

KOSMOS

Co-Creating the New Civilization



THE NATURAL WORLD | EMERGING WORLDVIEWS AND CULTURE

Nature and Humanity: Source of Life, Living and Everyday Transformation

by Kirsten Gallo

People are intimately tied to the natural environment. Our bodies are composed of water, we need clean air to breathe, and we need healthy and fertile soils to produce nutritious foods. Beyond that, nature has always been a source of inspiration and beauty for me. It shows me how to live. When I'm struggling with a situation in my life, I look at a river with its rapids followed by smooth glides and see that 'this too shall pass.' When I need a reminder of the abundance of life, I look at fruit trees generously bearing fruit to nourish us all. Flowers model courage with their fragile faces turned towards the sun. When we open our eyes to it, nature becomes our teacher. It's no surprise then that I chose a career as a biologist and committed my life to the study and savoring of life.

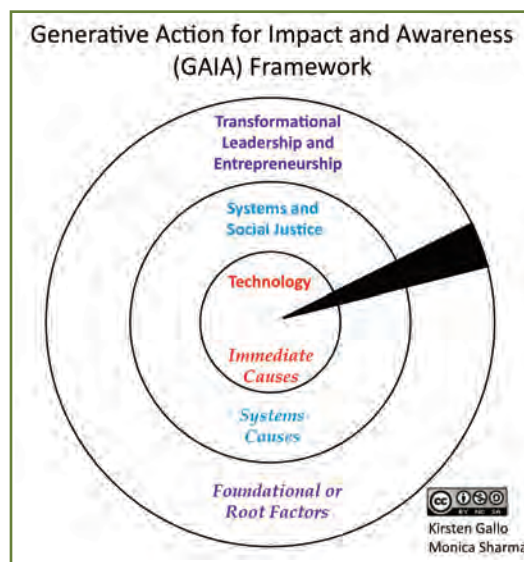
Like most of us, I hold a deep desire to leave a legacy. I want to know my life and my work made a difference, even by the smallest measure. Yet for the longest time, life meant searching for meaning rather than experiencing it. Although I was, and will forever be, committed to living in a way that benefits Earth and all her inhabitants, I was unable to express that commitment tangibly. I thought making a difference meant leading an amazing new initiative and that I needed a particular title or position to do so. Further, as an employee of the National Park Service (NPS)—a bureau of the United States government and one of the largest bureaucracies in the world—I had little hope I could affect any kind of change through my work. The 'system' seemed too strong, too entrenched, too bound by red tape. Filled with frustration, I fell into a trap of feeling that each day was the same as the last and I had no hope that tomorrow would be any different.

Nurturing Nature, Mentoring People

In the Sonoran Desert, mesquite trees serve as nurse trees for young saguaro cacti. These sheltering trees shade saguaros from the desert's intense sunlight, blanket them from winter cold, and hide them from rodents, birds and other animals that eat them. Saguaros rarely grow to maturity in the absence of these trees.

Enter Dr. Monica Sharma and her conscious full-spectrum (CFS) approach to leadership that sources people's wisdom while creating results to solve problems and shift systems that maintain the status quo. Monica's work awakened a part of me that I had long ago lost and forgotten. This part of me was not my artist self, though I became much more creative. This part was not my 'heart,' though I certainly became more whole-hearted and less head-centered, as scientists tend to be. The part of me that woke

up opened me to see and create patterns, allowing me to leverage my strengths and abilities to reach beyond what I believed was possible. Although I have always considered myself a visionary, the CFS principles opened me to possibilities beyond my wildest dreams. More importantly, they inspired me to take action right where I was, with the resources I had, to create the changes I wished to see through routine activities in my job. In other words, I began transforming my everyday actions at work and at home.



Working with CFS principles, I developed the Generative Action for Impact and Awareness (GAIA) Framework, an approach for solving environmental and social problems by sourcing the inner capacities of individuals and shifting the systems that maintain the status quo. Taking conscious full-spectrum action enables us to design and implement projects in a way that goes beyond treating symptoms by addressing systems issues and delivering sustainable results for people and planet. We use the GAIA Framework to design actions to respond to diverse conditions to help people innovate, generate breakthroughs, and sustain the specific changes needed for the planet and her inhabitants to thrive.

The More We Give, The More We Receive

Soil provides nutrients and the structure plants need to grow. As they grow, plants extract nutrients from soil and return organic matter, which in turn enriches the soil, making it more fertile. Through time, as plants come and go, the productivity of the soil increases, enabling it to support more and more plant life. Plants serve as food for animals. Animals also return nutrients to the soil. This is an underlying principle of nature: the more it gives, the more it receives.

The National Park Service is known for outstanding environmental education programs. While we excel at providing opportunities for people to explore nature, we don't deliberately engage people in our conservation mission or create awareness of the interdependence between people and the environment. I'm working to change that through a series of projects using the GAIA Framework. My goal is to create transformational learning centers in parks through which we deliver environmental education programs that give people understanding of why we need a healthy environment to live healthy and productive lives and the effect our current lifestyle has on the environment, even in our most protected and sacred places (our national parks). These programs are designed to inspire people into action and demonstrate the

DISTINGUISHING TRADITIONAL AND TRANSFORMATIONAL EDUCATION

	Traditional	Transformational—incorporates and builds on qualities of traditional education
Purpose	Use information to gain/transfer knowledge	Use information to make invisible patterns visible, shift/expand perspectives, and inspire action
Focus	Learning from past experience and what we know	Co-creating future by creating/holding space for all to access inner capacity, express creativity, and explore what is possible
Communication	Limited—limits opportunity, does not empower, maintains status quo	Generative—creates possibility and empowers others
Methodology	Emphasis on techniques effective for transferring knowledge	Emphasis on experiential learning, using transformational techniques while in action
Outcomes	Increases knowledge	Creates literacy and mastery of skills to create transformational spaces in everyday activities
	Provides answers to questions	Inspires inquiry and exploration
	Promotes independence—as if humans are independent of nature	Promotes interdependence between humans and nature
	Increases knowledge of ecology	Enhances appreciation and awareness of ecology and culture in daily living
	Increases knowledge of cultural practices	Affirms cultural diversity's ability to nurture human capacities and values Participants gain ability to thrive in a new context and work with complexity Participants see themselves as agents of change

power that one person, one family, or an entire community has to make a difference on local and global issues while also providing opportunities for taking action to deliver powerful results. Program topics vary; however, all focus on issues intended to create and maintain thriving communities and a healthy environment, demonstrate the benefit of public lands (and other commons) to people and communities, identify the pressures on public lands, and highlight actions we can all take today to make a difference.

The intention behind these programs is to help people engage their inner selves as they explore the great outdoors, so they find long-lost parts of themselves as I did. As this connection occurs, we start using our strengths and abilities to create change that serves ALL, not just me or mine. When our deepest values and commitments are the source of our actions, we discover a deep sense of fulfillment and feel alive as never before. It's exhilarating! In a practical sense, we also expand our influence, even when we have no authority, because people want what we've got.

I am not an environmental educator and I have no authority over educational programs in any of our parks. My expertise lies in natural resource monitoring. Therefore, influencing educational programs required a circuitous route, starting within my realm of authority and influence. We created transformational monitoring products for parks using the GAIA Framework by shifting our focus from transferring knowledge to making invisible patterns visible and increasing our understanding of the context and complexity of environmental issues and connectedness of all things. In addition to providing information to park staff, we develop products for visitors to help them see themselves as agents of change—stewards of the parks and stewards of their homes and communities.

Change Is Not Good, It's Not Bad, It Simply Is.

The transition between seasons is a reminder that change is a constant in this world. We must also cope with disturbances such as fires, floods, hurricanes and more. While we typically view these disturbances as negative, they are processes that shape our natural world and are often beneficial in the long term. Fires clear out debris



Big Bend National Park

and return nutrients to the soil. River valleys are fertile farm grounds because of past floods. When conditions change, plants must adapt or die. Animals also have the option of moving. Humans have a vast array of choices when responding to change. First and foremost, we can choose to be creative or we can choose to be victims.

As result of the success of these products, parks asked for my assistance in designing new programs for visitors and exhibits in visitor's centers to promote environmental awareness and empower individuals to wake up, reconnect to what matters most, and take action. NPS is always looking to engage youth in parks and grow the next generation of environmental stewards. Building on that theme, we implemented a leadership program to teach CFS principles to children between the ages of 9 and 12 whose parents were homeless or nearly so. We used examples from nature to illustrate that change is a natural part of life and the choices we have in responding to change. We used food to explore culture and how to embrace diversity. We used superheroes to help them articulate their inner values and commitments. One child brought tears to my eyes when he declared that he could use his superhero strengths to do what he believed was right and say 'no' to drugs.

Transformational products are reaching visitors via a grassroots-type effort. As educational programs are developed or revised, transformational principles are incorporated and these products are shared across parks. The national strategy for our educational programs was revised in 2013 and it includes transformational elements. We are still in the early stages of implementing these programs in parks and we don't yet have information on the number

of visitors we are inspiring into action. We do know that nearly 300 million people visit national parks in the US each year. If only 10% of our visitors are inspired to take action through this program, that's 30 million people a year serving as change agents, strengthening our communities and stewarding the environment. Win!

Education and monitoring are routine activities in the National Park Service. We aren't doing anything new, nor have we started new initiatives. We're simply doing what we already do but in a new way, which is key to opening spaces in bureaucracies for transformation. It's easy to make excuses for why we can't start something new... we rarely have funding or personnel or time. However, if we're going to have a meeting or write a report anyway, why not use the opportunity to create a new possibility? It's far easier to get permission from leadership if your idea or project is tied to existing work, projects or performance measures. Leaders will give you bonus points for helping them accomplish their objectives with little or no additional cost.

Two other keys for working successfully in bureaucracies include empowering those around you and creating excellence in your work. When we empower those around us, they too become agents of change and champions of transformational work. We also create accountability, responsibility, commitment and a dynamic work environment that is highly creative, productive and fun. In this environment, it's easy to be excellent in our work and deliver results. We'll only be able to create space for transformational programs if we're known for delivering results—if the higher-ups trust us to get the job done

and make them look good. That said, don't let me give you the impression that doing this work is always easy. It isn't. Sometimes we need to take a lesson from a tree and simply stand our ground until winter's chill passes. Persistence, a lot of persistence, is required.

The foundation of the GAIA Framework consists of transformational learning tools that create 'aha moments' based on inquiry, distinctions and generating new perspectives. The principles were honed by more than 50 practitioners working with Dr. Monica Sharma to deliver results on the ground worldwide, along with 25 world-class coaches. We use Annie Leonard's and Donella Meadows' work on systems thinking to understand the relationships between actions and events and find leverage points for action. This work is also informed by Daniel Goleman's writing on emotional intelligence, which links self-awareness to self-expression through action. Other contributing ideas are Likert-Emberling's stages of evolutionary organizations to provide an implementation framework, Robert Keegan's transformational conversations, Howard Gardner's exploration of learning for the future, and Ken Wilber's Integral Theory to understand phenomena better. The methodology is coherent, aligned and produces results. Simultaneously, it is also flexible because the whole process is based on inquiry and does not prescribe particular procedures or methods. This flexibility also allows the framework to be applied to solve any kind of problem.

The framework is simple. We identify particular measurable results we want to create to solve a problem. For example, distributing food is a specific solution to reduce hunger. However, this solution is not sustainable if the systems that support the current status quo remain intact. Shifting these systems could include distribution of seeds and development of community gardens. For changes to be sustainable, the systems we have in place and the values on which the systems are based must support the change. For example, we will be more successful at eliminating hunger if we act from a commitment that every person in our community is nourished and fed. Alignment of commitments, words and actions results in sustained, meaningful change. Misalignment of our actions with our words and commitments leads to rhetoric, which ultimately leads nowhere.

Pattern and Structure are Foundation for Everything

Although it may not seem like it, wild plants and animals are governed by structured patterns and processes that occur in nature. The seasons are one example. The water cycle is another. Water is transported around the Earth by wind, falls to earth via rain and snow, nourishes plants and animals, and is returned to the sky via evaporation and transpiration—more so in some places on Earth than others. The ocean currents and wind also follow patterns. Together, these patterns create deserts, rainforests and other ecosystems.

Identification of results and system shifts requires clarity of thinking and a comprehensive understanding of the system we're working in to ensure the results and products deliver the desired outcome. Use of systems thinking enables us to align our projects so they build on each other synergistically. For me, this has been critical for success. Prior to using the GAIA Framework, I possessed the ability to create results, but I wasn't very strategic about

identifying leverage points or discerning the importance of particular projects, so I spent a lot of time on many 'good little things' rather than a few great ones that generated meaningful results.

Prior to learning to think, be and operate in this way, it wouldn't have occurred to me that I could use monitoring data to influence environmental education programs. I knew I could use it to influence stewardship practices within NPS, but I didn't know how to go beyond that. Now I'm slowly but surely transforming the two primary elements of the NPS mission: stewardship and environmental education. We're creating the space to inspire nearly 300 million visitors into action. The next step is to work outside the park boundaries, through NPS employees engaging in community activities outside parks and, more importantly, through our volunteers. NPS has just over 20,000 employees and more than 200,000 volunteers across the US—people who are so deeply committed to our parks and our mission that they are willing to contribute years of their time for little or no compensation. This is the level of enthusiasm and commitment that arises when we connect to our deepest selves and take action sourced from that space.

The Tortoise Wins the Race

Bristlecone pines are remarkable because they are among the longest living organisms on Earth and live under adverse growing conditions. In fact, it seems one secret to their longevity is the harsh environment in which most bristlecone pines slowly grow.

With the GAIA Framework, our measurable results and system shifts are sourced from our inner wisdom, our deepest values and our commitments. The articulation of these values and commitments is truly empowering and it inspires me to be more courageous in my actions, enables me to use the strength of my convictions, and to be more deliberate in empowering those around me. I ensure that my actions are sourced from my commitments, so I build integrity within myself and can ensure that my work serves all beings. For me, this is probably the most inspiring aspect of the GAIA Framework. Embodying this level of integrity empowers those around us to use their strengths to deliver results. Now I can create synergy between people to create truly engaged, effective, creative teams by linking their commitments to our NPS mission and creating a space for exploring possibility and taking risks. In a recent series of meetings I held with my staff, they reported that they are excited to come to work for the first time in many years and they see possibilities they never saw before because they always had their heads down, focused on the crisis de jour. They moved from crunching numbers to facilitating stewardship of our treasured park resources.

Small successes create the confidence to take risks, expand the scope of projects, or initiate larger projects. Nurturing transformational work within the National Park Service takes considerable effort, but gets easier every day thanks to the ripple effect of empowering others to use their strengths to create new possibilities. I'm also working with monitoring staff of the other federal land management agencies in the US to incorporate transformational products to shift from management to true stewardship of federal lands.

Ultimately, I would like to see a set of environmental 'vital signs' that are monitored around the world. These vital signs would be tied to the environment's ability to support life, our livelihoods,



Otter

ELEMENTS OF TRANSFORMATIONAL MONITORING

The types of monitoring described here are common across many kinds of monitoring programs. Incorporating CFS elements (values/commitments, system shifts, results) through inquiry when developing and implementing the monitoring program makes the program transformational.

Status Monitoring

Purpose: Assess current status of a situation or issue, provide baseline for reference.

Questions:

1. What is the current status of this situation? Gather relevant facts, figures and statistics.
2. How is the current status created and maintained? Consider physical/biological elements, cultural attitudes, laws/policies, social and political systems.
3. What is the gap between the current status and the desired status (derived from our values and commitments)?

Trend Monitoring

Purpose: Measure how the situation is changing or what is changing with the issue.

Questions:

1. How has the status of the situation changed?
2. Did it change in the direction we wanted, consistent with our values/commitments?
3. What factors contributed to the change (from Status-Monitoring points 2 and 3 above)?
4. Are the systems that supported the former status shifting to maintain the desired status?

Implementation Monitoring

Purpose: Determine whether we implemented what we intended to in our action plans.

Questions:

1. Did we do what we intended to based on our plan?
2. Were we efficient in our actions?
3. Did we create what we wanted to create? Reference outcomes and impacts in the transformational results chain; see M. Sharma's article in this issue, p. 68.
4. Did we create transformational spaces in routine activities?

Effectiveness Monitoring

Purpose: Evaluate the effectiveness of our actions.

Questions:

1. Are our results consistent with our commitment?
2. Are our results serving everyone and everything?
3. Do we have congruence at all levels (values/commitments, actions, results)?
4. Did we have any unintended consequences?
5. What's shifting or becoming possible because of our work?



Grotto Falls

and evaluate whether natural processes are sufficiently intact to continue to support humans and all other life. The vital signs related to supporting life would include monitoring air quality, water quality, and attributes related to food production, such as soil quality and availability of seeds. This information will help us understand whether or not conditions will support human survival.

Because of my commitment to living in a way that benefits Earth and all her inhabitants, survival isn't enough. I want to see people and nature thrive. Therefore, we also need to measure whether the systems we have in place to deliver water and food support thriving people and communities. Time spent in nature nourishes our spirit, whether it's watching otters play or a beautiful sunrise or gazing at the stars. Connecting these moments with our values and commitments make our actions more powerful. It's also important to measure these less tangible, but life-enriching qualities of nature and humanity because they make the difference between surviving and thriving. Measuring the immeasurable is both an art and a science and will require creative thinking to develop new indices and proxies. One measure might be how much time people spend engaging in outdoor activities such as hiking or gardening, relative to time spent watching TV or surfing the Internet. In my view, this is a measure of engaging in life versus checking out of it.

A number of national parks are also designated World Heritage Sites or Biosphere Reserves, so I will use this avenue to begin working globally. Although monitoring isn't sexy and we frequently prefer to avoid doing it, it's also true that we instinctively monitor everything we value. Our lives and livelihoods depend on the health of the environment. Consequently, it's critically important that we monitor environmental health broadly and consistently. What we measure, we move.

Specific Combinations of Patterns Create Unique Results

White Sands National Monument encompasses a portion of the world's largest field of gypsum sand dunes. These dunes exist in only three places in the world because a specific combination of geology,

precipitation and wind patterns is required for their formation. Our families, culture and experiences make each of us who we are. What unique set of ingredients do you bring for everyday transformation?

While it's extremely important to see patterns, operate strategically, and engage others for support, the power of the GAIA Framework is the connection to our deepest values and commitments because these values and commitments emerge from who we are deep inside and what we stand for. Dr. Martin Luther King, Jr. stood for equality and his words and actions were deliberately chosen to manifest equality. Mother Theresa stood for compassion, which she manifested through her daily activities. I stand for oneness with Earth and all beings. It's currently not possible to live as a global citizen in a manner that doesn't harm people or the environment, and that doesn't work for me. Therefore, I endeavor to create health and well-being for all with every action I take. Declaring our stand and taking action on a daily basis to manifest that stand lights a fire in our bellies that cannot be extinguished. It's time to stand for change so we stop being passive observers, helplessly watching the destruction of the world around us.

What do you stand for? What is it that you are uniquely qualified to deliver? We often think that leadership is reserved for presidents or generals or CEOs. Not true. Everyone can take responsibility and assume leadership in their daily experience, regardless of how big or small it is. What's possible for you? Start where you are on something small that holds meaning for you. Transformation doesn't occur only through new projects or new initiatives. It can start with our day-to-day, routine activities. Sometimes our daily activities are the best place to start because the change isn't so scary or risky. When the ocean tide comes in, nothing can hold it back. When you unleash your power and potential, nothing can hold you back.

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