**Introduction**

During the past three decades, discussion of our planetary environment has been circulating around the world with increasing rapidity. The public shape of the problem has shifted from a diverse set of views about the biosphere to a coherent, globally acknowledged single point: Human activity is significantly changing the planet’s climate, putting our species and others at risk.

The solutions to the problem of climate change, the institutions of change, the interest groups participating and the intellectual climate all fluctuate while myriad uncoordinated actions have been set in motion. This incremental progress changes the relationship of humanity to the planet and determines whether the humanist power structures, with their drive to protect humanity from nature, will retain their hegemony in the new age that is being forced upon us. The essays and poems in this book are part of that process. They attempt to show different ways that people might effectively change their relationship to themselves, to each other and to nature, and how poetry can be a useful part of that change.

The solutions to reduce the effects of climate change are fairly well understood and don’t need poetic assistance. Numerous scientific solutions are being explored and sorted. The political framework to implement them is active in both wealthy and poor countries, in both totalitarian and democratic regimes. But somehow the will wilts. Resistance to change from a fire-based economy blocks alternatives in Brazil, China, India, the US, Europe, and elsewhere. Everybody’s got an excuse to avoid change and change itself has significant risks. At the root of this resistance, the lack of a broadly based functional environmental culture looms. Such a culture needs to build the will to change, provide dynamic mechanisms for change and address its risks.

In the US, vested interests trump up an amazing list of justifications from treating environmentalism as an attack on personal freedom to the false assumptions of how remediation drains corporate profits. In China even the man on the street suggests that developed countries had cheap, polluting growth for 150 years; why can’t they do the same? In Brazil, the landholders simply go on destroying their greatest heritage. The list goes on and on.

Highly productive individuals and their group formations such as corporations and religions agree about the risk to power of integrating humanity into the rest of the biosphere. Their shared assumptions means no conspiracy required. First, they have been so successful at dominating nearly every condition that society presents. Why should they give up those hard won gains against their surroundings and in dominating the multitudes of humans?

Second, the individual organism’s survival instinct and its effect on the ego reinforce the notion of human exceptionalism. And there’s every reason to privilege our species. The conflict between individual survival and evolutionary support for group interests impedes the integration between human culture and other planetary forces that is necessary for us to avoid destroying our charitable climate. What changes of thought, practice and beliefs need to take place in order to overcome this conflict?

Third, the immediate perception of our immense ability to think reflectively implies in all cultures that we have better control over ourselves than other species. While we have effectively manipulated our environment to a large degree, we have done so in concert with the tropism toward individual survival. We now have to exert control over ourselves in a way that is more focused on group and species survival. The way we think about ourselves extends to almost all human cultural features, not only the
top tier of individuals and groups. How with all these features of human mind can we encourage greater collective awareness, collective as humans and collective as living entities? How with these mental skills that have allowed us to control much of our environment can we exert this kind of group control and retain the freedoms that we have worked so hard to achieve?

Human resistance does not reflect a failure of political systems, although there is much to repair in that arena. Resistance is not caused by a lack of scientific solutions, although many obvious inventions are not yet scalable. We lack a culture to provide the will to change in the right direction. Writing these essays has emerged as a way to point to conflicts that need to be overcome and to illustrate the characteristics and structure of such an environmental culture.

Oops! is not an effort at cultural studies but a loose construction of examples, tools and methods by which a contemporary model that includes nature and humanity as a single complex entity can be built. Combining concepts of environmental thinking, changed perceptions of social structure, cross disciplinary methods, new forms of writing and creating works of art, music, and electronic media all contribute to shaping environmental change.

My reasons for choosing poetry are sketched herein as a theme, as examples and as form. The theme of poetry’s contemporary epistemological value frees it from many of the restrictions of more successful disciplines. Truly convincing people of the need to change and the paths to follow must, however, engage the entire cultural apparatus and identify integration points with scientific solutions and social structures.

When I started writing about the environmental model of poetry, I composed extended essays and poems around the subject. For several years I worked on them, on and off, never satisfied with the results. Finally, I hit on the reason for my dissatisfaction. I was writing about the subject, but I had no structure that fit the theme. Consequently, I began to write in short, niche-like forms that never answer questions completely but always leave them open, to be answered by a subsequent piece—a kind of structure that conditions continuity, works by environmental interdependence and reflects how we grasp most complex systems. I hope readers will collectively connect the dots, finding a literary ecosystem composed of short niches and thus focus a view consistent with how reality is constructed.

These essays have been built over time and in parts that are intended to be both linked and independent. I intend them to operate together as an ecosystem that is sufficiently complete, as our planet is heterogeneous but complete (that is it works) for a reader with raw curiosity to plow through the themes, both new and recurrent, without the usual narrative structure. Critics have suggested that I write the poems and essays together as a single argument with narrative flow to match. While such an approach is possible, it feels to me against the grain of my central argument to chart a single path through the multitude of issues, solutions and forms as if history occurred as it is read.

Together these chapters add to the growing number of tools that change the way we think about ourselves and our surroundings, to level the playing field between human and non-human nature and to encourage a view of the biosphere that is not simply looking backward to a natural pietism that reveres nature regardless of the results and extols its virtues in our writings. We need to more fully incorporate ourselves into the biosphere while giving up as few of the advantages accrued by civilization as possible. It will be an iterative and delicate process. The results are unpredictable.
I titled the book Oops! for those who have noticed their willful or inadvertent damages to the planetary environment. But guilt is not the appropriate response of those who have damaged nature (and ourselves as part of nature) or complicated the epistemological landscape with self-serving rationalizations. Neither does guilt help us redress past errors. Rather, guilt is the response that the "judges" of the ecology movement want from their incorporated loco parenti—the state—and from us, the citizens.

As judges they cannot be ignored, since they do and will have a wide influence. Yet guilt must be discounted as a way to inform our environmental point of view. Redress must take the form of change, not iterative punishment. We seek restorative not retributive justice. Those who might wish for some mea culpa from me can well forget it. History is the court of our collective anxiety. And the cause of global warming is desire.

I have chosen this path to understanding the planetary environment and how we fit into it because of an ongoing impression. One of the reasons for our difficulty in understanding poetry, much less understanding the environment and our place in it, is that one way of thinking frequently is separated from another, undermining the functional links between individuals. The weakness of these connections implies that the poet is not a person like the reader and that the poet stands alone and apart. In fact, and I will address this at several points in the essays that follow, the opposite is true.

Poetry is the role of an individual that is shared by others in the same role. When one takes the role of poet, one is part of a group with common affiliations and needs. Communication takes place among people who understand one another. Further, if we understand a poem, then the poet who wrote it is part of our community of comprehension. Poets are also connected to one another by individual poems that they respond to and through social interaction in the poetry world.

Yet in our contemporary view of knowledge things are defined primarily by their differences. A culture of difference has extended throughout the arts and sciences for centuries and will be difficult to change also because our minds are quicker to pick out differences; it's a matter of survival. But art and science can also provide the tools to assess both differences and similarities. They can ameliorate many social ills while clearly pointing up the risks and benefits of weak connections such as the construction of this writing.

The points of view I've taken may be difficult to reconcile, even contradictory, both as a measure of the irony of our current human situation and as a reflection of its realities. These differences fit into a shared landscape of diverse ecosystems. Many adept scientists and philosophers have used such taxonomy to critique specialization, by pointing to the connections of related disciplines rather than their differences. I want at an early stage in this volume to link with their efforts rather than seek to displace them without undermining the value of detailed and specialized knowledge itself.

Ultimately I want to elucidate the different roles we can take to help integrate humanity with the rest of the planet. Breaking down the logic by which humanism (and much of Eastern thought) separates us from nature and replacing it with a relational framework will take place at personal, familial, communal, political and institutional levels. I will show how by various means, mostly indirect, we can accomplish that leveling task and propose some tentative replacements. I do not anticipate that I have done a thorough job of defining the alternatives to current approaches to our planet, and consequently I consider these pages provisional. Nevertheless, this short work may act as a series of pointers to environmentalism. What follows is a more or less linear summary of the discussion:
As climate change has become more apparent, countless institutions, both public and private, as well as citizens around the world, have sought solutions to global environmental degradation. Each interest group tries to put itself at the center of the conversation, vying for primacy. Science understands and seeks solutions in science. Politicians understand and seek political solutions. And many other groups, including the polluters seeking to support existing economic processes, accumulating wealth and establishing dominance, compete for control of the environmental agenda. Highly productive individuals and groups who control vast resources support restorative approaches until they notice them interfering with their control or threatening their hegemony. At that point we have no well understood process for helping them resolve their clash.

To date these interest groups are proposing solutions based on fixing problems in their fields, repairing breaks in the infrastructure and planning for technologies and organizations that will be prepared to do battle with climate change. What little cultural energy has been applied asks us to conserve or to revert to natural pietism and as such garners little support among those activists who must get jobs done. A set of actions attracting highly productive individuals would gain support in all fields of endeavors, but what would attract these activists?

Some efforts to link art and biology have been made, but willingness to assign real correspondence between humanity and the non-human interactions has been partial and threatening to most intellectual frameworks. Important work is being done in biomimicry to engineer solutions drawn from non-human processes around energy consumption and infrastructure. But the underlying cultural assumption of biomimicry is again that of conservation and reduced expectation, relying on reverence for nature to convince people to revert to older cultures. Cultural conservatism remains insufficient for a robust set of environmental principles and practices addressing a planet that supports us but does not act in our interest.

The narrowness of most current eco-culture leads to solutions only about nature or writing about nature rather than delving into the interactions between humanity and the rest of the planet or showing how human interactions follow the same principles as the rest of the biosphere. They tend to be fragmented, address only part of the problem or like bio-fuels degrade a bad situation with the unintended effects.

Our existing, mainstream concept of nature, as a force humans need to dominate lest we fall prey to its indifference, continues to lead us in the wrong direction. Tennyson’s phrase, “nature red in tooth and claw”, informs our mainstream discourse and institutions rather than Darwin’s measured remarks. Such hyperbole reflects the weakness of the descriptions of nature in poetry.

In order to make his poem interesting, Tennyson has to misrepresent Darwin’s conditional phrases. Imagine Tennyson’s verse impressing us with “nature red in tooth and claw / within one species during mating season”—not that exciting as poetry. Or “nature red in tooth and claw / and in human’s slaughter houses and wars”—doesn’t garner that much support from those who use culture as diversion. How can poetry tell conditional truth with direct and powerful presentation?

We tend to continue with the activities and attitudes that put us in this compromised condition; it’s inertial. We are almost required by the current culture to fight against nature whereas a more effective method would propel us to synchronize our efforts with the biosphere and where appropriate by natural (inherent) methods. While engaged in exploring inherent methods of production, protection from our surroundings is crucial and must not be ignored.
To develop a relationship with the biosphere allowing our species to persist with the advantages accumulated over centuries of civilization, I propose in Oops! an approach that informs our partnership with other planetary forces. As climate plays an increasingly important role, our view of nature becomes increasingly central. Gradually the focus on human life in cities will become a special case of an environmental culture that focuses on global awareness. And human social interaction and culture can be better understood as adaptation.

Oops! proposes a set of perspectives and methods, a toolkit for coping with climate change. To reduce conflict with the environment, for example, the notion of cognition needs to extend beyond our minds. To define how thinking takes place as an interaction between our brains and the outside world enhances nature’s perceived value. We can begin to identify with the outside world.

Understanding how our view of the world is culturally determined will enable us to see the social construction of our combative relationship with nature, helping to modify that relationship for sustainable social interaction. Linking our survival to existing ecosystems, the culture of difference, understood today as the way taxonomy must work, will no longer be sufficient. The culture of difference has had a value in science, politics and art, but its oppositional assumptions adapt to emphasize the central role of symbiosis in our society. Next we need tools for synthesis and cross disciplinary analysis, a hierarchy that is more about inclusion than evaluation. I propose the example of q-analysis and how it might be used to modify our categories that value the planet’s resources.

Interactions in the biosphere, including humanity and its thought process, operate dynamically. Culture with a fixed view of our surroundings will not accommodate countless shifting connections among people and place. Environmental culture modifies our current ideas about risk and where risk management applies. Culture can improve our ability to cope with unpredictable events. (This précis of the book, for example, seems to me at risk of oversimplifying my approach. But I want to prepare you for what you will read so I am willing to take that risk.)

Culture must also demonstrate to us how to take risks in a complex and potentially lethal situation, since none of the efforts to right our ship can be undertaken without the risk of incurring even graver storms. Environmental engineering solutions increase those hazards, but if cultural renovation fails, that may be the simplistic solution that politicians will be forced to accept. Humans behave differently in uncertain conditions and we must understand how to compensate for the weakness of our approximations.

Putting unexpected things together is a common feature of recent innovative poetry and letters that we can project as part of the culture of environmentalism. Poets take the risk of failed juxtaposition, but how can we afford that risk to our biosphere? Oops! outlines several different types of risk and discusses risk management as it influences poetics, providing examples of how innovative writing can improve our ability to understand and manage the risks of unpredictable change. This expanded role for risk in poetry hands us another tool to cross the boundaries of contemporary thinking and puts humans on a path to sustainable relations with the planet in an integrated cultural, political and scientific framework.
Since this text proposes cross-disciplinary ideas and methods of delivery derived from innovative poetics, I have organized it so that the larger structure helps the reader with its shape. Book 1 consists of a group of poems and essays exemplifying how to connect in a framework that’s consistent with how nature operates. It explores the different types of conceptual and prosodic linkage that might be established between human thought and environmental reality. It establishes diversity of function and common shape as the dual criteria driving human and non-human interaction. Concepts are often reiterated in a new context to show by example how the biosphere addresses a problem in contrast to how the human mind addresses a problem.

Book 2 introduces tools that can help change the relationship between environment and culture: externalized cognition, environmental social structure, inclusive hierarchy, materialization of connections, cross-disciplinary analytics and risk. These exemplary reconsiderations of the basic assumptions of our culture can become part of culture workers’ techniques. Without these adjustments to our assumptions, culture provides no will to change and poetic innovations in language appear only as charming procedures, irony or satire. Although we have a strong link between science and the environment, there has been no clear understanding that we need a new model of culture to deliver the environmentalism to specialists and the society at large, providing the will to change even when our self-interest is at stake.

Book 3 redefines poetry as the risks that the writer is willing to take with the components of poetry. It addresses risk in symbiosis as the primary issue for the relationship between human and non-human nature, for as we know, even from the popular press, there is as much risk and less certainty in changing as remaining on our current path. Defining poetry as risk promotes innovation as the goal of writing and undermines the idea of canon in literature as well as in science and politics. Oops! proposes that we change the way we think and act in order to reduce the risks of how we interact with nature.