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Beyond the Weather

Advocating for women leading Emotional Climate Change through the marriage of culture, water, and consciousness to empower communities in health and education matter – from the Embera-Wounaan indigenous jungles in Panama to inner city neighbourhoods in New Orleans.

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Introduction

In this paper I mostly share and slightly expand upon a case study, which I called "the water story" that I presented in my M.A. thesis. I wrote it in order to contribute a little experience of what it would be like to link new research from science and consciousness with the knowledge of traditional cultures, i.e. indigenous peoples, in the context of development projects, and what benefits might be expected from such an endeavor.

It came recently to my mind that this story and the learning gained were enticing for explaining an idea that I had been playing with since reflecting on the climate change crisis that has become a primal global concern. I had been thinking that perhaps part of the solution to the problem would be to shift the attention from climate change to a change of our emotional climate, if we consider at the core of climate change

an alteration of the water cycle and also of the dynamic equilibrium of the emotional waters of our shared humanity. Our failure to see this relation would derive from an ever growing disconnection from our sense of belonging to the natural world, and therefore from an excess of confidence in technology and detached abstractions that pretend that we can control nature as if we were not part of it and subject to its laws.

Perhaps a few years back the worry about the alteration of global weather patterns affected mostly small islands, concerned for their future survival, which do not have much influence to push for policy change in the international spheres of power that are seduced by monetary gain obtained from the plunder of natural resources worldwide. However, after the intense and overwhelming earth disasters associated with water that humanity suffered in 2004 and 2005—Tsunami in South East Asia, Hurricane Katrina in the USA, and Hurricane Stand in Central America—a forced shift in the perception and political will took place around those high spheres. Collectively, we were called to order by a nature in disorder that was menacing to keep out of control if the prevailing dominant model of development continues to favor unbridled greed, and we do not refrain from irresponsibly testing the patience of the Earth's homeostatic system.

It is my hope that with the sharing of the water story, I may transmit encouragement and a few ideas for how to address climate change through emotional climate change, not just to indigenous peoples, who are keepers and stewards of biological diversity worldwide, but also to citizens in urban areas that yearn for cultural reconnection and shared purpose within their neighborhoods and communities. The journey in this paper from the Embera jungles to the inner city neighborhoods in New Orleans, which were flooded by Hurricane Katrina, intends to provide an example of the control we can regain over health and education in our villages and cities when, rather than resisting, we partner with the transformational healing power of natural elements, in this case water. Instead of being pushed to learning about our place in nature in a traumatic fashion we could choose to develop a finer sensitivity to the moods of elements through

our individual and collective moods, anticipating natural disasters and avoiding them by course-correcting our direction and bringing common sense to our actions.

The Research Context

From September 2003 to July 2004 I worked as a consultant for a private firm coordinating a land use project in Panama, giving technical assistance to the Embera-Wounaan indigenous Congress to design and implement a land use plan in their territory legally recognized by Panamanian law, called *Comarca*, concretely in the Sambu District, located in the Darien Province, nearby the frontier with Columbia.

The project was an outcome from the Darien Sustainable Development Program, co-funded by the Panamanian Government and the Inter-American Development Bank (IDB), and managed and administered by the Ministry of Economy and Finance (MEF).

I coordinated a team of eleven Panamanian people: an agricultural engineer, a sociologist, a botanist, an expert in forestry and fauna resources, an economist specializing in environmental economics, a lawyer, an expert in Geographical Information System (GIS) technology for mapping, and four assistants at the local level, three of them primary school teachers. A Kuna lawyer (another indigenous nation from Panama) and an international specialist in indigenous rights served as Indigenous representation in the team. He was involved in the creation of the *Comarca* Embera-Wounaan. And we had four Embera assistants. The team performance according to the expected results was supervised by the MEF and the National Environmental Authority (ANAM).

During the almost eleven-month implementation process (September 2003 to July 2004), we sustained a continuous collaboration with Congress authorities, mainly at regional and local levels, once the General Congress had authorized our presence in the area. Previous to that, there was a year of negotiations, conversations, and building agreements between the company and the Embera-Wounaan Congress, during which terms of collaboration, accountability, goals, and work

conditions were established. This long pre-negotiation phase helped to build credibility and trust among the parties. The collaboration was initiated actually at the time of making the project proposal, as this was planned, thought, and budgeted according to Embera advice and knowledge from the field.

I became enthused with the opportunity that coordinating this project gave me to undertake research on the impact of innovating with creative right-brain exercises within development projects.

On the one hand, given my interest in bridging opposite modes of thinking and acting, I wanted to test the effects on the project's participants and the results of including qualitative and sensory-oriented activities, which rely more on an intuitive approach to knowing, and not merely on reason. It is important to consider that the prevailing mode of thought and action in development projects are results rather than process oriented, that time frames are strict, and that quantitative measurement is the main source for data analysis and interpretation. I wanted to understand how participants in the project could make meaning of these experimental initiatives, how their intentions, understanding, and behavior could change afterwards, and whether this change might serve to propose a more integrated and holistic way to approach the understanding and the practices within the development field. Although my research was subject to a specific indigenous cultural context, it could generate credible results and theory of interest for similar sociocultural and professional domains.

In addition, I wanted to use myself as a testing ground, for my privileged position as coordinator of the project gave me authority to make decisions, as well as certain freedom to explore unconventional activities as long as aspects in project implementation such as goals, time line, and budget limitations were respected. I was willing to explore within myself the creative tension I soon started to experience as a consequence of being naturally drawn to care for processes and building communication with people, whilst simultaneously confronted by my liability to the corporate role I represented. The latter aspect obliged me to deliver results, protect the company interests, and project an honorable and efficient image through

my performance. The former served to add another source of curiosity to my exploration, and I decided to examine how my feminine psychology and way of knowing might serve to enrich my contribution to the project, not only at the level of project performance, but at the understanding of the challenges and opportunities that it would bring in my managerial role and in the relationship with my superiors. Findings from this third aspect would come to be consistent enough to constitute a case study in itself. Frequent reports and memos I wrote to my thesis advisers on the tensions I felt in trying to harmonize different roles, responsibilities, ways of knowing and action, made clear for all that I was immersed in a narrative inquiry, creating a rich pool of written stories where words and meaning-making were definitely more important than numbers. My words were pointing to a persistent struggle between reason/intellect and intuition, between head and heart, process and result, or people and monetary profit. By holding the tension I grew in comprehension, adaptability, and non-judgment.

Out of my research I developed an integrative model for cross-cultural engagement to be applied when working with culturally distinct people in developmental projects that attempt positive social change, understanding as "positive" a change that dignifies people because it happens on their own terms and is respectful of their cultural identity. This model was also meant to contribute to the emerging field of Public Interest Anthropology (PIA), an initiative that fosters the support of social change among anthropologists and within the practice of anthropology, aiming to overcome a suspicious attitude to change. It is framed within a commitment to democracy, human rights, and social equity, and offers a collaborative platform for those practitioners of anthropology who do not find institutional support for this approach within academic settings (Sanday, 2002, 1998).

PIA tries to bridge theory and action, as, according to Sanday "anthropology needs an epistemology which combines theory development with engagement in the contemporary world" (2002). The call for engagement to activate social change resembles a call to take science back to the streets to turn it into a social experiment, as if it were in the initial steps of the

scientific movement, before the Church would succeed, exercising pressure through fear, in returning science to institutional and scholastic settings.

The Water Story

The weekend of June 14-15, 2004, I visited Puerto Indio, in Sambu District, for our last workshop in the project area. Its purpose was the cultural validation of the technical environmental zoning and mapping that had been produced through a participatory methodology. Representatives from all the twelve communities arrived for the event.

Having learned from Dr. Masaru Emoto's research on water and consciousness, I thought of a final educational activity at the end of our last workshop, additional to the scheduled program, aiming to share with the Embera people his research findings, and to link them to their own culture and practices.

Dr. Emoto, a Japanese researcher, initiated his interest in micro cluster water through the work of biochemist Dr. Lee H. Lorenzen, furthering his knowledge with magnetic resonance analysis technology than was being used to work with homeopathy. He thought he might use the Magnetic Resonance Analyzer (MRA) for measuring subtle energies in water (Emoto, 1999/2003). The subtle vibration that exists at the elementary particle level is called HADO in Japanese. This expression is comprised of two ideograms, which literally mean "wave" and "move," and it is pronounced to rhyme with shadow. He then undertook extensive research around the world and visually documented the changes in the molecule structure of water that occurs when it is affected by different thoughts, ideas, words, music, and human vibrational energies. He would freeze water and take a photograph by using a dark field microscope, acquiring factual evidence of the very different crystalline shapes that formed under positive and negative influences. In the former, the crystals organized in beautiful geometrical designs, while in the latter, the crystalline molecular structure of water appeared distorted and randomly formed. Positive and negative influence referred not only to the quality of thoughts or music but to the physical and chemical quality of water. The more pristine the water, the more beautiful the designs appeared, while the higher the pollution level of water from a tap or a river, the greatest the distortion of the molecular structure.²

The belief of the influence of thoughts on water and on water's ability to carry energetic information, which underlie many cultural rituals across the globe, has started to be addressed in recent scientific studies, opening lines of research for further exploration.

Some of these studies have shown how individuals in a state of internal heart coherence, with a quieted mind and a loving feeling focused in the heart area, provoke structural changes in water through their intention. They have proved how that treated water can influence biological systems, causing structural changes in human DNA. Water structured with bioenergy can also alter the growth of plants and mammalian cells in culture (Rein & McCraty, 1994).

In other studies, such as in those undertaken by the Institute of HeartMath, preliminary findings on research into the energetic properties of water from Marian sanctuaries, known for their healing quality, have shown measurable changes in the water that affect physical and chemical systems (Tomasino, 1997). They are similar to those obtained from sample water treated with healers' bioenergetic fields, which suggests that Marian waters hold an intrinsic energetic activation due to the storage of spiritual or higher dimensional information in their molecular structure, which is ultimately the popular belief about them. They have gathered scientific evidence of water's ability to not only store, but also amplify weak and subtle electromagnetic and energy fields, as well as its capacity to transfer the energy to other chemical systems and change their structure. There exists the potential to build a solid model from these early results, with still many aspects of living organisms and biological systems to be discovered. Indeed.

Studies designed to advance our understanding of water's role as a bridge between the worlds of energy and matter will provide a crucial link between the realms of science and spiritual phenomena, bear profound implications for the betterment of human and environmental health, and may well

help lay the foundations for a newly emerging scientific paradigm.

I was interested in the implications that research findings on the connection between water and consciousness might have for the maintenance of environmental health and for strengthening cultural identity. For people that constantly are referred to as poor in documents from international agencies, and who are continuously reminded of their poverty because of lack of financial wealth according to the dominant view of development, I thought that it would be important to hear another story. In this other story, they can see themselves in a new light, appreciating those cultural values that have made it possible for them to keep a harmonious and intimate relationship with the natural world for generations. Helping them to shift the perception of themselves so that they identify the richness of a life lived in a close interdependence with nature, as well as with strong collaborative bonds at community level, was part of my objective.

Dr. Emoto's accounts of his experiments with groups of peoples and monks gathered around a lake to purify its water by sustaining and projecting that intention inspired me to reinforce a sense of pride in a people who live in deep intimacy with water. As the twelve communities of the project are located within the Sambu river watershed, their livelihoods depend much on the health and sustainability of the river ecology. The river is used for transportation among the communities, for fishing, washing and cleansing, and also for fun and pleasure. Moreover, the strong presence of water in their daily life is not only associated with the Sambu river, but also with the humid rainforest they know so well and the heavy rains that every year bring renewal to the land, although also frequently accompanied by some loss.

Thus, once the scheduled agenda for the workshop was accomplished, I invited the participants to stay a while longer and to hear a story about scientists finding new things that indigenous peoples like them had known for ages. I showed them a power point I had prepared from Dr. Emoto's findings and experiments, including photographs of crystallized molecules of water, and the evolution of his research.

I relied on some of our assistants from the local Embera team to teach me a few Embera words so that I could transmit a mental image in which the water "feels" our emotions and captures the quality of our thoughts. I invited them to imagine that when people fish, women wash the clothes or the children splash and giggle in the Sambu River, the water carries all songs far away, but also deep down to the earth. I also expressed that

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their way of living is very fortunate for having such a close intimacy with water, and that their culture, as well as other indigenous cultures, have been very wise for ages, offering rituals and ceremonies to the land and certain sacred places. As Dr. Emoto was finding, such rituals and prayers might be cleansing the water from pollutants, so that, I advanced, maybe in the future environmental management programs might include rituals and ceremonies, and not just focus on engineering practices based on pure technological expertise.

Some of the challenges of the presentation were that the Embera people couldn't relate or understand the concept of crystal at molecular level, or even to the crystals formed in the iced water, as they live in the tropics. Therefore, I doubted that they could relate to the photographs presented. In my effort to communicate, however, I kept repeating and performing a story of the water singing and carrying the song of our thoughts and words, while flowing into the surrounding environment, and

traveling deep down and far away.

It had taken a long time to manage to get the Embera people involved in discussions during the previous workshops because they are naturally shy. Thus, once I concluded my story, and after asking several times for any comments without getting any reply, I decided not to insist, although their faces appeared somehow impressed. I invited them to come outside to enjoy a last surprise. I had planned with Dania, one of my assistants. schoolteacher and instructor of traditional dances to girls, to organize her little students to come and offer several dances. They charmed us with some of those dances I am so fond of, simple and repetitive in steps as they mimic movement of animals, and enhanced by the colorful clothing and flowers the children wear. At the end I gathered them round, and with the adults as witnesses, I explained to the girls that I would pour some water into their cupped hands. Then, holding the water for a moment, they would think of something beautiful that they loved, and finally, they would open their hands and offer the water to the land so that its message would travel far and wide. As I closely watched their little faces shifting from expressions of giggling and nervousness, to introspection and seriousness, and at the end back to playfulness and openness, I felt more than fulfilled with just being there with them, such were the tender feelings that they inspired in me with their grace and innocence. With that celebratory event we finished the day.

After the workshop, I checked with the representative from the supervising institution, the National Environmental Authority (ANAM), wanting to know his opinion on the final activity. With some reserve, and certainly politeness, he replied that he did not know that I was into metaphysics, to which I responded with humor: "Well, I never said that I was not into it." Our relationship with them had been very good all the time, and although that activity could have looked a little bit eccentric to him, it was a minor observation in the general context and evolution of the project. I continued on with the conversation telling him about new research in many scientific fields that definitely are convergent with traditional indigenous knowledge. I appealed to his scientific mind by providing extra information, as my presentation was obviously short on this

because that was not my main goal bearing in mind the majority of the audience.

It was after dinner that, unexpectedly, I received the response that really mattered to me. Mariela, a female leader from one of the communities, approached me, and with almost tears in her eyes, told me in her own way how strongly impressed she had left the workshop. She described how she had felt something entering her heart as I was telling the stories of water becoming happy or sad with the people. She repeatedly pointed to and touched her heart, speaking of something that had overwhelmed her and made her weep, but also that had arisen hope. She told me of remembering how, traditionally, elders and mothers with their children would wake up early in the morning to perform ceremonies for rain calling, and how they had stopped doing so when children began to attend public school. They started to loose contact with the elders and their wisdom

As one possible idea for a project, Mariela had been thinking of opening a traditional clinic run by Embera midwives, aiming to provide pregnant women with adequate space and support before, during, and after delivery, following the Embera tradition and knowledge. She had noticed how Embera pregnant women were not acknowledged in their cultural beliefs and needs - which are very rooted in strong female support and specific herbal knowledge to help the process—by the Panamanian public health institutions. But, now, with this experience, she had felt inspired not only to make it happen, but to initiate other projects in her community, one of them involving elders and women to speak on how to recover their lost traditions that used to honor water. Mariela's enthusiasm and full commitment to her people made me feel I had not wasted my time or played the fool. Through her I learned that the most important factor for positive change is that the right people get motivated and ignited in their dreams and visions, people that carry strong leadership gifts, who can encourage others to mobilize themselves in taking action for the betterment of their communities. The ripple effect does not depend that much on the quantity of people we may target, but rather on trusting that we will be able to touch the people who are ready to wake up to the invitation to unleash their leadership potential.

I also became very conscious at that moment of how women are very close to the language of nature and emotions; Of their special receptivity to images and metaphors that may speak to their heart, and to their deep sense of knowing about what favors health and wellbeing in their individual and community life.

Equally, I also learned that to empower a people is to validate and encourage its identity, values, and the creative multiple languages that its members may use to relate to the world. Such diversity of languages constitutes an enormous pool of resources to be applied in collaboration with modern languages and technologies, pointing to a path where development can be implemented in a dignifying way by highlighting the best practices from both the modern and traditional worlds.

Similarly to Mariela, who caught Dr. Emoto's ideas through her heart, my heart led me when I took the decision to arrange this last activity. I trusted, although without seeing the clear results at the beginning that the outcome might be constructive, as it proved to be . . . at the right time and with the right people.

Comprehending the Whole of the Water Story

To discuss the effects of the water story on the participants I will rely upon two sources of analysis: a) Very briefly, I will expose the responses that my Embera assistants gave me when I asked them about the exercise; b) In greater measure, I will discuss Mariela's reaction to the water story.

As for the former, after the workshop I interviewed my assistants, asking them what they had learned after the water exercise, what did they think the attendants took with them as a lesson.

For Marquela there had been great learning: "Aprendimos mucho. Algo nuevo del agua. Aprendimos mucho" ("we learned a lot, something new about water, we learned a lot"). She shared her thoughts as she mused about how strange it was to think about water in those terms. "When one has a bad thought, water

feels it, it's angry. It also feels when the thought is positive. It reacts differently", exclaiming finally, " . . . and it takes it everywhere! Something strange." I explained myself better to her, trying to make sense of my intent in bringing this activity to the participants. So, I revealed that there was a connection with the Embera culture that I wanted to highlight, such as the singing of healers or ceremonies on the river. I explained that if one sings to a patient, and we are mostly water in our bodies, then the sound is transmitted through all that water we contain within. Therefore, my idea was to reinforce a sense of meaning for cultural practices, bringing information from science. And she reflected, "Yes, if I have a good thought, the patient heals, but if not, it gets more complicated. Yes, I understood something."

If Marguela paid attention to the ability of water to carry the energy of feelings, either positive or negative, so that her reflection was applicable to the importance of the quality of our strengthening weakening human thoughts in or environmental health, Arquinio learned something else. He commented that "it is like when one stirs water with something, because, otherwise, the water is still. But if you come with a stick and use it, todo se mueve (everything moves)." He applied his observation to inspiring people for action, as he further added that "the same is with society." He then made a passing timid remark showing certain skepticism towards the suggestion that water carries the energy of thoughts, "en realidad, eso de que *lleva pensamientos . . .*" ("really, as for the water carrying thoughts . . ."), and came back to his main interest, how to mobilize people. "If nobody leads, then the rest does nothing. But if someone arrives to tell them, it's like the water wakes up and moves all around. Then, everybody does and moves. We all live from water, animals,"

The most interesting thing for me here is the choice of interpretation that Marquela and Arquinio made of the water exercise, which appears connected to their personal interests and challenges. In Marquela's case, she had been suffering some health problems for a while, and had been taking herbal remedies that her father, a traditional botanist and retired school teacher, had been preparing for her. Therefore, her attention and concerns were focused on health matters, and

perhaps, she discovered the body-mind connection, and the importance of positive thinking for good health maintenance.

Arquinio, however, as well as working as assistant in our project, at that time held the position of President of the Local Embera-Woungan Congress of Puerto Indio, the community where our workshops were run. He had shared with me at different times the tricks he had to invent and the patience he had to unfold in order to bring people to the sessions, as there was high level of absenteeism. Thus, obviously for him, for his common challenges, a good lesson could be learned from water. He seemed really certain about the role of leaders in creating this effect of "stirring water with a stick" so that people would get active and participate in collective activities. He was probably identifying himself with one of these sticks and thinking that, truly, he would have to keep inventing ways to generate higher participation. Probably, for Marquela, the water lesson was more internal, more intimate, while for Arquinio it was more external, an instruction or reinforcement on the behavior required to get the expected results.

As for Mariela's response to the water story, I will discuss it from the perspective of Goethean participatory science, exploring its connection to women's and indigenous' ways of being, and also to the information coming from heart science. In addition, I will discuss about what we can learn from the teachings of the nature of water, and from the application of a science of qualities in social studies. An important aspect is to learn how this knowledge can contribute to a better understanding of the consideration of culture in the development field, telling us that, ultimately, this understanding and the methods that we may employ should be conscious and sensitive of the intrinsic link existing between culture and nature.

1) From the Participatory Approach of Goethean Science

Although far better known as an eminent German poet and playwright, Johann Wolfgang von Goethe (1749-1832) built during his life an abundant body of scientific work that dealt with plants, color, clouds, weather, and geology. His highly unusual scientific method has become increasingly recognized

for bringing together "the intuitive awareness of art with the rigorous observation and thinking of science" (Seamon, & Zajonc, 1998, p. xi).

Goethean science is rooted in a phenomenological approach to the natural world, as it studies nature from its own perspective if it had the ability to speak, following the core principle that the father of phenomenology, Edmund Husserl, established for this philosophical branch. Phenomenology, thus, is "the exploration and description of phenomena, where *phenomena* are the things or experiences as human beings experience them" (Seamon, 1998, p. 2).

In this process, description of the thing constitutes the initial step to learning more about the deeper patterns of meaning that exist embedded within a phenomenon. However, Goethe went beyond mere descriptions made by a passive observer, advocating for an active cognition that he defended through a scientific method characterized for its "systematic rigor and internal consistency" (Hensel, 1998, p. 74).

Modern science has assigned value to primary qualities, those that can be expressed mathematically in a direct way, among them, number, magnitude, or position. Those that cannot be quantified are called secondary qualities, and have been traditionally dismissed in science (Bortoft, 1998). This dismissal has created the basis for dualism, with secondary qualities assigned to the realm of subjective experience, whereas primary qualities have stood as the faithful indicators of objective reality. Given that Goethean science upgraded the value of secondary qualities, Hensel has noticed the "quintessentially mathematical" (1998, p. 76) scientific procedure that Goethe followed in his rigorous and sequential progression from the multiplicity of phenomena to "what he called 'pure phenomena' or, later, 'archetypal phenomena' (*Urphänomen*)," or "the highest level of experience attainable" (Zajonc, 1998, p. 25). Goethe thought that usually people do not find satisfaction in experiencing the pure phenomena and therefore, require further proof for something they insist lies behind.

The grasping of this higher insight occurs for Goethe by a sudden "apperçu" or "illuminating intention" (Brady, 1998, p. 98) that emerges from the interaction of our intentional idea

with the phenomena itself, revealing to our consciousness a new perception of it. In the phenomenological discipline, the importance of "intentionality" or the "directional quality of attention" in determining our perceptions, had been already presented by Husserl (p. 86).

Infusing with an intentional quality the mere fact of looking at something is what makes seeing an act of cognition in Goethean terms, and also what differentiates his empirical approach to the study of nature from the German idealistic philosophy of his contemporary nature philosophers, who approached it "from the pole of pure thought" (Zajonc, 1998, p. 18). As professor of philosophy and Goethean scholar Ronald H. Brady puts it, cognition for Goethe is not passive but active, "not a proposition about what is perceived but an activity that actualizes the perception. Each act of seeing is necessarily an act of understanding" (Brady, 1998, p. 88). In obvious contrast to nature philosophers, Goethe is eager to shift from the realm of abstraction to the involvement of body, turning to a visual science that highlights the symbolic quality of the eve as the organ that allows the perception of both unity and diversity in nature (Zajonc, 1998).

For Goethe, revelation facilitated by a penetrating eye does not occur by paying attention to an isolated event, but to coexisting universal patterns and relationships. This is the contribution of having an "insight" or "aperçu that weds together subsequent experiences" (Zajonc, 1998, p. 26).

A Goethean phenomenological approach, which uses reason and intuition in the study of sciences, so far mostly in the natural sciences, can be applied to the search for patterns and relationships within an organism or system, or between them. An example is the connection between humans and nature.

My interest in analyzing Mariela's reaction from a Goethean phenomenological approach was to present a view of patterns of human response that may spontaneously arise in a form directly related to the type of pedagogical tools that have been used.

For instance, by evoking the fluid qualities of water through the telling of the water story, a fluid or watery mode of consciousness can be called upon. The cognitive aspect of the mind that resonates with it responds, so that the mind as *Nous*, as was named by Aristotle and Thales, is the faculty that is able to contain or resonate with the water ability to "run through and take on the form of all things" (Hoffmann, 1998, p. 170). The motion aspect of water inspires people to use it as a metaphor for promoting change, very much exemplified in the expression that Arquinio used when he spoke of "stirring with a stick the water" to symbolize water's ability to remove stagnation, or apathy. Consequently, motivating for mobilization can start by bringing fluidity to our thoughts.

But beyond that, it could be that Mariela's mood in response to the story, her feelings, can be explained through Heidegger's ontological definition of moods as articulation of "humanity's openness for the being of entities" (p. 170). In this sense, knowing nature is not only about precise description of facts as a separate objective observer, although this is another step acknowledged by Goethe in the process of coming to know a phenomenon. The whole process is rather organic: it unfolds from the very first sensorial impressions received (sight, smell, sound, etc.), and includes moods experienced not out of projected subjectivity, but by remaining receptive and letting nature speak "on its own terms and in its own time" (p. 131). Under this consideration, it could be argued that Mariela's response was not an arbitrary personal projection to bring meaning, but a tuning into the qualities of water as a being or entity, acting as a mirror by reflecting them through her own emotional sensitivity. She would have been open to the story told by the "being" of the water entity, receptive to its mood we could say, her reaction flowing from that connection. A Goethean approach can also be applied to develop the modes of consciousness related to other natural elements, such as fire, air, or earth. In each case, Heidegger's influence might invite us to consider the possibility of the "beings" of these entities finding a mirror in the mood or emotional response of people receptive to them.

When applying this process of knowing to a culture we encounter for the first time—either by meeting its people, experiencing a landscape, a type of food, hearing its language or

its music—we might consider that we are gathering impressions from "the being of that cultural identity." Ways to know that culture would involve the observation of the spontaneous moods we experience, and the degree of receptivity invested in the process. We could find that there are cultures we are more open to—because we resonate more with them for some reason—and therefore we can get to know better. Failing to value a culture might relate to an inability to get to know it, just because there is a blockage to feel "its being," a lack of resonance to it. Wrong interpretations might define, however, a culture as "lacking," when actually it is the person's receptivity to it that is "lacking."

A receptive interaction with the phenomenon depends on a developed imaginative faculty, which when considered from the perspective of Goethean science, is not merely "vague reverie" that floats in abstract thinking rooted in dualism. It is rather an "exact imagination" that is anchored in "participatory consciousness" (Cottrell, 1998, p. 261), which facilitates an empathic feeling with the being or entity of the encountered phenomenon.

But does this engagement refer only to the "feeling" dimension, one might ask? Or is it associated with an impulse to act, to generate change, according to what is felt? Mariela's explanation about the inspiration she felt to initiate the projects she had been thinking and dreaming of for a while, points to an affirmative response to the latter question. Her activated participatory consciousness did not only facilitate her empathic feeling with the water entity. It also activated a grounded awareness in her of her community's problems and potentials, and of her role in bringing transformation. As a consequence, she shifted her perspective so that she felt empowered and motivated to take action and move forward where before she had felt perhaps hesitant.

The evaluation from a Goethean perspective of the effectiveness of the water story in its capacity to bring positive change for a community would have a positive result. For, according to Goethe, the ultimate test of truth "-the truth of sense-experience and of thinking- is that it shall be 'fruitful' and

further life and health" (Cotrell, 1998, p. 272). Mariela's decision to foster women's health care projects in her community through an integration of both cultural and allopathic clinical practices appears indeed a victory in this "ultimate test of truth:" It shows how "fruitful" the effects of her experience was, how supportive of "life and health."

An activated imaginative cognition in the attendants may be a consequence of using storytelling as a pedagogical tool, as Mariela's response indicates. It is reasonable to predict that other artistic tools would also spark the creative/artistic cognition in participants, enhancing social engagement levels; for instance, the use of ritual for enhancing the imagination of a shared vision, which I discussed in another case study. This reflection suggests that a more thorough application in a development project would derive larger numbers of participants benefiting from positive decision-making and action-undertaking. Although the impact of the water story is not impressive when considering numbers, a focus on the quality and depth of the impact that certain change agents can create for their communities is of utmost relevance. The proposal here is definitely about quality, not quantity, and the invitation to consider a paradoxical approach to social change. One that considers that long-term sustainable positive changes can be catalyzed by subtle means, and equally initiated in a subtle and non-visible manner. As stated earlier, the most important factor would be an inner shift in the awareness of key agents, who have great influence in inspiring and mobilizing others to take action.

This view may pose a challenge to the frequent need for quick visibility of results in development projects. While seeing that results are necessary not only for the client and funding institution, but more importantly, for the beneficiaries, ignoring the sustainability of changes generated from within to without can frustrate all parties involved. At the very end, continuous failures in development projects equal a huge waste of human and financial resources, and attract the bad press that, rightly so, has surrounded the dominant approach to international development. While I have not been able to monitor Mariela's subsequent steps after making her decision, my impression is

that she was fueled for radical action, and that the stronger the emotional engagement of people in initiatives for social change, the greater their commitment to sustained action will be.

2) From a Gender Perspective

Are the results of this experiment gender related? Has Mariela's female condition influenced the way she responded to the water story? Three or four women were attending that workshop out of more than forty attendants. Are women more susceptible to these types of pedagogical tools?

It could be argued that women, according to Mariela's experience and example, are deeper tuned to their *culture's soul* psychology, or in other words, to the practices and traditions by which a nation, or a people, can keep on course with their cultural identity—the core that gives them meaning and a sense of collective belonging. Stories and artistic practices that are culturally isomorphic, meaning that they somehow resonate with the local tradition, can also impact through resonance the information encoded in humans' hearts. Women may be more easily tuned to this heart code inside them that holds the memory of ancestral legacy. This is related to the production of a hormone by the heart, called Atrial Naturetic Factor (ANF), which apart from regulating immune function, emotional states, sleep cycle, aging processes, and general energy levels, it affects the limbic brain, associated with memory, learning, and emotions. Considering women's psychological orientation towards connection and care, it could be expected in them a more intimate relationship with their hearts and therefore easier access to cultural memories encoded in them. Easier engagement to the resonant response of their hearts might explain why, in energy cardiology it has been found that "women, more easily than most men organ recipients, are more comfortable dealing with the new connection established with a new heart and express more interest in their donor" (Pearsall, 1998, p. 95).

I have derived the concept of culture's soul psychology from the understanding of a person's soul psychology that is used in The International Institute of Hand Analysis (IIHA), funded in 1985 by Richard Unger.³ If hand analysis shows a person's life purpose as encoded in her/his fingerprints, the purpose of a people whose identity is deeply dependent on a given territory, their unique gift and quality, may be coded in their natural landscape, that which has provided for them since ancestral times the physical ground for their collective soul manifestation, their cultural expressions either tangible or intangible.

Women might be the keepers of a culture's soul psychology through their facility to retrieve collective memories that relate to the way their people preserve its connection with the ancestral land, knowledge that relates to the essential practices for maintaining their culture's soul psychology in a healthy state. For, if there is a connection between environmental health and human health in pure physical terms, and if the human body is connected to a specific purpose or soul, would it not be reasonable to think that also the body of land that sustains a people is connected to its cultural collective soul, which in turn influences each of its members' individual soul? Actually, identical wave patterns, although differing in size, appear in human fingerprints and in nature, either in zebra stripes, rippled sand at the beach, or the ridges of sand dunes in the desert. Why then not consider that energy waves that constitute an individual's psychology follow a similar pattern to those that conform to the collective psychology of the people she/he culturally belongs to?

Women, because of their high cardio-sensitivity, seem to be especially receptive to pedagogical interventions based in the use of artistic cognition. The facilitator can use them to evoke and awake women's inner or artistic sense, which in turn heighten their awareness about their leading role in taking control of the cultural practices that strengthen individual and community health. Equality and empowerment for women appear to be enhanced when the intuitive ways by which they communicate and relate among themselves, with their communities and with the land, are encouraged and acknowledged in their power to generate social change.

Drawing from this strength, center women can act as "social artists" within their cultural group and for their

communities, helping a collective transition towards a new story, which balances being able to remain open to the best of modern science and technology while at the same time protective of a people's cultural soul identity. They can function as keepers of the genius⁴ that characterizes their collective identity, needed to counterbalance the sudden and destabilizing change that economic globalization forces are imposing over many indigenous nations nowadays. As a matter of example, by helping Mariela to remember, to retrieve forgotten traditional rituals that can help the Embera-Wounaan to recall their intimate connection to nature, her people can move to a new story of relationship with the outside world without weakening their core essence. New healthy stories can then develop through both their interaction with the Panamanian dominant Latin culture, and also with the international trends that bring new potential activities to their territory, such as tourism, sustainable forestry management, and trade, among others.

Women—as I have discussed in other part of the thesis that compares traditional healing arts among center women in different traditions like the Sephardim and Aztec-know and interpret the world drawing from their receptivity to the sensory information conveyed through secondary qualities, such as taste, smell, flavor, or sound. Perhaps, women, through the application of their receptive mode of consciousness would be more suited to also perceive the "active absence" of the "wholeness" of this still latent new story, as it could be expressed through the lens of physicist and Goethean scholar Henri Bortoft. The ability of center women to be active workers for their communities, together with their heart receptivity to sense emotional connections to the evolving natural and cultural worlds, offer a model for a new way of being, encouraging us to keep ourselves open and receptive "to be moved by the whole" (Bortoft, 1998, p. 286).

Venturing to describe how the possible new story might look, I would say that in it, wholeness would be inclusive, respectful, and proud of diversity. Opposite worlds would cultivate an attitude conducive to building common ground while honoring their differences. Through the willingness to

encounter the "whole" that embraces partial differences, a new wisdom might emerge, more capable of successfully facing the essential complexity that social sciences have to deal with, and that economist Von Hayek (1974) talked about thirty years ago.

Seeing the whole would be possible, as we would have learned to develop the inner organ of vision that Goethe cultivated, susceptible to perceiving continuity and connection in the midst of discontinuity and disconnection. When external vision may align with the internal vision encouraged by the beats of the resonant heart, we will be able to integrate the opposite virtues of the eye that the Irish culture has voiced through the late philosopher and poet John O'Donohue (1997): the eye as both mother of distance, and of intimacy and closeness. This harmonizing function of the eve would offer contrast to the mere interpretation of the eye's ability to perceive light as a tool to dissect knowledge, which has been favored by the dominant science of quantities since the Age of Enlightenment. It might be expected that diminishing the scientific addiction to dissect and classify would also diminish the prevailing influence of financial assets when defining wealth, which has caused so far the classification of societies and cultures into superior or inferior, developed or underdeveloped.

Scholars and practitioners that attempt to build common ground with others from fields traditionally in opposition, such as economists and anthropologists, might acknowledge the receptive mode of consciousness that center women display in traditional cultures, and agree to promote them to take a more central stage in public life by acknowledging their role as teachers. In the case that they decide to work together to foster mutual understanding and unity beyond their different views, Goethean science suggests that unity cannot be perceived in an abstract, theoretical, or detached way. Being open to its revelation requires engagement of the senses, and the awakening and development of appropriate organs perception, or put it in other words, "our thinking needs to assume the character of a doing" (Hoffmann, 1998, p. 168). It needs creative participation and an enhanced intuition, which comes more naturally for women, making them potential guides in the journey to perceive wholeness within the parts. For, this is another important remark in the approach to unity from the Goethean's conception. The persistence to reach unity through the unification of parts just reflects the confusion generated from a discursive way of thinking. Merging into totality or trying to integrate parts or different types of knowledge into a whole that makes sense is not the Goethean's recipe for working towards unity. This is precisely the correction that L.L. Whyte received when he was pursuing that interpretation. He recalls the very whispering of Goethe's spirit in his ear reminding him that "the unity is there to discover, and always has been" (as cited in Hoffmann, 1998, p. 169).

Therefore, if Mariela was responsive to the being or entity of the water element speaking to her of ancestral rain calling ceremonies that unified her people, I suggest that teaching others how to engage sensuously and emotionally with nature's elements would help them to also retrieve knowledge favorable to unity and cohesion, rather than opposition and confrontation.

3) From an Indigenous Perspective

Beyond her greater cardio-sensitivity as a woman, could Mariela's condition as an indigenous person have added an extra facility to retrieve cultural memories of her people after listening to the water story? Was she conditioned to be more susceptible to it as an indigenous person than another person who is not?

From a Goethean approach, the response suggested is affirmative. By applying the Goethean phenomenological method to the study of native plants in the Sydney region of Australia, it has been found how a landscape "speaks" through different species as if they were different organs of such landscape. For instance, through some plants the landscape communicates "outwardness," delicate radiance or sweetness, while through others the message is of "inwardness" or a commanding concentration (Hoffmann, 1998, p. 165). These qualities would be expressions of the generative idea or "inner necessity" of that landscape, acting like "creative actions or impulses" rather than abstract qualities, and constituting organs of the landscape's "organized being" (p. 166).

Goethean phenomenology contemplates the possibility of human manifestations being other types of organs in a landscape expressing its inner necessity, as in the case of organic architecture or agriculture. Truly belonging to a landscape is what may determine whether an artistic work may be considered an organ of it.

Concomitantly, a people native to a place may be also an expression of the inner necessity of the landscapes that they inhabit, expressing through their art the creative impulses that the land generates. For instance, Embera dances traditionally performed by women, their movements mimicking those of different animal species (like in the pari-pari dance, a type of bird's dance), and even imitating the movement of culturally significant objects, such as the case of the hammock dance. From this point of view, would other indigenous people native to places without water as a relevant element of their landscape, for instance a desert, have responded similarly to the water's message? Are the Embera people more tuned to the inner necessity of its cultural landscape and the water element in it than those who do not relate to their land as an organ? And what about a non-indigenous person, who may be further away from being able to sense the inner necessity of a landscape, either desert or rainforest, when her/his cultural landscape has been reduced to metropolitan areas dominated by concrete?

Musing over those questions is conducive to reflecting on how destroying indigenous nations may indicate that humanity is losing with them its ability to know the creative pulses of the places these people inhabit. As larger amounts of population migrate to urban areas, away from nature, the capacity of humans to tune to the "beings" of their native landscapes diminishes as they "forget" that they were at one time organs of those landscapes, like the animal and plant species native to them. Training people to be able to again sense nature can help them to facilitate not only the retrieval of memories fundamental to their sense of belonging to a cohesive group, as I stated before, but also to cultivate a spontaneous care for nature, and with it, greater enthusiasm for designing organic technologies that may in turn become healthy organs of a landscape, not poisonous appendices. The heightened sensitivity

implicit in the Navajo saying "The Great Spirit breathes in the breath of life, and the tracks of that breath becomes our fingerprints," serves for inspiration. Indicating that their nation already knew about the subject of study in hand analysis, their saying suggests that there are traces of the connection between the visible and invisible worlds, which are observable in the human body, as are in the body of the land, and learning to identify them may change our relationship to one another, to nature and to the unseen world.

Results from this on-going discussion suggest that perhaps simple stories, or inviting children to dance and send loving thoughts to the ground with a fully engaged heart may be the type of practices to spark a motivating impulse for positive change. In telling these stories, a fundamental aspect would be to be able to enter the story as we tell it, modeling what the Zuñi Indian do according to Highwater (1981) in his book on the characteristics of the primal mind. Mariela's enthusiastic response informs me that it is possible to enter the story, to live and to feel it so as to become contagious to others. Acting like the poets *fili* or women and men of arts as known in the Irish tradition (Dames, 1992), heart confident and imaginative in the range of artistic tools from which to draw to engage people and teaching others how to do so, could soon become dangerously infectious so as to threaten to turn the terminology used to define the Least-Developed Countries (LDCs) into the Unleashed-Developed Countries (UDCs).6

The bridge-building mission of intrepid women and men of arts is what may be sorely needed for the healing of a twenty-first century with many environmental, social, and political scars. These women and men would be required to travel freely, just like the *fili* did "through tribal areas and across politico-social boundaries" (Dames, 1992, p. 69). Operating at the threshold of categories, at the frontiers of knowledge, they should have a capacity to enter the stories of the people they are encountering. They should draw from their heart intelligence to respectfully accommodate to different cultural situations, using the charm of the performative arts to bring about common understanding.

Envisioning the Scaling-Up of a Bridge-Building Mission

Across Cultures

How to reach a greater audience? How to institutionalize and give wings on a larger scale to a style of work that integrates different ways of thinking and practice, more subtle and perhaps less visible although with potential great impact? How to make its benefit available to more people through an extended circle of influence?

When I explored these creative activities during the project, both with the water story and the creative ritual, I could not name what I was doing and I thought that I was alone. Later, at the end of the project, I found a new field of practice that has been named Social Artistry by its proponent, Jean Houston, PhD., a philosopher, cultural historian, and pioneer in the human development movement, with the purpose to apply its principles and methods in leadership development. The Social Artistry method is rooted in approaching the development of leadership qualities in oneself and others through the enhancement of four domains of the human psyche: the *sensory* or *physical*, the *psychological* or *historical*, the *mythic* or *symbolic*, and the *integral* or *unitive* (Houston, 2003). Each level builds upon the previous one in an expanding-like kind of motion.⁷

During 2002-05 the United Nations Development Program (UNDP) partnered with the International Institute of Social Artistry (IISA) to take social artistry leadership skills to the international development agenda, launching programs in Albania, Kenya, Eastern Caribbean, the Philippines, and Nepal.⁸ The global initiative called *Decentralizing the Millennium Development Goals (MDGs) through Innovative Leadership (DMIL)* was framed within the Decentralized Governance Programme (DGP), and supported by Democratic Governance Group (DGG) and the Bureau for Development Policy (BDP). In the words of Robertson Work, Principal Adviser in the DGP,

As a complement to the technical dimensions of development, DMIL weaves together in a highly experiential manner the MDGs, decentralized governance, culture and leadership thus increasing creativity, innovation, passion and commitment for localizing the MDGs.⁹

Implementation of the program was planned to take place through workshops and a follow-up phase of several years. ranging from five years, in the case of The Philippines, up to a 10-year-long plan of action in the case of Nepal. The response obtained by attendants to the workshop phase indicates that the approach is seen to bring the promise of a new perspective in the understanding and practice of development, one that assigns value to cultural diversity as a core aspect in the attempt to improve the quality of life of societies and countries in need. As an example, in the words of two of attendants to the Nepali workshop: the Minister of Education and Sports, Mr. Radha Krishna Mainali stated, "the training in Social Artistry helps in opening doors to new approaches of thinking in the human lives and society"; and Dr. Yogi Bikasananda's opinion, a Nepali renowned spiritual leader, highlighted the importance of Social Artistry in exploring the internal domain, and the contribution of the training program in linking West and the East. 10

Similarly, policy recommendations that emanated from the workshops point to the need to shift perception, and to open ways to learn from those that have lacked recognition in the development agenda, in the understanding that they may be the principal agents of change for their communities. Some of the questions raised about how to learn from and integrate indigenous peoples' systems of governance and children's and women's views intersect with the contributions I bring through my research findings.

After hearing about Social Artistry, I decided to take some training, aiming to explore how it is related to what I had done. I realized that I had acted very intuitively both in my personal and professional learning journeys during my M.A. studies, very much resembling the description of what a Social Artist is supposed to spark in those places where she/he enters the scene. A capacity to perceive new patterns, new stories emerging from the confluence of past and present stories, and a persistent search for balancing inner and outer dimensions in the approach to solve complex problems are some of the qualities that a Social Artist embodies. As Jean Houston puts it:

The Social Artist is one who brings the focus, perspective, skill training, tireless dedication and fresh vision of the artist to

the social arena. Thus the Social Artist's medium is the human community. She or he seeks innovative solutions to troubling conditions, is a lifelong learner ever hungry for insights, skills, imaginative ideas and deeper understanding of present-day issues (Houston, 2003, p. 5).

Although I did not operate under the umbrella of the Social Artistry methodology, I found myself profiled by the description above. This tells me that, in most cases, having an innovative spirit, a passion for inner and outer exploration, a creative and artistic mind, and a social vocation can be the engine for acting in a way that generates positive change. There must be many people acting at local, national and international levels as Social Artists, without naming themselves or being identified by others as such. Nevertheless, it cannot be underestimated that a group effort organized around the Social Artistry concept could build momentum, and in the process of gradually attracting attention being able to deeply affect decision making in matters of policy development, resource allocation, and advocacy direction.¹¹

Envisioning the Organic Development of a Culture's Soul Psychology

I believe that an increasing number of creative proposals will come out of the shadows, and that although they may originate in different parts of the world or in different disciplines, they will converge in similar areas of interest and/or approaches, as it has happened in my case with Social Artistry. The reason for that may lie in the existence of what biologist Rupert Sheldrake has termed morphic fields of resonance, or said in a simple way, "the influence of like upon like through space and time" (Sheldrake, 1991/1994, p. 111). He has been developing in a series of successive books his hypothesis of formative causation, which can be applied to either natural organisms -from the micro to the macro—or social organisms, also independently of the levels of complexity (Sheldrake, 1981/1995, 1988/1995, 1991/1994). This hypothesis suggests that self-organization occurs because of morphic fields, which are called morphogenetic fields when referring to embryonic processes of development and maintenance in the body of

natural organisms.¹²

We could extrapolate this idea to consider the system comprised of a nation-land as a basic field that conditions how the resulting expression of this association will develop—which will be known as a specific culture with a specific character. Morphic fields would act as fields of possibilities or probability structures for a culture's future path of development. There would be an end goal or morphic attractor to which it would head, meaning its best possibility for a given path of development, which is named chreode in the formative causation hypothesis. Similarly to the way an egg has several possible development paths ahead, each of them conducing to the different attractors that developing different organs would require (like becoming a liver, becoming a heart, or becoming a brain), I suggest it would be of benefit to think in similar organic ways when evaluating possible development pathways for different nations.

As the analysis of the water story and Mariela's reaction suggests, landscape and the culture of a nation are intimately related, a relationship that is mostly registered in traditional stories, rituals and other customs. The cultural expressions of a given nation become an organ of its native landscape, as different plant species of that landscape are too. This is the approach emanating from a Goethean participatory science. When including the hypothesis of formative causation, a reinforcement of such an approach is added. The part of the egg that intends to become a heart would fail in achieving its goal by following the development pathway of, for instance, a lung. In parallel, nations that are organs of a desert-like landscape, rainforest landscape, mountain landscape, valley landscape, and so on, will have to pursue their own different development pathways to succeed in their meaning as organs of their corresponding landscapes. Therefore, the lesson is that development has to be organic and adapted to the best possible development goal according to the peculiarities of a nation or *culture.* The pull towards evolutionary change in a given nation follows then this formative cause, as called by Sheldrake, or generative movement, as called by Goethe, with a best adaptive goal corresponding with the essence of the nation—and one

could also say its life purpose, taking the term from hand analysis.

A culture's soul psychology then, would be determined by its purpose, which in Aristotelian terms would be known as its "entelechy" (from en, meaning 'in', and telos, meaning 'end'" (Sheldrake, 1991/1994, p. 99), referring to what has meaning in itself, also named as the psyche, the soul. This dynamic purpose, this sense of destiny that propels human beings towards transformation and change, should also be considered when working with peoples that state that they have a very concrete self-identity, the indigenous nations. Summing up the idea in one single phrase: If indigenous peoples are supported in pursuing the best expression of their collective cultural selves, development aid will definitely prove that it is able to work anchored in the basis of true democracy, respect to human rights, and social justice.

Inviting water consciousness to broaden perceptions among those who go to foreign places "to help" and those indigenous nations who, because historic cultural oppression and economic dominance, have doubted their own wisdom and know-how, might bring rebalancing of the relationship into more reciprocal terms. An emotional climate change of those implied into the task would preclude lifeaffirming planning and action-taking for development that is accountable to the survival right of children at least seven generations ahead. It would be expected that this opening of the eyes, which could be facilitated by pedagogical experiences engaging artistic cognition and women's leadership, would help those involved in the reciprocal relationship of mutual collaboration to develop proposals for social change that only support the manifestation of a people's entelechy, and not divergence from it.

The Implications of Emotional Climate Change for the Empowerment of Culturally Diverse Inner City Neighborhoods

I have examined so far how the water story inspired a female indigenous leader to remember ancient practices that would help her people reconnect to nature and one another. She felt empowered to design better culturally suited health care programs for her community and raised her awareness about the negative impact of the state public education system on her people, which caused the disappearance of community practices meant for partnering with nature elements and for intergenerational connection through the transfer of knowledge from the elders to the younger.

Could it be far-sighted to predict that similar experiences would be of benefit in urban settings and among culturally and racially diverse neighbourhoods? If so, what part would water and consciousness play in it?

In order to show that culture and partnership rituals with the water element are still deeply engrained in countries considered "developed" and industrialized, I will firstly share the discovery I made about some that take place nowadays in the Western Hemisphere, concretely in Northern Spain. I came across the information synchronically during the days that I was reflecting about rain-calling ceremonies among indigenous peoples, after learning of the Embera tradition that Mariela had recalled while listening to the water story. As part of my research path I was engaged in a cultural connection journey with my country and land of origin. I was born in Badajoz, a town located three kilometres away from the border with Portugal and belonging to the Extremadura Region, Southwest of Spain. The majority of my extended family is still based there. 13

I was looking for similar dances to those performed in my father's village in other regions of Spain when I came to know about rain calling ceremonies in the country. I heard on TV news about the dances honoring Saint Orosia in the towns of Jaca and Yebra de Basa, located in the Aragon Region, far to the North, close to Catalonia. They are conducted also only by men, showing similar ceremonial dresses, dances and musical instruments to those from my father's village, Fregenal de la Sierra, located in the Southern area of Badajoz Province, very close to Seville Province. Although the latter, performed in honor of la Virgen de la Salud-Virgin of Health, are seen by many as having Celtic origins—according to archeological records the surroundings of my father's village are known for the remains of the Southernmost Celtic settlement in the Iberian Peninsula—

another interpretation exists. This would highlight their connection to similar dances performed in Northern Castilia, which would have been brought down to other areas of the Peninsula through the activity of *trashumancia*—seasonal movement of cattle and sheep shepherds in search of fresh pastures.

The traditional festivity of Sta. Orosia is celebrated on June 25 in the mentioned two towns of Aragon Region, which both preserve relics from the saint that is revered. This saint, who for vears was worshiped as the patrona de endemoniados—patroness of those possessed by evil—because of the famed healings including regions of France, was requested for help at this time concerning more worldly matters. The TV news referred to a couple of procesiones—religious parades that had taken place in Yebra de Basa in August 2005 to call for rain, after a long period of drought. The last rogativa de lluvia petition or prayer for rain, performed by locals by bringing the image of the saint out from the church into the streets in a walking prayer had succeeded, as when the people were gathering to return home rain started to fall. As I heard about it, I could not avoid the comparison with cultural practices by indigenous peoples that reflect their deep connection with nature. It was clear that up to present times, rural areas in Europe still maintain oral knowledge and rituals deeply rooted in the connection with nature, and that the more geographically isolated the area, the better preserved are its cultural traditions.

It is understandable therefore that if nature has become accustomed for ages to be in partnership with human societies through cultural and religious practices, that when we forget nature in urban settings nature may respond in rage, despondent for the offense. And this brings us to the raged waters of Hurricane Katrina that flooded New Orleans in 2005.

We own very much to the power that catastrophe has to deeply shake the human heart and imagination. This is represented by one of the aspects of the trickster character in many indigenous cultures, mainly known by its better-humored side. Paul Pearsall, a psychoneuroimmunologist with extensive clinical practice with heart transplant patients and heart attack victims in cardiac rehabilitation, and who has initiated the new

field of *cardio-energetics*, helps us to see how the ability to endure the pain and shock originated by catastrophes may lie in our capacity to have a laughing heart.

He reminds us that a great sense of humor is a very intrinsic heart quality, in balance with the other somber side of the coin, as "cardio-energetics teaches that by letting our heart 'break open' with full immersion in and receptiveness to the catastrophes of life, and laughing freely and openly with others. we can regain an energetic balance" (Pearsall, 1998, p. 202). Drawing from the teachings of Maui, the demigod version of the trickster from his Hawaiian culture, who is "like all of us, part buffoon and part philosopher, partly human and partly divine" (p. 204), he strongly recommends a willing receptivity to the good medicine of the trickster effect in our life any time our expectations are not met, we feel inadequate according to our brain standards or interpret life's catastrophes as disaster. Quite the opposite, Pearsall has learned, both from his clinical experience and his own personal challenge on the edge of life and death during his stay at the hospital intensive care unit after a bone marrow transplant, that catastrophe may be the threshold to a joyous epiphany and liberation from the absurdity of trying to control life. With this understanding, Pearsall comes to support Dr. Kabat-Zinn's posture on catastrophe when the latter invites to interpret it as "awareness" of the 'poignant enormity' of the full experience of the energy that constitutes life" (p. 202).

It could be that the Katrina-provoked catastrophe may have arrived to test the capacity of residents to endure the local trickster's paradoxical sense of humor, forcing them to awake their creative water consciousness and to break open their hearts to a new story, healthier for children and adults alike.

This is what I thought when I read about the innovation taking place in the public education system in New Orleans.

Harvard Business School (HBS) lecturer and senior researcher Stacey M. Childress is tracking the entrepreneurial vision and action that is putting New Orleans as a leader in transforming U.S. public education. She wrote a context case for her MBA students for an elective course called Entrepreneurship in Education Reform, featuring the pre and post-storm

conditions of the public school system and chronicling the changes that the city, state, and federal governments have initiated after Katrina (Gilbert, 2008). The New Orleans public school district was the lowest performing in the state and one of the worst in the country, with approximately a fifty per cent of the schools failing to progress in 2004 according to the federal No Child Left Behind Act. After Katrina. 80 of the total 125 previous schools have reopened, just that this time about half of the 80 are charter schools, being the remaining traditional as before. Although charter schools are public schools they differ from the conventional ones in that they are not subject to the governance and policies of their local schools districts, so they enjoy more autonomy in hiring teachers or developing programs for the identified needs of the students. Their authorizers are usually the state department of education or a university, having their performance evaluated on a five-year contract basis. This implies more pressure for accountability, depending on the willingness of the state department to shut down the school if it falls short of targeted benchmarks. In November 2005, the majority of the schools were taken over by the state, setting the stage for innovation in the educational system, as some teachers and principals responded to the invitation to reopen schools as charters.

Childress became interested in a start-up called New Schools for New Orleans (NSNO), an organization facilitating network of collaboration and mutual support among the new schools, given that their performance depends very much on overcoming isolation and engaging with others in the sharing of resources. This entrepreneurial aspect is what Childress saw that could inspire her students in finding audacious answers for the thought experiment she challenged them with in her elective course—what kind of education system would we build if we had the opportunity to start from scratch?

It would seem that the trickster effect has influenced New Orleans since Katrina, as the paradox of destruction and renewal, or pain and new hope, reflected in the questioning by school leaders on the new educational system they would want to create in the storm's aftermath of destruction. Although it could be argued that innovative thinking and acting needed for

entrepreneurship flourish with the challenges posed by uncertain times and living conditions, and that these were obvious in the post-storm environment, the global environment is more of the same at many levels.

Therefore, why we don't consider initiating other thought experiments in communities, neighborhoods, towns, and cities, around health, education, participation, economy, arts, ecology, or any other subject of concern/interest, without waiting to be swept off in our certainties by a big wave, wind, or fire-as it has happened at the beginning of 2009 in Australia?

Applying disruptive innovation—a concept that was developed by HBS professor Clayton M. Christensen initially for the technology and health care industries (Lagace, 2008) may help, as he and other colleagues are now proving it is happening in the educational field, which expands the understanding of the shifts in the public system affecting the New Orleans district. Disruption as a positive force that brings changes to a highly regulated industry or market that offer complicated services or products is affecting also public education, turning unattractive conditions into opportunities. There are people who would like to have access to what is available but find themselves restricted. Flexibility in curricula design, program development, or teachers' style is what may open doors and rise hope for population segments that so far have felt discriminated against because of understated institutionalized blackmail.

Mostly, it seems to have an impact on students' performance, related to raising their self-esteem, self-confidence, and self-pride, often damaged through a history of discrimination in the case of ethnic or cultural difference. Scaling-up does not have to be a goal or a priority initially, but perhaps a natural consequence of a small experiment. The impact of subtle and simple initiatives is showing to improve test performance of children and teens, as Richard E. Nisbett (2009), professor of psychology at the University of Michigan and author of the book *Intelligence and How to Get It: Why Schools and Cultures Count*, explains. He writes about the findings of diverse psychologists when studying gaps in performance among black and/or Hispanic students as opposed to white ones' scores. They explore concepts related to social

acceptance, stereotype threat, or assessment methods, coming to interesting conclusions that point to needed changes, without requiring big investment. Students proved that they could fill in those performance gaps when they were told that their intelligence is under their control through classes on brain research, when they were consulted on the future they would like to have and the resources they would like to gather to face anticipated obstacles, when invited to write on their most important values, or when they could show knowledge through a puzzle instead of a test of academic achievement. Also, he states that what is coming to be known as the "Obama effect" is based on similar considerations, as a still unpublished study has found out how African-American adults performed worse than the whites when tested on verbal comprehension questions of the Graduate Record Examination before the presidential election, while the scores of those tested immediately afterward were almost as high as the scores of the white students.

Creative solutions to problems may lie in turning from a discursive way of thinking, that categorizes and judges through the notions of "either or" or "black" and "white," to a disruptive way of thinking, similar to the disruptive power of water that came to alter the limited perceptions of New Orleans' school leaders, promoting educational reform through their entrepreneurial thinking.

Conclusion

The greatest innovation we could wish from the local to the global would be perceptual. As exposed so far, water and consciousness would have much to say in the shift. Women's way of knowing and communicating, more emotionally receptive and supportive of relationship building and caring should be given more institutional support to lead the way toward innovation. Relational empowerment, nevertheless, is something available to men alike, given proper nurturance and vocational calling to service-oriented leadership. Men—either teachers, psychologists, or business academics, who take time to explore imaginative innovation that enhances life and the well being of people, and especially of children and youth, deserve all

the support in their contribution to the emotional climate change revolution. I foresee that this can happen from the green to the concrete jungles that we inhabit, if we build upon the present momentum that natural and man-made challenging circumstances have created.

Ultimately, no categorization as indigenous, black, Hispanic, woman, or man, must distract us from our responsibility to be active co-creators of the kind of life and services we would like to have in our societies. We are all indigenous to this planet and trusting in our heart as the keeper of our universal indigenous roots may open the door to a more organic approach to deal with global environmental and social problems. As an Apache elder once told to Dr. Pearsall concerning the ancient energy carried by the heart's code:

Those in the Western world often forget that they too are indigenous peoples with roots to their original land and ties to their ancient ancestors' wisdom. The modern rational brain can also learn to think with its indigenous spiritual heart (Pearsall, 1998, p. 10).

The new story that we may want to choose to transmit to the next generations depends on our ability to identify, focus, and foster those approaches in science and indigenous knowledge that are based in partnership with nature. The UN Decade of Education for Sustainable Development (DESD),14 December 2002 for 2005-2014, provides adopted in institutional and political support at the international level for innovation in education. Its founding value is respect and its challenge to find new behaviors and practices that secure our future in a sustainable way. It embraces terms dismissed by traditional education, such as interdisciplinary, holistic, creative, participatory, and value-based learning, which offer the opportunity for curricula and program development that integrate cultural differences in ways of knowing and learning.

On the other hand, the Goethean approach, as a participatory science of qualities, does not clash with native science, but rather can provide an opportunity for mutual support in negotiating summits around the world that deal with climate, food, water, and economic crisis. As Goethe would say, the ultimate test of truth that decisions at those round tables

must pass is that they are fruitful, that is, that they support life and health of humanity as a whole.

Notes

- ¹ More information can be found in one of Masaru Emoto's web sites. Retrieved May 13, 2006, from http://www.hado.net/hado_introduction.html
- ² Photographs of the water crystals can be seen in this website. Retrieved May 13, 2006, from http://www.hado.net/gallery.html
- ³ Hand analysis, as approached in The International Institute of Hand Analysis (IIHA), draws from the ancient palmistry tradition of many cultures plus scientific knowledge derived from dermatoglyphics (dermato=skin, glyphics=carvings), or the science of fingerprint analysis as was named by Harold Cummins, M.D. in 1926 in the field of medicine, after having added the study of embryology to the knowledge that had been already applied in anthropology and genetics. At the IIH they interpret the changeable aspects of the personality through the study of the line formations and comparative shapes of the hands. These features are alterable, but not the fingerprints, which are marked five months prior to birth and remain the same during a person's life. A person's soul purpose would be encoded in the topographic map of the fingerprints, as they reveal a connection to something larger than the conscious self. It would reveal, according to the hand analysis system of the IIHA, a person's life purpose or highest self-actualizing possibility, which goes beyond personality, character or temperament, and perhaps is not as obvious as a strength or attribute, but nevertheless essential for a person' fulfillment. Retrieved December 10, 2005, from http://www.handanalysis. net/
- ⁴ Idea taken from the concept of a Social Artist as the preserver of the genius of a culture as she/he helps it to move into a new story. Retrieved December 19, 2005, from http://www.socialartistry.com/dearfriends.html
- ⁵ Retrieved December 5, 2005, from http://www.handanalysis.net/about/ about handanalysis.htm#lp
- ⁶ The Least-Developed Countries (LDCs) constitute a well-defined target group

in the United Nations system. From twenty-four countries in the original list in 1971 they passed to be forty-nine by 1998. They account for about just over 10 percent of the world population, and just over 13 percent in developing countries. Further criteria to determine the inclusion of a country on the list have been added over the years, but in the beginning, three were required: per capita Gross Domestic Product (GDP) of \$ 100 or less per annum, in 1968 dollars; 10 percent or less of manufacturing in the GDP; and 20 percent or less of adult literacy. (Jolly, Emmerij, Ghai, & Lapeyre, 2004).

⁷ The sensory level honors information gathered through enhanced senses, and looks to increase the awareness of the body, of energy levels, and of the relationship between surroundings and physical needs for wellbeing. The second level attends to psychological behavior built upon personal and cultural history, and pays attention to new scientific breakthroughs in mind research, evolutionary biology and other fields that may expand the knowledge of human psychological development. The mythic domain goes still to a deeper layer of the psyche, to the pool of stories, myths, religions, and symbols that inform the belief system of a person or a collective. And finally, the diversity of influences that inform previous levels are conducted through the unitive level to a sense of interconnectedness with different aspects of oneself and others, cultivating a sense of identity that feels integrated in the reality of a larger frame of reference.

⁸ http://www.jeanhoustonfoundation.org/partners.aspx

- ⁹ Work, R. (personal communication, August 12, 2005). Philippines mission report on *Decentralizing the MDGs through Innovative Leadership (DMIL)*. July 6-21, 2005, The Philippines.
- Personal communication from Tatwa Timsina, representative from the Institute of Cultural Affairs (ICA) in Nepal, and trainee in Social Artistry, reporting on the results from the workshop in Nepal.
- From 2008 the concept and practice of Social Artistry is being promoted through the Jean Houston Foundation (http://www.jeanhoustonfoundation.org/)
- ¹² There are some fields, or "non-material regions of influence" (Sheldrake, 1988/1995, p. 97) that we are more familiar with, i.e., the gravitational, the electro-magnetic, or the microscopic force between particles (quantum

- matter). Although we are less familiar with morphogenetic fields, all of them are real. In living systems, the field is a condition that determines its self-organizing abilities and how the formation that will result out of it will be.
- 13 My region, Extremadura (extrema=extreme, dura=harsh), emerged under Muslim rule as a frontier with the Christian society at al tagr al-yawfi, or the Northern frontier of al-Andalus (Andalusia nowadays). Its size would be reduced in favor of the kingdoms of Portugal, Leon and Castilia, the people unfolding their lives, customs, and economy, in the middle of constant war. Thus, the people of Extremadura are the people from the frontier, resilient through the ages, without an awareness of nation, as are the Basque, the Catalonian, or the Gallician. However, in Pliny and Estrabon's chronicles, the original settlers of what would later become Extremadura appear as fierce and proud. Shepherds and cattlemen who resisted the Roman domination for a long time were deeply attuned to the rhythm of the seasons as they moved with their flocks and herds between mountaintops and valleys searching for fresh pastures. At that time, their basic diet was composed of grilled meat, a pancake from *bellota* flour—the fruit from the *encina*, the oak tree, a beer-like drink, zythos, and the blood of their horses. Thus, I would say that without a traditional political identity in Extremadura, its people have been rather marked by a strong connection to the land and its natural resources. Nowadays it remains very rural, its people quite resilient, tranquil, patient, probably still holding the sense of being at the frontier, because "important" things happen outside its limits.
- ¹⁴ Retrieved March 10, 2009, from http://portal.unesco.org/education/en/ev.php-URL ID=23279&URL DO=DO TOPIC&URL SECTION=201.html

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About the Author

Rosario Galvan Torres holds a Master's Degree and is a graduate of the Center for World Indigenous Studies Certificate/Masters program. Ms. Torres is originally from the province of Extra-Madura. Spain where she maintains close contact with her family. She has conducted her work in environmental assessment primarily in the Republic of Panama. She graduated in 2006 with a MA degree in Independent Study upon the presentation of a thesis titled: Bridging the City and the Jungle: A Narrative of a Personal and Professional Journey Toward the Twining of Culture and Development Using an Integrative Approach that Draws from Indigenous and Women's perspectives. She undertook a cross-disciplinary literature review including, among others, the following fields: development, environmental science. economics and anthropology. cross-cultural communication in international relations, participatory science, indigenous epistemologies, energy cardiology, Fourth World studies, women's psychology, and international business. From ethnographic research among the Embera-Wounaan indigenous people of Panama and narrative analysis she developed three case studies out of which she presented an integrative model for cross-cultural engagement that may be of interest not just to the development field but to others such as conflict resolution and peace building, cultural diplomacy, corporate citizenship, environmental education/health, international negotiation, security. organizational leadership, and global management. This paper was built upon one of her thesis' case studies, focused in a jungle setting, expanding its application to culturally diverse urban contexts.