

truth, yet they point to a truth, and I would say no, we cannot claim that our discourse ever captures or contains the truth, but our life does. And, in this sense, I am an unabashed foundationalist. Yes, I am convinced that there is reality, and if you want an argument, I would point out that many people who do not use conceptual languages nonetheless show clear evidence of highly differentiated experience. For instance, cows, goats, dogs, porcupines, they do not act as if their experience were meaningless, they act as if they could orient to it, respond appropriately, yet they do not use languages. And for this reason, yes, I believe there is a lived experience. Experience is not a product of *l'écriture*.

David Cayley

L'écriture, writing, is a term which takes on a particular colour in the philosophy of Jacques Derrida. It stands for the idea that the world we confront is never simply experience but always already a text, and for Derrida and the post-modernists, there is nothing outside of the text. Kohak disagrees.

Erazim Kohak

The ultimate referent of my knowledge is not a text, as Derrida would have it and all the post-modernists, but rather that there is an experience about which I write my texts. The moment I speak about it, it is always experience as conceptualized. I always tell a story about it, but I want to claim that there is "something" about which I speak, I do not speak only about my speaking, against the French claim, starting with Foucault, and very clearly in someone like Derrida, that the bottom line, our bottom referent is always already a text.

David Cayley

So Derrida and his disciples are still within the Cartesian framework.

Erazim Kohak

Very much so. Post-modernism appears to me as the *reductio ad absurdum* of modernity. As they define modernity, really the Cartesian scheme, what they do is to point out that there is a fundamental contradiction built into modernity's basic conception that of the subject knowing and controlling a meaningless world, that in such a world truth is always the subject's invention imposed upon the world. If reality has no shape in itself, neither value nor meaning, if reality is only so much rolled out dough and my mind is the cookie cutter, then the shapes which I know will be always shapes which my mind imposed upon it. Therefore the post-modernists point out that the whole claim that we are discovering the truth is an illusion, and, I would add, within the Cartesian framework they are absolutely right. If what they are attacking is the conception of the subject not as an integral part of reality but as a pure mind observing a meaningless object, then it seems to me the attack is justified. Against this I would very much present the conception of the human--I shan't use the term "subject," but of the human--as integrally an incarnate part of this world,

and this is why, never having been a Cartesian, never having been modern, I have no need to be post-modern. I am continuing in the tradition that starts with Comenius and that I now pick up Husserl.

David Cayley

When you earlier used the example of your violence to the teddy bear and the horror of your students, you gave that example to say that we begin with the assumption that the world is meaningful, I think. Right? That we learn our Cartesianism, in a sense.

Erazim Kohak

I would not say we begin with the assumption. This is not even an assumption. We begin with the experience of the world as meaningful, and not only as meaningful for me. You know, why is it that most humans will instinctively draw back if I'm walking along the path and there is a flower growing there, a trillium. We'll break stride rather than to step on it. Why? Or there is a lizard there. Yes, there are people who step on lizards, but most of us, our first impulse is to treat them with a certain respect, not because of their utility for us but a--I don't want to say "instinctive," but I would say prereflective sense that being simply as being is good, that being already has a meaning, a value, a truth to it, not simply the property of extension, a simple mere existence in space.

David Cayley

If, then, from the beginning we assume that we are confronting other subjects in nature, how is it that we learn our Cartesianism without ever studying philosophy or reading Descartes, for the most part?

Erazim Kohak

It is built all around us. Look at the way in which child psychologists will tell you that a child has to mature to learn to make the distinction between humans, to whom one kind of behaviour is appropriate, and teddy bears, to whom that behaviour is partially appropriate--that's why the term "transitional object," and things. A child is taught that yes, you are considerate of a person but you crush a paper cup, that Cartesianism is built very much into the context in which we live, and part of growing up, we would say, is learning to differentiate between people, whom we treat with respect, and things, which we use. A child or an adult who feels pained at the sight--all right, we'll stay with teddy bears--a teddy bear being crushed by a dumpster. We regard this as sentimental, immature and inappropriate. It shows lack of adulthood. The similar procedure was used in the early days when the German SS, were still given rigorous training. They were to raise a puppy, train it, and then take a knife and cut its throat. If the man hesitated, he obviously was not mature enough to be a member of the Waffen SS. You don't have to study philosophy. We live in a world which is conditioned by the perception of differential treatment. Be respectful of humans but not of animals, or somewhat to animals, but not to the effect of refraining from eating them or worrying overmuch about the practices in food production,

and recycling until very recently we tended to regard as a sign of personal peculiarity. You know, it was undignified to collect the beer cans. I have never stood on my dignity, I have better things to stand on, so I always have collected beer cans.

David Cayley

Erazim Kohak does not believe that we can touch the reality of things simply by revising our concepts. We need also to change our circumstances. How, for example, can we learn the meaning of "night" if we live always in the glare of technology's perpetual daylight? Our philosophy depends on our surroundings.

Erazim Kohak

What I would argue is that we first experience, then philosophize, and I would say yes, on the basis of experience of a world of artifacts, we create a philosophy in which humans appear as the source of all meaning, source of all value. Because when I'm surrounded, as in this room, every one of the objects here, all of it was created, none of it grew, none of it has any agenda of its own, all of it exists solely as my creation, where "my" stands for collective humanity, human creation, and for my use. The sole purpose of the lamp, of the chair, they would be worthless if there was not "I" to sit upon them or to use the illumination. On the other hand, when I'm in the context of the living world, the tree has its own agenda. It doesn't need me. Even if I go away, it's going to continue growing, as the apple trees whose people died out a century ago, the apple trees on my land, they go on bearing their apples and feeding the deer. The porcupine has its own agenda. So I would argue the context teaches us a particular way of interacting which we then articulate as a philosophy. And the philosophy which we articulate, if our model experience of reality is the disposable styrofoam cup, of course the philosophy which I am going to find most persuasive is one which makes a distinction between humans, the masters, or it probably would be "man" the master, homo mensura, and the disposable world.

David Cayley

The Embers and the Stars is one of a growing number of books which tries to foster a more philosophical mood within environmentalism, but the book is not otherwise typical. Kohak, for example, definitely doesn't share deep ecology's view of humanity as a plain citizen in life's community.

Erazim Kohak

I am very keenly aware of the special task of human beings, and I am very much convinced that unless we are able to perform a special service, we can in no way justify the special demands that we make on this earth. We're just too expensive to be just plain citizens. For the money that the earth is paying us, so to speak, we had better perform a little more than the woodchuck. Much as I love woodchucks, and even beavers, and in spite of the devastation they have just wrought on my birches, yes, here I do see a distinctive human calling but I would not say that this makes us more valuable. I think this makes us more obligated.

David Cayley

Another aspect of radical environmentalism about which Kohak is uneasy is a tendency to see nature in mystical terms. To Kohak, as a Christian, nature is our fellow creature, not our creator.

Erazim Kohak

I am also very much aware of the danger that irrationalism poses. I was born in 1933. Some of my earliest memories are of the German occupation of my country, Nazism, which people forget about and they wrap it up with fascism as if it were the same thing. But the Nazi cult of the old pagan gods, there is a danger in it. I want to retain a clear moral dimension. I do not want to become a nature worshipper. Yes, I want to become, together with nature, a worshipper of the holy, but I don't want to worship nature. It is not, as in Spinoza's phrase, "God, that is to say, nature." No, it is not. Nature is not an object of worship. Of respect, yes. Of worship, that's scary.

David Cayley

Erazim Kohak's philosophy does not speak about "the environment," it speaks about "the life world." The environment is an abstraction, the life world what we actually experience, and it's in our experience and not in the environment, he says, finally that we must look for answers.

Erazim Kohak

I am delighted that we are becoming conscious of environment, but as long as we think that there is a problem of the environment, we will not solve it. We are the problem. It seems to me that environmentalism has to learn to think not only of how to manipulate the environment for its own benefit, you know, even biocentrically, but also what kind of being ought humans to be in order to be compatible with a world. I don't think we should stop being human, but that we ought to be thinking not only about how to manage the environment, but rather what are we doing on this earth, what are we all about. So if you want a final reflection, I would say, "What is man, that thou art mindful of him, or the son of man, that thou shouldst care?"

Lister Sinclair

On IDEAS tonight, you've been listening to the final program in our series, *The Age of Ecology*. Heard on tonight's program were Erazim Kohak, David Rothenberg and Bill McKibben. The series was written and presented by David Cayley. Production assistance: Gail Brownell and Faye MacPherson. Technical operations: Lorne Tulk. Producer: Jill Eisen.

Transcripts by Multi-Media Transcriptions, Toronto.

The following is not an exhaustive bibliography, just a listing of the books and articles by which I was guided in preparing The Age of Ecology.

William Barret, Death of the Soul: from Descartes to the computer, Anchor/Doubleday, New York, 1986.

Thomas Berry, The Dream of the Earth, Sierra Club Books, San Francisco, 1988.

Thomas Berry and the New Cosmology, ed. Anne Lonergan & Caroline Richards, Twenty-Third Publications, Mystic, Conn. 1907.

Murray Bookchin, Re Making Society, Black Rose Books, Montreal, 1989.

Anna Bramwell, Ecology in the 20th Century: A History, Yale University Press, New Haven, 1989.

David Ehrenfeld, The Arrogance of Humanism, Oxford, New York, 1978.

David Ehrenfeld also writes a regular column in Orion Nature Quarterly.

Dominating Knowledge: Development, Culture, and Resistance, eds. Frederique Apffel-Marglin & S.A. Marglin, Oxford University Press, Clarendon (in press).

Donald Edward Davis, Ecophilosophy: A Field Guide to the Literature, R & E Miles, San Pedro, 1989.

Gaia: A Way of Knowing, ed. W.I. Thompson, Inner Traditions/Lindisfarne Press, Great Barrington, Mass. 1987.

Yaakov Jerome Garb, The Use and Misuse of the Whole Earth Image, Whole Earth Review, March, 1988.

Healing the Wounds: The Promise of Ecofeminism, ed. Judith Plant, Between the Lines, Toronto, 1989.

Historical Ecology: Essays on Environment and Social Change, ed. Lister J. Bilsky, Kennikat Press, Point Washington, New York, 1980.

Erazim Kohak, The Embers and the Stars, University of Chicago, 1984.

Aldo Leopold, A Sand County Almanac, Oxford, New York, 1949, (re-issued 1987).

John Livingston, "Ethics as Pyrosthetics" in Environmental Ethics: Philosophical and Policy Perspectives, ed. Philip Hanson, Simon Fraser University, 1986.

John Livingston, The Fallacy of Wildlife Conservation, McClelland and Stewart, Toronto, 1981.

James Lovelock, The Ages of Gaia, W.W. Norton, New York, 1988.

Bill McKibben, The End of Nature, Random House, New York, 1989.

Robert Paehlke, Environmentalism and the Future of Progressive Politics, Yale, New Haven, 1989.

David Rothenberg with Arne Naess, Ecology, Community and Lifestyle, Cambridge University Press, 1989.

David Rothenberg, "Ways Toward Mountains", The Trumpeter, Summer, 1989.

David Rothenberg with Peter Reed, Wisdom and the Open Air: Selections from Norwegian Eco-Philosophy, Council for Environmental Studies, Oslo, 1987.

Martin Ryle, Ecology and Socialism, Radius, London, 1988.

Vandana Shiva, Staying Alive: Women, Ecology and Development, Zed Books Ltd., London, 1988.

The Subversive Science: Essays Toward an Ecology of Man, eds. Paul Sheperd and Daniel McKinley, Houghton Mifflin Co., Boston, 1969.

John Todd, "Adventures of an Applied Ecologist", Whole Earth Review #62, Spring, 1989.

John & Nancy Jack Todd, Tomorrow is Our Permanent Address, Harper & Row, New York, 1980.

(Regular news of the doings of John Todd are published in the journal, Annals of Earth, Ocean Arks International, 1 Locust St., Falmouth, Mass. 02540, U.S.A. This is also the address of The Society for the Protection and Restoration of Waters, the auspices under which Todd does his solar aquatics greenhouses)

The Trumpeter, Journal of Ecosophy, Lightstar, P.O. Box 5853, Station B, Victoria, B.C., Canada, V8R 658.

Lynn White Jr. "The Historical Roots of Our Ecological Crisis" in The Subversive Science cited above.

Who Will Save The Forests: Knowledge, Resistance, and the Environment, eds. Tarjo Banuri and Frederique Apffel Marglin, Oxford University Press, Clarendon (in press).

Whole Earth Review, P.O. Box 38, Sausalito, CA, U.S.A. 94966.

Donald Worster, Nature's Economy: A History of Ecological Ideas, Cambridge University Press, New York, 1977.

NOTE: The writings of Wolfgang Sachs are unfortunately not yet available in English.

"The Age of Ecology" was written and prepared by David Cayley.
Producer: Jill Eisen.

You can obtain a printed transcript of this series by writing to CBC Ideas, Box 500, Station A, Toronto, M5W 1E6. Enclose a cheque or money order for : **CBC Ideas Transcripts** 7".
\$25. Box 500, Station A
Toronto, ON
Canada M5W 1E6

The following is not an exhaustive bibliography, just a listing of the books and articles by which I was guided in preparing The Age of Ecology.

William Barret, Death of the Soul: from Descartes to the computer, Anchor/Doubleday, New York, 1986.

Thomas Berry, The Dream of the Earth, Sierra Club Books, San Francisco, 1988.

Thomas Berry and the New Cosmology, ed. Anne Lonergan & Caroline Richards, Twenty-Third Publications, Mystic, Conn. 1907.

Murray Bookchin, Re Making Society, Black Rose Books, Montreal, 1989.

Anna Bramwell, Ecology in the 20th Century: A History, Yale University Press, New Haven, 1989.

David Ehrenfeld, The Arrogance of Humanism, Oxford, New York, 1978.

David Ehrenfeld also writes a regular column in Orion Nature Quarterly.

Dominating Knowledge: Development, Culture, and Resistance, eds. Frederique Apffel-Marglin & S.A. Marglin, Oxford University Press, Clarendon (in press).

Donald Edward Davis, Ecophilosophy: A Field Guide to the Literature, R & E Miles, San Pedro, 1989.

Gaia: A Way of Knowing, ed. W.I. Thompson, Inner Traditions/Lindisfarne Press, Great Barrington, Mass. 1987.

Yaakov Jerome Garb, The Use and Misuse of the Whole Earth Image, Whole Earth Review, March, 1988.

Healing the Wounds: The Promise of Ecofeminism, ed. Judith Plant, Between the Lines, Toronto, 1989.

Historical Ecology: Essays on Environment and Social Change, ed. Lister J. Bilsky, Kennikat Press, Point Washington, New York, 1980.

Erazim Kohak, The Embers and the Stars, University of Chicago, 1984.

Aldo Leopold, A Sand County Almanac, Oxford, New York, 1949, (re-issued 1987).

John Livingston, "Ethics as Pyrosthethics" in Environmental Ethics: Philosophical and Policy Perspectives, ed. Philip Hanson, Simon Fraser University, 1986.

John Livingston, The Fallacy of Wildlife Conservation, McClelland and Stewart, Toronto, 1981.

James Lovelock, The Ages of Gaia, W.W. Norton, New York, 1988.

Bill McKibben, The End of Nature, Random House, New York, 1989.

Robert Paehlke, Environmentalism and the Future of Progressive Politics, Yale, New Haven, 1989.

David Rothenberg with Arne Naess, Ecology, Community and Lifestyle, Cambridge University Press, 1989.

David Rothenberg, "Ways Toward Mountains", The Trumpeter, Summer, 1989.

David Rothenberg with Peter Reed, Wisdom and the Open Air: Selections from Norwegian Eco-Philosophy, Council for Environmental Studies, Oslo, 1987.

Martin Ryle, Ecology and Socialism, Radius, London, 1988.

Vandana Shiva, Staying Alive: Women, Ecology and Development, Zed Books Ltd., London, 1988.

The Subversive Science: Essays Toward an Ecology of Man, eds. Paul Sheperd and Daniel McKinley, Houghton Mifflin Co., Boston, 1969.

John Todd, "Adventures of an Applied Ecologist", Whole Earth Review #62, Spring, 1989.

John & Nancy Jack Todd, Tomorrow is Our Permanent Address, Harper & Row, New York, 1980.

(Regular news of the doings of John Todd are published in the journal, Annals of Earth, Ocean Arks International, 1 Locust St., Falmouth, Mass. 02540, U.S.A. This is also the address of The Society for the Protection and Restoration of Waters, the auspices under which Todd does his solar aquatics greenhouses)

The Trumpeter, Journal of Ecosophy, Lightstar, P.O. Box 5853, Station B, Victoria, B.C., Canada, V8R 6S8.

Lynn White Jr. "The Historical Roots of Our Ecological Crisis" in The Subversive Science cited above.

Who Will Save The Forests: Knowledge, Resistance, and the Environment, eds. Tarjo Banuri and Frederique Apffel Marglin, Oxford University Press, Clarendon (in press).

Whole Earth Review, P.O. Box 38, Sausalito, CA, U.S.A. 94966.

Donald Worster, Nature's Economy: A History of Ecological Ideas, Cambridge University Press, New York, 1977.

NOTE: The writings of Wolfgang Sachs are unfortunately not yet available in English.

"The Age of Ecology" was written and prepared by David Cayley.
Producer: Jill Eisen.

You can obtain a printed transcript of this series by writing to CBC Ideas, Box 500, Station A, Toronto, M5W 1E6. Enclose a cheque or money order for \$20.00 and ask for "Ecology".

remains the same attitude which produced an ecological disaster, then our attempts simply to manage more rationally, welcome though they are, are not sufficient, that we need to be rethinking the relation between humans and reality.

Lister Sinclair

"Images of Nature," part eight of *The Age of Ecology*, written and presented by David Cayley.

David Cayley

In the early 1980s, a writer named Jonathan Schell made a remarkable impact on the public conscience with a series of articles in the *New Yorker* magazine on the threat of nuclear weapons. They were called "The Fate of the Earth." I had a sense of déjà vu this past fall, when it suddenly seemed as if everyone I met was urging me to read an essay in the *New Yorker* called "The End of Nature." The author was Bill McKibben, and when I did read it, I found the same portentous tone, the same terrible sense of occasion that had given Schell's work its galvanizing impact on the reborn peace movement of the early '80s. McKibben's essay, also published as a book of the same name, is a meditation on the meaning of global warning. His argument is that nature is only nature if it confronts us as a power which human purposes can not substantially alter. When industrialization begins to change the chemistry of the atmosphere, and therefore potentially the weather, then summer, in McKibben's slightly sinister phrase, "will go extinct, to be replaced by something else that will be called summer". Bill McKibben lives in the vast Adirondack wilderness of northern New York. It was partly his reflection that even this seemingly pristine place could be transformed by global warming that caused him to write his book. I visited him at his home near Johnstown, New York this spring, and we talked about *The End of Nature*.

Bill McKibben

It doesn't mean the end of the world and it doesn't mean the end of the human species, it means the end of a way of looking at the world, a way of looking at the world where we're one species among many and there's something much larger than us. I think that that way of looking at the world is unfortunately becoming harder and harder to maintain, that we're becoming more and more and more dominant a species, and now we're taking a quantum leap by interfering with the most fundamental forces of the natural world around us, the weather and the climate. You know, short of interfering with gravity or something like that, this is about as profound as you can get, and in so doing, we manage for the first time to alter or to put our boot print on every square inch of land and sea.

David Cayley

What, for you, is the significance of this "end of nature," as you've called it?

Bill McKibben

Well, ... It's on many different levels. One that's I think immediately apparent to a lot of people is the kind of

theological level, you know. An awful lot of our ideas about our place in this world and our relation to some higher being have to do with the idea that there was some creator God who in some sense operated through natural forces. I mean, if you look in your insurance policy, it says that things like hurricanes and stuff are "acts of God," and, you know, don't bother writing to them if your house blows down in one. But it's very unclear that anything of that sort will be an act of God in the future. I mean, a hurricane, for instance, its power comes from the warmth of the ocean. If we raise the air temperature very much, we'll also raise the tropical sea surface temperature and quite quickly create the possibility of a hurricane half again as large as any that are physically possible now, and that won't be an act of God, that'll be an act of man. I guess in some more personal sense for me it's the sense that there is no place you can go to get away from people and their effects, that there's no sphere or won't be any sphere left larger than us, and that to me is a saddening and kind of scary thought. One of the things that's made life, especially life out here in the woods, as wonderful for me as it is, is the sense that there are many other forms of life around us, that we're merely one part of some great, large, complicated, humming operation, and we're threatening to reduce that to just us, to reduce it by changing the climate so that we'll wipe out an enormous number of other species and things, or by tinkering with genes so that we're creating and modifying all the forms of life around us. One writer on biotechnology that I was reading recently said that, I think the quote was that "once we've mastered genetic engineering in the fairly near future, we'll be able to turn the working of all other living things on earth to the particular advantage of our own species." Now, to me, that's a very barren idea, you know, a sort of shopping mall kind of world where everything's ordered for our pleasure and consumption and whatever else, and it's much less interesting than the world we live in now, which is mysterious and where we don't understand why we're here or why anything else is here, but yet most of us feel an enormous delight at living here and at being in this world.

David Cayley

This is partly an aside, but you habitually use the term "we" when you're talking about this. But do you really mean "we"?

Bill McKibben

As opposed to?

David Cayley

"They"?

Bill McKibben

No, I mean "we." As I say--

David Cayley

How many species have you wiped out this week?

Bill McKibben

Oh well, I've done my part. As I say, I'm a good child of suburban America, the most consumptive commodity-intensive society that the world has ever produced. Heck, just

to print my book, I shudder to think of the size of the forest that they needed to knock down, you know, and it's now in eleven languages, so I assume in each part of the world there's a small grove of trees that I personally have taken down. That's the thing. It's not that any of us is particularly to blame. You know, we didn't until very recently have any idea that what we were doing threatened things in any large scale. We're born into these patterns. I mean, we now have to figure out ways to get out of them and to learn to live other ways. But no, definitely I am a major league hypocrite and I realize it.

David Cayley

The thing that struck me about your essay, first of all, was that I saw it as an argument for limits. I felt like I was walking with you, in that way, but I couldn't follow your idea of "nature" as something not containing human beings, that somehow nature is tainted if a human presence is detectable in it, then it's no longer nature.

Bill McKibben

No, "wilderness" might be a better word if you're talking about these things. It's very clear that human beings are a part of nature, you know, and there's nothing wrong with that. As I say, we've needed to change nature around us and that seems to me perfectly permissible, just as it's perfectly permissible for the beaver who lives up in Mill Creek here to build a dam. It's less permissible when it threatens to flood my basement. But there need to be places--we're the one species that possess the ability, if we choose to use it, to go everywhere and be everywhere and dominate everything. There's no other species that can have that kind of impact. If we want to have a world that has anything but us in it, we do need to begin, I think, to limit ourselves in ways both practical and philosophical. We need to kind of give up the dream of living in a perfect world where we live forever, free of sickness, and where we have absolutely unlimited comfort and convenience and things like that. I'm not even sure that these are treasures worth having in their ultimate sense, but they're certainly sort of what we've been aiming at. And now we're finding that, at best, they're going to lead us I think to a kind of sterile and barren world, and at worst, they're going to create a planet that's very uncomfortable and very inconvenient and very hard to live on.

David Cayley

I want to know what you think the implications of this are for environmental politics, because it's always seemed to me that once things are at this pass, that the solutions can intensify the problem. You cite some pretty zany examples of that in your book, people wanting to zap fluorocarbons with lasers and so on.

Bill McKibben

Yes, or cover the ocean with styrofoam chips to reflect the sunlight back out to space. Those are kind of the ludicrous examples, but the temptation is to continue following the same paradigm and the same general path and, you know, "manage things more wisely than we're managing them now,"

which is a better idea than managing them badly. But it seems to me that in some sense our goal should be to have a world where eventually we don't have to manage it and where we're merely one part of it and not an overwhelming part of it. So I think we need to sort of question the idea that it's always going to be some new technology, new way of doing things that saves us, and remember that we already have a lot of good ideas about how to live in this world and we just don't make use of all of them.

David Cayley

Journalist Bill McKibben, the author of *The End of Nature*.

David Rothenberg

The kind of nature that's dying, this vision that is no more, the luxury of saying, here is nature, here is civilization, I will walk between them when I please. That's what's ending.

David Cayley

David Rothenberg is a musician--that's his music in the background--and a graduate student in philosophy at Boston University. He's worked at *The Ecologist* magazine in England and collaborated with Norwegian philosopher Arne Naess, the godfather of a philosophical school called "deep ecology." Rothenberg's writings raise questions about the meanings we associate with nature, and he thinks that the environmental movement needs to be grounded in such questions and not facile answers.

David Rothenberg

People expect a lot from this idea without thinking too much about what it is. It becomes a kind of shallow religion, a vague, thin idea--a thin religion, I guess we talked about before, that there's just this vague idea that caring about the earth or paying attention to interconnections will solve our problems, and interrelationship is a powerful idea but it's quite a vague idea. It's only a place to begin, and people taking ecology, which started as a new direction in biological science, and then just said oh, ecology is the word, ecology is the answer, without taking the time to realize what needs to be developed and what's the question, exactly, what are we trying to answer with this. And some of this spills over into the thinking about "the new paradigm," where people say ah, everything's changing, we're at the verge of a new paradigm, and then you often read the entire parameters of this new paradigm as if it's already here, as if we can just switch over by flipping the channel or something. But if we really are at a changing point in our thought, then we don't know the answer. We've got to work more carefully on specific changes and on specific questions rather than just saying this is the way it is and we already know enough, if only we could implement it. I think that's too naive. There's a lot of problems here. We don't really know very much about where we should redirect society, and that to speak of a new paradigm generally seems to me to bring with it this false sense of security that we already know where we're going.

David Cayley

One of the concepts that David Rothenberg wants to query

is the idea of "nature." He's not satisfied, for example, with Bill McKibben's account of nature. McKibben belongs to the romantic tradition of Henry David Thoreau which opposes nature and civilization. He sees nature as a sublime teacher and deplores humanity's ever-present "boot print," just as Thoreau longed for a wilderness "I cannot put my foot through." Rothenberg wants a more flowing, less divided image of the world.

David Rothenberg

Our civilization developed in a certain way, such that we could place a wall around it and say, "Beyond this is nature," and it starts that this nature beyond the wall is something frightening and negative and evil, and then we begin to see it as antidote to the problems of our own world and say, "Ah, let us escape into nature." And I think that's another part of this superficial world view, which I certainly feel as much caught up in as anyone else, because I love going out into the wilderness, this place bereft of other people and, you know, other cars and shopping malls and no gas stations. But I want that because my culture and civilization is not connected enough to the world which surrounds it, so I need to escape it into some imaginary realm that's off on its own, but I think it's part of the delusion that I need to think that way. That's part of what's wrong with the civilization that I live in, and that another way to live would feel a greater connection to the world around all the time and not think that one escapes into it and back from it, and where I feel just as cultured or civilized out there, in the woods, or in the desert, than I would be at home, writing about all this stuff, sitting at a computer. We don't know exactly how to talk about these things without dividing them up, which is a big frustration.

David Cayley

Rothenberg is currently at work on his PhD thesis on the philosophy of technology. His research follows the way in which the meaning of nature modulates with technological change.

David Rothenberg

What I want to examine is how technology changes the world, both by allowing us to build things and change our physical environment, as well as letting us think about the world in a new way. It's tremendously powerful in redirecting our thoughts in different directions, and throughout the course of this investigation--I started by looking at very simple tools and how impressed we humans get with things we can build that work. You take something, a tool, a simple machine, we see that it works, then we begin to imagine the world working in the same way. So that even from the very first glimpses of the way the world is conceived, it seems to be like a machine, like our very simple machines, and then like our more complicated machines. At the same time, you know, this is technology, as it develops, changing what nature means. Because first Heraclitus says the universe is like a bow and a lyre--it's tension and release. And then Plato talks about the world, says it's spun on a potter's wheel and shaped by the creator. And then later on,

we have Descartes and Leibniz saying it's all like clockwork, the world is like clockwork. And then in the 18th century, nature is like an engine, self-regulating systems, and this becomes later into cybernetics, which comes out of mechanical, self-correcting mechanisms. And then we have the computer, which becomes a kind of technology that doesn't even have a material basis. We use it, apart from its material construction, it's a way of organizing ideas. When technology becomes that abstract in its use, it changes the way we think about things which we can't build or we can't make. Things like waterfalls or the spread of forest fires can be simulated with digital thinking that has nothing to do with the way it actually happens, but because we notice certain patterns, we think we can explain it. It's not that nature is now a machine and wasn't seen as a machine before, it's just machines have become more complicated and they threaten, perhaps, to explain more. On the other hand, as I'm reading all these various theories that have been put together about technology over the centuries, it seems that everyone has always wanted technology to be natural and be like nature. Even people like Francis Bacon, considered the arch villain by many eco-freaks of the modern era, thought of as the man who turned humanity against nature, he too wanted technology to fit in, be able to fit into the world. It's all there, it's the same dream, only what nature is keeps changing, and so we keep going in different directions. Well, the disturbing thing about this is that I started my whole research into this with the idea that I'd explain all these things and then emerge still with this victorious idea that somehow we can look for what is right in what is natural, as Aristotle encouraged us to, and that we can use nature in this way. Only now that I'm about halfway done, I'm just no longer sure what nature means, it's just being twisted and transformed so much.

David Cayley

Rothenberg's inquiries into the meaning of nature came to my attention through an article, called "Ways Towards Mountains," which appeared in a Canadian eco-philosophy journal called *The Trumpeter*. The article investigates a famous letter by the 14th century poet Petrarch concerning his ascent of Mount Ventu, near Avignon. Petrarch's climb is reputed to be the first case of a European climbing a mountain purely for the experience of doing so. But when he reaches the summit, he rejects the elation he feels and concludes that "there is nothing wonderful except the soul, which, when great itself, finds nothing great outside itself. Then, in truth," Petrarch goes on in this letter, "I was satisfied I had seen enough of the mountain." Beside this text Rothenberg sets another, *The Mountains and Rivers Sutra*, by the 13th century Zen master, Dogen.

David Rothenberg

He gave this as a lecture at 12 midnight on November 3, 1240. It's exactly written down. It was to all his students--they were staying up late just to listen to him--and he doesn't talk directly about an experience climbing a mountain, but just makes certain statements about mountains that try and connect them to things that we as humans are and can do.

The basic image which the rest of the talk is centred around is the following. "The blue mountains are constantly walking. The stone woman gives birth to a child in the night." The rest of the talk sort of enigmatically weaves in and around that image, that idea. "Mountains," Dogen says, "lack none of their proper virtues because they are constantly at rest and constantly walking. We should study this virtue of walking. The walking of mountains is like that of men. Don't doubt that the mountains walk simply because they do not appear to walk like humans. He who doubts that the mountains walk does not yet understand his own walking." It's not that he doesn't walk but he doesn't yet understand, has not yet clarified his walking. This is a vision of a mountain somehow alive in a way that we are alive, not different from us but like us. Like Petrarch, Dogen says that if we refuse to believe or participate in these perfect, virtuous mountains, we are lacking in virtues, we are imperfect. What Petrarch refuses to do is leap to the notion that the mountains are perfect, beyond the limitations of the human soul. This is because, unlike humans, presumably, the mountains can be calmly at motion and at rest. Nature doesn't need to reason between these two states, it contains both. Now, this isn't just an Asian idea. I think it's a common but somewhat dangerous simplification to say that there's something right about the way the East understands nature and there's something wrong about the way the West does. I mean, there are specific people who believe specific things and think specific things, and we can find images that are inspiring from both at different times. You know, Plato somewhere describes wisdom as "touching the motion or stream of things," and that's the same kind of thing Dogen is getting at here. The language of the Mountains and Rivers Sutra is not the kind of thing that we would like to call logical, or straight philosophical the way argument is supposed to be written, but most of the great philosophy is like that too. It's all written in strange, enigmatic ways and people are trying to pretend that it's logical and clear, but actually it's all forcing us to try and get outside the strictures of the thought we're used to and think in new ways, and language isn't really prepared to do this, so it's all a struggle one way or the other. Plato, Aristotle, Spinoza, they're all twisting language in different ways, so it's frustrating, but in some sense it has to be written in this difficult way, though often I wish it were not so. Well, Dogen ends by saying that mountains are not just things for us to see on the horizon, but "as for mountains, there are mountains hidden in jewels, there are mountains hidden in marshes, mountains hidden in the sky, mountains hidden in mountains. There is a study of mountains hidden in hiddenness." Okay, this is what inspired me to write this whole thing, just this one quote, to try and figure out what could remain of the meaning of the word "mountain" after it's been twisted in so many different ways, after it's been hidden in so many different places, after it's been taken away from where we're used to climbing on it and touching it and seeing it, and now it's everywhere. Does it mean anything? And that's where I began to investigate what mountain might mean as idea. And this began to resonate the way images in poems are supposed to resonate with other experiences, in my own limited experience, that

got me thinking about these ideas. And one of them also in this paper is this advertisement on a bus in Boulder, Colorado, which was a poem which just said, "I wish I could look at a mountain for what it is and not as a comment on my life," and that's a poem by David Ignatow. And that idea has been with me for years, wondering what it means and whether it's a good idea, even, since all of this is looking at mountains as comments on our lives in some way, but not without looking at our own lives as comments on the mountains at the same time. He wants to get beyond the situation of modern man and modern woman trying to make everything make sense for us, for me, for you, rather than looking at things the other way around. He feels stuck in the place where Petrarch is stuck, you know, nothing greater than the soul, nothing outside the soul, nothing outside itself, never mind the mountain. It's just something that sends me back within and he's saying I wish I could get beyond that. Whether Dogen gets beyond that is another question, since we're not exactly sure what he's after, but one thing which he may be after is the notion of mountain as idea. Before it's something we see or climb or identify, there's this idea, the rise and the fall, the peak, the valley. All these are ideas that are found in all parts of experience and thought. Maybe it's wrong to ask which comes first, but that maybe this is the most profound meaning of mountain, that it's a concept which flows through all kinds of experience, even things that seem flat. The world we live in is not separate from what we think about and our ideas are not separate from the world in which we live there. One can't think of self-realization without the environment. One can't think of human thought without the world as it's experienced and as it's changed. That's the most basic point of this. Don't think you can be anything without the world.

You might be able to tell from this whole discussion that there's this part of me that's entirely suspicious of all attempts to discuss these things in words. There's a whole other side of my life where I play music and try and compose music and explore some of these same questions in a medium which doesn't have any arguments, which doesn't have any conclusions, but has its own form of expression.

David Cayley

Musician and writer David Rothenberg.

Erazim Kohak is a professor of philosophy at Boston University. In fact, he's been David Rothenberg's teacher there, and Rothenberg his teaching assistant, though I came to know of them independently of each other. Kohak writes in the tradition of Czech philosophy, which goes all the way back to Rene Descartes' great opponent in the 17th century, John Comenius, a tradition that has not accepted the split between nature and mind that Descartes introduced into the mainstream of European philosophy. In 1984, Kohak published *The Embers in the Stars: An Inquiry into the Moral Sense of Nature*. The book is a poetic and personal account of the author's own discovery of meaning in the world around his rural New Hampshire home. But it's also

an effort to put environmental concern into an adequate philosophical framework.

Erazim Kohak

Practice is always an idea in action, and what I am doing there, I am not giving prescriptions on how to clean up rivers or how to change modes of consumption. But I am very much convinced that we have an ecological crisis not only because there is an awful lot of us, five times as many as there were when I was born, and I don't know how many times it'll be before I die, but also because of the way in which we have oriented towards nature. And it seems to me that environmentalism can now take two general directions. One of them is more rational management of natural resources, and here the assumption is yes, that humans are basically the exploiters of a lifeless reality, and the question is only how to exploit it most rationally so it would last minimally for our lifetime. It seems to me that while I welcome, no matter what the motivations are, I'm always happy when somebody uses more environmentally sound materials and practices, I welcome it. If the devil is divided against himself, he will not stand. But my concern is that as long as our basic attitude towards ourselves and the world remains the same attitude which produced an ecological disaster, then our attempts simply to manage more rationally, welcome though they are, are not sufficient, that we need to be rethinking the relation between humans and reality. And this seems to me that what I'm trying to do here is to provide persons with environmental concerns a conception of nature and the place of humans in it which can provide a more adequate guidance than the arbitrary human deciding about dead materials.

David Cayley

Environmentalism, for Kohak, faces a choice of world views. His philosophy recognizes other purposes in nature than our own. Modern European philosophy has not.

Erazim Kohak

The conception of reality with which we operate today and which is so deeply engrained in us that we're not even aware of it is indebted heavily to the early 17th century, to Rene Descartes, and it conceives of reality as bifurcated between a mind, a *res cogitans* which is in no intrinsic sense a part of the remainder, the remainder being an aggregate of *res extendes* of objects which have no properties other than spatial extension, mathematical and causal ordering. This is the so-called world of "dead matter." Against this I was trying to revive a conception of reality as value-laden and meaningfully ordered, a reality of which the subject, and all subject beings, all purposive beings, living beings, are an intrinsic part, and which is therefore a world that is both meaningful and valuable. So that value is not something that humans impose upon the world but which the world already has as a life's world.

David Cayley

For Kohak, it is no easy thing to throw off a philosophy, because it confronts us not only as a body of ideas but as a set of perceptual habits. To perceive the life world around

us, we have to unlearn our concepts, a procedure Kohak's phenomenological tradition calls "bracketing."

Erazim Kohak

What I am concerned with, simply is breaking a particular habit of perceiving. When a human being perceives the world, he/she does not perceive it as dead matter. This is something that we have to be taught, and in our lived experience, that remains an artificial perception. We perceive the world as meaningful. I used to do an experiment for my students. I would bring in a small, stuffed bear. I would introduce him to the class, tell something of his personal history, where he got his degrees and what he has done since, and I would put him on my desk and forget about him. About five minutes later, I would take some notes out of my briefcase, start to place them on my desk. The bear would be in the way and I would say, "Let's get this thing out of here," and I would swing my arm as if to hit the bear aside. The entire class--and here I'm dealing with adults, advanced graduate students--instinctively reacted: "Don't hit that cute little bear." Now, clearly, theoretically they know that--his name was Coccy because he was stuffed with coconut husk--that Coccy is just a piece of cloth stuffed with crushed coconut husks. Yet what they actually perceive is a meaningful entity to which they relate--I don't like the word but I'll use it anyway--emotionally, empathetically as well as in strict utilitarian terms. And what I'm trying to suggest by the term "bracketing," set aside the learned ways of perceiving the world as dead matter there for your use and see if you can recover again your actual perception of the world as a community of beings to whom you are meaningfully related. Other writers would invoke the Navajos, for instance, who have a very strong sense for the rhythm of nature. I am a man of the West and so I use Husserl's concept of bracketing, setting aside. But the purpose here is to recover the actual experience from the heavy overlay of theoretical interpretation, because we are all convinced that the bear is cloth and coconut husks, but in the world of our experience that is not the case.

David Cayley

Is there in fact such a thing as our "actual" experience, apart from the theoretical constructs we use?

Erazim Kohak

This would be the question that a philosopher would say, and I would say, very definitely so. Here I would invoke Paul Ricoeur and his lovely statement in *The Rule of Metaphor*: "Something must be for something to be said." The moment that I start speaking about my experience, I am of course dressing it in a set of particular terms, and this is why I would say the truth is never the sentence. Truth is not the property of sentences. Truth is the reality to which a sentence seeks to point me. So that just as with our doctrinal statements, a particular creed points me to the truth but it is not itself the truth, and this is why the church can have a range of creeds from the Apostles' Creed all the way down to the 39 Articles of Religion, the most definite statement, of course. And we can say none of them is the

be a hermit and be a practicing Jew. You have to have to have a community.

David Cayley

I'd like you ask you finally about what I'll call environmentalism for want of a better term, meaning all those persons who are concerned with this. And this is a movement which seems divided in many ways but which ranges certainly from a managerial perspective at one end, an attitude which is confident that sustainable development is possible, that you can have growth and environmental protection, however it's phrased, and at the other end one has a biocentric perspective, let's say, descending from Leopold's famous saying that we should be only a "plain citizen" of the biotic community. It seems to me that coming out of your Jewish roots, you take a different view, neither one nor the other.

David Ehrenfeld

Yes, let me try to answer your question by describing the Jewish attitude towards work and the Sabbath, which I think is the ultimate, for me at least, the ultimate way of stating this problem. In Judaism, you're supposed to work six days and rest on the seventh. On the seventh day, on the Sabbath, which for us is Saturday--or it actually starts Friday evening at sundown, you are supposed to stop working and there's three things you have to do if you are going to observe the Sabbath correctly. You can't create anything. I mean anything. If you get an idea for a book, you cannot write it down on a piece of paper. That's very painful for an author and it happens to me all the time, and I wonder, will I remember this till after sundown on Saturday, and sometimes I do and sometimes I don't, and I have stopped worrying about it. If you're a gardener, you can't plant a seed. That's a creative act. You can't do it. You also can't destroy anything. That's the second thing you can't do. Again, if you're a gardener and you see a weed growing in your garden, you can't pull it up, you can't kill an insect pest, you can't shoot a rabbit, or anything of that sort on the Sabbath. The third thing that you're supposed to do is a positive injunction, which is to celebrate the Sabbath and celebrate the fullness of the earth that was given to people to live in, to work in and to enjoy. So you have this prohibition against creating or destroying, which means you cannot be a manager, you can't be a steward even in any sense. You've got to leave it alone, and it will continue all by itself. It's a wonderful lesson. You also have to learn how to enjoy it, and that's the other part of the lesson. People were told you had to have the confidence, in a sense, in the earth and in the creator of the earth that says I'm going to just rest for one day, I'm going to leave it alone. Now, I think that stewardship without the idea of the Sabbath is bound to go wrong. Without the idea of the Sabbath, without some idea of a built-in restraint, then the steward eventually becomes very arrogant. Hence my title, *The Arrogance of Humanism*. The stewards says I'm really the king. You know, the late J.R. Tolkien, in his book, his wonderful Ring trilogy, *The Lord of the Rings*, has this dilemma of a steward who says How long do I have to stay a steward if the king doesn't

show up? When do I become a king? And the man who asks this question is told by his father, who is the steward, Even ten thousand years wouldn't be enough, and essentially there is never a time when a steward becomes a king. Well, I think that there's a great temptation for stewards to want to play king, to want to play God, and without some kind of a restraint that's built in at a regular basis, a kind of constant reminder you're not running the show, you can't run the show. You don't know enough to run the show and you never will and you're only going to mess it up if you have that attitude. Without that idea, then I think that stewardship is bound to go awry, to go amiss. I think that the idea of the Sabbath, for Jews, and perhaps for Christians too, introduces this idea of restraint which is so essential to keep stewardship on the right track. So I think that stewardship is the only hope, but I think it has to have some kind of restraint built into it.

David Cayley

David, thank you so much.

David Ehrenfeld

You're welcome.

David Cayley

In 1980 a book appeared which I think of as a kind of sibling to *The Arrogance of Humanism*. It was called *The Fallacy of Wildlife Conservation* and it was written by John Livingstone, a lifelong naturalist and a professor in the Faculty of Environmental Studies at York University. It was a book, Livingstone once told me, written in blood--his life's blood. After a lifetime of arguing for wildlife conservation, Livingstone took apart the arguments he himself had made and found them all wanting. Everything seemed to come back to what David Ehrenfeld calls "the doctrine of final causes," the idea that the end to which something can be put is the cause for which it was created, the idea, as Ehrenfeld says, that gravity exists in order to make it easier for us to sit down or that rain forests should be saved because they may contain undiscovered medicines. Species and places with no obvious economic usefulness become recreational amenities, prized for their aesthetic value. All arguments circle back on humanity. None can penetrate what Livingstone calls "the metaphysical dome" which encloses human society and cuts us off from the living world. In the light of *The Fallacy of Wildlife Conservation*, John Livingstone began, in effect, a second career, searching for a way out of environmentalism's utilitarian bind, trying to put a retractable roof on the metaphysical dome. We spoke recently in his office at York.

John Livingstone

If I have a technique, it has been, I think, to ask the question that my colleague, Reg Lang, always asks: What is the problem to which this is the solution? So what I've done mostly is critical analysis, I think, of the statements of the so-called conservation movement, the so-called environmental movement, and so forth. Nobody seems to want to reveal what the problem is that is being addressed by all the environmental placards. I like to say to my students, "Go out