



# Stories to Live By

Martin Ogle

Oh, for a story to explain the times we live in and guide us down saner paths! In the midst of ever-heightened awareness and concern about the unsustainable course of human society, we seem to be heading, with increasingly deadly speed, down an environmentally and societally destructive track. Laudable actions to change direction, or at least slow down, often seem to have the opposite effect. In this paradoxical predicament, we would do well to reexamine the subtly entrenched narratives that drive our individual and collective actions.

In his book, *Collapse* (2005, p. 433), Jared Diamond put it this way: “Perhaps a crux of success or failure as a society is to know which core values to hold on to, and which ones to discard and replace with new values when times change.” Similarly, eminent mythologist Joseph Campbell deemed it vitally important that a society’s mythology remain flexible and alive in order to respond to changing conditions. He noted, for example, how the stories of Mississippian Indian culture changed when the people adopted the horse from the Spanish and moved out into the Great Plains. As they made the transition from being farmers to nomadic hunters of buffalo, their mythologies changed quickly and profoundly (Flowers, 1988).

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Our own stories have not yet evolved in a manner that allows us to address present-day challenges with conviction. This may be the biggest bottleneck and barrier to our society’s ability to create sustainable ways of living at the scale needed. Commonly held mind-sets can be explored with terms such as *values* and *mythology*, as used by Diamond and Campbell, or others such as *story* or *narrative*. Whatever the terminology or methods, however, a new mind-set in accord

with new realities is sorely needed to guide us safely and effectively into the future. This essay itself is a story of a personal and professional quest to identify and transcend sustainability-limiting narratives. It is offered as a “straw man” to prompt discussion. Whether readers perceive the thoughts herein as insightful, commonplace, or even wrong, the hope is they might serve as a catalyst for new, collectively imagined stories. To the extent readers agree with the need for new narratives, they are encouraged to help to co-create them, share them with their communities, and use them in their work.

## Human Beings Are a Part of Nature, Not Separate

From 1985–2012, my work was as Chief Naturalist for the Northern Virginia Regional Park Authority (NVRPA) at Potomac Overlook Regional Park and Nature Center (PORPNC) in Arlington, VA. In the 1980s, our young staff was sensitized to “unsustainable stories” after noticing a pervasive perception in society that human beings are separate from nature. This was evident, for instance, in the distinction between things “natural” and “man made” and the sentiment of “mastering” and “controlling” nature. Indeed, the very term *nature center*, to label distinct places where non-human nature is the main or only focus, seemed to subtly reinforce this sense.

Thus, PORPNC undertook a conscious effort to help redefine the relationship between nature and humanity as a seamless continuum. The theme, “Everything is Interrelated,” based on the so-called “first law of ecology” (Commoner, 1971), was chosen to guide our work and help incorporate human aspects of nature into educational and management activities. Energy education became a big part of PORPNC’s work and significant energy renovations were made on park buildings. Energy issues were interpreted as the “biggest nexus between human systems and the rest of nature.” A demonstration



Potomac Overlook Regional Park and Nature Center. Photo by Martin Ogle

organic vegetable garden was created with the assistance of local Master Gardeners. Community events, birthday parties, and concerts became part of the center's repertoire. In support of these efforts, we drew upon the "land ethic" of American ecologist Aldo Leopold. Though Leopold died in 1948, his work was and is extremely relevant to understanding humans as part of nature. He wrote that "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 his fellow members, and also respect for the community as such." (Leopold, 1949, p. 204).

A big boost to advancing the "Everything is Interrelated" theme came in 1987 when PORPNC applied for and received a joint grant from the Virginia Environmental Endowment and Virginia Foundation for the Humanities. The grant funds supported creation of a program called The Human and Natural Heritage of Potomac Overlook Regional Park; an Integrated History. The resulting research and insights enabled interpretation of how local geology, biology and human history

are intricately enmeshed; how the human story is part of the land's story. These concepts were incorporated into PORPNC's mission and purpose statements and, in the 2000s, staff helped develop a new mission statement for the entire Northern Virginia Regional Park Authority that included the wording: "fosters an understanding of the relationships between people and their environment." In short, the traditional mission of PORPNC was enlarged to reflect that human society is a seamless part of the larger world. Interpretive activities were greatly enriched by doing so.

## Earth Is Alive

Venturing into this new interpretive and management paradigm, stimulated discovery of corollary narratives. One was a prevalent understanding of Earth being positioned at just the right distance from the sun to allow organisms to live atop its inert rocky surface without freezing or burning up. This narrative has been the basis for high school and college science until recent years,



and was echoed in the 1990s TV show, *3rd Rock from the Sun*. As shall be seen, however, it is not an accurate scientific explanation of Earth's life. Along with a sense that humans are separate from nature, this false view of life allows (and perhaps even encourages) a view of Earth as a storehouse of resources exclusively for human use.

To chip away at this narrative, Leopold's work was tapped again. In expounding upon the land community concept, Leopold wrote, "The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land (Leopold, 1949, p. 204)." He believed "the outstanding scientific discovery of the twentieth century is not television, or radio, but rather the complexity of the land organism (Leopold, 1993, p 146)." Significantly, Leopold formulated his concept of a "land organism," decades earlier than the *Sand County Almanac* (Leopold, 1979, p. 139; from writings c. 1923):

[I]t is at least not impossible to regard the earth's parts—soils, mountains, rivers, atmosphere, etc.—as organs or parts of organs, of a coordinated whole, each part with a definite function. And if we could see this whole, as a whole, through a great period of time, we might perceive not only organs with coordinated functions, but possibly also that process of consumption and replacement which in biology we call metabolism or growth. In such a case we would have all the visible attributes of a living thing, which we do not now realize to be such because it is too big, and its life processes too slow.

## Earth is Alive

Leopold's view of life was much more organic than the 1990s *3rd Rock* narrative, and inspired by his prescient

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Human beings are a seamless continuum of a living Earth. *NASA Image.*



understanding, we made “The Land Ethic” our park’s annual interpretive theme in 1999. However, even at the close of the 20th century, ecological teaching and research often ignored important new understandings of relationships between disciplines and between human and Earth systems. Due to academic structure, ecology was hopelessly isolated from other ways of knowing the world. Leopold himself noted this shortcoming: “An understanding of ecology does not necessarily originate in courses bearing ecological labels; it is quite as likely to be labeled geography, botany, agronomy, history or economics . . . whatever the label, ecological training is scarce” (Leopold, 1949, p. 224). Because of these practical shortcomings of the discipline of ecology, PORP-NC staff was also exploring a new and growing body of scientific knowledge—the Gaia Hypothesis (later Gaia Theory)—to better incorporate all disciplines in a unified context.

Gaia Theory, developed in the 1960s by British scientist James Lovelock, provides the definitive alternative to the 3rd Rock narrative. During and after his work with NASA to determine whether or not life was present on Mars, Lovelock had come to astounding new scientific ideas about our home planet. It appeared to him that organisms, water, rock, the atmosphere, and all other parts and processes of Earth had evolved together as “a single physiological system, an entity that is alive at least to the extent that, like other living organisms, its chemistry and temperature are self-regulated at a state favour-

able for life” (Lovelock, 1991, p. 11). This is the basis for new narratives! Life is not perched atop a rock at just the right distance from the sun. Instead, everything at Earth’s surface is evolving as a whole system to the increasing energy of the sun through eons! Over the past four decades, Lovelock and colleagues (most notably microbiologist Lynn Margulis) showed how the Gaian system automatically moderates not only temperature, but atmospheric gases, ocean salinity, and other factors. The maintenance of oxygen near 21% in the atmosphere and ocean salinity at about 35 parts per thousand over vast geological periods of time are two examples among many (Lovelock, 1991; Margulis, 1998).

This new science resonated with our staff because of its technical accuracy and its ability to link scientific disciplines. Additionally, the origin of the name, *Gaia*, inspired bridges between the sciences, humanities, history and other subjects. When Lovelock returned to England after his work with NASA, one of his neighbors was none other than William Golding, author of *Lord of the Flies*. Upon hearing Lovelock’s developing hypothesis of how rock, water, air, organisms, and everything else at Earth’s surface had co-evolved as a singled living system, Golding suggested that Lovelock name his concept *Gaia* after the ancient Greek Goddess of Earth. Golding reasoned that Western science was rediscovering what Western society had long known through myth; that Earth is alive and that human beings are a part of that life.



Energy education at Potomac Overlook Regional Park’s “solar stage. Photo by Martin Ogle.



## **This new synergy of science and metaphor sheds light on the importance of story in the human experience...**

This new synergy of science and metaphor sheds light on the importance of story in the human experience, helps us see how science becomes part of those stories, and how our stories are part of the ecology of a living planet! Vaclav Havel, former president of the Czech Republic, believed the idea of Gaia was one of the main reasons for optimism for the future. In a speech in Philadelphia's Freedom Hall in 1994, Havel said Gaia Hypothesis reminded us "of what we have long suspected, of what we have long projected into our forgotten myths and what perhaps has always lain dormant within us as archetypes. That is, the awareness of our being anchored in the Earth and the universe" (Havel, 1994).

The Gaia Hypothesis enabled PORPNC staff to enrich and transcend our first integrated story, *The Human and Natural Heritage of Potomac Overlook Regional Park*. It led to finding, creating, and integrating many other narratives—some ancient, some new, some still in the making. Creation stories from around the world, but especially those of Native American cultures, were incorporated into programs from summer camps to adult programs on local natural history. Interpretation and educational programs on technical aspects of the human/land connection—such as the nitrogen cycle, climate change, energy, and agriculture—took on new clarity and meaning. Over the years, hundreds of programs on Gaia Theory and associated cultural and scientific subjects were presented. In 2006, in conjunction with several departments at George Mason University and two dozen other cosponsors, a two-day conference entitled Gaia Theory: Model and Metaphor for the 21st Century was organized featuring scientists, historians, storytellers, and others from across the country. (See [www.Gaia-Theory.org](http://www.Gaia-Theory.org) for more information on the conference and Gaia Theory in general).

### **Nature Centers Evolving as Catalysts for a New Paradigm**

Explicit attention to new narratives greatly enriched interpretive mission and activities at PORPNC. It compelled staff to address sustainability directly rather than to assume nurturing a love for nature by itself would inspire and lead PORPNC collectively in sustainable directions. (In fact, staff members often discussed the

possibility that this assumption itself was potentially a narrative that slowed sustainable transitions.) The attention paid to energy renovations, sustainability education, organic food production, composting, and more was widely recognized in Arlington County and the region. In 2007, PORPNC was presented the Green Innovation Award (Best Green Organization) by the Virginia Sustainable Building Network. Staff consistently worked with Arlingtonians for a Clean Environment and other local organizations on sustainability matters, and those efforts helped advance sustainability policy and actions in Arlington as a whole.

The point here is not to claim that PORPNC was any more or less effective than other nature centers or environmental organizations. The amazing work of many centers and organizations around the country was and is amazing and humbling. The important thing to note is the great impact PORPNC did have on advancing sustainability specifically by advancing new stories, mythologies, values and viewpoints, and expanding the role of a nature center in all of these efforts. Nature centers are uniquely positioned to analyze, question, and provide alternatives to narratives that describe the relationship between humans and a living planet.

### **Constant Growth for Its Own Sake Is Lethal and Is a Dangerous Measure of Success**

Growth for growth's sake as a primary value may be the most firmly entrenched, and ultimately destructive, narrative of our society. Other, currently dominant narratives (such as those discussed above) grant misplaced credibility, if not justification, to the premise that constant growth is imperative. The growth narrative has taken on a life of its own, however, and stands almost immune to questioning despite the fact that it is the primary driver of resource extraction, ecosystem disturbance, human conflict and other unsustainable trends. A cursory understanding of living systems, however, reveals the basic truth that uncontrolled and/or perpetual growth has grave consequences. Growth of almost all organisms and systems proceeds quickly at first and then slows or ceases. Growth that continues without moderation or cessation is usually referred to as cancer or disease. Nature centers are uniquely positioned to notice the discrepancy between the narrative of perpetual growth and the way living systems work!

Those concerned with this dilemma should know alternate views and values do exist. Consider, for example, the organization, Citizens for the Advancement of the Steady State Economy (CASSE). Its website (2013)

highlights the statement: “Perpetual economic growth is neither possible nor desirable. Growth, especially in wealthy nations, is already causing more problems than it solves.” Supporters of CASSE’s mission include an astonishing array of recognized leaders in many walks of life, and the words of two giants in the environmental/sustainability field, David Orr and David Suzuki, are featured prominently:

Somehow, we have come to think the whole purpose of the economy is to grow, yet growth is not a goal or purpose. The pursuit of endless growth is suicidal. – David Suzuki.

Growth for the sake of yet more growth is a bankrupt and eventually lethal idea. CASSE is the David fighting the Goliath of endless expansion, and we know how that one turned out.  
– David Orr (CASSE, 2013).

PORPNC staff believed the growth-for-growth’s-sake narrative could not be ignored and made “Conservation” the Center’s annual theme in 2007. Interpretive programs were presented on how systems grow and how they moderate their growth in systems ranging from wildlife populations to individual organisms (in which growth is moderated by the inhibitory functions of hormones and enzymes). These seemingly technical subjects are actually quite basic to any system and are as fun and easy to interpret as other topics such as adaptations and seasons! In keeping with the emphasis on human beings as part of nature, the need for reducing resource use in human systems was also highlighted. One important lesson in this regard is how efficiency of energy (and other resource) use does not necessarily (and usually does not) reduce consumption by itself.

With broad support from other organizations in Arlington, PORPNC promoted public dialogue on the issue of growth as a matter of sustainability, community health, and the health of Earth systems. A panel discussion featured the chair of the Arlington County Board, a local U.S. Congressman, and representatives from environmental and business organizations. The discussion was very open and frank, with nearly unanimous agreement that visions to replace the assumption of perpetual growth were needed. No specific recommendations emerged beyond the need to continue dialogue and explore the work of groups such as CASSE. However, the open exchange between highly placed members of the Arlington community demonstrated the potential for such discussion and that a nature center could be a catalyst for advancing such awareness. It is within our capacity—at all levels—to help create new narratives and build the critical mass necessary to advance them!

In 2009, PORPNC opened “The Energerium,” a suite of interpretive displays that comprised the top floor of our nature center. This project was a blend of many themes already explored in this essay. The Energerium introduced Gaia Theory and showed how energy flowed through human systems and non-human systems of Earth. It interpreted the important distinction between energy efficiency and conservation, noting that without a conscious goal of reducing energy consumption, energy efficiency can and often does lead to more energy consumption.

## **Entrepreneurship Is Innate Human Creativity—The Conscious Creativity of Earth!**

Larry Robertson, a neighbor of PORPNC, wrote a book in 2010 entitled *A Deliberate Pause: Entrepreneurship and its Moment in Human Progress*. Larry defined entrepreneurship as innate human creativity and based the book on interviews with over 200 people he considered “entrepreneurial” in this way. Interviewees included Nobel Prize winner Muhammad Yunus, developer of the microloan system in India; Robin Chase, cofounder of Zipcar; and many others from business, government, and NGOs. A fascinating commonality among all of those interviewed was that they had consciously taken some time, such as a retreat or a sabbatical, to look at the world around them to see what patterns and needs existed and consider how they might apply their creativity to make the world a better place.

We could all take “deliberate pauses” to examine if and how underlying narratives and values reflect the reality of today’s world, and an important part of this could be re-examination of our societal understanding of entrepreneurship itself! The dictionary definition of entrepreneur is: “one who organizes, manages, and assumes the risks of a business or enterprise.” A popular stereotype is of a person who gets rich quick with clever and risky schemes. And in the context of existing cultural narratives, entrepreneurs are also seen as drivers of economic growth. Indeed, much human creativity is presently channeled in ways that drive faster and greater resource use, and even creativity applied toward efficient use of resources, when in the context of growth, contributes to more rapid consumption.

In contrast, a new view of entrepreneurship as innate human creativity provides a conceptual bridge spanning the false dichotomy of business vs. environment. Most of what human beings do is referred to as business or relates to business in significant ways, and as long as humans live on Earth, there will be human business. The nature of that business is, of course, in need of constant





A lesson on energy efficiency and conservation in the "Energerium." Photo Credit - NVRPA

re-evaluation and change, but being against or skeptical of business per se is a non sequitur. For society to flourish and not collapse, business will have to evolve, and this must be guided by new narratives, including new narratives of entrepreneurship!

## Our Minds and Creativity Are Seamless Extensions of this Living Planet

Following a personal deliberate pause to digest these new ideas of "innate human creativity" and entrepreneurship, it became crystal clear that our human minds evolved from Earth as surely as did our upright posture and opposable thumbs! We have long possessed self-awareness and awareness of Earth, but an even newer awareness is now being born. When humans invented technologies such as spaceships and cameras (using the elements of Earth of course), and then took photographs of our planet from outer space, Earth—quite literally it can be argued—became aware of itself. Humans are tru-

ly the conscious creativity of Planet Earth! The awareness that our entrepreneurial minds are a seamless extension of Earth holds the potential to spawn the societal stories, narratives and values we need!

During most of my tenure at PORPNC, staff worked closely with the business community. Through energy-based activities, work on promoting community sustainability, and more, the Center engaged individual businesses, the Arlington Chamber of Commerce, the Arlington Economic Development Office, and other entities in an exploration of sustainable business approaches. We hosted energy fairs and programs, seminars on sustainability and "green economics," and involved many local businesses in park activities. In the late 2000s, my work included presenting programs on the implications of Gaia Theory for green business at county board offices, the local career center and a public library. With Larry Robertson, we coproduced a presentation entitled *Entrepreneurial Earth*, blending Larry's concepts of entrepreneurship with Gaian science in a new narrative of economic transformation.





*Indian Circle Garden photo by Martin Ogle.*

## The Creation of Entrepreneurial Earth, LLC

During a long career as a park naturalist, the exploration of plants, animals, geology, climate, history, waters, and related biophysical and sociocultural aspects of PORPNC was fascinating and meaningful. Sharing the beauty and wonder of the local ecosystem was a satisfying and important contribution to the education of my community. The most basic understanding gained, however, from those many years of experience is that humans are seamlessly connected to our living planet. It became increasingly important, especially after the birth of our two children, to help advance new narratives upon which to build a healthy, peaceful, and sustainable future. To be able to advance these ideas more fully, a family decision was made to transition to new work for the first time in almost 30 years. Following my retirement from the Northern Virginia Regional Park Authority, our family moved to Colorado.

In our new home, and after another “deliberate pause” to assess the world and how my views and abilities could contribute to sustainability, it became clear the idea of sharing new cultural narratives was more important

than ever! Like the opening lines of the book, *Gaia: The Human Journey From Chaos to Cosmos*, it was clear my new career was to be “a work of philosophy in the original sense of a search for wisdom, for practical guidance in human affairs through understanding the natural order of the cosmos to which we belong” (Sahtouris, 1989, page i).

After a few months of reflection, my own business, Entrepreneurial Earth LLC, was launched to help spawn new visions of human life on a living planet. Underlying the educational, consulting, and project offerings of Entrepreneurial Earth LLC, is the “Gaia Paradigm,” the confluence and synergy of new scientific realizations of Earth as a living system with cultural understandings (ancient and new) of human society as a seamless continuum of Earth’s life. Readers are invited to visit [www.EntrepreneurialEarth.com](http://www.EntrepreneurialEarth.com) to learn more about what is being built. Advice, suggestions, and collaborations are welcome.

Those who study, value, and love Earth are uniquely suited to help create new cultural stories, narratives, values, and mythologies we need. An exchange in the Bill Moyers interview with Joseph Campbell (Flowers, 1988) captures the profound nature of this task:



**Bill Moyers:** Scientists are beginning to talk quite openly about the Gaia principle.

**Joseph Campbell:** There you are, the whole planet as an organism.

**Bill Moyers:** Mother Earth. Will new myths come from this image?

**Joseph Campbell:** Well, something might. You can't predict what a myth is going to be any more than you can predict what you're going to dream tonight. Myths and dreams come from the same place. They come from the realizations of some kind that have then to find expression in symbolic form. And the only myth that is going to be worth thinking about in the immediate future is one that is talking about the planet, not the city, not these people, but the planet, and everybody on it.

And what it will have to deal with will be exactly what all myths have dealt with—the maturation of the individual, from dependency through adulthood, through maturity, and then to the exit; and then how to relate to this society and how to relate this society to the world of nature and the cosmos. That's what the myths have all talked about, and what this one's got to talk about. But the society that it's got to talk about is the society of the planet. And until that gets going, you don't have anything. (p. 32)

Until new stories about human relationships with the living, breathing Earth are created and internalized, we “don't have anything” except continued travel down destructive paths. Until we openly and proactively talk with each other about our mutual lives and how we are “anchored in the Earth and the universe,” we may never imagine alternatives outside presently perceived reality. However, through an honest exploration of our place in nature, as the conscious creativity of Earth, we may yet create stories to help transcend present predicaments and guide us to new ways of being!

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## References

- Center for the Advancement of the Steady State Economy. (2013). Retrieved from <http://steadystate.org/>
- Commoner, B. (1971). *The closing circle: Nature, man, and technology*. New York: Random House.
- Diamond, J. (2005). *Collapse: How societies choose to fail or succeed*. New York: The Penguin Group.
- Flowers, B. S. (Ed.). (1988). *The power of myth*. New York: Doubleday.
- Havel, V. (1994). *The new measure of man*. Speech given at award ceremony for Philadelphia Liberty Medal, Independence Hall, Philadelphia, PA. (Printed in *New York Times*, July 8, 1994.)
- Leopold, A. (1979). Some fundamentals of conservation in the southwest. *Environmental Ethics*, 1:131–141.
- Leopold, A. (1949). *A Sand County almanac*. Oxford, England: Oxford University Press.
- Leopold, A. (1993). *Round River*. New York: Oxford University Press.
- Lovelock, J. (1991). *Healing Gaia: Practical medicine for the planet*. New York: Harmony Books.
- Margulis, L. (1998). *Symbiotic planet*. New York: Basic Books.
- Robertson, L. (2009). *A deliberate pause: Entrepreneurship and its moment in human progress*. New York: Morgan James Publishing.
- Sahtouris, E. (1989). *Gaia: The human journey from chaos to cosmos*. New York: Pocket Books.

## About the Author

**Martin Ogle** was Chief Naturalist for the Northern Virginia Regional Park Authority from 1985–2012. He was awarded the 2012 Arlington Green Patriot Award for outstanding work in sustainability by George Mason University, Arlington Department of Environmental Services, Arlington Chamber of Commerce and Arlingtonians for a Clean Environment, and the 2010 Krupsaw Award for Non-Traditional Teaching. Martin retired in 2012 and moved to Colorado, where he is an adjunct professor at Naropa University in Boulder and teaches a graduate-level course on sustainability. He also started his own education and consulting company, Entrepreneurial Earth LLC. Martin welcomes feedback at [martin@EntrepreneurialEarth.com](mailto:martin@EntrepreneurialEarth.com)