

On the Frontier of Time
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Responsive Reading: “Out of the Stars” by Robert Weston

In this responsive reading from the Unitarian Universalist Hymnal Robert Weston gives a poetic rendition of what some scientists are calling the “epic of evolution.”²

Out of the stars in their flight, out of the dust of eternity, here have we come,
Stardust and sunlight, mingling through time and through space.
Out of the stars have we come, up from time;
Time out of time before time in the vastness of space, earth spun to orbit the sun,
Earth with the thunder of mountains newborn, the boiling of seas.
Earth warmed by the sun, lit by sunlight:
This is our home; out of the stars have we come.
Mystery hidden in mystery, back through all time;
Mystery rising from rocks in the storm and the sea.
Out of the stars, rising from rocks and the sea, kindled by sunlight on earth arose life.
Ponder this thing in your heart; ponder with awe:
Out of the sea to the land, out of the shallows came ferns.
Out of the sea to the land, up from darkness to light,
Rising to walk and to fly, out of the sea trembled life.
Ponder this thing in your heart, life up from sea;
Eyes to behold, throats to sing, mates to love.
Life from the sea, warmed by sun, washed by rain,
Life from within, giving birth, rose to love.
This is the wonder of time; this is the marvel of space;
Out of the stars swung the earth; life upon earth rose to love.
This is the marvel of life, rising to see and to know;
Out of your heart, cry wonder: sing that we live.

Reading: “The Cry” by Nikos Kazantzakis

Nikos Kazantzakis in *Report to Greco* describes the process of evolution as the result of a divine creative activity. He personifies this activity as a “Cry.”

Blowing through heaven and earth, and in our hearts and the heart of every living thing, is a gigantic breath—a great Cry—which we call God. Plant life wished to continue its motionless sleep next to stagnant waters, but the Cry leaped up within it and violently shook its roots: “Away, let go of the earth, walk!” Had the tree been able to think and judge, it would have cried,

"I don't want to. What are you urging me to do? You are demanding the impossible!" But the Cry, without pity, kept shaking its roots and shouting, "Away, let go of the earth, walk!"

It shouted in this way for thousands of eons; and lo! as a result of desire and struggle, life escaped the motionless tree and was liberated.

Animals appeared—worms—making themselves at home in water and mud. "We're just fine here," they said. "We have peace and security; we're not budging!"

But the terrible Cry hammered itself pitilessly into their loins. "Leave the mud, stand up, give birth to your betters!"

"We don't want to! We can't!"

"You can't, but I can. Stand up!"

And lo! after thousands of eons, humans emerged, trembling on their still unsolid legs.

The human being is a centaur; our equine hoofs are planted in the ground, but our body from breast to head is worked on and tormented by the merciless Cry. We have been fighting, again for thousands of eons, to draw ourselves, like a sword, out of our animalistic scabbard. We are also fighting—and this is our new struggle—to draw ourselves out of our human scabbard. Humans call in despair. "Where can I go? I have reached the pinnacle, beyond is the abyss." And the Cry answers, "I am beyond. Stand up!" All things are centaurs. If this were not the case, the world would rot into inertness and sterility.³

Sermon

Several years ago, I was driving down a main street in Winter Park, Florida on my way to a class at Rollins College. Winter Park has these wonderful, lovely southern oak trees that create canopies over the streets. It's a beautiful community. The sun was behind me, streaming down through the trees, giving everything a warm, early morning glow. As I drove, I was reflecting on a course I was teaching, a science and religion course on evolution and creation. I was thinking about the fourteen billion year history of the universe.

Suddenly I realized that I was on the frontier, the frontier of the universe. This was not a frontier of space but a frontier of time. I realized that the whole universe had taken fourteen billion years to bring me, and everything else, to the moment I was in. All that time, all that creative activity bring into being galaxies, stars, our Earth, life, and me. Wow! I was awestruck. I still am.

We all are on this same frontier of time—right now, every moment—going into the future. It is an unknown future. Yet it is a future upon which our thinking and actions will make a difference. We help create the future. We shape what the future will be like. My thoughts and actions, our thoughts and actions, help create the future. What a responsibility! What kind of future should we be creating?

This morning I'd like to reflect with you on what it means to live on the frontier of time. I'll sketch some of the transformations in the history of the universe that have brought us to this point. Then I'll suggest some ways to think about our place in this grand scheme of things and the kinds of things we can do as humans beings. Finally, drawing of some of the world's religious traditions, I'll suggest some the things we should be doing as we help create the future—on the frontier of time..

Universe Transformations

One way to tell the history of the universe is as a series of transformations that bring new phases of the universe into being. The basic stuff of the universe is energy-matter. In keeping with the first law of thermodynamics, energy-matter is neither created nor destroyed. However, as the universe evolves, as it expands and cools down after the “big bang,” energy begins to be transformed into matter, into subatomic particles and simple atoms—hydrogen, helium, and a very small amount of lithium. These atoms form huge clouds that become galaxies and the first stars.

A second transformation occurs when some of the early massive stars—stars ten times the mass of our sun—burn up all their hydrogen fuel in nuclear fusion. They go through a process of dying, ending in a tremendous explosion called a supernova. In the extreme temperatures of supernovae, elements more complex than hydrogen and helium are created—oxygen, nitrogen, carbon, phosphorus, iron, and so on. Out of these elements and more interstellar hydrogen and helium, new stars are created. Some of these have planets. Our sun and its planets, including Earth, were formed about five billion years ago out of the debris of earlier, exploded stars. This is the scientific picture behind our responsive reading this morning—Robert Weston’s “Out of the Stars have we come.”

On earth further transformations take place as atoms form molecules and as some molecules become more complex and self-replicating. Life comes into being. Once life occurs about 3.5 to 4 billion years ago, Darwinian evolution takes over, creating millions of forms of life. One aspect of evolving life is the nervous system, dating at least back to worms. Through Darwinian evolution simple nervous systems evolved into more complex nervous systems—nervous systems complex enough to think with symbols—the human brain capable of creating complex languages and mathematical formulae—making human beings what anthropologist Terry Deacon calls the “symbolic species”.⁴

Still more transformations occur in human society and culture. Human beings originally evolved biologically to care for genetically close kin and to engage in small-group, reciprocal altruism. With the invention of morality, economics, politics, and religions, these small-scale communities were transformed into larger, cooperating societies and multi-national civilizations.

A question for the future is whether these large-scale societies and civilizations can evolve into a peaceful, cooperating world-wide community, living in harmony with the rest of the earth. Or will evolution’s human experiment end in a global nuclear holocaust or in environmental disaster?

What all these transformations mean is that each of us is made up of the energy present fourteen billion years ago at the origin of our universe. We also are made up of atoms of oxygen, nitrogen, carbon, phosphorus, and iron created in the explosive deaths of massive stars. Likewise, we are the descendants of a one-celled organism that was the first replicating life on our planet almost four billion years ago. More particularly, we have evolved from a tiny mouse-like creature that was present at the time of the dinosaurs. When an asteroid collided with the earth sixty-six million years ago, causing the extinction of the dinosaurs, this mouse-like creature (like a tree shrew) began to flourish, leading to the common ancestor of chimpanzees, bonobos, and human beings. Finally, in this evolutionary history, we are the inheritors of many of the

inventions, values, and thoughts of countless human beings that have gone before us on planet Earth. Each of us stands on the frontier of time—able to continue in our own small way the legacy of energy, atoms, molecules, life, and culture that has evolved to give us the gift of our own existence.

Possibilities for the Future

Where can we go from here? What kinds of possibilities do we have for living our lives in ways that continue our trajectories in the fourteen billion year history of the universe? As Nikos Kazantksis says, we are like centaurs. We are emerging out of our human scabbard, drawn by “the Cry”—a metaphor for the ongoing creativity that ceaselessly brings all things into being. Where can we go?

One possibility is suggested by theologian Philip Hefner in his book *Technology and Human Becoming*. Hefner says that we not only create technologies. Our technologies are in turn creating us—giving us a new self understanding and defining us as *technosapiens*.⁵ We are on a frontier where our own creations also create us.

Just think about how much we are integrated with our technologies. We are reaching a point where we can’t get along without a wide variety of technologies—transportation and communication technologies, food-producing technologies, medical technologies, technologies of home and yard, educational technologies, recreational technologies, and reproductive technologies. Such technologies are beginning to define who we are as human beings.

That we are being defined by our technologies raises the question, what kind of *technosapiens* should we be? This is the moral and ethical question: how *should* we live? How should we use the new technologies? What kinds of technologies should we create that in turn are creating us? Should we create and be defined by technologies of violence and war or by technologies that promote co-operation and peace? Should we be *technosapiens* that wastefully consume the resources of our planet and endanger other species? Or should we be the kind of technological beings that live in a way that our Earth is sustained for future generations of humans and other life forms? If we are becoming *technosapiens*, what kind of *technosapiens* should we become?

This will depend in part on what kind of stories we tell about our world and ourselves. Some suggest that one of the directions we can go on the frontier of time is to be the story tellers of the universe. This echoes an insight of the biologist Julian Huxley, namely that in humans “evolution was at last becoming conscious of itself.”⁶ Wow! Think about that. In humans the universe has become conscious of itself. This means that one of our purposes of living, as a symbolic species, is to tell the universe story.

But how do we place ourselves in this story, especially on our planet Earth? Some who tell the story of the universe regard humans as the apex the evolution—the culmination. They tell and live a story in which humans are the conquerors and rulers of planet Earth. Everything is to be used to fulfill our human desires, whatever those desires may be. This story of conquest and domination is especially prevalent in our American culture. Perhaps it is the dominant story.

Some, including myself, want to tell another story. This story understands the history of the universe as a history in which all things are united in one large natural family, in which all

share the energy of the universe, the matter created in stars, and the resources of our planet. This is a story of sharing, of promoting biological and cultural diversity, of respecting different ways of living. It is a story not of conquest but of citizenship.

Aldo Leopold writes about this contrast between conquest and citizenship in his “land ethic.” He writes: “a land ethic changes the role of *homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for [our] fellow members, and also respect for the community as such.”⁷ This is the story of friendship—of being friends with all human beings and with all of creation.

A powerful metaphor that represents these two stories is expressed by a Chinese Taoist philosopher, who suggests two ways of portraying the climbing of Mt. Everest. We might say that Mt. Everest represents the goal and purpose of human life. The philosopher says: “When you Westerners climb Mt. Everest, you say ‘We have conquered Mt. Everest.’ However, we Taoists would say, ‘We have befriended Mt. Everest.’”⁸

A story of conquest? A story of befriending? What kind of story should we be telling as we live on the frontier of time. More important: What kind of story should we be *living* as we help create our future and the future of life on our planet?

How Should We Live?

In other words, How should we live? As Unitarian Universalists, we have many religious resources. Some are traditional resources that have evolved over thousands of years. Some of these may provide guidance for us today. Of course, some of the traditions we have inherited tell stories of conquest and domination. Religion does not always promote peace. It is not always, in every respect, a good thing. But these same traditions also call us to ways of living that promote friendship and harmony with other humans and the rest of the earth.

The Jewish historian, Ismar Schorsch, former chancellor of Jewish Theological Seminary in New York city, says that one of Judaism’s main contributions to the human community is an “ethics of restraint.”⁹ In contrast to a life of out-of-control consumption, Judaism calls us as individuals to recognize that the earth and all life is a gift from God—from that which creates the universe. It calls us to observe boundaries, to recognize our human limits and the limits of our planet. And Judaism calls us to restrain our desires so that all can benefit from the gifts of the earth and other human beings.

At the level of society, Judaism, beginning with the Hebrew prophets, suggests that we need to create social, economic, and political structures that support justice, peace and love. In the tradition of the Hebrew prophets and of Jesus, some Jews, Christians, and Unitarian Universalists call for social justice, especially for those who are subject to racist, economic, and sexist oppression.

And Jewish and Christian writings hold up as an ideal that humans will one day live in harmony and at peace with the natural world. These writings offer a vision in which nature itself will be free from conflict and death. In the peaceable kingdom of book of Isaiah in the Hebrew Bible, “the wolf and the young lamb will feed together.”¹⁰ This is a metaphor of everything working together in tranquil unity. In his New Testament letter to the Christian community in Rome, Paul talks about the destiny of that community in the context of the universe’s creation:

“From the beginning till now the entire creation . . . has been groaning in one great act of giving birth. . . .”¹¹ The birth of a kingdom in which there is no pain, sorrow, suffering, and death. This is a grand vision, a grand ideal by which to guide our lives.

How can we translate such grand visions and ideals into our everyday lives. Here I find another religious tradition helpful—Buddhism. Much of Buddhist thinking suggests that we should live in the present moment on our frontier of time. Even though we have a fourteen billion year history, and even though we are creating the future, we do best if we live fully in the present and cultivate a mindfulness that is completely attentive to the needs of all people and all beings we meet.

Buddhism tells us to become free of our own specific attachments and desires. Because all things are continuously changing, we have to learn when to let go of old ways of doing things and let new ways emerge. Living on a frontier of time in an ever evolving universe means that we have to be open to new possibilities in every situation we are in.

The new possibilities we should be open to are possibilities for good, possibilities expressed in the Jewish-Christian vision. One way that I’ve heard this put in Buddhism is that we should live with “bliss bestowing hands.” With bliss bestowing hands, fully in the present, we should live with compassion for others, helping others in their time of need.

However there is a problem with living with bliss bestowing hands, with acting for the good of others. This is a problem that I’ve encountered in teaching college courses in Ethics. It is the problem of doing good for others. People often want to help others, to work for the benefit of others. But ethicists sometimes point out that we don’t always know what will actually benefit others. More important, when we think we do know, we often end up projecting our own ideas as to what we would like for ourselves onto others. We don’t listen to what others really need. When this happens, those who claim to be doing good often become “do gooders.”

I think Buddhism in particular has a helpful insight here. Before we can help others, we have to let go of being attached to our own interests, to let go of our small self-protective egos. This means living in the present moment, taking things as they come, taking others as they come. It means listening, listening to them, opening our hearts to them, being mindful—mindful of their needs.

The Japanese Zen master Zenkei Shibayama has an interesting way of saying how we should be mindful of others, opening our hearts to the needs of others. He says it means “assuming whatever shape according to the conditions.” Assuming whatever shape according to the conditions. He calls this “playing.” Playing like children play, “assuming whatever shape according to the conditions.”

Shibayama illustrates this with the following story. He writes: “It was right after the war in Japan when living conditions were the worst and the people had lost any peace they may have had in their mind. A poor old blind lady called Nobu, who lived in a corner of a burnt and devastated area, came to worship at a temple, and quite joyously said to the priest of the temple: ‘Reverend, I have had a light placed near my house.’ ‘Did you! Why?’ asked the priest. [Nobu replied], ‘It is outside my room. My room is in a tenement house in the midst of an alley. The walk is in a terrible condition, and at night it is very dangerous for people to pass through. I have long wanted to place a light for them.’”¹² Nobu assumed whatever shape according to the conditions. She was mindful of what others really needed. She lived with bliss bestowing

hands.

Many religions encourage us to live with bliss bestowing hands. But Buddhism, and related eastern religions (such as Jainism) also tell us to extend our acting with bliss bestowing hands to all beings, not only human beings. This raises for me a tough case. How do I live with bliss bestowing hands in relation to the insects in my home? They too are on the frontier of the universe—the frontier of time. Just as it has taken fourteen billion years to bring each of us humans into being, so it has taken the same time, the same galaxy and star formations, the same supernovae creating the elements, the same transformation from molecules to living organisms, and the same Darwinian evolution to bring insects such as flies, ants, and wasps into being.

All these creatures are a part of what we might call our “natural family.” We are related to them. Their story is a part of our story, even though we and not they are the story tellers. And the question is, how should we use the technologies we create when they inhabit our homes with us. Should we call in our weapons of chemical warfare—our aerosol and pump sprays of extermination? I must confess that sometimes I do this. But I also recognize that I do not always need to. True, sometimes I may need to kill other living beings. But I also realize that much killing, especially killing insects, is not always necessary.

So I’ve developed a simple, and insect friendly technology. It has two components. One is a plastic food storage container (I think a square one works best). The second component is stiff piece of paper (campaign flyers from state legislators) are good for this. What is do is wait for an insect to land on a wall or window, or stay still on the floor. I gently put the plastic container over it. (This is actually easier than trying to swat a fly or wasp, because there is no wind current to warn it; when it feels the air current it usually flies away before I can squash it.) Next I slide the stiff paper behind the insect and over the cover the container. Then I transport my fellow earth creature outside. Using this modest technological creation, I can easily trap ants, flies, and wasps, take them outside, and release them to continue their journeys on the frontier of time in their trajectories of the history of our universe. In doing this I try to live out a story of friendship with all beings. A story of supporting life as much as I can. A story of the peaceable kingdom—as I cohabit my small space on the our Earth with other creatures, including insects.

We live on the frontier of time, the frontier of a fourteen billion year-old universe. The way we live helps create the future of our universe on our planet Earth. How should we live? I suggest that we should live on this frontier—as much as we possibly can—like the blind Japanese woman Nobu. We should live with bliss bestowing hands for all beings.

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Notes

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the Frontier of Time.

2. Robert T. Weston, "Out of the Stars," *Singing the Living Tradition*, (Boston: Beacon Press, The Unitarian Universalist Association, 1993), no. 530.
3. Nikos Kazantzakis, *Report to Greco* (New York: Simon and Shuster, 1965), pp. 291-292. Quoted in John B. Cobb, Jr., *God and the World* (Philadelphia: Westminster, 1976), p. 53. Passage revised by Karl E. Peters to have inclusive language.
4. Terrence W. Deacon, *The Symbolic Species: the Co-evolution of Language and the Brain* (New York: W. W. Norton, 1997).
5. Philip Hefner, *Technology and Human Becoming* (Minneapolis: Fortress Press, 2003).
6. Sir Julian Huxley, "Introduction," *The Phenomenon of Man* by Pierre Teilhard de Chardin (New York: Harper & Row, Harper Torchbooks, 1965), p. 20.
7. Aldo Leopold, *A Sand County Almanac, With Essays on Conservation from Round River* (New York: Ballantine Books, 1970).
8. Huston Smith, "Tao Now: An Ecological Testament," in *Earth Might Be Fair: Reflections on Ethics, Religion, and Ecology*, ed. Ian Barbour (Englewood Cliffs, N. J.: Prentice-Hall, 1972), pp. 62-81.
9. Ismar Schorsch, "Learning to Live with Less: a Jewish Perspective," *Spirit and Nature: Why the Environment is a Religious Issue*, ed. Steven C. Rockefeller and John C. Elder (Boston: Beacon Press, 1992), pp. 24-38.
10. Isaiah 65: 25, see also 11:6-7.
11. Romans 8:22, *The Jerusalem Bible* (New York: Doubleday, 1968).
12. Zenkei Shibayama, *A Flower Does Not Talk* (North Clarendon, VT: Tuttle Publishing, 1970), p. 203.