

**PROCESS THOUGHT FOR WHAT?:  
THE ECOZOIC ERA, THE GREAT WORK,  
AND THE IMPORTANCE OF PROCESS THOUGHT**

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**I. Introduction – Process Thought for What?**

Process thought, developed by Alfred North Whitehead and others,<sup>1</sup> has great explanatory powers. Many people are drawn to it because it makes sense of their experience of the world. They also find it attractive because it bridges fragmented fields of knowledge—science and the humanities; self and community; human and nature; East and West; being and time; secular and divine; microcosm and macrocosm. Many students of process thought became its devotees because of an “ah-hah” experience, one where they might have said beneath their breath or aloud, “I SEE!”

Certainly then, to those who have devoted themselves to process thought, it has private value. It has given them an inspired sense of comprehension and insight. Those who have gained this understanding have not found themselves misled by the guidance they have been given. No, they have found their lives to be more effective and more satisfying. For this reason alone process thought has considerable merit.

What this paper is concerned with, however, is the public value of process thought, which leads us back to the question asked in the title of this paper, “Process thought for what?”

At different times there are certain great currents that shape human history and are non-local in their origin. They seem called into being by being itself to deal with some overarching problem that, until the time of these currents, had not even been identified as a problem. For example, speech was not a problem for humans before humans spoke. It was only a problem for those who found stirring in their beings an urge to express their inner selves in categories that

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<sup>1</sup> Alfred North Whitehead, was a mathematician, physicist, and philosopher. His greatest philosophical work was *Process and Reality* originally published in 1929 and then re-published in 1978 (New York: The Free Press) in a corrected edition edited by David Ray Griffin and Donald W. Sherburne. The other philosophical works of Whitehead include, notably, *Science and the Modern World* (New York: Macmillan, second edition, 1926), *Adventures of Ideas* (New York: Macmillan, 1933), *Modes of Thought* (New York: Macmillan 1938), and *Religion in the Making* (New York: Macmillan, 1926). Other philosophers recognized as having been important in the origins of process thought include Charles Sanders Peirce, William James, Henri Bergson, John Dewey, George Herbert Mead, and Charles Hartshorne. Douglas Browning and William T. Myers, eds., *Philosophers of Process* (New York: Fordham University Press, 1998). For an extensive bibliography of writings of current process thinkers see [www.ctr4process.org](http://www.ctr4process.org).

gave birth to conscious self-awareness and to communicate ideas, perceptions, intuitions and feelings to others. When speech came into being it was a great leap forward for humans and this happened all around the world at about the same time. Speech solved a problem that was not, until that time, a problem.

We see such other great currents in the migrations of people across the Earth; the coming of agriculture, written language, historical thinking, mathematics, astronomy and the calendar; the establishment of the great religious traditions; and, in later times, the movements that gave rise to the scientific revolution, nation-state, Enlightenment, and modern industrial enterprise. In each of the great ages of transition, some deep current flowed that was moving the great river of humanity into a new course.

We are in such a great age of transition, one of unprecedented magnitude. This transition involves an overarching problem that has not been a problem until this time and we are dealing with this on a non-local basis, across the world. A deep current is moving.

What is this transition? What is this deep current? Does process thought speak to it? Does it constitute a part of it? Can our understanding of process thought and its significance be deepened by understanding this current and process thought's potential role in it? I think it can.

The thesis of this paper is that the role and importance of process thought may best be understood in relation to the emergence of an Ecozoic Era in the history of the planet Earth. In this paper I will argue that the central task of our time is creating global community in an ecological age, what I will refer to as the "Ecozoic Era." I will then present how this might come to be by talking about (a) three understandings of the Ecozoic—the "terminal Cenozoic," the "emergence of the Ecozoic Era," and the "Great Work"; (b) three building blocks of the Ecozoic—the "New Story," "bioregionalism," and "ecological spirituality"; (c) three contributors to the Ecozoic—Thomas Berry, Alfred North Whitehead, and E. Maynard Adams; and, finally, (d) the Earth Charter as the guiding vision of the Ecozoic Era. Then, with this as background, I will conclude with a discussion of how our understanding of the role and significance of process thought might be deepened by (i) understanding process thought within its historical context, (ii) by giving attention to the Earth Charter, and (iii) by linking efforts through the "International Process Network."

Process thought for what? The answer developed here is that process thought is for bringing into being an organic, process-relational worldview as an undergirding philosophical framework for global community in an ecological age.

## **II. The Deep Current – Creating Global Community in a Ecological Age**

### **A. Globalization; Dimensional Changes in Human Presence on Earth**

We hear again and again about globalization. Some people sing its praises as an answer to all of our problems, and others condemn it as the source of all our problems. One thing, however, is unavoidable and that is we are connected on a global basis as never before. Moreover, we, as

humans, exist in greater number, have greater knowledge and technological capabilities, have greater disparity between rich and poor, have greater cultural, religious, ethnic and national awareness, and have more impact on other-than-human nature than ever before.

This state of affairs leaves us with unprecedented opportunity and unprecedented peril. We have come to a turning point. If we continue as we have, as though huge dimensional changes in human presence on the Earth have not occurred, then we invite peril. A new direction is needed if we are to invite opportunity. This new direction involves creating global community for both human and non-human beings in an ecological age.

## **B. The Concepts of “Ecology” and “Community” Serve as Guides to the Future**

“Ecology,” the study of the interrelations of organisms and their environment, serves as a primary guide to the future. 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 remain important, but a new emphasis on the well-being of the community, which extends to all humans and to other-than-human nature, will be of primary importance in the future. Just as progress and freedom served as guides in the modern period, ecology and community will serve as guides in the age to come.

## **C. An Appraisal of What Is Needed in the Future Must Begin with an Assessment of the Environmental Situation**

Ecology must be the focus of our concern as we move into the future because of the gravity of the current environmental situation. 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.<sup>2</sup> Biologists tell us that the natural rate of extinction is one every four years,<sup>3</sup> and that the current rate of extinction is 27,000 species each year, three each hour.<sup>4</sup> Given the continuation of present trends, by the end of this 21<sup>st</sup> century 50% or more of the species on Earth will have vanished.<sup>5</sup> The current causes of these extinctions—habitat loss, habitat

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<sup>2</sup> Richard Leakey and Roger Lewin, *The Sixth Extinction* (New York: Anchor Press, 1995), 233-254.

<sup>3</sup> *Ibid.*, 241. John Harte in *The Green Fuse* (Berkeley: University of California Press, 1993), 85, gives the background extinction rate as one each year.

<sup>4</sup> Edmund O. Wilson, *The Diversity of Life* (New York: W.W. Norton, 1992), 280. Wilson explains how he made this calculation in pages 274-80.

<sup>5</sup> Leakey and Lewin, 240-41; Harte, 85. *See also*, Wilson, 278, and Paul Harrison and Fred Pearce, *American Association for the Advancement of Science Atlas of Population and Environment* (Berkeley: University of California Press, 2000), 162. 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 that of the last great mass extinction. Harte, 85 (stating that a quarter of the species became extinct at the end of the Mesozoic Era in a period of a few thousand years).

fragmentation, invasive species, toxic waste, resource depletion, human population growth, human overconsumption, interruption of natural systems, and climate change—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.<sup>6</sup>

#### **D. Difficulties of Giving Primacy to the Environment; Ethical Breakdown in Dealing with Environment; Role of Philosophy in Addressing the Situation**

Some, of course, do not consider the environmental situation as being the proper focus for defining our future task. They disagree for various reasons. Some deny on scientific or other grounds that the situation is as bad as environmentalists reckon.<sup>7</sup> Others see the human problems as being more pressing, immediate or important. Others take a cosmic view that humans are part of nature and that whatever is happening is in the course of nature—if this means the extinction of humans this is acceptable because human life on Earth is finite; if this means extinction of other species then such extinctions have happened before and life will go on through nature’s regenerative powers.<sup>8</sup>

Probably for most people, whether the environmental situation should be considered as primary does not rise to the level of philosophical reflection. There is a long history of seeing nature as being for the use of humans. One coming from this perspective sees no problem in the unlimited exploitation of nature. Others are faced with survival needs that are paramount to any other consideration. Even for those who are genuinely concerned about the environment, there is an ongoing tradeoff of immediate benefit for long-term benefit and of the needs of the present generation for the needs of future generations; also there is a sense that what “I” do can’t make much of a difference. In institutional behavior there is a sense that the existing institutional requirements and expectations are central and environmental concerns can only be peripheral.

We are, as Thomas Berry and Brian Swimme have stated, beings with “a microphase sense of responsibility or ethical judgment,” but who “through our scientific insight and technological skills, have become a macrophase power, something on the level of the glaciations or the forces that caused the great extinctions of the past.”<sup>9</sup> In such a situation we are faced with a breakdown of our ethical and moral systems. In the words of Thomas Berry:

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<sup>6</sup> It is now thought that an important cause of the extinctions at the end of the Cenozoic Era was caused by a meteor impact. Leakey and Levin, 55. While such an impact vastly changed the atmosphere, it did not introduce unnatural contaminants into the ecosystem.

<sup>7</sup> See, for example, Bjørn Lombord, *The Skeptical Environmentalist*, and “‘The Skeptical Environmentalist’ The Litany and the Heretic,” *The Economist* (February 2, 2002), 75-76.

<sup>8</sup> A cogent reflection on this view is given by Harrison and Pearce at 162:

Looked at on a geological timescale the planet’s biodiversity has always been faced with threats of one form or another. Mass extinctions have a history almost as long as biodiversity. . . . Extinction moreover, is an essential engine for evolutionary progress. Even mass extinctions, by killing large numbers of creatures, open up ecological “niches” to which surviving organisms swiftly adapt. Thus the demise of dinosaurs allowed the rapid evolution, within 10 million years, of bats, whales, horses and numerous other species of mammals and birds. Nonetheless, whatever such benefits to life on Earth may be in the long term our own [(human)] immediate future on the planet is jeopardized by the current human-induced mass extinctions.

<sup>9</sup> Thomas Berry, *The Great Work* (New York: Bell Tower, 1999), 101. Berry gives credit to Brian Swimme in *The Hidden Heart of the Cosmos* (Orbis Books, 1996) for the microphase/macrophase distinction. The meaning of this distinction is explained in Brian Swimme and Thomas Berry, *The Universe Story* (San Francisco:

We find ourselves as ethically destitute just when, for the first time, we are faced with ultimacy, the irreversible closing down of the Earth's functioning in its major life systems. Our ethical traditions know how to deal with suicide, homicide, and even genocide; but these traditions collapse entirely when confronted with biocide, the extinction of the vulnerable life systems of the Earth, and geocide, the devastation of the Earth itself.<sup>10</sup>

Does process thought have anything to offer to deal with this situation? The answers that are needed are in fact very complex. We could probably all agree that we would like a healthy Earth rich with biodiversity. We would find it harder to agree that we should not drive our car 25 miles to our offices, that we should not fly jet planes to important conferences or business meetings, that we should not have the right to vacation and build cottages in environmentally sensitive areas, that destitute people do not have a right to more goods, or that our children do not deserve to have the best education possible and the housing and goods to establish their dignity in the community. We would also find it hard to agree, in real world situations, that our business, governmental and educational institutions should curb their activities due to environmental concerns.

The answers to the environmental issue are also complex because, unless one reduces it solely to moderating negative environmental impacts resulting from untrammelled human development, there is no single identifiable point of concern, such as there is, for example, in race or gender discrimination. No, when considering the environmental problem one sees that every human interaction has an environmental impact and tradeoff and therefore any solution to the environmental situation involves every aspect of human action. It is no wonder that the environmental issue is one of almost universal concern,<sup>11</sup> and yet is pushed to the side in order of priority.

To come back to the issue whether process thought has anything to offer to this situation, I am a strong believer that it does. I would even venture to say that process thought came into being for such a time as this. This is so because, since the environmental issue involves everything, we need a framework that allows us, as humans, to respond holistically in the midst of a complex system of relations and dynamic interactions. Process thought offers an understanding of the nature of reality that seems to correspond to the understanding we would need to have to "act ecologically." Process thought sees reality as being organic, constituted by relationships, evolutionary, and created continually by decisions made by accountable individuals responding to a lure of feeling that takes into account their social relationships, all of past actuality and the possibility of a moral future.

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HarperSanFrancisco, 1992), 55, as follows: "By microphase we mean that which pertains to the here and now of a particular creature. By macrophase we point to the larger realities involved in the moment, both in terms of the largeness of the universe and of Earth and the mystery of the unborn future."

<sup>10</sup> Berry, 104.

<sup>11</sup> According to Paul Ray and Sherry Anderson in *The Cultural Creatives* (New York: Harmony Books, 2000), 140, "[i]n opinion surveys, 70 to 90 percent of people in most countries world wide are deeply concerned about the environment. . . . The level of concern in the United States is about average, at 85 percent."

Yet being descriptive of reality is not enough if process thought is to provide leadership in shaping a future in which the health of the planet can be assured. To provide such leadership, process thought must understand itself within an historical context, define its mission within that context, and be in dialogue with other philosophical and religious traditions to develop those understandings that help in accomplishing this objective. We might begin to understand what philosophy can accomplish through this statement by E. Maynard Adams, who writes:

Philosophy attempts to bring under critical review and to correct errors in the cultural mind of our civilization, the prevailing assumptions and beliefs about our knowledge-yielding powers, the various sectors of the culture, and the basic structure of the world. It holds the cultural mind accountable to the unavoidable presuppositions of experience, thought, and action. Errors in the cultural mind can lead to distortions in the development of the culture and to social and personal pathologies. . . . The mission of philosophy today is to point out the errors in our cultural mind and to work for a humanistic cultural reform.<sup>12</sup>

As I will develop later, to this understanding of the mission of philosophy must be added Thomas Berry's understanding that humanistic cultural reform must involve re-integration of the human into the community of life systems.<sup>13</sup>

There have been many articles and books written about the priority of the environmental issue. Some say we must attend to this because it is a matter of human survival. If that is so, the environmental issue is not a primary issue for this generation of humans, so what right have we to sacrifice the fulfillment and betterment of our current generation for the needs of future generations? Others say we must attend to this because humans must be seen as no better than any other creature and humans have no right to deprive other creatures the right to exist. If this is so, how can we ever justify the fulfillment of human needs where the needs of other species would be sacrificed? Some say that we must preserve nature for spiritual reasons because our own spirituality comes from our encounters with nature. Yet, spirituality may be thought of as a higher level need and when more basic needs such as the needs for sustenance, health, housing, security, and reproduction must be met, preserving nature for spiritual reasons will usually not provide a sufficient reason for doing so.

The problem in dealing with the environmental issue, I think, is that no satisfactory solution can be found within our current framework, and this is because we have not conceived of our community as including the whole community of life systems. It is only when we broaden our framework in this way that we can begin meaningfully to address the health of the entire community of being. That we should do so is implicit in the philosophy of Whitehead, which extends to all of reality, includes sensing and experience in all aspects of reality, and explicates the interdependent nature of reality. That we should do so is implicit in the philosophy of Adams which establishes the normative structure of existence and the legitimacy and necessity of value and meaning concepts and of teleological causation. That we should do so is explicit in the work of Berry who sees the radical discontinuity that has been established between the human and the

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<sup>12</sup> E. Maynard Adams, "The Mission of Philosophy Today," *Metaphilosophy* 31 (2000), 349

<sup>13</sup> Berry, 161-62.

nonhuman as the central flaw in human development,<sup>14</sup> and that “the renewal of life on the planet must be based on the continuity between the human and the other than human as a single integral community.”<sup>15</sup>

Berry leaves no doubt on his position. He states:

In reality there is a single integral community of the Earth that includes all its component members whether human or other than human. In this community every being has its own role to fulfill, its own dignity, its inner spontaneity. Every being has its own voice. Every being declares itself to the entire universe. Every being enters into communion with other beings. This capacity for relatedness, for presence to other beings, for spontaneity in action, is a capacity possessed by every mode of being throughout the entire universe.

So too every being has rights to be recognized and revered. Trees have tree rights, insects have insect rights, rivers have river rights, mountains have mountain rights. So too with the entire range of beings throughout the universe. All rights are limited and relative. So too with humans. We have human rights. . . . But we have no rights to deprive other species of their proper habitat. We have no rights to interfere with their migration routes. We have no rights to disturb the basic functioning of the biosystems of the planet. We cannot own the Earth or any part of the Earth in any absolute manner. We own property in accord with the well-being of the property and for the benefit of the larger community as well as ourselves.<sup>16</sup>

Berry further states that the human-system is a subsystem of the Earth system; therefore, we must recognize that “the community of all living species, including the human, is the greater reality and the greater value [than that of the community of the human species alone]. The primary concern of the human community must be the preservation and enhancement of this comprehensive community, even for the sake of [the human community’s] own survival.”<sup>17</sup>

Don’t these explicit positions of Berry follow implicitly from process thought? Or, at least, could it not be said that process thought offers support for the positions of Berry and may be useful in developing a philosophical foundation for Berry’s positions? I believe the answer to both of these questions is “Yes.” I will partially, but not fully, develop the basis for my positions below. More importantly, however, for the purpose of this paper, I will state why I believe it is necessary for process thought to turn its attention in the direction suggested by Berry in order for process thought to fulfill its greatest potential. This will involve a shift in philosophy to a cosmological rather than a humanistic orientation.<sup>18</sup> This cosmological orientation is, however,

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<sup>14</sup> Ibid., 4, 80.

<sup>15</sup> Ibid., 80.

<sup>16</sup> Ibid., 4-5.

<sup>17</sup> Ibid., 58.

<sup>18</sup> This shift is not that difficult in process thought. It could even be argued it involves no shift at all, except that cosmological, as understood by Berry, includes the “New Story” discussed in the text accompanying footnote 40 below. Incorporating that story into process thought would involve a shift for most process thinkers. The shift to a cosmological orientation with Adams’ thought is more complex. (Adams’ thought is discussed in the text

not the hierarchical cosmology of the past; but rather the new cosmology of a dynamic, evolutionary universe, and, on Earth, the “functional cosmology” of ecology.<sup>19</sup>

### **E. The Modern, the Neo-Traditional, and the Ecozoic Alternatives.**

Let us look at the three broad alternatives for the future. The modern alternative means the continuation of the present mode of development which originated in the West. It sees nature as a set of resources (including an aesthetic resource) for humans. Its success is driven by the entrepreneur. Its vision is one of a global market, where free choice allocates resources, including ecological resources, in the most efficient manner. Its science is materialistic, and solutions to intractable problems, such as poverty, environmental degradation, even war, will come through technology and finance. In this vision, the “common-wealth” will become the “common-weal” as people become tied together in an inter-related world of communication, trade, cultural exchange, and mutual self-interest. This alternative has a benign view of human control of nature and wants few restraints on biotechnology and genetic manipulation of life. Regulation is to be used sparingly, and the role of government is to support the growth of business and maintain political stability. Value is determined primarily in monetary terms, which is defended on the basis of the inherent morality of the market of providing the greatest good for the greatest number of people, on the freedom allowed to the individual, and on the basis that it transcends culturally relative value systems that would inhibit the free exchange of goods and ideas among people. These understandings combined with the understandings of human rights and democracy developed during the modern period offer a powerful and compelling vision of the future.

While the modern alternative offers a compelling vision, it also produces a reaction in many people. Modernism involves the rejection of traditional values and ways of life. It also involves abandonment of authority as a criterion for truth. Some question the secular tendencies of modernity and the acquisitive and hedonistic values of the consumerism that seem to go with the modern order. Some may also be disturbed by the fragmentation of families, tribes and social groups they see as resulting from modernity. Some may object to the commoditization and monetization of life, the destruction of the land, the antipathy to agrarian life and indigenous folkways, and the violation of nature. Some are offended by the arrogance of moderns who excuse too much in the name of “progress” and are blind to the consequences of their actions. Some are confounded by the inequities and callousness of modern industrial enterprise. Some are concerned about the spread of a “McWorld” sameness that takes away the distinctiveness of local communities and cultures. Some are concerned by the buildup of military power and weapons of mass destruction and the perilous aspects of technology from cloning to genetically modified organisms, to toxic wastes, to nuclear power, to monocultures in agriculture, and other matters.

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accompanying footnote 59 below). Adams considers himself a metaphysician and he qualifies his understanding of humanism with the word “realistic,” as in “realistic humanism.” The import of this qualifier is that the distinctly humanistic categories are grounded in the nature of the universe. E. Maynard Adams, *The Metaphysics of Self and World* (Philadelphia: Temple University Press, 1991), 45. See generally, E. Maynard Adams, *A Society Fit for Human Beings*, (Albany, NY: SUNY Press, 1997), 8-15. Yet, Adams has written little about the non-human universe. Rather he has concentrated on the nature of humans, what humans can know, and how they should act in view of their human constitution.

<sup>19</sup> Lecture by Thomas Berry at the Raleigh Theological Society, Raleigh, North Carolina, April 24, 2002.



There are responses that seek to find an alternative to modernism in traditional values and ways of doing things. This is the second alternative, the neo-traditional alternative. It has a variety of manifestations ranging from back-to-the-land movements, to Christian, Islamic and Hindu fundamentalist movements, and to conservative political and social movements in many countries. These movements may involve the restoration of authority-based value and social structures, strict moral codes, defined social roles for women and classes of people, resistance to technology, consumerism, and Western culture, and greater emphasis on agrarianism and preservation of local cultures.<sup>20</sup>

The third alternative, I will call the “Ecozoic.” It too might be thought of as a reaction to modernism, but rather than seeking to return to traditional or pre-modern approaches, it seeks a constructively post-modern alternative. Its distinguishing feature is that it sees Earth as a single community of beings and seeks to arrive at a role for humans that is mutually enhancing to the larger community of life. Rather than seeking to control nature, humans in the Ecozoic try to learn from nature to reintegrate the human community with the ever-renewing processes of nature. The Ecozoic alternative is neither anti-modern nor anti-tradition, but it realizes that no prior way can provide answers that are adequate to provide a viable human/Earth future.

The Ecozoic sees both the modern and neo-traditional alternatives as continuing the radical discontinuity between human and other-than-human nature. The Ecozoic sees the modern alternative as flawed because of its belief that nature (and humans as well) can be exploited and controlled without causing unacceptable harm to the entire community of life. The Ecozoic sees the neo-traditional alternative as flawed because it re-establishes authority based on pre-modern worldviews as the criterion for truth and limits free inquiry and the moral responsibility of the individual.<sup>21</sup> In addition, in many cases, neo-traditionals who seek a return to conservative social values do so without rejecting the industrial, exploitative model of economic development.

One may wonder if the Ecozoic alternative really exists. Is it only an alternative in theory, or is it a description of a widespread social movement? I believe such a movement does exist, and was documented in the United States by Paul Ray and Sherry Ruth Anderson in *The Cultural Creatives*. According to Ray and Anderson’s description, in the United States the movement consists of approximately 50,000,000 people, all of whom have a strong concern for “green” or environmental values and a concern for issues of women.<sup>22</sup> About half of this group is spiritually oriented and the other half secular.<sup>23</sup> This group of “cultural creatives” represents about 26% of the adult population of the United States,<sup>24</sup> 60% of which are women and 40% of

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<sup>20</sup> I am indebted to Paul Ray and Sherry Anderson for the analytical framework of modern, neo-traditionalism, and the third way, which they call the cultural creatives. Ray and Anderson, 65-95, and lecture by Paul Ray and Sherry Anderson, at the Northwest Earth Institute, National Earth Institute Training, Eagle Creek, Oregon, July 20, 2000. My own use of the term departs somewhat from their use and from the data set on which they based their usage.

<sup>21</sup> While a high level of moral responsibility seems to be required in neo-traditionalism, it is responsibility to established norms rather than to the individual’s own responsibility to decide ethical norms and behavior.

<sup>22</sup> Ray and Anderson, 12-14.

<sup>23</sup> Ibid., 14-15

<sup>24</sup> Ibid., 4

which are men,<sup>25</sup> and is growing by about 1% per year.<sup>26</sup> In addition, according to Ray and Anderson, surveys indicate there are as many cultural creatives in Europe as in the United States,<sup>27</sup> and presumably this phenomenon is not limited to these areas. It represents a third way between the moderns and the neo-traditionals, a way that accepts the gifts of both viewpoints, but seeks new answers based on understandings that see Earth as a single sacred community.

What the broad-based movement represented by the cultural creatives lacks is a strong sense of “self-awareness as a whole people”<sup>28</sup> and an integral understanding of the tendencies found in the movement and a mature logic behind its vision.<sup>29</sup> It is this integral understanding and mature vision-logic that process thought can play an important role in providing. Process thought will, however, only be able to play effectively this vital role by understanding properly the historical context out of which we are operating, addressing requirements of ecology, and engaging in a broad dialogue with supporting philosophies and traditions. The remainder of this paper will be devoted to a discussion of these matters and a proposal for how the process movement may strengthen its impact and organize its efforts.

Before proceeding, however, let me recap the three alternatives that are competing for the future. One is the modern or technozoic alternative. It is the dominant force that originated in the West and has spread throughout the world. Resisting the modern alternative is the neo-traditional.<sup>30</sup> The third way we have termed, the “Ecozoic.” The term was coined by the ecologist, Thomas Berry, and it comes from the Greek word “oikos” meaning “house” and “zoic” meaning “life.” So “Ecozoic” means “house of life.” The Ecozoic is neither modern, nor traditional, and it is both. It recognizes on the one hand, the benefits of modernity, and, on the other hand, the objections of the neo-traditionals to modernity and the benefits of traditional values. The starting point of the Ecozoic is, however, different than either the modern or the neo-traditional, because it begins not with the human alone but with a cosmological view of the Earth

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<sup>25</sup> Ibid., 23.

<sup>26</sup> Lecture by Paul Ray and Sherry Anderson, at the Northwest Earth Institute.

<sup>27</sup> Ray and Anderson, 5

<sup>28</sup> Ibid., 39.

<sup>29</sup> Ken Wilber, *A Theory of Everything* (Boston: Shambhala Publications, 2000), 30.

<sup>30</sup> An argument can be made that the struggle between the moderns and the neo-traditionals is being dramatically played out in the current “war on terrorism.” The neo-traditionalist “terrorists” are depicted in the United States as a tiny minority of people, but they may also be understood as an extreme expression of a widely held view. The roots of this struggle are very deep and go back to injustices suffered in the colonialism of the past, the excesses associated with Christianity, and the current economic and cultural imperialism of the West backed by extreme military superiority. Samuel Huntington writes about our period as one involving a “Clash of Civilizations.” His description of this clash does not track the modernist, neo-traditionalist analysis, but it offers some indirect support for this analysis in his observation that “the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among humankind and the dominating source of conflict will be cultural. Nation states will remain the most powerful actors in world affairs, but the principal conflicts of global politics will occur between nations and groups of different civilizations. The clash of civilizations will dominate global politics.” Samuel P. Huntington, “The Clash of Civilizations?” *Foreign Affairs* (Summer 1993). See generally, Samuel Huntington, *The Clash of Civilizations* (New York: Simon and Schuster, 1996). Huntington’s admonition that we must come to terms with the diversity of world civilizations is a good one. At the same time, given global interrelatedness and the human impact on the environment, there is a need to develop to a significant degree a shared ethos and understanding. The Ecozoic alternative offers this without imposing modernist, Western values.

as a single sacred community. It recognizes that the human-system is a subsystem of the Earth-system, and that we have a world in common.

The Ecozoic offers a new starting point for how we might solve age-old dilemmas. It is a context in which process thought can flourish and play a leading role in helping to shape the understandings, values and social institutions of an Ecozoic future.

### **III. Three Understandings of the Ecozoic**

Now let us better understand the Ecozoic and the historical context out of which it arises.

#### **A. The Terminal Cenozoic**

Understanding the Ecozoic begins with understanding that we are in the terminal Cenozoic Era in the history of our planet. 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 fundamentally to re-orient the civilizational effort. 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 first period of life on Earth, the Archean Eon, when life was restricted to microbial beings like bacteria, the atmosphere did not contain oxygen and the living organisms could not deal with it. Yet, over billions of years, 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.<sup>31</sup> 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 toxic to the biosphere. As a new kind of life had to be invented to bring into being the Proterozoic Era, so a new kind of life now has to come into being to bring about the Ecozoic. To continue in the terminal Archean, those many years ago, 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.<sup>32</sup> 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.<sup>33</sup> There is no invention in nature, as it has evolved from the beginning of time to

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<sup>31</sup> Swimme and Berry, 93-99.

<sup>32</sup> Ibid., 94.

<sup>33</sup> As stated earlier, pollution itself is only one cause of the current extinctions. There are multiple causes, the biggest of which is habitat loss and fragmentation, but also include climate change, alteration of natural systems, invasive species, over population and over consumption. For a discussion of the causes, see generally the books cited in footnote 4 above by Wilson, and in footnote 2 above by Leakey and Lewin. Leakey and Lewin conclude their book on 254 by stating: “For each of the [five earlier great mass extinctions] there are theories of what caused them, some of them are compelling, but none proven. For the sixth extinction, however, we do know the culprit. We

the present, to enable life systems to deal with human activity in its current and rapidly accelerating technological mode of functioning.<sup>34</sup> 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 clear, 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 vast 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 Earth's history 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 alarming. 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 inter-relatedness with other-than-human nature.

## **B. The Emergence of 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,<sup>35</sup> 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 Ecozoic Era are difficult to grasp and profound. Here are some:

(i) By using the term "Era," we are drawn 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 period of the Cold War or the Great

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are."

<sup>34</sup> It is not "technology" itself that is the problem. Humans are *homo sapiens*, but also *homo faber*, i.e., tool-making animals. The problem is the application of technology under the current conception of the non-human world as existing as a set of natural resources for the "use" of humans, rather than a mutually enhancing community of beings. Berry, xi.

<sup>35</sup> Janet A. Michello, "Spiritual and Emotional Determinants of Health," *Journal of Religion and Health* (Vol. 27, No. 1, 1988), 62, cited in Dennis Patrick O'Hara, "The Implications of Thomas Berry's Cosmology for an Understanding of the Spiritual Dimension of Human Health," unpublished thesis submitted to the Faculty of Theology of the University of St. Michael's College and the Department of Theology of the Toronto School of Theology in partial fulfillment of Doctor of Philosophy requirements (1998), 34.

Depression, 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-dependent 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 Earth, and all other activities extending at least from 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 modern period, but to use these (and new) technologies and this (and new) knowledge in more creatively adaptive 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 development.

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 and among humans as well.

(iii) By using the two terms "Ecozoic" and "Era" together as "Ecozoic Era," we are called to consider an age that will be 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 (our present era—efflorescence of mammals, grass spreads across the land) is from the Mesozoic Era. In terms of periods of human history, we are called to consider a period that will be as different from our current period as the Paleolithic (hunter-gatherer 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 to 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 energy and other resources within the human community.<sup>36</sup> 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.

### **C. The Great Work – Re-inventing the Human**

The “Great Work” of our time, according to Thomas Berry, is to bring into being the Ecozoic Era.<sup>37</sup> This involves “reinventing the human.” Berry 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.”<sup>38</sup>

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. Thus as a species, we are what we are biologically and we are what we are culturally.<sup>39</sup> Reinventing the human means changing culture; and this means changing the belief systems, moral values, knowledge and meaning concepts, and understandings of fulfillment at the base of culture.

## **IV. Three Important Building Blocks of the Ecozoic Era**

As we consider the Great Work, we might think of three important building blocks—the New Story, bioregionalism and ecological spirituality.

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<sup>36</sup> “The Natural Step to Sustainability,” *Wingspread Journal* (quarterly publication of The Johnson Foundation, Inc. 1997).

<sup>37</sup> Berry, 1.

<sup>38</sup> *Ibid.*, 159.

<sup>39</sup> See Swimme and Berry, 157-60.

## A. The New Story

The “New Story” is the narrative of the creative development of the universe from the primordial flaring forth<sup>40</sup> to the emergence of the Ecozoic Era. It is both a scientific account and an epic myth of origins. This story relates how things came to be and what significance and role humans have in the ongoing drama of the cosmos. The dual nature of the story, its blending of the scientific and the meaning-giving mythological, is what makes it the “New Story.”<sup>41</sup>

All great civilizations have a great story of the origin of things, a “cosmogonic myth.” If we contemplate a civilization with an ecological basis, we can see that this New Story serves as such an understanding. It gives meaning and purpose to our individual lives and direction to our social endeavors, first by awakening a sense of the awe and mystery of existence and of our participation in the cosmological order of the Universe, second by reconnecting the self (and so restoring the self) with that which is more primordial than family, tribe, clan or nation—the self’s relationship with the natural world from which it came and of which it is a part; and third by providing a unifying mythology for all human cultures and a basis for common action in the realization of the Ecozoic Era. The New Story is an important part of the “knowing” dimension of the Great Work.

## B. Bioregionalism

A “bioregion” is a naturally occurring geographic division of Earth that contains an interacting community of life functioning as a relatively self-supporting system within the ever-renewing processes of nature.<sup>42</sup> To think bioregionally means to think of humans as being co-existent with and dependent upon the natural order, not as being dominant over it. The role of humans in the bioregion is to appreciate and celebrate its diversity and to honor and preserve its vitality, including the human part of it.

The bioregion would be the fundamental ordering principle in the Ecozoic Era. Thinking bioregionally means understanding that all things exist within the dynamic order of the universe, and that the universe expresses itself through the Earth, and the Earth expresses and sustains itself in its bioregional modes of being. The universe in all of its processes, becomes the supreme norm of reality and value. In the words of Thomas Berry, the universe is “the primary lawgiver, the primary economic corporation, the primary scientist, the primary technologist, the primary healer, the primary revelation of the divine, the primary artist, the primary teacher, and indeed the primary source, model and ultimate destiny in all earthly affairs.”<sup>43</sup> “The ecological community is not subordinate to the human community. Nor is the ecological imperative derivative from human ethics. Rather, our human ethics are derivative from the ecological imperative. The basic ethical norm is the well-being of the comprehensive community and the attainment of human well-being within that community.”<sup>44</sup>

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<sup>40</sup> The primordial flaring forth is commonly referred to as the “big bang.”

<sup>41</sup> An important source for learning about this story is Swimme and Berry’s *The Universe Story*, cited in footnote 9 above. The New Story is also sometimes referred to as the “new cosmology.”

<sup>42</sup> Berry, 162.

<sup>43</sup> Berry, 81.

<sup>44</sup> *Ibid.*, 105.

Bioregionalism provides the setting for meaningful human endeavor. Good works are those which sustain the diversity, communion, and self-organizing dynamics of the bioregional community. Bad works are those which destroy the diversity, communion and self-organizing dynamics of the bioregional community.<sup>45</sup> Bioregionalism is an important part of the “doing” dimension of the Ecozoic Era.

### C. Ecological Spirituality

Ecological spirituality is grounded in the sense that from the beginning the universe has had a psychic/spiritual dimension and that this dimension is manifest in every element of the universe and in the universe as a whole. As Thomas Berry said in his essay “The Spirituality of the Earth,” when we speak of the spirituality of the Earth we are not speaking of the Earth as having an objectively spiritual quality, as when we observe the beauty of the Earth, but of the spirituality of the Earth as subject, the interior numinous reality that gives form to the Earth and in which we participate.<sup>46</sup> Ecological spirituality doesn’t separate the divine and the natural realms, rather it sees the divine as indwelling and influencing the process of creation; nor does it separate human from other-than human life, rather it understands, in both an evolutionary and existential sense, that there is a kinship of all beings.

Simply understood ecological spirituality involves reconnection with the natural world and its numinous quality. In a more complex understanding, ecological spirituality includes the humanistic dimension of spirituality and presence to the mystery and value of the human community within the inclusive community of life. It honors the role of humans, as “enabling the Earth and the universe entire to reflect on and celebrate themselves, and the deep mysteries they bear within them, in a special mode of conscious self-awareness.”<sup>47</sup> We might understand the human, as the Chinese do, “as the *hsin* of heaven and Earth. This word *hsin* is written as a pictograph of the human heart [and might be translated as] the ‘understanding heart of heaven and earth.’”<sup>48</sup> As so understood in its comprehensive meaning, ecological spirituality becomes a guiding motif for the realization of the Ecozoic Era, an important part of the being dimension.<sup>49</sup>

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<sup>45</sup> Swimme and Berry, at 70, state that differentiation, autopoiesis (self-organizing dynamics), and communion are the primary characteristics of the evolution of the universe.

<sup>46</sup> Thomas Berry, “The Spirituality of the Earth,” in Charles Birch, William Eakin, and Jay B. McDaniel, eds., *Liberating Life* (Maryknoll, NY: Orbis Books, 2000), 151.

<sup>47</sup> Swimme and Berry, 1.

<sup>48</sup> Berry, “The Spirituality of the Earth,” 155.

<sup>49</sup> By way of contrast, the understanding that has dominated the sense of reality and value in the classical religious traditions has been based on a sense of the pathos of the human condition and of the transient and tragic nature of the temporal order. As observed by Swimme and Berry in *The Universe Story*, the phenomenal world in this understanding has been viewed as oppressive to the more exalted aspects of existence. Swimme and Berry, 188. The spiritual world and the natural world have been viewed as two different orders of being. The conviction that the natural world is a lower, temporal reality, as distinguished from the higher, eternal reality, has served to justify the exploitation of the Earth for the sake of humans.

The secularistic tendencies of modern period have not proven to be an antidote for the problems related to this ancient dualism. In the West, with the de-souling of nature by Descartes in the 17<sup>th</sup> century began another dualism, this between the human world of mind and the nonhuman world seen as mechanism without inherent values or purposes. Nature became something to be mastered and conquered, to be tortured to reveal her secrets. In the words of Sir Francis Bacon, “[Nature] exhibits herself more clearly under the trials and vexations of art [mechanical devices] than when left to herself.’ . . . Nature was to be bound into service and made a ‘slave’ and ‘put in



## V. Three Contributors to Understanding the Ecozoic

There are many sources of thought that are contributors to understanding of the Ecozoic Era. I will describe below three authors, Thomas Berry, Alfred North Whitehead, and E. Maynard Adams, who have been extremely important to me. They are not the only ones who have helped me in developing my understanding, but they have become pillars of my thinking. To mention these three does not mean to elevate them in stature above the many, many others who have contributed and are contributing to this understanding. By singling these three out, I fail to give credit to the contributions of women, both past and present, who have taught me so much and have so much to offer to an Ecozoic understanding of life, very likely more than men. Also, I fail to give credit to indigenous people who have understood our relation to the Earth in a way that surpasses anything of which I am capable. And I have not mentioned the contributions of scientists and of the deep wisdom to be re-covered in our classical religious and humanistic traditions. With humble recognition of these other important contributors not cited here, I will proceed.

### A. Thomas Berry

Thomas Berry has provided the crystallizing vision of the Ecozoic Era. One of 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 implications of the New Story 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 evidences a psychic-spiritual aspect 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 are intimately bonded and 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 to a viable human future. 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. As he would be the first to say, his thought has to be developed and expanded upon by others. Brian Swimme,<sup>50</sup> Mary Evelyn

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constraint.' She would be 'dissected,' and by the mechanical arts and the hand of man she could be 'forced out of her natural state and squeezed and molded,' so that 'human knowledge and human power meet as one.'" Rupert Sheldrake, *The Rebirth of Nature* (Rochester, Vermont: Park Street Press, 1991), 43, quoting Sir Francis Bacon, as quoted in C. Merchant, *The Death of Nature* (London: Wildwood House, 1982), 169. The millennial expectation of the ancient dualism (to be realized by divine intervention) gave way to the technological pursuit of a humanly made paradise in historical time.

<sup>50</sup>Brian Swimme, a mathematical cosmologist and philosopher, teaches at the California Institute for Integral Studies in San Francisco, California. In addition to *The Universe Story*, co-authored with Berry, his books include

Tucker and John Grimm<sup>51</sup> deserve special mention for the important work they are doing in this regard. And not only does Thomas Berry's thought need to be developed and expanded upon, but again, as he would be the first to say, many other sources, ancient and new, female and male, East and West, and South and North, are needed for developing the Ecozoic vision.

## **B. Alfred North Whitehead (Process Thought)**

Thomas Berry and Teilhard de Chardin, who greatly influenced Berry,<sup>52</sup> have been impressed by the story of the universe as narrative, and from this narrative have drawn conclusions about the nature of the universe. Their reflections were 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 20<sup>th</sup> 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."<sup>53</sup>

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 does 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 or 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 "cosmogenesis," the time-developmental character of the universe, developed by Berry and Swimme and the understanding of which, they believe, involves the most important intellectual shift of our time.<sup>54</sup> In the past, according to Berry and Swimme, the universe has been seen as existing in a "spatial mode" as opposed to a time-developmental mode.<sup>55</sup> The universe viewed in a spatial mode was constant,

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*The Universe Is a Green Dragon and The Hidden Heart of the Cosmos.*

<sup>51</sup> Mary Evelyn Tucker and John Grimm, are, both, historians of religion and teach at Bucknell College in Pennsylvania. They are editors or co-editors of *Worldviews and Ecology*, *Buddhism and Ecology*, and *Indigenous Traditions and Ecology*.

<sup>52</sup> Teilhard de Chardin's body of work is an important contribution to the Ecozoic understanding. His most important book is *The Phenomenon of the Human*.

<sup>53</sup> Alfred North Whitehead, *Process and Reality*, 2.

<sup>54</sup> Swimme and Berry, 2.

<sup>55</sup> Ibid.

unchanging, and ever-existing. Actions taken could not irreversibly affect the universe and its resources were seen as limitless.

*Third, the fundamental element of reality is not “substance” but “experience” - everything comes to be through experience and everything has both a physical and mental 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 modern era has seen the universe as material only, a collection of objects for humans to manipulate. When the universe is seen as having a psychic-spiritual aspect, it becomes a communion of diverse, self-organizing subjects.<sup>56</sup> Such an understanding of the universe would affect our science so that the study of organisms would not only focus on their measurable characteristics, but also on developing a feel for the organisms and their places within the larger community of life.<sup>57</sup> This feel for the organism would be of equal importance with the data one could collect about them. Such an understanding would also affect our understanding of the creative interactions of subjects that shape reality and serve as a check on our attempts to introduce manipulatory controls that would inhibit the vital dynamic processes of nature. Such an understanding also would permit a reintegration of the humanistic, cultural and religious concerns of the human community with the scientific, technical, controlling aspects as a clearer understanding was reached of the ultimate and essential nature of reality as involving both a material and a psychic-spiritual dimension.

*Fourth, every individual experience is influenced by the experience of everything else in the universe throughout its history.* This is the philosophy of organism, which means that the universe has an organic character and everything is interrelated, experienced and remembered (valued). 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 a cosmic drama.

*Fifth, societies of multiple individuals units of experience 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 leading 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.<sup>58</sup> 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, and the health of the universe and every society rests on the health of the individual.

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<sup>56</sup> Swimme and Berry, 71-78.

<sup>57</sup> Thomas Berry, “Conditions for Entering the Ecozoic Era,” *The Ecozoic Reader* (Winter 2002).

<sup>58</sup> Swimme and Berry, 75-78.

*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 individuals.

*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, thus events do not occur in time, but create time.* 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 emergent events. The present is perpetually emerging out of the past, but is never merely a repetition of the past. It is the emergence of these events that give time its sequential character, and thus it can be said that the events create time and time is a measure of a period of the sequential transformations resulting from the occurrence of such events. It follows that time is necessarily uni-directional from past to future. This thought is consistent with the Berry and Swimme's observation in that the universe is emergent, an evolutionary sequence of irreversible transformations.<sup>59</sup> Irreversibility has important implications for our actions. We cannot go back in time to recapture a lost opportunity and our actions in the present are of lasting significance. For example, when a species vanishes, it cannot be recovered. Note also that Whitehead's understanding of reality as creative process (a sequential occurrence of events building on each other) has philosophical significance for understanding that perishing and death are necessarily a part of reality, just as succession and new life are.

*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 within the limits of the universe as it has come to be at any given time.* Thus, in this understanding, the guiding intelligence of the universe is not conceived as something that exists independently of the universe, but rather as pervasive reality within which every part of the universe exists and which brings unity and purpose to the universe in its cosmogenetic 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

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<sup>59</sup> Swimme and Berry, 70-71.

coming to be; and the cosmic intelligence is ultimately grounded in the evolutionary, creative adventure of the universe.

### C. E. Maynard Adams

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 and the need to reinstate the humanistic categories of value and meaning in the understanding of the universe. He argues persuasively in *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 disenchanting. 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.”<sup>60</sup>

He then goes on to say, “A culture defines the human enterprise by its dominant values . . . .”<sup>61</sup> It follows then that a culture devoid of humanistic values 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 this argument—that humans have inherently normative requirements of selfhood, or a “normative constitution,”<sup>62</sup> that is being subverted by the materialistic culture of modernity—on which Adams’ bases his philosophy. Working from this base Adams has devoted his major philosophic works to the issues that humans have such a constitution, that “value and meaning” are the basic humanistic categories,<sup>63</sup> and that these are realistically present in the structure of the universe. Adams states that modernity is based on a naturalistic or scientific worldview.<sup>64</sup> 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

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<sup>60</sup> Adams, *A Society Fit for Human Beings*, xvi.

<sup>61</sup> *Ibid.*, 6.

<sup>62</sup> Adams, *The Metaphysics of Self and World*, 34-39.

<sup>63</sup> Adams, *Society Fit for Human Beings*, 14. In addition, “ought” is the basic value concept. If ought is present in existence, then from this follows teleological causation. Conversation with Adams, April 21, 2002.

<sup>64</sup> Adams, *The Metaphysics of Self and World*, 6-16.

meet the subjective, individualistic and relativistic enterprise of selfhood.<sup>65</sup> Thus, for example, in the modern view anyone can buy a car 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,<sup>66</sup> in other words they are realistically present in universe independent of human experience.<sup>67</sup> An important part of this argument is that the secondary (non-sensory) modes of perception by which value and meaning concepts become known to us have the capacity to yield knowledge of universal applicability.<sup>68</sup>

Adams' overall critique of the current naturalistic worldview is that it has produced a society in which humans do not fit. 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 “in which the value and meaning dimension of culture is grounded and in which the language of meaning is grounded.”<sup>69</sup> We have denied our interiority, by denying the secondary modes of awareness that constitute our deepest selves—the ability (i) to perceive beyond sense perception through our emotive powers and those powers which Adams refers to as the affective (feeling) and conative (impulse to action, desire, volition, and striving) powers,<sup>70</sup> and (ii) to exercise ethical choice through the exercise of our knowledge yielding powers, our rational critical powers, and our powers of moral appraisal.<sup>71</sup> 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.<sup>72</sup>

Adams approach differs from that of Berry and Whitehead. Berry is a cultural historian and his over-riding concern has been the relation of humans to other-than-human nature in terms of attitudes, intimacy and ultimately a pathologically destructive separation that threatens the functioning of the entire natural system. Berry's cosmology has been developed from the narrative story of the universe and what must have been involved in such an evolutionary development. Yet Berry's thought is also grounded in a very complex philosophical understanding, the roots and nature of which have only barely been articulated. In my view, process thought and Adam's philosophy provide the best resources for explicating the necessary philosophical presuppositions of Berry's thoughts. Whitehead's thought seeks a universal

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<sup>65</sup> Adams, *A Society Fit for Human Beings*, 10.

<sup>66</sup> *Ibid.*, 35.

<sup>67</sup> Adams, *The Metaphysics of Self and World*, . 44-47. In a conversation with Dr. Adams in February 2001, I asked him if he agreed with Thomas Berry's statement that the universe is primary and the human is derivative, he replied, without hesitation, “Of course.” The import of this is that the categories of value and meaning are present in the nature of the universe and from this the nature of the human is derived.

<sup>68</sup> Adams, *Society Fit for Human Beings*, 13.

<sup>69</sup> *Ibid.*

<sup>70</sup> Adams, *The Metaphysics of Self and World*, 148-157

<sup>71</sup> *Ibid.*, 207-215.

<sup>72</sup> In addition to the books cited above, see Adams' books *Ethical Naturalism and the Modern World-View*(1960) and *Philosophy and the Modern Mind* (1975).

scheme to explain all the dimensions of experience. Surprisingly, given this goal, yet perceptively, Whitehead begins in a reductionistic way with the smallest unit of experience, the actual occasion, and then, presupposing creativity,<sup>73</sup> builds from the actual occasion to an organic, processive universe.<sup>74</sup> Adams' begins from an analysis of human experience, and precedes from this to an analysis of society and the nature of the universe.<sup>75</sup>

While each of these philosophers comes at his subject in a different way, I believe that the conclusions at which they arrive are substantially consistent, and more importantly that their works complement each other. Without Berry there is no broad historical context to understand where we are in the human journey and no identification of the central issue (the separation of humans from other-than-human nature) and the major directions the human community must take to deal with that issue (toward an Ecozoic Era). Without Whitehead there is no broad categorical analysis of the nature and dynamics of the universe in which humans and other-than-human nature may be re-integrated. Without Adams there is no extensive analysis of the nature of humans and of the essential humanistic categories of value and meaning and of the central philosophical problem of the elimination of value and meaning categories in the modern understanding of the universe and the need to reinstate these categories in the descriptive-explanatory system and to understand their causal (form-generating/moral) efficacy. Together these philosophers give a comprehensive understanding and provide the elements for the development of an adequate, constructively post-modern philosophy.<sup>76</sup>

## **VI. The Earth Charter as the Guiding Vision of the Ecozoic Era**

Philosophy has to do with the underpinnings of thought and action. Without an adequate philosophy, the wrong questions are asked and knowledge is not grounded in reality. As a result, we operate with a superficial awareness of the world in which we exist and are unable to place ourselves in the dynamics of the world and to take effective action. While the philosophical task is foundational and of pivotal importance, the world will not stop while it goes on. It is possible for people to operate now with the awareness that the philosophical project we have described above will make self-conscious and teachable for the proper instruction of generations.

Let us look at the philosophical conception of the world we have begun to articulate. It is an organic world; one constituted by its relations; a time-development/evolutionary world; one of value, meaning and purpose, with objective normative requirements and teleological causality; one of a diversity of beings all of whom are interrelated and form an integral whole, each of which is necessary for the existence of the other, each of which has its own interiority and self-organizing dynamics; one which is alive with a vital principle, that has had a psychic/spiritual dimension from the beginning; a creative universe with a nurturing cosmic intelligence; one in which the human emerges with a special mode of conscious self-awareness and a special role of

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<sup>73</sup> Whitehead, 7.

<sup>74</sup> "The ultimate facts of immediate actual experience are actual entities, prehensions, and nexus. All else is, for our experience derivative abstraction. The explanatory purpose of philosophy is often misunderstood. Its business is to explain the emergence of the more abstract things from the more concrete things. Ibid., 20.

<sup>75</sup> Adams, *The Metaphysics of Self and World*, 47-48.

<sup>76</sup> For the term "constructive postmodernism," I am indebted to David Ray Griffin. David Ray Griffin "Introduction to SUNY Series in Constructive Postmodern Thought," in Adams, *A Society Fit for Human Beings*, ix-xiii.

appreciating, celebrating and sustaining the grand communion of being; one in which the human emerges as a cultural being who has epistemic powers based in emotive, affective and conative experiences and in rational-critical analysis and moral appraisal, as well as sense perception. Is there any way we can explain the universe we experience without presuppositions such as these? Our explanation of the universe must not only explain the existence of the stars, but also of a Beethoven symphony and a mother's love for a child, and how all of these are connected. We must not only explain the existence of the stars, but, also, why they twinkle in us.

And if this is the universe in which we live, what would it mean to place the human in it? What would it mean to fit humans into the cosmological order of the universe so conceived? We have tried to adapt humans to a mechanistic, industrial-technical, appetitive universe, and as Maynard Adams has said, humans don't seem to fit. This is because humans are born of the universe, are a part of the universe, and are a self-conscious expression of the universe. Let us open our eyes and hearts to this world in which we live and find our place in it . . . at the species level . . . within the community of life systems.

The Earth Charter is the first comprehensive statement of what we must do to place humans within the order of such a universe. In 1987 the United Nations World Commission on Environment and Development called for creation of a charter for sustainable development. Such a charter was begun but not completed in the 1992 Earth Summit in Rio de Janeiro. In 1994 Maurice Strong, the secretary general of the Earth Summit and chairman of the Earth Council, and Mikhail Gorbachev, President of Green Cross International, launched a new Earth Charter initiative. In the summer of 2000, after a decade-long series of conversations, meetings and workshops that were global in scope, cross-cultural and cross-sectorial, agreement was reached on a set of common goals and values that became the Earth Charter. You may view this charter on The Internet at [www.earthcharter.org](http://www.earthcharter.org). Thousands of people from over a hundred nations participated in creating the Earth Charter. It has been called the "people's treaty." It was presented to the General Assembly of the United Nations at the August 2002 Earth Summit in Johannesburg, South Africa and an active movement continues for endorsement by that body.

The Earth Charter will never become law, that is not its purpose. Its purpose is to provide a comprehensive set of values and principles for the future. While short (it can be printed on four pieces of paper) it is not easy to read. We are used to dealing with things in segments. We are accustomed to one declaration on the environment, another on human rights, another on health, another on poverty, another on biotechnology, another on global communication, and so on. We can understand things in parts, the difficult task, however, is putting them together and this is what the Earth Charter does. I think one could read this short document everyday for a year and only begin to understand it, because it requires one to integrate his or her knowledge, vision and values for the whole world for the foreseeable future.

Still its basic principles are easy to grasp:

1. Respect Earth and life in all its diversity;
2. Care for the community of life with understanding compassion, and love;



3. Build democratic societies that are just, participatory, sustainable, and peaceful; and
4. Secure Earth's bounty and beauty for present and future generations.

This is an understanding of life where humans fit. This is an understanding of life where humans fit in the Earth community. This is an understanding of life where humans fit in the cosmological order of the universe.

It is not enough, however, to understand these four broad principles. The Earth Charter contains 73 more detailed statements of what is needed. To understand the Earth Charter, one must understand each and every one of the 77 principals and statements.

Because declarations proliferate without implementation, the tendency is to see the Earth Charter as just another lofty, inconsequential document. It is not. The Earth Charter describes what is needed for a viable human future and the survival of other-than-human nature. What is written was, in the past, an unattainable goal. Now it is our hope. The Earth Charter is a map to the future.

## **V. The Role of Process Philosophy**

I will close this paper with conclusory remarks on how the role and influence of process philosophy may be deepened. I will do this under the headings "Process Thought and Our Historical Moment," "Process Thought and the Earth Charter," and "Process Thought and the International Process Network."

### **A. Process Thought and Our Historical Moment**

Process thought has extraordinary explanatory powers, and, importantly, it has the capacity to give meaning and purpose to life and to motivate zestful, creative and adventurous living. These characteristics alone, however, are not enough to secure the destinal role of process thought. They are enough to make process thought one of many ways of understanding existence and to make it meaningful for those who take the time to understand it, but not enough to establish the historically transformative role I believe process philosophy is meant to play.

Process thought can only play its destinal role if it understands its place in history. I think we can agree that for the first time in history we are developing a global civilization of humans. What we may not understand as well is that for the first time in history we are coming to understand the human as having a global and decisive impact on other-than-human nature, and as having the need to re-define community as including other-than-human beings. In, addition, what we may not have become aware of is that the scientifically-developed understanding of the universe as beginning with a primordial flaring forth and evolving through a continuous sequence of irreversible transformations involves a shift in understanding that is as significant as the Copernican revolution.<sup>77</sup> And importantly, what we may have avoided recognizing is how

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<sup>77</sup> We are the first generation to have this story. It only became established as scientific consensus in the 1970s.

inadequate the current philosophical basis of the human community is for the transformation that is required for our move into the future.

I cannot begin a discourse here on the role of philosophy, but suffice it to say that philosophy examines the presuppositions on which the cultural mind is based and seeks to establish the truth-yielding claims of the cultural mind on a more solid foundation. We find ourselves at a critical juncture in history. It is a time, when as Thomas Berry says, we must reinvent the human, and this cannot be done without a renaissance in philosophy.

Maynard Adams puts it this way:

Assumptions and theories about the structure of experience and reality and the various sectors of the culture may take over and more directly influence our experience, thought and action than the presuppositions on which they are based and to which they are accountable. Such a set of assumptions and beliefs that are widely shared may be called the “cultural mind” of the society. Erroneous assumptions and beliefs of this kind may systematically mislead people, indeed a whole society, in their efforts to know and to cope with reality and to live successfully. A cultural mind that distorts our perceptions and beliefs about ourselves and the world is deranged and may generate personal and social pathologies.

....

[Philosophy] has been caught up in the dominant ways of thought in the culture and has tried to accommodate itself to the prevailing scientific paradigm of knowledge.<sup>78</sup> Although much of what is taken for granted in our efforts to know and to cope with reality is no doubt subject to empirical confirmation or correction, the most fundamental assumptions and beliefs that constitute the mind of the culture are not. They pertain to the categorical features and structures of experience and thought as well as to the basic constitutive features and structures of whatever the subject matter of our experience and thought may be, including a comprehensive view of the world. We do not discover these features and structures of things by an empirical investigation of them in the way in which we discover contingent features and structures; rather, the way we empirically investigate and think about any subject matter presupposes commitments about its categorical features and structures. These presuppositions govern the outcome of empirical investigations rather than being the products of such investigations. This is not to say that our empirical findings may not generate problems that call into question our categorical commitments, but these problems are of a different order from the logical problems among empirical beliefs that force revisions to keep them faithful to reality.

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<sup>78</sup> Neo-conservative philosophy has a different problem. It adheres to the authority-based tenets of pre-modern tradition and scientific worldviews.

Therefore, philosophy needs to focus on the presuppositions of experience, thought, and action in the various sectors of the culture, to develop a responsible methodology for excavating the inherent commitments about the categorical structures of various subject matters and the world as a whole that are hidden in these presuppositions, and to develop an account of how the culture is grounded in and maps the basic structure of the world.<sup>79</sup>

Each of Thomas Berry, Alfred North Whitehead and Maynard Adams has given a critique of the presuppositions of the modern worldview concerning the structure of experience and reality and has concluded that the presuppositions are fundamentally flawed and give rise to cultural beliefs that are incapable of yielding truth-claims about the world in which we live and about the nature and purpose of human society.

Berry has done this based on what he calls the “new cosmology” or, as discussed above, the “New Story.” He argues that the evolutionary story of the universe as disclosed by science and the implications of quantum theory, ecology and other recent science call into question the reductionistic, utilitarian, atomistic, physicalist philosophical presuppositions of modernity. He also argues on historical grounds that the modern bias has made the human community an anomaly within the community of life systems. Finally, he argues on the basis of indigenous traditions, there are critical dimensions of human experience that are not recognized in the modern cultural understanding.

Whitehead has done this by taking creativity as his basic axiom on which he builds his metaphysics and by his concepts of pan-experientialism, non-local causation, and together with Berry the time-developmental, organic character of the universe.

Adams has done this by examining the functional requirements of human experience, thought and action, and what must be presupposed in order to make sense of them. He then proceeds to offer substantially the same critique as Berry and Whitehead of the philosophical presuppositions of modernity by arguing that in an evolutionary universe the value and meaning dimensions which are essentially present in human existence cannot have come out of nowhere and must be presupposed to exist in the universe. He also argues for the epistemic, or knowledge-yielding powers of secondary modes of human perception—emotive, affective, conative modes—in addition to sensory perception. And he critiques cultural understandings of what it means to be authentically human.<sup>80</sup>

These three philosophers need each other. Berry provides the New Story, the historical framework and the definition of the civilizational problem. Without Berry’s insights, people could, and do, read Whitehead and Adams for years, and never arrive at the conclusion that our primary concern must be the ecological one—how to secure the health of the larger community

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<sup>79</sup> E. Maynard Adams, “The Mission of Philosophy Today,” *Metaphilosophy* (July 2000), 352, 356-57.

<sup>80</sup> In other words, what it means to have human experience and understanding, what it is possible for humans to know, and what it means to act individually and socially and within the larger community of life consistent with Adams’ view of the human.

of life and within that to establish a viable human presence that is mutually enhancing to the larger community.

Likewise, Adams is needed. Berry states that humans have become autistic as regards the natural world, but the dimensions of experience that Berry feels have been missed are presupposed not to exist within the modern philosophical understanding. Adams focuses precisely on this lacuna and provides a revolutionary alternative to the prevailing modern epistemology and metaphysics. One might say that he or she doesn't need to correct philosophy to recognize a dimension of experience when all one has to do is mention an experience and people know what he or she is talking about. The problem, however, is that the tenets of a philosophy subtly undermine social structures and thought and may legitimize that which is at variance with our deeper, unexamined experience. Examining this deeper awareness has been Adams' task. Just as Berry has identified the central civilizational problem of the separation of the human from nature, Adams has identified the central philosophical problem of how modern scientific naturalism has eliminated value and meaning concepts as descriptive/explanatory categories of reality. Without the reinstatement of the categories, we are left only with political laws based only on ideological preferences without any claims to objective truth to regulate behavior.<sup>81</sup> The transformation to an Ecozoic Era cannot, however, occur on the basis of ideological preferences. There must be a humanistic revolution of character, morality and civil discourse based on the normative requirements of existence for nature, society and personhood. Berry calls for the reinvention of the human and focuses on what this means within the community of life systems. In doing so, however, he leaps over his own requirement that this must take place "at the species level." In order to reinvent our species, we must have an adequate understanding of what it means to be the human species. Modernity's concept of the human is seriously flawed. Adams' work has been to provide an understanding of what it means to be human, how humans know the world, how society can support the development of fully human beings, and how humans and human awareness fit into the larger structure of the universe.

Finally, Whitehead (in a larger sense process thought as it has been developed by Whitehead and others) is needed. As Berry has stated, the New Story of the universe is ours for the first time. Never before has this understanding of the way things are been available. Now we need a philosophical system that can explain the dynamics of such a universe, in other words what must be presupposed to understand the nature of a reality (the universe) that is organic, time-developmental, creative and alive. Such a philosophical system, if adequate to reality, can help us to understand our experience, know our world and develop our capacities as individuals and as a society within the larger order of the universe. Such a system is Whitehead's process philosophy and its distinct contribution has no parallel in the thought of Adams or Berry. Yet it is, to my understanding, consistent in all respects with Adams and Berry, and resonates in countless philosophies and religious traditions. Without Berry, however, it lacks historical grounding and process philosophers may develop their conclusions without comprehension of our historical setting. With Berry, we might even come to see that process thought was brought into being for such a time as this, in order to provide the central philosophical framework for the Ecozoic Era.

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<sup>81</sup> Adams, *A Society Fit for Human Beings*, 28.

## **B. Process Thought and the Earth Charter**

In January of 2001 the first Whitehead Summit was held in Claremont, California, at the Center for Process Studies. About 40 people, representing several European and Asian nations as well as the North American continent, gathered to discuss how the process philosophy movement should go forward. This assembly took three actions: the first was to endorse the Earth Charter, the second was to form the International Process Network, and the third was to begin a film festival, named “Toward the Common Good,” on films that best reflect the values inherent in process thought. I will discuss the first two of these as I conclude this paper.

In endorsing the Earth Charter a match was lit. The founding members of the International Process Network in their “Declaration in Support of the Earth Charter Initiative” committed themselves to

a philosophical critique of the values and understandings that have led to our present situation. We pledge ourselves to the development of an integrative understanding of the world that under girds and supports just and sustainable human communities in an ecologically responsible context. We are committed to affirming and developing supportive philosophies and actions for the realization of the goals of the Earth Charter. We believe the adequacy of philosophy is reflected in its capacity for enabling humanity to respond to the deepest spontaneities and authenticities in the universe, as they are made known to humanity in experience and thought. We find a meaningful resource for this endeavor to be the process philosophy of Alfred North Whitehead, but we include in this quest all relational philosophies and worldviews that enable humanity to live out the principles of the Earth Charter, opting for life in an integral community of all beings.

These are important commitments, and much could be said about them. Yet, they speak for themselves, and need no further elaboration here.

If process thought is effectively to play its role and to accomplish its potential impact, I believe it must also understand the historical significance of the Earth Charter and the importance of providing an undergirding philosophical framework for the principles of the Earth Charter. This should not be an uncritical exercise, rather it should be a dialogical one. First, process thought (in my view augmented by the thought of Berry, Adams and others as discussed above) and what it says about the world should be understood. Next the Earth Charter and what it says about the structure of the world should be understood. Then where there is congruence, the philosophical undergirding should be set forth. Where there is incongruence, the presuppositions of process thought should be examined and the presuppositions of the Earth Charter should be examined. Then an analysis should be made of which presuppositions are in error and action should be taken accordingly.

### **C. Process Thought and the International Process Network**

The most important action taken at the Whitehead Summit was the formation of the International Process Network (“IPN”) for IPN provides the basis for concerted action. Until that time there had been scholars around the world engaged in reflection on process thought, but there was no way for them to link up and provide mutual support to each other. A concern at the summit was that there were many areas of the world that had not been exposed to process thought. Another concern was that in the United States a lot of theologians were working with process thought, but not many philosophers. A need was felt that more attention be given to process thought within the formal discipline of philosophy.

At the summit, John B. Cobb, Jr., was delegated the responsibility of calling into being a governing board to create the organizational structure for IPN based on the ideas that had been expressed at the summit. During the summer of 2001, a set of Bylaws was developed for IPN, and in September 2001, the first meeting of the Board of Governors was held. There are currently twelve members of this Board, two from Australia, one from Belgium, one from Canada, one from Hungary, one from India, one from China, one from Japan, one from Korea, and three from the United States. Judith Jones of the Philosophy Department of Fordham University in New York City was named Director of IPN, and the Coordinating Office for IPN was established by Gregory James Moses and Peter Farleigh at the Centre for the Advanced Studies of Humanities at Griffith University in Brisbane, Australia. In turn the Coordinating Office set up a listserv for members of IPN and a website, [www.processnetwork.org](http://www.processnetwork.org). In October 2002, I was named Administrative Director of IPN.

The Bylaws of IPN describe its purposes:

IPN is organized to support, generate and disseminate an international discourse on the meaning and implications of process thought across academic disciplines and in relation to the entire community of life and the cosmos, and to fulfill these purposes, shall:

- (a) Serve as an active communications link among process-oriented organizations and interested individuals;
- (b) Create a listserv for communication among member organizations and interested individuals;
- (c) Promote programs, conferences, publications, activities and institutional initiatives generated by member organizations and interested individuals;
- (d) Coordinate and disseminate declarations, resolutions, and awards; and
- (e) Conduct such other activities for the promotion of process thought, and process-oriented projects and organizations as the Members of

IPN or the Governing Board may determine. Such activities may include, but are not limited to:

- (i) Facilitate translation and dissemination of process-oriented works;
- (ii) Maintain a website on IPN, the activities and undertakings of IPN, process thought, process resources, and process-oriented organizations;
- (iii) Make applications for grants and provide financial support for process-oriented projects and organizations; and
- (iv) Support activities consistent with the declarations and undertakings of the Members of IPN, including, without limitation, the Declaration in Support of the Earth Charter Initiative adopted at the first Whitehead Summit.

The Bylaws also set up procedures for becoming a member of IPN. There are two types of membership, one for organizations and the other for individuals. Information about membership is available on the IPN website.

The future of process thought is not directly dependent on IPN, but IPN offers the possibility of linking up people who are involved in process thought on an ongoing, global basis. As such it offers a great opportunity to expand and deepen influence of process thought and to provide support for process thinkers in disparate parts of the world.

Connecting up people involved in process thought will not, however, accomplish what is possible in this opportunity. This will only happen if people have a sense of why it is important to be connected and why it is important to work together.

This brings us back to the question asked at the beginning of this paper, “Process thought for what?” I recognize there is already an understanding of the purpose of teaching and learning process thought and why it can be a benefit to society. This has served as a motivation for what is now generations of process scholars. What I have tried to argue in this paper, however, is that if we look at the full implications of process thought and place this in our current historical setting of the devastation our current industrial society is wreaking on the Earth community, the insufficiency of both the modern and the neo-traditional worldviews for guiding the future, the obsolescence of our governmental and military institutions in a world that requires global cooperation and a bioregional-orientation, and the distorted and confused views of character development, selfhood and family in our societies, then we will come to understand an historic role for process thought to play of utmost importance.

Whiteheadian and other process-relational worldviews can guide the human community in the transition to the Ecozoic Era. It can do this by examining the nature of reality as revealed in process thought, undertaking a comprehensive cultural and institutional critique based on this

understanding, and making proposals for the reconstruction of culture and institutions. This work is made possible by the International Process Network.

I have proposed that there are two allied sources of thought that need to be taken into account by process thinkers, the work of Thomas Berry and that of E. Maynard Adams. This is not meant to be an exclusive list, but, in my view, each of these bodies of work brings something to process thought that is essentially important.

Let me close by summarizing in one short statement the essential understandings of which I have written: *Thomas Berry* – We live in the terminal Cenozoic and our Great Work is to bring into being an Ecozoic Era in the history of the planet Earth; *E. Maynard Adams* - We live in a meaningful, moral universe that places inherently normative requirements on human existence; and *Alfred North Whitehead* – We live in an organic, process-relational universe and this universe exists within a larger divine reality of remembrance (valuing), love and possibility. May these understanding become the *lingua franca* of our philosophical discourse joining many schools of thought across gender, religion, race, tribe and nation in accomplishing the mission of philosophy today.

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