conduct for the Ecozoic Era.

11. *Science, Technology, Economics, Government and Civil Society*. Science must provide an integral understanding of the functioning of Earth and how human and nature's activity may be mutually enhancing, technology must become coherent with the ever-renewing cycles of nature, economics must provide sustainable sufficiency for the human community and protect the health of Earth's economy, government and civil society, as equal partners, must ensure participation, protection of human and other-than-human rights, and meaningful regulation at global, regional and local levels for justice, equity and peace.

The Great Work

12. *The Great Work*. The epic task, or "Great Work," of our time is to bring into being the Ecozoic Era. It is a task in which everyone is involved and from which no one is exempt, and it will require change in every aspect of human society. On it the fate of the Earth depends, and in it lies the hope of the future.

II. Sources of Thought

The Center will be open to all thought that gives insight into, builds on or develops the key ideas discussed in the first part of this paper. In this part of the paper, certain sources of thought will be recognized as having been important in the formulation the initial ideas of the Center and as having continuing importance, along with the many other sources to be added by others, to the work of the Center.

The Ecozoic Vision

Thomas Berry has provided the crystallizing vision for the work of the Center for Ecozoic Studies. The ideas of the Ecozoic Era and the Great Work discussed in the “Key Ideas” part of this paper, were first articulated by Thomas Berry. One of Thomas Berry’s most important contributions is his observation that the fundamental flaw of contemporary civilization is the lack of an integral relation between the human and the other-than-human natural world. This flaw is expressed in a science which objectifies and manipulates the natural world without understanding the vast implications of the new story of the Universe science itself has disclosed. This new story is one of a Universe in which everything is related, has a common story of development through a sequence of irreversible transformations, shows a kinship of all things in their origins and in their bondedness to each other, and shows some kind of shared consciousness or psychic-spiritual dimension that gives rise to novelty and a questing, intentional aspect in the unfolding evolutionary journey. This flaw is also expressed in culture where the modern bias toward anthropocentrism, acquisitive materialism, and utilitarianism has separated us from our deeper selves, our human neighbors and our natural community with which we share a common destiny.

Thomas Berry has provided and is still providing a rich and enduring source of wisdom and understanding. He presents an essential critique of modern culture that must be understood if we are to find our way in a viable future for the human community. He has provided the fundamental narrative for understanding our place in human history, the work we have to do and the vision of where we are to go. Thomas’ work is not complete in itself however. His thought has to be developed and expanded upon by others. In this regard Brian Swimme, Mary Evelyn Tucker and John Grim are of special importance. Many others, as well, deserve special mention for their continuation and development of Thomas Berry’s work, including Miriam Therese MacGillis, Jim Conlon, Jane Blewett, K. Lauren de Boer, Dennis O’Hara, Heather Eaton, Ruth Rosenhek and John Seed. And there are many, many others who ably and effectively participate in this effort.

And not only does Thomas’ thought need to be developed and expanded upon, but many other sources, new and old, Western and non-Western are needed for developing the Ecozoic vision and leading us into the future.

Value and Meaning

Dr. E. Maynard Adams, Kenan Professor of Philosophy Emeritus at The University of North Carolina at Chapel Hill, has dedicated his life work to an enterprise that is different from, but complementary to, the work of Thomas Berry. Like Thomas Berry he has analyzed the philosophical underpinnings of modernity, but rather than, in the first instance, expressing concern, as Berry has, about the effects of modernity on the relationship of humans to other-than-human nature, Adams has focused on the effects of modernity on the humanity of humans. He argues persuasively in his most recent book *A Society Fit for Human Beings* that in the modern period

[v]alue and other humanistic categories were eliminated from the scientific/descriptive/ explanatory system. The world was disenchanted. No longer did we recognize any inherent ends or normative laws in nature. Reality was understood as imposing only factual limits on our will, limits that could be progressively pushed back by advances in science and technology. Human identity, values, morals, and religion have been problematic every since. As Ernest Gellner says, “Our identities, freedom, norms are no longer underwritten by our vision and comprehension of things Nietzsche referred to this intellectual development as “the death of God.” C.S. Lewis spoke of it as “the abolition of man.”⁴

He then goes on to say, “A culture defines the human enterprise by its dominant values” It follows then that a culture devoid of humanistic values (Adams would argue that our current culture, which he says is based on materialistic values, is such a culture) is one bereft of legitimacy, at least in the sense that legitimacy is imbued with the requirement that a culture foster the conditions for the fulfillment in humans of the inherently normative requirements of selfhood.

It is, of course, this argument--that humans have inherently normative requirements of selfhood, or a “normative constitution,” that is being subverted by the materialistic culture of modernity--on which Adams’ whole argument turns; and, thus, it is to the issue that humans have such a constitution and, consequently, that “value and meaning” are the basic humanistic categories, that Adams has devoted his major philosophic works.

⁴ E. Maynard Adams, *A Society fit for Human Beings*, p. xvi (SUNY Press, 1997).

Adams states that modernity is based on a naturalistic or scientific worldview. This worldview, he observes, relativizes all concepts of value and meaning so that what is real is what can be quantified, and value and meaning are taken to be only subjective concepts that exist to meet the subjective, individualistic and relativistic enterprise of selfhood. Thus, for example, in the modern view everyone can buy cars and whether one's values calls for a giant sports utility vehicle or an ultra-efficient compact car is just a matter of relativistic values, all of which are equally correct. As a result, in the current culture, cars and their production--materialistic components--are highly valued and protected, whereas issues concerning the use and meaning of personal transportation--humanistic values culturally deemed to be relativistic--receive little attention. Attacking the modern view, Adams provides an extended argument for "realistic humanism" under which value and meaning concepts have universality.⁵ An important part of this argument is that the secondary (non-sensory) modes of perception by which value and meaning concepts are acquired have the capacity to yield knowledge of universal applicability.

Adams' overall critique of the current naturalistic worldview is that it has produced a society that is not fit for humans, and in this lies the crisis. As a result of our dominant cultural understanding based on this naturalistic worldview, we have debased our humanity, our moral agency, and we have deprived the faculties that make us uniquely ourselves. We have denied our interiority, in religious language, our souls, by denying the secondary modes of awareness that constitute our uniqueness--the ability to perceive beyond sense perception through our emotive powers and those powers which Adams refers to as the affective (or feeling) and conative (or will) powers, and to exercise ethical choice through the exercise of our knowledge yielding powers, our rational critical powers, and our powers of moral appraisal. As a result, we have lost, or are losing, our capacity for self-transcendence that constitutes the essence of our humanity, and we have perverted our concepts of self and society, and our understanding of the meaning of our existence and the purpose of the cosmic adventure of which we are a part.

⁵ *Editor's note:* In Adams' Thought, this universality is ultimately grounded in the character of the Universe itself. This is his "realistic" view of the Universe, and this provides the tie between Adams' thought and Thomas Berry's thought which sees the Universe as primary and the human as derivative (in other words, sees the nature of the human as being derived from the nature of the Universe).

While Adams' way of thinking may seem too focused on the human to many who have developed ecology as a primary concern, one of the ideas that will be developed by the Center is that Adams' thought is important for understanding what is involved in "reinventing the human" and that a focus on *value* and *meaning* within human culture is an essential aspect of this. For there to be an Ecozoic Era, there must be an Ecozoic society, a new human society. Bringing this into being will involve more than focusing narrowly on the boundary of where the human community interacts with non-human nature. We must also be concerned about the development of humanistic values within human society and with the relations of humans with humans.

The Center will place an emphasis on the building of an Ecozoic society as the key to realizing the Ecozoic Era. The human community has huge needs. We now number over 6 billion people and human population is expected to grow to 10 billion or more in this twenty-first century.⁶ Humans have vast needs that go beyond the subsistence needs that are predominant in other animals. We can imagine how the subsistence needs of humans would be met in the Ecozoic Era if humans reverted to a primitive way of living. This is, however, unlikely, probably impossible, and also undesirable because this former way of living had its own enormous problems. When thinking about bringing into being the Ecozoic Era, the more difficult question than how to meet subsistence needs of humans while providing for the survival of other species, is how to meet the needs that bring about human fulfillment while bringing the functioning of the human community into a coherent relationship with Earth for the survival and enhancement of other species. To address this more difficult question will involve a revival, within the context of ecological concerns, of the humanistic enterprise and sustained reflection on what kind of society would make for human growth and well being, and an elevation of humanistic categories (such as meaning, subjectivity, the mental, spirit, normativity, selfhood, freedom, cultural objects, justice, social structures, human history, aesthetics, artistic expression, teleological causality, and ultimate reality in religion and philosophy) to a position of primacy within the human intellectual and social life (displacing in primacy, but not denigrating within their proper spheres, economics and technology). That this revival must take place within the context of ecological concerns will require a reexamination of the meaning and purpose of our humanity, of our capacities for fulfillment, and of the

⁶ *United Nations World Population Prospects: The 1998 Revision* (New York: December, 1998).

goals and aspirations of our societies, all for the purpose of re-placing ourselves within the larger community of life systems and establishing a viable mode of human presence on Earth.

Process Thought

Another important source of thought for the Center will be “process thought,” which is thought based on the writings of Alfred North Whitehead. Like Maynard Adams’ thought, the thought of Whitehead and his followers is complementary to that of Thomas Berry’s. Thomas Berry and Teilhard de Chardin, whose thought had a great influence on Thomas Berry, have been impressed by the story of the Universe as narrative, and from this narrative have drawn conclusions about the nature of the Universe as being evolutionary, changing, processive and teleological and as having a psychic-spiritual reality from its beginning. Their reflection was based on the cosmological, geological and biological story as it has become known in modern science. Each also brought to his thought a wealth of knowledge of human cultures, and of philosophy and theology.

Whitehead came at his reflection through the world of mathematics and physics as they developed in the first part of the 20th century, and also his knowledge of Western philosophy and theology. He sought not to understand a grand narrative, but to understand the nature of reality and to explain in categorical terms how everything comes to be. In his most important work, *Process and Reality: An Essay in Cosmology*, he described his task as that of “speculative philosophy,” which he defined as “the endeavor to frame a coherent logical necessary system of general ideas in terms of which every element of our experience can be interpreted.”

The framework of ideas he developed has become known as “process philosophy” and also “the philosophy of organism.” It has been called a neo-classical metaphysics because it undertakes to frame a general metaphysical system in the manner of classical metaphysics, but did this in a new way. There are several elements of this thought system as expounded by Whitehead that are of particular importance as follows:

First, reality in all of its dimensions is creative. This contrasts with the view that reality is determined by random events and change through locomotion (cause and effect determination resulting from substances in motion and controlled by the laws of motion).

Second, the essential character of reality is “becoming” or “flow” rather than “existence” or “stasis.” This is related to the concept of “cosmogogenesis,” the time-developmental character of the Universe, developed by Thomas Berry and Brian Swimme in their book, *The Universe Story*, the understanding of which, they believe, involves the most important intellectual shift, the “Copernican revolution,” of our time. In the past, according to Berry and Swimme, the Universe was viewed in a “spatial mode” as opposed to a time-developmental mode. Viewed in a spatial mode, the Universe was constant, unchanging, and ever-existing; viewed in a time-developmental mode the Universe is evolutionary, ever-changing.

Third, the fundamental element of reality is not “substance” but “experience” - everything comes to be through experience and everything has both a physical and a mental or experimental dimension. This corresponds to Teilhard de Chardin’s, and Berry and Swimme’s, thought that the Universe has had a psychic-spiritual dimension from its beginning. The mechanistic view of the Universe that became predominant in the early modern era saw the Universe as a collection of objects for humans to manipulate. When seen as having a psychic-spiritual aspect, the Universe becomes a communion of subjects.

Fourth, every individual experience is influenced by the experience of everything else in the Universe throughout its history. This is the philosophy of organism, that the Universe has an organic character and everything is interrelated, experienced and remembered. This corresponds to Berry’s and Swimme’s thought that the Universe has a narrative dimension in which every particular reality is a part of an unfolding cosmic drama.

Fifth, societies of multiple individuals have synergistic capabilities. This is the sociality principle and is consistent with Teilhard de Chardin’s observation that the Universe is moving in its evolutionary sequences toward greater complexity (toward more complex societies of individuals) and this

in turn is lending toward greater capacities for consciousness. Berry and Swimme have also observed there is a tendency in the evolutionary journey of the Universe to increasing complexity and consciousness.

Sixth, every creative experience of becoming is also influenced by novel possibilities and the individual exercises a choice in realizing those possibilities. Thus, each individual and consequently each organism (or society of individuals) has some freedom and is in part self-determining. This corresponds to the concepts used by Swimme and Berry of the differentiation of individuals and also the self-organizing characteristic, or *autopoiesis*, of individuals. While there is a dynamic tension between part and whole in the Universe, each individual in the Universe is unique, ultimately significant and of intrinsic value.

Seventh, the future is undetermined and open and exists only as a set of possibilities that are not realized until chosen. In this understanding, the future is not mapped out by either physical causality or divine causality, but is open to creative activity. Thus, there is always cause for realistic hope and always the call for conscious, responsible, creative participation of all.

Eighth, the character of existence is adventure and a quest for beauty, complex order and harmonization of contrasts of feeling. The ideal state of being then is not changelessness or being at rest, but creative adaptation and participation in a quest for beauty and harmony. Thus, the Universe has a teleological, or future/end-seeking, dimension.

Ninth, reality is a pulsating sequence of events each building on the other. In Whitehead's understanding, each new event in actualizing itself apprehends those events which precede it and takes into account novel possibilities of the future in deciding its final form, at which time the event becomes an object for new events. The present is perpetually emerging out of the past, but is never a mere repetition of it. It is the emergence of these events that gives time its sequential character. Events do not occur in time, they create time—a measure of a period of sequential transformations resulting from events—and time is necessarily uni-directional from past to future. This thought is consistent with Berry and Swimme's observation that the Universe is an evolutionary sequence of irreversible transformations.

Tenth, the Universe is guided by a pervasive, integral cosmic intelligence or consciousness that has both a primordial character of love by which everything is valued, and a consequent nature by which everything that comes to be influences this intelligence and becomes a new source of possibilities. Thus the guiding intelligence of the Universe, in this understanding, is not conceived as something that exists independently of the Universe, but rather as a pervasive reality that is within every part of the Universe and is an expression of the unity of the Universe in its cosmogenic journey. This cosmic intelligence has had a variety of names from the Tao, to the Buddha nature of the Universe, to God, and many more.

Eleventh, the cosmic intelligence does not act through coercion, but through persuasion and lure of feeling. Thus, the cosmic intelligence does not control the Universe, rather it and each individual are co-creators, and individuals have a capacity for free choice for good or ill.

Twelfth, spirituality and creativity are related concepts and they always occur in actualizing events. Therefore, the locus of spirituality is in the creativity of actual existence not in some higher realm; spirituality is not disembodied rather it exists in the process of things coming to be; and the cosmic intelligence is ultimately concerned with the evolutionary, creative adventure of the Universe.

One might wonder what the value of such an abstract system of ideas and categories would be in the Great Work. The answer is that behind our thought and analysis as humans lies a philosophical framework. This framework both enables our inquiry and limits it. This philosophy also affects perceptions of value and of worthwhile action. There is a need for a philosophical framework that is consistent with the Universe story and it is believed that process thought provides this framework. Understanding this philosophical framework permits the application of the wisdom of the Universe story in every dimension of life. Thus, it can make an important contribution to the realization of the Ecozoic Era.⁷

⁷ For an additional discussion of Whitehead's ideas, see Lewis S. Ford, "A Conceptual Background for Ecozoic Aspiration," *The Ecozoic Reader*, Vol. I, No. 1, p. 31-40 (Fall, 2000).

Archetypes and Cultural Transformation

Another source of thought for the Center will be that of the Swiss psychoanalyst, Carl G. Jung. Jung, like Freud saw the unconscious as having a dominating influence on human conduct. But for Jung, the effect of the unconscious was more positive than for Freud, and the unconscious for Jung had more of a social or collective dimension. Jung saw the dreams and intuitions of the unconscious as offering positive guidance to life. For Jung, the unconscious has its own wisdom, a wisdom that he saw as repressed by our modern culture that bifurcates the factually, provable known world from the imaginings of the unconscious. As Thomas Berry, however, expressed in *The Dream of the Earth*, and again in *The Great Work*, we are now at a time when we must go beyond knowledge that is factually available to us and open ourselves to the wisdom and power of the dream to guide us to an Ecozoic Era that exists beyond the cultural framework and limitations of the modern era. This is a thought with which Jung surely would agree.

Another thought of Jung's of great importance is that within our unconscious are certain archetypes, or models of reality, that guide our actions. Thus, one might have an archetype of a heroic warrior and one might configure one's life in response to that image. Jung believed that these archetypes were developed over the course of human history and are now shared as collective unconscious archetypes that guide our actions. Transformation in human culture, therefore, involves transformation of these archetypes. Archetypes might involve not only personal images, such as the heroic warrior, but also models of civilizational presence, such as an image of how a community should look. Thus, in the medieval period, the archetype of the quintessential building might have been a gothic cathedral whereas today it might be a skyscraper office building.

For Jung, the way archetypes change is part of the process of the unconscious dreaming self. The movement into the Ecozoic Era will involve a change of archetypes, archetypes that may already be found within us. For Thomas Berry these dreams come to us through our genetic coding as an expression of the dream of the Earth. A part of the purpose of the Center will be to encourage the sharing of stories and dream experiences as a way of enabling the creative advance to bring into being new cultural archetypes for the Ecozoic Era.

Other and Non-Western Thought

The sources of thought described in this paper are in not meant to exclude other ideas and sources of thought. The Center will welcome other sources of thought, as well as stories, images, art, dance and music. Voices of the South and the East will be especially welcomed. Whatever the sources of what is offered to the Center for consideration, the question that will be asked is, “Does this help us to understand, appreciate, move toward or celebrate the Ecozoic?”

III. Relation of the Center to Other Groups

Ecology, Human Justice and The Earth Charter Initiative

Organizations that become involved in ecology sometimes lose sight of human justice issues. Moreover, at times a single-minded focus on environmental concerns may be seen by people who work on human justice issues as a wrongful diversion of human resources for change.

The Center will consciously bridge the gap between ecological activism and social activism by showing how environmental degradation disproportionately impacts the poor, by showing the correlation between environmental abuse and social abuse, by calling attention to eco-justice issues such as dumping of toxic wastes and exposure to toxins in the work place, by promoting economic equity and a fair distribution of water and other natural resources, by stressing the importance of development of relatively self-sustainable economies and investment in appropriate technologies in each bioregion, and by calling for a culture of peace with an extensive reduction of military forces and armaments

A movement has arisen that has expressed such an integrated approach to ecological and social issues, and it is called the Earth Charter Initiative. In the 1990's, hundreds of organizations and thousands of individuals around the world worked to develop a people's treaty setting forth fundamental ethical and political principles for achieving a sustainable way of life. The Earth Charter is intended to be both a soft law document and an educational instrument expressing principles that could guide any organization. The Center will join in the Earth Charter Initiative and actively support its aims, objectives and programs.

Ecological and Philosophical Groups

The Center has a natural connection with other ecological and philosophical groups. The hope is that the Center will work in a cooperative way with these groups and augment their efforts.

At its inception, the Center will work with *Earthlight Magazine*, the Center for the Universe Story, the Forum on Religion and Ecology, the North American Coalition on Christianity and Ecology, the Epic of Evolution Society, The Center for Process Studies, The Whidbey Institute, the Northwest Earth Institute, the Piedmont Bioregional Institute, the Center for Reflection on the Second Law, the Center for Respect of Life and Environment, and the Center for Spirituality and Sustainability. As the work of the Center continues, relationships will be formed with many other groups.

Religious Communities and Other Groups

The word “religion” comes from Latin word “*religare*” meaning “to tie fast” or “to bind together.” This rootage seems to fit that aspect of religion which is conservative and binds together a society and its existing cultural norms and institutions. Because of this aspect of religion, there seems to be a sound basis for arguing that religious institutions are inherently conservative. The authority of the establishment in every age seems to become grounded in the precepts of the prevailing religion. Given this, it is no surprise why many reformers throw up their hands at “religious institutions.” These institutions, they say, despite the revolutionary nature of many of their teachings, is really the problem, not the cure. Yet, because of this binding character of religion, and religion’s emphasis on understandings of value and meaning, perhaps the most important effort a reformer can make is to transform established religion. Likewise, because of this binding character, perhaps there can be no comprehensive change in a society without a change in established religion.

The changes related to the Ecozoic Era will involve all institutions of society and the Great Work involves transformational efforts in each one. The Center will address various institutions (Thomas Berry highlights the universities, governments, and corporations, along with religious institutions, as being institutions deserving special attention) and, among them, with special importance, the institutions of religion.

IV. Closing Thoughts on Forgiveness and Grace

Two final thoughts deserve mention and will filter their way through all of the work of the Center. The first is forgiveness, forgiveness for our own ecological ignorance and harmful actions and for the ignorance and harmful actions of others. Guilt seems to be an occupational hazard of the ecologist. We live compromised lives and do not know how to live the sustainable lives we seek to realize. The Center's message on this will be for us to acknowledge, as individuals and communities, our own complicity in the ecological crisis, but not to become paralyzed by demands for consistency in life style and ecological values, and not to take on unbearable responsibility for resolving the ecological crisis. Instead having acknowledged our complicity, the task would be to think about, or be open to, what the next step would be for one to take to move toward the Ecozoic, and to take it . . . and if one does not, or cannot, to accept forgiveness and take the next one. That's all anyone can do.

And the final thought is grace. Grace might be thought of as unmerited favor. There has been a quality of grace to the Universe--this has been shown in the Universe's capacity to bring about novel solutions for seemingly intractable problems, for renewal in the aftermath of catastrophe, and for resilience in the face of adversity. The Universe, God, the cosmic intelligence, however you would put it, has been gracious. Because we see the record of such graceful events in the evolutionary story of the Universe, we have a basis to trust there are larger processes at work that will give significance to our own seemingly inconsequential efforts to bring into being the Ecozoic Era. Indeed, we have a basis to trust that by grace our undertakings in the Great Work will not be in vain and that despite the current crisis and denial and our own inadequacies, the Ecozoic Era will in time come to be.

Center for Ecozoic Studies

Officers

Herman F. Greene <i>Director</i>	F. Nelson Stover <i>Treasurer</i>	Sandra Payne Greene <i>Secretary</i>
	Albert Hardy <i>Webmaster</i>	

Service Group

Barbara Barr	Laura-Hummingbird	Julie Purcell
Jennie Baumeister	Frazier	Ted Purcell
Pamela Bruns	Herman Greene	Dirk Spruyt
Betty Lou Chaika	Sandra Payne Greene	Elaine Stover
David Cook	Albert Hardy	F. Nelson Stover
Deborah Dunning		

Advisory Board

E. Maynard Adams	Jim Conlon	Dennis O'Hara
Margaret Berry	K. Lauren de Boer	Ruth Rosenhek
Thomas Berry	Lewis Ford	Brian Swimme
Jane Blewett	John Grim	Mary Evelyn Tucker

Statement of Purpose

The purpose of the Center for Ecozoic Studies (CES) is to contribute through education and research to the realization of the Ecozoic Era—a time when humans live in a mutually enhancing relationship with the larger community of life systems. CES is distinguished by an emphasis on dreaming and story telling (a groping, feeling, imaginative process expressed through art and thought) as a way of enabling the creative advance needed to bring into being cultural archetypes and understandings for a new mode of human civilizational presence, and also on discerning practical steps leading toward the Ecozoic. CES is dedicated to the principle that we are embedded in a meaningful Universe that is irreversibly and continuously evolving. In such a Universe, the Ecozoic Era is a process concept...not something to be arrived at, but something ever to be created. Its hallmarks are inclusiveness, interdependence, and celebration; communion, differentiation, and subjectivity (self-organization); and sensitivity, adaptability and responsibility. It crucially involves more just and cooperative relationships among humans, as well as transformed relationships of humans with the larger natural world.

Contributors to This Issue

Laura-Hummingbird Frazier

is creator of the cover art in this issue. She is a spiritual director and educator in Winston-Salem, North Carolina, and an ordained minister. She expresses her connection with the natural world through visual arts. Her e-mail is laurahummingbird@yahoo.com.

Andrew Hawker,

age 11, wrote the poem “After A Summer Rain” in this issue while on a walk at Art Camp, Eno River State Park, Durham, North Carolina.

Betty Lou Chaika

is a holistic psychotherapist in private practice in Chapel Hill, North Carolina. She offers classes, workshops, counseling, and consultation in eco-psycho-spiritual wellness and can be reached by phone at (919) 549-6690 or by e-mail at blchaika@excite.com.

E. Maynard Adams

is Kenan Professor of Philosophy Emeritus at The University of North Carolina at Chapel Hill. He is the author of twelve books and may be contacted by writing to the Center for Ecozoic Studies.

Herman F. Greene

is the Director of the Center for Ecozoic Studies. He is a lawyer and an ecologist. His e-mail is hfgreene@mindspring.com.

Jennie Baumeister and **Pam Bruns**, both publications managers at organizations located in Research Triangle Park, North Carolina, designed and published this issue of *The Ecozoic Reader*.

Submissions for Publication

We invite you to share with us your stories and dream experiences of an Ecozoic Era and your insights into how to realize it. We also invite you to send us your art, poetry and music. Submission of an item for publication is a grant of permission to the Center for Ecozoic Studies to publish the item in *The Ecozoic Reader* (including reprints and compilations of items published in *The Ecozoic Reader*) and on the website of the Center.

To submit an item for publication, send a double-spaced printed copy of the item and the electronic file(s) on diskette (formatted for PC) to Center for Ecozoic Studies, 2516 Winningham Road, Chapel Hill, NC 27516, U.S.A. Alternatively, you may e-mail your submission to ecozoic@mindspring.com. In addition, please send your contact information and a brief biographical description of yourself so that we may identify you to our readers.

The Ecozoic Reader

Volume 1, Number 2

Winter 2001

Dancing Trees	cover art
<i>Laura-Hummingbird Frazier</i>	
After a Summer Rain	1
<i>Andrew Hawker</i>	
Learning from the Barred Owl.....	2
<i>Betty Lou Chaika</i>	
Modern Civilization and the Environment	10
<i>E. Maynard Adams</i>	
Elaboration of the Initial Ideas for the Founding of the Center for Ecozoic Studies	21
<i>Herman F. Greene</i>	



2516 Winningham Road, Chapel Hill, North Carolina 27516 USA

voice (919) 968-7200 • fax (919) 942-4358

e-mail ecozoic@mindspring.com

website www.ecozoicstudies.org