Reflections on Humans, Nature and Education:

Prologue by Jorge Conesa-Sevilla

In the mid 1980s, while attending Humboldt State University, I took courses from deep ecologist Bill Devall and had the privilege of stopping by his office and asking him questions that formed the basis of my own "ecosophy." I also lived in Trinidad, California. There, from time to time, I would bump into Bill walking on a trail we both shared. Bill's recent passing was personal. With his passing, I mourned uncountable opportunities, never realized, to have sat down with him to compare notes on nascent and established ideas—a patient and correcting soundboard.

After the deaths of Arne Naess and Bill Duvall, thus, a sense of urgency overcame me and prompted me to gather a series of writings—these interviews—from other founders or well—known writers in ecosophy, deep ecology, ecosemiotics, and other areas. Similar to the impending realization that the last few remaining shamans are the depositories of knowledge they themselves have gathered over a lifetime of experiences, I thought about a list of questions (sadly, never inclusive) that would serve as an inspiring and guiding oracle for younger writers, researchers, and activists. In the autumn of my own professional life, I feel a strong need to alert a new generation to the wisdom that already exists so that they do not reinvent the proverbial wheel.

A relevant sideline: because I write about ecosemiotics and ecopsychology, I had the privilege of, while working in Switzerland, to sit down over lunch with well-known psychologist and semiotician Dr. Alfred Lang. It is this memorable (for me) experience that I have used to model these interviews after. Namely, Professor Lang went on to describe the shortcomings of psychology in being slow in realizing (implementing) semiotics (or, for example, continuing the semiotics of J. Lacan). These important conversational tangents helped me realize the work I still needed to undertake within my profession.

Some of the individuals contacted for this project know each other or know of each other. Some have corresponded with one another, shared meals, and have exchanged enviable moments where they partook of each other's company,

charity, and wisdom. However, they are also individuals who have their own views about the issues and questions I posed for them.

Because I am a teacher and a writer I crafted the questions hoping to elicit specific responses that dealt with the experiences that shaped the thinking of the chosen wise men and women. I thank Michael Caley for helping me to hone these questions in their final form. These questions, in addition to being field specific, seek basic formative knowledge that could reveal something about the ontogeny of these individuals who have done so much for so many. The people selected received these questions in writing and had the opportunity to sit down and reflect before answering them. Reflective writers that they are, they took their time to answer and return them to me. They are published without added commentaries (mine) because they speak for themselves. Some of the questions overlap somewhat, and they act as follow up devices seeking further clarification.

Their responses, lengthy or pithy (a reflection of their own voices), were beyond my expectations. As I first read them, and now once again, I experienced a sense of intimacy as if I had sat down and partaken of their immediate company. Then, I was amazed by how much I did not know about them: as professionals or individuals developing during the course of a lifetime to be the distinguished and caring persons they are today.

I am very grateful for their time, for having shared these experiences and thoughts with us. I hope the readers will find in their words an invaluable source of biographical information to be sure, but also more: the "spirit" of great hearts on their way to self-actualization—a "self" actualized by "nature."

Florence Shepard

1. What people, works, and specific ideas (introduced to you for the first time) increased your awareness about environmental/ecological problems (with possible solutions)?

Answer: My first awakening to ecological relationships came in the early 60s at the Audubon Camp of the West in the Wind River Mountains in Wyoming when I was in my mid-thirties. I had been teaching general science in our small town for several years and had just moved to a biology position and needed teaching recertification credit, which was offered at the camp.

I had been raised close to nature on a sheep ranch in southwestern Wyoming. My father was an immigrant from the Austrian Tyrol and my mother, the daughter of immigrants from the Piedmont region of Italy. About a decade after my parents married and just before the Great Depression hit, with their savings and some loans, they purchased a sheep ranch on the Hamsfork River in Southwestern Wyoming. I was three when we moved there. My early childhood was idyllic in terms of being close to nature. As a young child, I spent summer days playing along an old oxbow, teeming with life; in the winter I explored the log house and the snowdrifts surrounding it, always within reach of my mother's voice.

The value of property and livestock plummeted following the crash, so during my childhood and youth we lived in the shadow of our indebtedness. As we grew older, my two sisters and I participated in the working ranch under the tutelage of parents with high expectation for us to perform tasks well and to completion. I was honed in an environment of hard work and to this day find the greatest joy in active involvement in making a life. Although my parents appreciated the aesthetics of the natural world, their view was clouded by the utilitarian necessity of subsisting, making a living and paying the debt on the ranch. And this became my vision as well. Although I majored in zoology as an undergraduate, it was primarily pre-medicine preparation with emphasis on physiology, anatomy and taxonomy rather than relationships of organisms to the environment.

At the Audubon camp, the instructors and their methods of teaching the natural history of the ecosystems, epitomized the kind of teacher I wanted to become. The participants in the camp for the most part were activists from all parts of the country with environmental issues always on their minds. Their appreciation of the intricacies of every flower, the markings of every bird, an understanding of the interdependence of all creatures impressed me profoundly. The total experience of the camp ushered me into the environmental milieu of the 60s and reawakened my love and interest in nature that had slumbered since childhood.

2. What training and degrees did you obtain to expand and clarify these interests?

Answer: That two-week course at the Audubon Camp of the West set a new direction in my life. I realized that to teach as these instructors were teaching I would have to increase my knowledge. At the time, the National Science Foundation (NSF) had initiated a series of programs aimed at improving the teaching of science in high schools. I applied for and received an NSF scholarship to study at Washington State University. With my four young children and baby sitter in tow, I attended summer school for the next years and earned a masters degree.

The program suited me perfectly, rectifying my deficiencies and enhancing my interests. Three outstanding teachers, Dr. Rexford Daubenmire, a plant ecologist; Dr. David Rahm, a masterful teacher of geomorphology; and Dr. Harvey Miller, a botanist and chair of my program, through their excellent courses and instruction, extended and strengthened my understanding of the whole of nature.

After returning home each summer, on camping forays with my family, with field guides in hand, I studied the sagebrush steppe that had always been my home. Before I began teaching each fall, I revised my biology curriculum using what I had learned that summer and with special attention to the careful critique I had written the previous year at the end of each unit of study. My aim with revisions was to design a course for students that was place and experientially based.

3. Would you recommend that students undertake similar career paths?

Answer: I do not recommend my career path as it was mostly improvised out of necessity and was very tortuous. Especially for teachers, a broad educational foundation in both the sciences and humanities is important. Teachers also need well-developed skills in communication, both written and oral and appreciation of the arts. I had a foundation in science but little else.

Ideally such education would begin for each person in childhood and youth in

educational experiences that are grounded in community. Individualized instruction has been greatly over-rated. What is needed is education that does not place the individual over the group, but emphasizes the competence of each person as they contribute to and function within a group.

A recent topic that has been resurrected and holds much promise in revitalizing place-based studies is the study of the cultural and educational commons, the resources and ideas that all people hold in common that are not a commodity; that is, cannot be bought or sold, but are the basis for civil life on Earth—for example, soil, water, air and scientific knowledge about life, including our own bodies.

4. What specific projects did you undertake that changed the way you presented scientific ideas to students and colleagues?

Answer: With the help of federal agency scientists in the area, I developed an area near the high school as an outdoor laboratory for my biology classes. It was an over-grazed bull pasture with a little spring and was adjacent to the school. I convinced the school board to buy the land and with a small grant, I provided workshops and field equipment for the elementary teachers who took to the outdoor activities like ducks to water. At the end of my teaching there, all grades K-12 were using the outdoor lab. Since that time, more schools have been built around the outdoor laboratory. Forty years after having been established, fenced and protected from grazing, it is a lush and vibrant habitat accessible to the schools.

5. When and why (e.g. triggered perhaps by a specific event, personal relationship, watershed publication or political situation) did you become involved in pro-environmental causes?

Answer: During midlife, from 1958-72 when I was 32-46 years of age, two streams of transformation occurred in my life. My growth in ecological consciousness was coupled with increased knowledge of self, my motivations as well limitations. While I was creating a field-based high school biology curriculum, I was also undergoing spiritual and emotional changes.

Since high school I had been a devout Catholic and followed the letter of

doctrine. Early on I recognized problems with my marriage but convinced myself that with prayer and following my faith, I could overcome these difficulties. A combination of post-partum depression, following four consecutive births, and the growing realization of the problems I faced led to a psychological meltdown—called "nervous breakdown" in those days. With poor medical attention in the small community and deepening problems, I consulted a psychiatrist in Salt Lake City, 125 miles from our small town, which mitigated against seeing him frequently. But on one visit as I was leaving, he handed me a book with this advice:

"Flo, you should really look into the field of ecology."

The book he gave me was Marston Bates's The Forest and the Sea. Loren Eisley had written the introduction to the book and this led me to his Immense Journey. It was during this time that I found a brochure on the Audubon Camp of the West and applied for their summer program. My roommate, noticing that I went hiking rather than spending quiet time after lunch, gave me Gavin Maxwell's Ring of Bright Water with the mandate to lie down, rest and read the book during our rest time. At the camp through the courses, I was also introduced to Aldo Leopold's Sand County Almanac and the environmental literature of the day on population control and ecosystem and bioregional perspectives.

During the following school year, a colleague gave me Teilhard de Chardin's The Phenomenon of Man that bridged the gap between science and religion for me. The reading of that book I remember as something like aboriginal dreamtime because of the tremendous psychological impact it had on me.

In 1969 after tumultuous but exciting psychological and intellectual years, with three teen-age children (by that time my older daughter had married), I left husband, home and church and, with a teaching fellowship, began my doctoral studies at the University of Utah. I decided to concentrate my studies in education rather than in ecology since I found teaching, which I had first explored out of financial necessity, to be an exciting and rewarding profession. During my doctoral studies in addition to educational philosophy and the plethora of books on educational reform (this was the time when open classrooms and alternative education modes were being explored) I continued

improving my science background with courses in ornithology, animal ethology and plant geography.

During the next summers, during my doctoral studies and after being appointed an assistant professor at the University, I returned to the Audubon Camp as an instructor. At this point I had also begun taking an active part in environmental causes.

As president of the local Audubon Society, I addressed ecological concerns at public hearings during various environmental reviews, from wilderness designation, to hunting permits, to building power plants. I also served on advisory boards for the Governor, the United States Forest Service and the Bureau of Land Management.

My efforts in teaching were directed toward environmental education and alternative education. I develop a 5-credit field course in environmental education offered each spring. In it students chose a region for study and, divided into teams, researched the geophysical, biotic and cultural history as well as the current environmental problems of our study area. Classes were devoted to instructing them on general principles of ecology and nature study. The course ended with an extended camp-out of the region during which the students instructed each other in the aspect they had chosen for study. Students together developed a final group project such as curriculum guides for teachers for the area they had researched with appropriate environmental educational activities. When the area was being considered for wilderness designation, students would make statements at environmental impact hearings. I also offered graduate seminars each quarter on environmental issues and thought during which we delved into the writings of environmentalists including those of Paul Shepard.

In response to the empathy I felt toward alienated students at a high school that I visited with my education students, I began an alternative education program for disaffected students at that school. With the success of this program, I helped establish alternative education programs in junior high and high schools in the area.

An integral part of these alternative classrooms was environmental studies. Teachers working on their masters often chose some aspect of environmental education as the topic of their final papers or theses.

6. Related to the previous questions, were there any watershed moments during your professional career when you came to understand key (environmental/ecological/eco-psychological/eco-social) issues in a new light? Could you share some of these insights.

Answer: A watershed moment occurred one summer after sessions at the Audubon Camp had ended. Two of my friends and colleagues, two of my children and I hiked over the top of the Wind River Mountains to Green River Lakes on the other side. At the time there were no distinct trails over this vast expanse of wilderness. The top at 12,000 feet of elevation was strewn with frost-shattered rocks that once were formed on the floor of a great inland sea. Black rosy finches and horned larks were gathering for migration. Small flocks of mountain sheep grazed on alpine grasses and flowers. Picas were gathering hay for their winter stay. In this so-called marginal habitat, the wild animals and plants were making it on their own without any assistance from humans. Here before me was the culmination of undisturbed evolution at this particular place in time. I was stunned by the congruence of wild nature and value of wilderness. From that experience forward I have advocated the protection of wild nature and wilderness.

7. Why did you choose to be an educator-a writer?

Answer: I entered teaching out of necessity when I had to seek employment because of my husband's illness and disability. I lived in a small town in Wyoming where there was no opportunity for work in physical therapy for which I had been trained and certified. Since I had no formal training in education, I found teaching difficult but also more challenging and rewarding than anything I had ever experienced. I became committed to it as a profession.

After completing my PhD, I began writing personal narrative, describing my experiences in nature with students. Student journaling and writing became an intrinsic part of my courses and I used my essays as readings and examples for students. I wanted them to examine their own learning and learning experiences and encouraged graduate students to use personal narrative in

writing their final practica, theses and dissertations.

I began presenting my own environmental "journeys" at a curriculum theorizing conference I attended yearly. Dr. William Pinar, who organized these conferences, supported my method and subject and published my essays in his journal and later in his books.

8. Human psychology (the way we relate, perceive, feel, and think about the world and other people) seems to be a central concern or scientific interest as we unravel the complexities of human-made environmental and ecological challenges. What areas of psychology do you deem more important (relevant) in addressing these challenges?

Answer: I had no formal background in psychology but developed an eclectic approach from many areas that I found helpful. During the 70s when I began college teaching, my department was very involved in intellectual, moral and interpersonal development theories and I became familiar with the work of Lawrence Kohlberg, Carol Gilligan and Robert Selman, and the theories of Piaget and Erikson. In the open, alternative classrooms I used interpersonal communication applications of Abraham Maslow, Rollo May and Carl Rogers. I was also impressed with the contemporary critics of education and society by Erich Fromm, Edgar Friedenberg, Herbert Kohl, John Holt, Paul Goodman, Neil Postman and Charles Weingartner and especially with the social criticism of Ivan Illich and Paulo Friere, whose book Pedagogy of the Oppressed very much influenced the way I organized the open classroom. Paul Shepard's books on human ecology, his critique of our modern society and his application of attachment theory also guided my program development. I was fortunate to team and work with a colleague, Ladd Holt, who held a degree in psychology and taught me much about interpersonal interaction and communication. Merleau-Ponty's existential philosophy helped me understand more deeply my experiences in nature.

9. What is your opinion about "eco-psychology" (loosely defined) as a means for addressing and gaining some understanding of these issues?

Answer: Paul Shepard's Nature and Madness, which is accepted as an "eco-psychological" approach to child development, as well as his Coming Home to

the Pleistocene, which emphasizes our evolutionary attachment to nature, have helped me appreciate our primal ties to nature. His books, my relationship with him, and my work after his death preparing his archives held at Yale University and editing his last books solidified my thinking about child as well as life-long development in nature-based communities. As Paul said, humans evolved close to nature and are genetically tuned to the Earth and its creatures. I believe there is no better therapeutic or learning environment than the natural environment for us "Thinking Animals."

10. What obstacles, barriers did you encounter while becoming a professional "environmentalist"?

Answer: I often found it difficult to explain to my colleagues exactly what environmental education was or what I was doing. As a result I felt a bit outside the norm. Because I was a good teacher, worked hard, and received good ratings by students, neither the content of my courses nor my methods of instruction were seriously contested or considered. After sponsoring a fundraiser for the Utah Wilderness Society at the University at which Edward Abbey and Barry Lopez were guest speakers, I was called into the Dean's office because of complaints received from State Legislators. This did not lead to any dire repercussions and I continued with my environmental activities with students as I have described above.

10. In your opinion, does "eco-psychology" need to be rooted in evolutionary (natural) science for it to be a credible branch of Human Ecology?

Answer: As Paul did, I believe that humans co-evolved with other species on Earth as a part of nature. This is quite different than believing that we and other creatures and the natural gifts of the Earth were created by a supreme being. However, I do think that creationists can also see the benefit of living their lives close to nature and of being wise stewards of these gifts. I do not think that ideology about origins should mitigate against living non-consumptive ecological lives.

11. New terminology, such as Nature Deficit Disorder (NDD), has been proposed to describe the consequences (neurotic or psychotic) of personally or collectively disengaging from natural processes, rhythms, and activities. Is this

a useful concept and apt description of the behaviors that you have observed?

Answer: In our world today, naming things seems important and so the phrase has taken hold although there really may not be any such disorder. That is not to deny that alienation from nature and addiction to technological gadgets may cause many kinds of mental and physical problems in children and adults. I think the important thing is that the term and the "Children and Nature" programs have made people more conscious of the serious problems faced by our children today in our technological society.

Some very good research has gone into the "Children and Nature" programs. However, teachers and parents with little understanding of the natural world sometimes take it as a panacea. A naïve approach that proposes that our modern problems are solved merely by taking children for a walk in the woods falls short of what they need. What is as important as this introduction to young children is the mentoring of children from birth to adulthood by adults who understand that young children must play freely in natural settings where they may experience "flow time," moments of childhood meditation; that as they grow, they must progressively have more experiences in nature that teach them the complexities of interrelationships of living and non-living components of their environment; and, as adolescents that they have as mentors, models who understand the importance of challenges, adventures and support for youth as they mature into adults. It is my belief that too much attention on individual learning may thwart the development of empathy and that in age-appropriate experiences in nature the idea and experience of community must be paramount.

12. Could you share the names (if appropriate) of your students who have gone on to become significant figures in their own right, as nature writers, social activists, environmentalists, etc.—anything you would like to share about them (things that they would not mind you sharing about them: what they were like in school, their interests, etc.) What have these students taught you in return?

Answer: Many of my students have gone on to live good and productive lives, in many different ways. I hesitate to give examples because I don't feel directly responsible for their successes. Most of the students who have become successful or famous came to me endowed with special gifts. Some have

achieved great success but many others now live ecological and socially-conscious lives. If I did anything for them it was to reinforce the goodness and talent that was in them. In every case I learned more from them than they from me.

13. Looking back and into the future, in your opinion, what is the likelihood that humanity (individuals, societies, governments, scientists) could solve dire environmental, ecological, and population problems before these processes (globally and locally) reach a significant threshold, a "point of no return"? (Please, identify specific and immediate steps that must be taken to turn things around.)

Answer: Here at my cabin on the sagebrush steppe of Wyoming, looking out at magnificent mountains encircling this basin, I cannot be pessimistic about life on Earth. The turning toward autumn has already begun: ranchers are putting up hay for the winter; the grasses and willows are beginning to show the touch of autumn. The season of growth has ended but after a long, cold winter, spring and rebirth will again return.

Using the cycle of nature's seasons as a guide, I refuse to be down-hearted about out national and global, societal and environmental, problems. Paul himself warned that the Earth's ecosystems have been in crisis since the turn of the last century. I am not in denial that the situation is dire but I know that in my own way I can make a difference by:

• making constant changes in my lifestyle to make it less consumptive and more

ecological and sustainable;

- helping my family, friends, and neighbors in their times of need;
- contributing funds to the welfare of others in need far removed from me;
- practicing democracy by speaking out and becoming involved in the protection of

the commons,

- maintaining good health and welfare so as not to be a burden on others.
- enjoying each day to the utmost shared with others and close to nature.

I have great faith in the goodness of ordinary people who themselves can make

a significant difference in the world. I changed my entire way of being in the world after my experience with people with a sincere love for the Earth and know that others are also capable of this transformation. I do think that ecopsychology, however it is defined—as the understanding of our deep affinity for the natural world, the source of our being, as a general educational goal—can help misguided humans to revise their life plans to make them sustainable and in harmony with life on Earth.

14. If relevant, how does your "spirituality" (loosely defined) inform your environmentalism?

Answer: My spirituality is very loosely defined but does inform my life. I believe in the great power that infuses the natural world of which we are a part. I know that this power goes beyond the matter out of which the Earth and its creatures are made. I have faith in this great mystery that will somehow sustain life and spirit on this Earth and perhaps on others where life may now be evolving.

15. Why is it so easy to swat and kill a mosquito-without remorse?

Answer: It's a part of our cultural learning that they are harmful and lesser beings than ourselves. We have never been taught that the mosquito also has a right to live and itself helps sustain other lives. In India in the bush with forest people and scientists, I did not see a person swat a mosquito; they merely brushed them away. Perhaps in time, this trigger response in us will pass.