PART II: Classic Quotations

COMPILED BY CONNIE BARLOW

PRE 1950

"Does organized existence, and perhaps all material existence, consist of one Proteus principle of life capable of gradual circumstance-suited modifications and aggregations, without bound under the solvent or motion-giving principle, heat or light? There is more beauty and unity of design in this continual balancing of life to circumstance, and greater conformity to those dispositions of nature which are manifest to us, than in total destruction and new creation."

— PATRICK MATTHEW, 1831 Naval Timber and Arboriculture

"There is a grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved."

— CHARLES DARWIN, 1859 The Origin of Species, first edition

"Educationalists in general agree that imagination is important, but they would have it cultivated as separate from intelligence, just as they would separate the latter from the activity of the hand. They are the vivisectionists of the human personality. In the school they want children to learn dry facts of reality, while their imagination is cultivated by fairy tales, concerned with a world that is certainly full of marvels, but not the world around them in which they live. On the other hand, by offering the child the story of the universe, we give him something a thousand times more infinite and mysterious to reconstruct with his imagination, a drama no fable can reveal."

— MARIA MONTESSORI, 1948 To Educate the Human Potential.

"It is a century now since Darwin gave us the first glimpse of the origin of species. We know now what was unknown to all the preceding caravan of generations: that [people] are only fellow voyagers with other creatures in the odyssey of evolution. This new knowledge should have given us, by this time, a sense of kinshipwith fellow creatures; a wish to live and let

live; a sense of wonder over the magnitude and duration of the biotic enterprise."

— ALDO LEOPOLD, 1949 A Sand County Almanac

1950's & 1960's

"Is evolution a theory, a system, or a hypothesis? It is much more: it is a general condition to which all theories, all hypotheses, all systems must bow and which they must satisfy henceforward if they are to be thinkable and true. Evolution is a light illuminating all facts, a curve that all lines must follow."

— PIERRE TEILHARD DE CHARDIN, 1955/59 The Phenomenon of Man

"As a result of a thousand million years of evolution, the universe is becoming conscious of itself, able to understand something of its past history and its possible future. This cosmic self-awareness is being realized in one tiny fragment of the universe — in a few of us human beings. Perhaps it has been realized elsewhere too, through the evolution of conscious living creatures on the planets of other stars. But on this our planet, it has never happened before."

— JULIAN HUXLEY, 1957 New Bottles for New Wine

"For the first time in four billion years a living creature had contemplated himself and heard with a sudden, unaccountable loneliness, the whisper of the wind in the night reeds. Perhaps he knew, there in the grass by the chill waters, that he had before him an immense journey. Perhaps that same foreboding still troubles the hearts of the those who walk out of a crowded room and stare with relief into the abyss of space so long as there is a star to be seen twinkling across those miles of emptiness."

— LOREN EISELEY, 1957 The Immense Journey

"The universe is an evolving product of an evolutionary process. It is not an accident; it is an enterprise."

— THEODOSIUS DOBZHANSKY, 1966 Zygon 1 (4)

1970's

"'Look,' he said, waving a hand toward the street, 'every culture in the world has a built-in clock, but in what other culture than ours has time been discovered to contain novelty? In what other culture would leaves, these yellow falling leaves, be said to be emergent and not eternal?' 'Evolutionary time,' I added, 'the time of the world-eaters—ourselves.'"

> LOREN EISELEY, 1970 The Invisible Pyramid



"In the beginning there was light; then a dark cloud appeared, and made the sun and earth. The earth grew warmer; its body exhaled moisture and gases; water collected on the surface; soon the first molecules struggled across the threshold of life. Some survived; others perished; and the law of Darwin began its work. The pressures of the environment acted ceaselessly, and the forms of life changed and became more complex. Until today, when humans stand on the earth. Intelligent, self-aware, we alone among all creatures on earth have the curiosity to ask: How did I come into being? What forces created me? And, guided by our scientific knowledge, we come to the realization that we were created out of all that came before us. In a fifteen-

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billion-year drama, the Universe has evolved from its fiery formless beginnings into a complex tapestry inhabited by beings able to contemplate their long cosmic history."

> — ROBERT JASTROW, 1977 Until the Sun Dies

"The evolutionary epic is probably the best myth we will ever have."

— EDWARD O. WILSON, 1978 On Human Nature

"A new creation story has evolved in the secular scientific community, the equivalent in modern times to the creation stories of antiquity. This creation story differs from the traditional Eurasian creation stories much more than these differ from each other. It seems destined to become the universal story taught to every child who receives formal education in the modern form anywhere in the world... By means of this story the new paradigm of the human is established. With its support we can awaken in the morning and know where we are. We can answer the questions of our children. We can interpret suffering, integrate knowledge, guide education. We can have a context in which life can function in a meaningful way."

> — THOMAS BERRY, 1978 Teilbard Studies (1)

1980's

"We are the local embodiment of a Cosmos grown to self-awareness. We have begun to contemplate our origins: starstuff pondering the stars; organized assemblages of ten billion billion billion atoms considering the evolution of atoms; tracing the long journey by which, here at least, consciousness arose."

— CARL SAGAN, 1980 Cosmos

"The creation story unfurling within the scientific enterprise provides the fundamental context, the fundamental arena of meaning, for all the peoples of the Earth. For the first time in human history, we can agree on the basic story of the galaxies, the stars, the planets, minerals, life forms, and human cultures. This story does not diminish the spiritual traditions of the classical or tribal periods of human history. Rather, the story provides the proper setting for the teachings of all traditions, showing the true magnitude of their central truths."

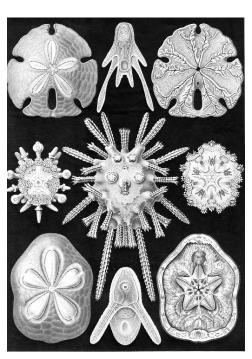
— "THOMAS" IN BRIAN SWIMME, 1984 The Universe Is a Green Dragon

"We cannot produce ourselves and must value the system that has. But the systemic source cannot reflectively evaluate what it has produced; only we can. In humans, an evolutionary ecosystem becomes conscious of itself."

> — HOLMES ROLSTON III, 1986 Philosophy Gone Wild

"Can the materialistic evolutionary epic—in its mythic dimension—restore a sense of at-homeness and human significance? The purpose of myth is not just to provide a so-called objective understanding of ourselves and the world we live in; it is also to provide a sense of personal meaning and worth, moral direction, morale in periods of life crises, and motivation and power to overcome the worst in us and realize the best. Can scientific materialism—as myth—do this?"

— KARL PETERS, 1986 Zygon 21 (3)



"Why do we strive to build such a grand synthesis? Well, if we can understand the essence of cosmic evolution, then perhaps we can better appreciate who we are, where we came from, and how we fit into the cosmic scheme of things. We shall gain a wider, integrated knowledge of stars and galaxies, plants and animals, air, land, and sea. In particular, we shall learn how living organisms evolved the expertise to invade the land, generate language, create culture, devise science, explore space, and even study themselves. In short, we are now striving to frame a heritage—a cosmic heritage—a sweeping structure of understanding based on events of the past, an intellectual road map identified and embraced by humans of the present, indeed a virtual blueprint for survival if adopted by our descendants of the future."

— ERIC CHAISSON, 1987 The Life Era

"A principal characteristic of human life is that it develops into biography. In that sense, humans do not want their values in nature, any more than they want other goods in life, to come seriatum, like beads on a string—intrinsic goods without meaningful interconnection. Humans want a storied residence in nature where the passage of time integrates past, present, and future in a meaningful career.... The evolutionary epic ... is now consummated in environmental ethics."

— HOLMES ROLSTON III, 1988 Environmental Ethics

"We have a new story of the universe. Our own presence to the universe depends on our human identity with the entire cosmic process. In its human expression the universe and the entire range of earthly and heavenly phenomena celebrate themselves and the ultimate mystery of their existence in a special exaltation. . . Science has given us a new revelatory experience. It is now giving us a new intimacy with the Earth."

— THOMAS BERRY, 1988 The Dream of the Earth

"I am convinced that the story of the universe that has come out of three centuries of modern scientific work will be recognized as a supreme human achievement, the scientific enterprise's central gift to humanity. . . For the first time in human existence, we have a cosmic story that is not tied to one cultural tradition, or to a political ideology, but instead gathers every human group into its meanings. . . We are in the midst of a revelatory experience of the universe that must be compared in its magnitude with those of the



great religious revelations. And we need only wander about telling this new story to ignite a transformation of humanity."

> — BRIAN SWIMME, 1988 in David Ray Griffin, ed., The Reenchantment of Science

"There is science now to construct the story of the journey we have made on this Earth, the story that connects us with all beings. Right now we need to remember that story—to harvest it and taste it. For we are in a hard time. And it is the knowledge of the bigger story that is going to carry us through."

> — JOANNA MACY, 1988 Thinking Like a Mountain

"We call upon the power which sustains the planets in their orbits, that wheels our Milky Way in its 200-million-year spiral, to imbue our personalities and our relationships with harmony, endurance, and joy. Fill us with a sense of immense time so that our brief, flickering lives may truly reflect the work of vast ages past and also the millions of years of evolution whose potential lies in our trembling hands."

— JOHN SEED, 1988 Thinking Like a Mountain

"We lack a cultural mythology that might function as a matrix of shared meanings. Without such a mythology, we lack the resources to achieve collective coherence and personal wholeness. And under these conditions, that is, the conditions of *amythia*, there is little chance that Western culture will survive very far into the 21st century. . . When artfully presented, when fitted with its implications for hope and its call to service, the metaphor of evolution can restore Western culture to its bearings in nature and history."

— LOYAL RUE, 1989 Amythia

1990 - 1995

"To behold the Grand Canyon without thoughts of its ancient condors, sloths, and goats is to be half blind."

— PAUL MARTIN, 1992 Wild Earth, Winter

"Only now can we see with clarity that we live not so much in a cosmos as in a cosmogenesis, a cosmogenesis best presented in narrative; scientific in its data, mythic in its form."

— BRIAN SWIMME AND THOMAS BERRY, 1992 The Universe Story



"The new naturalism does a superior job of telling everybody's story. It is more durable than metaphysical perspectives precisely because it rejects claims to finality, inviting upon itself scrutiny and falsification. And it gives us what is to date the most reliable and satisfying account of where we came from, what our nature is, and how we should live. What is new about the new naturalism is that the story has become more complete and coherent as scientists have recognized that the organization of matter, the organization of life, and the organization of consciousness are continuous phases of development within a singular evolutionary event. The new naturalism may not be everybody's story in the absolute and final sense, but it is far and away the closest anybody has come."

— LOYAL RUE, 1994 By the Grace of Guile

"Religions have always been in the business of meme generation, offering narratives that orient and inform the course of existence. Such stories have traditionally described the dilemmas experienced and the moral and spiritual decisions reached by particular persons—Moses, Muhammad, The Buddha, Jesus—persons with whom we identify and

whose faith decisions we try to emulate. Such stories are, of course, to be cherished. They link us with our heritage, they speak deep psychological truths, and they are sacred to those who orient their lives within the eminence of God. But, in addition, a new naturalism would strive to articulate metaphors from nature, metaphors that have a universality, a global meaning that transcends particular cultures and faith traditions."

— URSULA GOODENOUGH, 1994 Zygon 29 (4)

"How important it is that we learn the Sacred Story of our Evolutionary Universe, just as we have learned our cultural/religious stories. Each day we will begin to do what humans do best: Be amazed! Be filled with reverence! Contemplate! Fall in Love! Be entranced by the wonder of the Universe, the uniqueness of each being, the beauty of creation, its new revelation each day, and the Divine Presence with all!"

— MARY SOUTHARD, 1994 Spiritearth 4 (4)

"'Tell me a story.' How often as children did we ask this of those who cared for us? How exciting it has been in recent years to discover that the First Book is not a collection of disconnected scientific facts about a universe that serves merely as a backdrop for our lives. Rather, it is a Story of a Universe that from within itself has unfolded stars and galaxies, mountains and oceans, plants and animals, you and me. The whole cosmos is on a collective journey, and our individual journeys are part of that. It is a Story of the Universe that carries the meaning of what it means to be human, telling us where we are, where we come from, who we are, and what is expected of us. At our peril we ignore it. As a guide into our future we must read it."

> — JOHN SURETTE, 1995 Spiritearth 5 (4)

"As language-using organisms, we participate in the evolution of the universe most fruitfully through interpretation. We come to grips with the world by drawing pictures, telling stories, conversing. These are our special contribution to existence. It is our immense good fortune and grave responsibility to sing the songs of the cosmos."

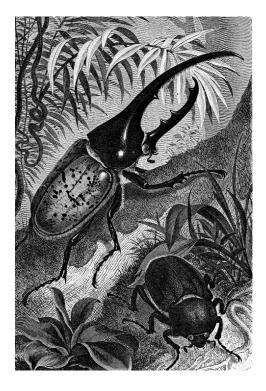
— EDWIN DOBB, 1995 Harper's February

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"What we have is a story of the universe we can see and imagine, set within an ultimate mystery, a myth like all the preceding ones of whatever culture or religion. Except that this one is woven by all humankind from far wider strands of experience and imagination, fed by electronic circuitries and seen through electronic eyes, shepherded by a common scientific method. It is our ultimate personal history, tracing our individual existence beyond our families, beyond our species, beyond life, beyond the earliest galaxies, and finally beyond the primordial fireball to the time when there was no time, the place where there was no space, and there was only mystery."

> — ERIC CARLSON, 1995 in Clifford Matthews, ed., Cosmic Beginnings and Human Ends



1996

"This frame of orientation or vision of reality—this more amplified conception of the biohistorical epic of evolution, in which the evolutionary unfolding is taken to be grounded in serendipitous creativity—is not in any way forced upon us: it can be appropriated only by means of our own personal and collective decisions, our own acts of faith. It has sufficient richness and specification to provide significant orientation for our time, but it can

accomplish this only if we decide to commit ourselves to it, ordering our lives and building our futures in the terms it prescribes. Acceptance of this vision can help women and men in our world—not only those who think of themselves as religious in some more or less traditional sense but also modern/postmodern women and men of other quite different persuasions—to gain some sense of identity, some sense of who we humans are and what we ought to be doing with our lives."

— GORDON KAUFMAN, 1996 IRAS Epic of Evolution Conference; published in Zygon 32 (2)

"The Epic of Evolution is *a* story of *the* story. It is compelling, it is gripping, it is moving, and it has potentially unitive power. The new synthesis is an understanding that traditional religions are necessary but not sufficient to move to a macrophase of wisdom... There is power in this new story to evoke awe through a deeper understanding of process. There is power in this story to elicit identification through profound resonance with pattern—to nurture a deep feeling that matter matters. And there is power in this story to catalyze action through greater awareness of the processes of change."

— MARY EVELYN TUCKER, 1996 IRAS Epic of Evolution Conference

"The power of this story, what makes it appear, at least at first, to offer a naturalistic ground for self transcendence, is its pure magnificence, the wonder of our improbability and the embeddedness of that improbability way back at the beginning in the inconceivable instant of the Big Bang."

— TED LAURENSON, 1996 IRAS Newsletter 25 (1)

"Even if the discovery of the birthplace of the universe is the greatest of the twentieth century or of all time, it is meaningless until it comes alive within us. The discovery itself was not the result of an accidental or automatic action, but came through the sustained effort of millions of humans. So too with its meaning. It is easy for anyone to become momentarily fascinated or titillated with the wild data of the new story of the universe, but it is another thing altogether to absorb this over time into the center of one's being. Facts by themselves are not enough; what is needed is embodiment."

> — BRIAN SWIMME, 1996 The Hidden Heart of the Cosmos

"A mere scratch to an evolutionist reveals the life-blood of a storyteller, a poet, a philosopher, and maybe even a theologian. Whether we now uphold a narrative of Biblical creation or the more reasoned narrative of evolution, we will find existence within such narrative frameworks that structurate lived experience. Within those narratives, which tell themselves through us, lies the meaning of life."

— VASSILIKI BETTY SMOCOVITIS, 1996 Unifying Biology

"We can begin to speak of the evolutionary value of lineages as an end in itself, because the evolutionary epic is our creation story. We can begin to speak of the diversity value of species as an end in itself, because for us biodiversity is today's glorious manifestation of our sacred story and the only way to ensure that the story will continue."

— CONNIE BARLOW, 1996 Wild Earth (fall)

1997

"We are entering an age of synthesis such as occurs only once every few generations. The years ahead will surely be exciting and productive times in the world of science, largely because the scenario of cosmic evolution will give us an opportunity to systematically inquire into the nature of our existence. As we approach the end of the millennium, such a coherent story of our origins—a powerful and true myth—can act as an effective intellectual vehicle to invite all our citizens to become participants, not just spectators, in the building of a whole new legacy."

— ERIC CHAISSON, 1997 editorial in Science 275: 735

"The world is almost mind-numbingly dynamic. Out of the Big Bang, the stars; out of the stardust, the Earth; out of the Earth, single-celled living creatures; out of evolutionary life and death of these creatures, human beings with consciousness and freedom that concentrates the self-transcendence of matter itself. Human beings are the universe become conscious of itself. We are the cantors of the universe."

— ELIZABETH JOHNSON, 1997 EarthLight (25)



"The Epic of Evolution is the biggest of all pictures, the narrative context for all our thinking about who we are, where we have come from, and how we should live. It is the ultimate account of how things are, and it is therefore the essential foundation for discourse about which things matter.... The more we learn about the Epic of Evolution, the more we are motivated to repay the generosity of the past by seeding hope for the future."

— LOYAL RUE, 1997 EarthLight (26)

"My encouragement to those who want to live this new story is to find a way of bringing it into your everyday life. Feel the magic of holding a child, comforting someone in pain by hearing their story, or tasting the sensuous wonder of a fresh garden tomato. Find out what energizes you and share it."

— KURT LAUREN DE BOER, 1997 editorial, EarthLight (26)

"Tell me a creation story more wondrous than the miracle of a living cell forged from the residue of an exploding star! Tell me a story of transformation more magical than that of a fish hauling out onto land and becoming amphibian, or a reptile taking to the sky and becoming bird, or a bear slipping back into the sea and becoming whale! If this science-based culture, of all cultures, cannot find meaning and cause for celebration in its very own cosmic creation story, then we are sorely impoverished indeed."

— CONNIE BARLOW, 1997 Green Space, Green Time

"If we have within us a biological need to internalize a rather permanent story of what the world is about, then not having a story, or being confronted with the changing story of science, could trigger a personal crisis. What if, however, our story becomes the story of how stories change? Even if we can't ground ourselves in an immortal story anymore, the immortality can be had in the story of how we make stories, of how we find stories through science. This means that rather than just celebrating the new cosmology, the new geophysiology, there would be instances of celebrating, say, this week's top story in Nature and the story of how that new story came to be. Keeping current

means we would be celebrating the story of the changing story, too."

— TYLER VOLK, 1997 in Green Space, Green Time

"Evolution is Darwin's great gift to theology."

— JOHN HAUGHT, 1997 AAAS Epic of Evolution Conference



"We know more about the universe than any people ever knew. We have more command over the functioning of the Earth than any people ever had. Yet we are less intimate with the universe than peoples of prior times. This can be seen in the work of scientists who write with great insight into the earlier phases of the universe and then remark that the more we know about the universe, the less meaning it seems to have... Now that this awareness of the epic dimension of the evolutionary process begins to be seriously considered, a new world of understanding appears on the horizon. My first thought is that we not try to write theology at this moment. My thought is that we celebrate the glory of the universe that is there before us. We need have no doubts of the appropriateness of our celebration of the sacred in this epic narrative. Here we join the great wisdom traditions of the past. In the Epic of Evolution, science becomes a wisdom."

> — THOMAS BERRY, 1997 AAAS Epic of Evolution Conference

"I like to speak of this moment in our evolutionary history and its challenges in terms of weaving. We are, all of us, weavers. The weaver constructs the warp, anchoring it to the loom, and then, by working the weft in and through the warp, creates patterns and the entire tapestry. The Epic Evolution, in the form that scientists present it in their research papers, is the warp on which all present and future meaning for our lives must be woven. There is no single correct way in which the weaving will take shape, no single authorized manner in which the Epic must appear in our worldviews. All of the various weavers of meaning will find a commonality in the warp and in the cultural crisis that faces us all, and each will learn from how others negotiate their visions within the loom's constraints and possibilities. This is what we are here for, we humans who are the cultural religious animals of evolution on our planet. We are here to weave the spiritualities that are life-giving for our phase of the Epic of Evolution and for the next generation."

> — PHILIP HEFNER, 1997 AAAS Epic of Evolution Conference

"A rationally compelling environmental ethics is dependent on religion. Ironically, the only way to resolve conundrums regarding science, religion, and morality is to stand environmental ethics on sacred ground. Only when we perceive that the value of the living natural world is grounded in something greater than ourselves, in something other than our human ability to value it, will our rational capacities be satisfied fully that life on earth matters. . . Even though I consider a religious worldview essential for a compelling environmental ethics-however-most days I am agnostic. Yet I also have deep, affective experiences of the value of people, of our earthly home, of our miraculous kindred relations. These experiences are meaningless in the absence of the sacred, and yet they are as convincing as what I know scientifically. In the final analysis we must choose—either to believe in a fascinating but meaningless universe—or in one congruent with our own experiences of the value of people and place. Choosing is difficult. Yet, I am compelled by my own affective life, my aesthetic preferences, by a few moments in nature that are beyond

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words, to affirm that it all matters. I am not sure of much, but I am sure of this."

— BRON TAYLOR, 1997 Worldviews 1

"As reconstructive postmodernism has matured, the project of reconstructing a postmodern worldview, after the collapse of the modern one, has become the project of reconstructing a postmodern grand narrative. A narrative is, and is unapologetically so, a mere story. A narrative makes no claim to be the unvarnished truth, makes no claim on certainty; it is a selfconfessed representation, and nothing more. A narrative may be characterized as 'grand' when it tells a comprehensive story, a story that, when most comprehensive, includes everything. Theologian Thomas Berry and physicist Brian Swimme have collaborated to compose The Universe Story. They have been joined by astronomer Eric Chaisson, comparativist Mary Evelyn Tucker, philosopher Loyal Rue, theologian Gordon Kaufman, among others, to compose an epic of cosmic evolution as a grand narrative on the order of, and addressing the same problematics as, Genesis, the Theogony, the Enuma Elish, the Hawaiian Kumulipo, and similar traditional origin myths."

— BAIRD CALLICOTT, 1997 Amer. Academy of Religion Conference

1998

"How to interpret the Epic of Evolution is neither obvious nor simple. It requires romantic vision and philosophical rigor. It requires appropriate metaphysical concepts and inspiring artistic forms. The Epic of Evolution requires an interpretive community that seeks to integrate knowledge and wisdom from across the disciplinary boundaries of our compartmentalized modern university and our fragmented postmodern society. The solution is evolution. Adapt! . . . Many of the frameworks best able to interpret the Epic of Evolution are already present in the world's spiritual traditions. Successful adaptation is built upon creative replication. We need ancient wisdom upon which to build this new world."

> — WILLIAM GRASSIE, 1998 Science and Spirit 9 (1)

"The true evolutionary epic, retold as poetry, is as intrinsically ennobling as any religious epic."

— EDWARD O. WILSON, 1998 Consilience



"We are the life that knows how it came to be, that can contemplate its future. We are the universe become conscious of itself. For four billion years life never even bothered to ask, and thenjust 40 thousand years ago—life finally popped the question. But it was only yesterday that we grasped the answer: we all life—have evolved and will continue to do so. Wakened suddenly from our fourbillion-year slumber, our millennial stirrings, we find ourselves in the midst of an explosion. At the precise moment we have awakened, have come to know, we appear to be either life's fool, accelerating toward the brick wall of planetary finiteness, life's clever revolutionary headed toward the stars, or a sadder but wiser species yearning for Eden. As we struggle to come fully awake, we are not yet sure which it is-the fool, Captain Kirk, or a new Adam and Eve-but we suspect our self-assessment could, in itself, make a decisive difference."

— R. GENET, C. DAVIDSON, A. VAUGHN
Zygon (in press)

"For me, the existence of all this complexity and awareness and intent and beauty, and my ability to apprehend it, serves as the ultimate meaning and the ultimate value. The continuation of life reaches around, grabs its own tail, and forms a sacred circle that requires no further justification, no superordinate meaning of meaning, no purpose other than the continuation continue until the sun collapses or the final meteor collides. I confess a credo of continuation. And in so doing, I confess as well a credo of human continuation. We may be the only questioners in the universe, the only ones who have come to understand the astonishing dynamics of cosmic evolution. If we are not, if there are others who Know, it is unlikely that we will ever encounter one another. We are also, whether we like it or not, the dominant species and the stewards of this planet. If we can revere how things are, and can find a way to express gratitude for our existence, then we should be able to figure out, with a great deal of hard work and goodwill, how to share the Earth with one another and with other creatures, how to restore and preserve its elegance and grace, and how to commit ourselves to love and joy and laughter and hope."

> — URSULA GOODENOUGH, 1998 The Sacred Depths of Nature

"The epic of evolution is the sprawling interdisciplinary narrative of evolutionary events that brought our universe from its ultimate origin to its present state of astonishing diversity and organization. In the course of these epic events matter was distilled out of radiant energy, segregated into galaxies, collapsed into stars, fused into atoms, swirled into planets, spliced into molecules, captured into cells, mutated into species, compromised into ecosystems, provoked into thought, and cajoled into cultures. All of this (and much more) is what matter has done as systems upon systems of organization have emerged over fifteen billion years of creative natural history."

— LOYAL RUE Everybody's Story (forthcoming,)

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