Lyrical Expression, Critical Engagement, Transformative Action: An Introduction to Art and the Environment

by Tim Collins
with Erica Fielder, Herman Prigann, Ann Rosenthal, Ruth Wallen and Jeroen Van Westen

Introduction

In this essay, I provide an overview of contemporary visual art practices that address the relationship between nature and the built environment, including some history and a touch of theory, as well as brief profiles of some interesting practitioners. Placing the environment in a social context, I provide a framework that describes three modes of relevant practice: lyrical expression, critical engagement and transformative action.

I touch on current ideas about eco-art and bio-genetic art. I then present an artists’ dialogue, where an international group of friends and colleagues is developing linguistic clarity about methods, theories and pedagogy relevant to one particular area of practice. I close this essay with an overview of artists who have both a clear intention and an effect on social-environmental policy at a variety of scales around the world.

Susan Leibovitz Steinman, "River of Hopes and Dreams" three-acre eco-sculpture garden at San Francisco's waste management company, NORCAL Sanitary Fill Company

(The work that I have chosen challenges [1] some of the common ideas about community art practice. Issues of authenticity and proper representation of community interests are magnified and complicated when we move from human communities (with voice) to natural communities (without language [2]). Some of the artists I will describe enter social-ecological political communities with instrumental knowledge and specific intent. Others arrive in service to existing community interests, offering expertise and knowledge as support in local affairs. Others define their authenticity as internal members of bio-regionally specific social-political groups with sole authority and long-term interest. I think it is safe to say that there is a range of ways to embark upon art-based, social-political and community practices; the idea of one best way for all conditions is a remnant thought-pattern of high modernist science. The principle I believe we all share is a moral and ethical intent to "do no harm." We all want to get better at what we are doing, to listen to our friends, colleagues and acquaintances with heartfelt attention and to work with care and creative passion to shift the energies that currently undermine the best of our social and ecological potential.)

I. Nested Creativities: Art in Society - Art in the Environment

When we are talking about Art in the Environment, it is important to define our terms. The word "art," standing alone, classically refers to an artists' production framed by the authorizing reaction of (artworld) institutional support, and an
impact upon the viewer that demands intellectual and/or material consideration. "Environment" refers to the material phenomenon and experience of life. It includes the built environment[3], which, until recently, was considered separate from the natural environment. "Ecology" is an essential element of our discussion to follow. It is a basic science, focused upon dynamic living systems. Environmental author Ernest Callenbach describes ecology as "the study of patterns, networks, balances and cycles." (Callenbach, 1998:34). It is no accident that environmental art emerged in the second half of the 20th century, at the same time as artists became interested in systems aesthetics. More about that later.

As we enter the 21st century, we find ourselves at a moment of profound change. In the post-industrial society we live in, we can no longer take nature and its ability to maintain itself in the background for granted, while humanity lives in the cultural foreground. In the last century, we preserved and conserved nature outside of cities, setting it aside and protecting it from the industrial tools and economies of that period. In this century, we must refine and extend the ongoing programs of preservation and conservation into the cultural landscapes of cities as well as outside of them. We must also learn to restore and heal nature to take responsibility for the dynamic living systems that enable life and its creative spark.

I would argue that the environment, in its cultural and natural manifestations, is simply an extension of who we are. Nature and culture, like wood and oxygen, are the material condition for the spark that is a creative human existence. Industrial society is and has been a blazing bonfire for over a century. We can no longer expect nature to sustain itself while culture blazes in the foreground. One does not exist without the other. Art at its best provides us with lyrical, critical and transformative means to interface, perceive, name, describe and understand experiences that are new and unexpected, experiences that might not be considered relevant to a paradigmatic understanding of the world in other areas of knowledge. I would argue that artists and scientists alike must learn to think about nature not as something in the background of human culture but instead as an extension of humanity that is an essential condition of life.

Another way to talk about this is to consider art as just one of the range of intellectual and material tools that benefit and/or inform human society. Most of us in the United States have little understanding of art as a modern area of knowledge, with value outside itself. Rather, Today art is widely perceived as a discipline that is passionate about the freedom to speak, yet having very little to say that actually matters or impacts our conception and perception of the world, or our collective ability to take instrumental action to change its material condition.

We are just now emerging from that period of expressive autonomy. Theorists and philosophers such as Suzi Gablik, in "Has Modernism Failed" (1984), Joseph Kosuth in "Art after Philosophy and After: Collected Writings, 1966-90" (1991), and Arthur Danto in "After the End of Art" (1997) have raised the flag, declaring an end to art as we know it, but few outside the discipline recognize this condition. The modernist subject of art has been art, its media and its own history. I would argue that art has reached the end of this reductionist pathway
ahead of most other disciplines. We are now reconsidering art and its relationship to knowledge, as well as its relationship to, and impact on, the previously described fuels of human creative existence — nature and culture.

I would like to frame our discussion of environmental art. The artist's role in society and the environment has been described by authors and practitioners alike in a range of terms: art and context, art and politics, art and society, art for social change, art and the Internet, art in the public interest, community art, critically engaged art, eco-art, environmental art, new genre public art, new muralism, public art, reconstructive post-modernism, reclamation art, restorative art and social sculpture. I choose to identify the context for our discussion as art in society. Art in the environment is merely a subset of this broader area of practice. Art in society and art in the environment are areas that struggle within the institutional framework of art. The institutions that frame the discipline of art are organized around historical media and technology relationships. Artists, like practitioners of other disciplines throughout history, seek to know the world by probing it with tools in their hands. As a result, our creative, curatorial, educational and critical practices are primarily defined along the lines of media and technology rather than subject matter. Art in society and art in the environment are areas without critical or pedagogical clarity, while the arts of technology and media (from painting to welding, video and the latest computer technology) have considerable support infrastructure as well as pedagogical investment. If the arts are going to emerge from the self-imposed exile of reductionist, discipline-specific self-analysis, these areas of art in society and art in the environment must evolve into primary areas of creative, curatorial, educational and critical practice.

I believe the arts in the U.S. have to reconsider the technological approach to knowledge and open themselves to social, biological and ecological ideas and interdisciplinary creative practice and eventually a research [4] culture. (It has begun to evolve in both the U.K and Canada.) I believe we must begin to teach from the inside out rather than probing the world from the outside in with tools in our hands. The artist's role in society and the environment has been broadly described by a range of contemporary authors and theorists including Carol Becker, Rosalyn Deutsche, Tom Finkelpearl, Suzi Gablik, Mary Jane Jacob, Grant Kester, Miwon Kwan, Suzanne Lacy, Lucy Lippard, Barbara Matilsky, Malcolm Miles, Arlene Raven, Harriet Senie, Sue Spaid, Heike Strelow, Meg Webster and Jane Kramer. Each of these authors has worked to theorize and describe this emergent area of practice. While these authors *** only 3 or 4 of those*** They cite numerous examples of this type of work, but they also describe the lack of a focus in this area in comparison to other areas in the arts.

In a seminar organized by Malcolm Miles at the University of Plymouth in 2002, an assembled group [5] of artists, faculty and students came up with the idea (after struggling with dualistic positions and arguments of hierarchical value) that it is through the sum-total of lyrical, critical and transformative practices that art affects society and its conceptual understanding and material manifestation of culture and environment. Over the last year, Reiko Goto [6] and I have been working and reworking that concept to get it to this current conceptualization and design.

A graphic representation of the artists' modes of practice within a social - environmental setting.
Most artists have elements of two or three of these terms or modes of practice embodied in their conceptual intent and in the range of their works. No single modality is more important or less important than any other. The diagram is actually a circular continuum, with the overlapping modalities of a venn diagram, rather than a linear hierarchy. I would argue that lyrical-creative expression is the most common and lasting form of social art. It is primarily based in an internal relationship to social, political or environmental systems. It emerges from a desire to be involved. Critical engagement is the next most common form of social art practice. It is primarily external from its social, political or environmental subject. As a result, it tends to be a monologue that seldom has any capacity or framework to receive or process response. It emerges from a moral or ethical idealism. The creative transformative action requires critical (external) distance and a discursive (internal) relationship that is based in rational approaches to knowledge. While the lyrical and critical modes are long accepted areas of art practice, the transformative approach, with its focus on creative interaction and rational impact, is the least understood and, as a result, the most difficult to accept, describe and defend as art. It emerges from a moral and ethical position but embraces the creative potential of discourse and compromise. It is in the artwork that falls in the nexus (the interstitial space) between the critical and transformative modes that we begin to see the breakdown of primary authorship, and new collective forms of creativity that were forecast by Joseph Beuys in his theory of social sculpture. This theory suggests that we are all artists with a role to play in the creative transformation of the social-political and aesthetic fabric of the world.

Using some of the best known works of earth-art as a common example, I can demonstrate the use of this diagram. If I were to consider Christo and Jean Claude's memorable "Running Fence," the temporary project that ran across Sonoma County, California, and into the sea in 1976, it would fall solidly in the area of lyrical expression. If I were to consider Robert Smithson's "site/non-site" artworks from 1968 (which referred to the dump sites and industrial wastelands of his later work in a gallery setting), they would fall into the area of critical engagement. If I were to consider Maya Lin's "Viet Nam Veteran Memorial," it would fall in the area of transformative action. When I consider Joseph Beuys' final project "7000 Oaks for Kassel," I would place it in the interstitial space at the center of the diagram, although his diverse body of artworks would be distributed throughout the diagram. Working with this diagram, I can talk with friends and colleagues to attempt to understand how the methods and means of different artists, acting with varying degrees of lyrical, critical and transformative intent, collectively impact society and its relationship to the environment.

II. An Evolution of Environmental Concept and Practice [7]

Artists have worked with the nature/culture dichotomy for generations. Europe has a rich landscape-painting tradition. In the 17th century, Claude Lorrain painted Italian landscapes specifically chosen for their contextual references to Roman history. Intertwining images of nature and nostalgic culture, his work provided a primary source of ideas about pictorial framing. Nature was the formal setting to consider the ruins of Rome as picturesque elements of an
experientially rich landscape. In the 18th century, Thomas Cole, Frederick Edwin Church and John James Audubon worked in America, painting the wilderness and wildlife of the United States. The American painters illustrated pristine landscapes that were being newly tamed by the technologies of the pioneers. With the advent of the modernist period of the 20th century, the relevance of landscape as a subject began to fade. Painters moved away from landscapes and other subjects external to the author, the medium and its means of expression. The painter's effect on the meaning and perception of landscapes and nature diminished accordingly.

Earth-Art and Environmental Art

The historical relationship of sculpture to landscape is different from that of painting. It is only with the advent of the minimalist era of modernist sculpture in the 1960s that landscape began to play a sustained and primary role in the sculptor's thinking. The earth-artists engaged landscape directly. Earth was the material, and the form oriented the viewer to the place of the work. Earth-art challenged the purpose of art as a collectible object. In some ways it was among the first artworks to return to the public realm and to establish art as an interface to the world. John Beardsley, Thomas Hobbs and Lucy Lippard are the primary authors on the subject of earth-art. Beardsley's "Probing the Earth: Contemporary Land Projects" (1977) and later "Earthworks and Beyond" (1984) provide the authoritative view on the originators of earth-art. Hobbs' "Robert Smithson: Sculpture" (1981) is the best reference on that artist's works and writing. Lucy Lippard's "Overlay" (1983) is a classic. The author willfully transcends the hierarchy of the art world as well as the ranks of the earth-artists, providing her readers with a comprehensive overview of diverse archeological, historic and contemporary practices.

Aviva Rahmani, "Echo of the Islands," Vinalhaven, Maine

(?Herbert Bayer, Walter De Maria, Michael Heizer, Nancy Holt, Mary Miss, Isamu Noguchi and Dennis Oppenheim were just some of the original practitioners that began working as earth-artists or environmental sculptors. They experimented with simple geometric forms that integrated place, space, time and materials. The work ranged from pristine natural environments to post-industrial environments. Theorist-practitioners Robert Smithson, Nancy Holt and Robert Morris expressed a more integrated relationship to nature as system. Smithson was acutely aware of nature's entropic and eutrophic cycles and embraced mining areas and quarries as the content and context for his work. Smithson's partner and colleague Nancy Holt was particularly interested in earth/sky relationships, creating works that updated ancient techniques with a modern sculptural vocabulary. Morris addressed post-industrial landscapes in both form and theory. Writing about his own work in Kent, Washington, he addresses the ethical responsibility of artists working in post-industrial landscapes. (Morris, 1979: 11-16; Morris, 1993: 211-232) Discussing the potential for aesthetic action to enable further natural destruction on the part of industrial interests, he telegraphs issues that would emerge in restoration ecology a decade later. Is the aesthetically restored ecosystem an authentic one [9], or is it a counterfeit? Then, can the human ability to restore nature enable further destruction of nature, leaving us with preservation as the only viable cultural response to nature?)
Eco-Systems Approaches

At the same time, another group of artists emerged with a focused interest in systems theory and ecology. Hans Haacke, Helen Mayer Harrison and Newton Harrison, Alan Sonfist and Agnes Denes were the original (and continuing) practitioners. They differed from the land-artists in their interest in dynamic living systems. Where the land-artists expressed themselves in the landscape, these ecological artists were interested in collaborating with nature and ecology to develop integrated concepts, images and metaphors. Haacke explored plants, natural phenomena and the water quality of the Rhine. The Harrisons secured a Sea Grant at the University of San Diego and studied the life cycle of crabs and the function of estuaries, leading to work in the Salton Sea and San Francisco Bay. In New York, Alan Sonfist proposed the restoration of a native forest to parklands throughout Manhattan, resulting in the "Time Landscape" in SoHo. Agnes Denes grew wheat at Battery Park City beneath the shadows of the twin towers. Shifting a brownfield site from a wasteland, "Wheatfield" became a symbolic source of wheat and bread for a city that had long forgotten its relationship to agriculture. These are just the first of many artists' projects with living systems. While earth-art was among the first to go public, these ecological artists were the first to act in the greater interest of nature and concepts of the commons [10]. In 1974, Jack Burnham wrote an important book, "Great Western Salt Works" (1974: 15-24), that developed an initial approach to systems aesthetics.

Alan Sonfist edited "Art in the Land" (1983), a selection of texts that addressed the scope and range of artists working in relationship to environment at that time. Barbara Matilsky curated and wrote the catalog for "Fragile Ecologies" (1992) providing an excellent overview of the historic precedents for this work, as well as some of the most important work of the first and second generations of ecological artists. A text edited by Baile Oakes, "Sculpting with the Environment" (1995), is unique and quite valuable as a reference in that he asked artists to write about their own work. "Land and Environmental Art," an international survey of both types of artists projects, was edited by Jeffrey Kastner, with a survey of writing on the subject by Brian Wallis (1998). The text goes into the first, second and third generations of earth and ecological artists, providing an overview of works and accompanying articles.

The Next Generation:
Herman Prigann, Terra Nova, "Circle of Remembrance," on the former border between East and West Germany

New groups of artists are emerging who are committed to social-ecological processes that go beyond the ideas of authorship, creative identity and means of communication typical of previous generations. Where the ideas of modernist authorship were personal and identity-driven, authorship today is frequently more diversified and collective. Lucy Lippard and Suzy Gablik have been theorizing and revealing alternative approaches to artmaking for decades. "The monological perspective, as we have seen, is individualistic, elitist and antisocial — the very antithesis of social or political practice. In a sense, the essence of modern aesthetics can be summed up in this single, primary feature of rejecting
dialogue and interaction." (Gablik, 1991: 150) The creative practices of artists today are increasingly dialogic and interactive. Recent texts attest to this current condition by exploring a range of changes in the way artists think about identity, their relationship to community, society and environment and, in turn, the efficacies of these practices. Miwon Kwon's recent text "One Place After Another" (2002) focuses upon the formal theoretical evolution of the concept of site specificity from form and place to place and society. She critically examines current practices in an increasingly social context within explicit dialogic methodologies. Grant Kester e.g. (2004) is about to publish a text on dialogic aesthetics, "Conversation Pieces: Community and Communication in Modern Art" that provides a rigorous historical/philosophical context with a critical oversight of the most important work in this area from around the world. He then goes on to construct an aesthetic framework that transcends formal attributes, considering instead the relational, moral and ethical issues that emerge within various processes used by artists interested in transformative social discourse. Malcolm Miles' (2004) new book looks at the phenomenon of the artist and relationships to leadership, change and power. "Avant Gardes: Art, Architecture and Urban Social Change" will outline the previous conceptual models of the avant garde from the 19th century to the present, then review contemporary artists' practices that address social, political, economic and environmental issues.

Returning to the environmental question, let me begin by providing a simple framework that I will use in the final sections of this article. Two terms that I believe are of primary relevance to the environmental-natural are eco-art, referring to a macro-biological relationship, and bio-genetic art, which has primarily a micro-biological relationship to society. The eco-artists are informed by the radical ecologies of deep-ecology, ecofeminism, social ecology and environmental justice. The bio-genetic artists are principally informed by a critical understanding of bio-technology and its equity relationship to society. The work is framed by post-structuralist philosophy and its analysis of language, subject and power. While I am more familiar with the artists, curators and thinkers involved in eco-art, it is important to address the area of bio-genetic art as well. The post-industrial era provides significant challenges to our biological and ecological commons. First, the external world is affected by a legacy of industrial pollutants that remain in our atmosphere, soils and waters. We are just now beginning to realize that we have and are affecting nature and the global commons in ways never before thought possible. Secondly, the concept of resource extraction has now descended to the microbiological level, with market interests scrambling to capture value through mapping, manipulation and patenting of genes. The market interests in these processes are, of course, enormous, with desire and economic speculation outrunning moral and ethical constraints. In the sum of these two examples there is an enormous range of meaning, form and function, which radically redefine the concepts of humanity, nature, public space and the global commons in the coming century. This is an area of massive cultural flux, one where strategic energy in terms of interdisciplinary arts practices can result in creative engagement with significant social-political return.

Eco-art Exhibitions
In 1999 Heike Strelow curated "Natural Reality" at the Ludwig Forum in Aachen, Germany. This exhibit was an international overview, which expanded the concept of ecological and environmental art and its range of effort to include the human body as a site of "natural" inquiry. The accompanying exhibition catalog provides cogent arguments for the three areas of the exhibition — the unity of man and nature, artists as natural and cultural scientists and nature in a social context. The next exhibit to address the new ideas about eco-art occurred at the Contemporary Arts Center in Cincinnati, Ohio. In 2002 Sue Spaid and Amy Lipton co-curated "Ecovention: Current Art to Transform Ecologies." The accompanying catalog explores the artist's role in publicizing issues, re-valuing brownfields, acting upon biodiversity and dealing with urban infrastructure, reclamation and environmental justice. Recently, a new online "Green Museum" has opened, loosely curated by Sam Bower. This site presents a range of eco-artist works and texts as well as providing an area for dialogue about art and the environment.

**Bioart Exhibitions**

In 2000 Marvin Heiferman and Carole Kismaric cocurated "Paradise Now: Picturing the Genetic Revolution" at Exit Art in New York. This exhibit explored the emerging field of artists working with microbiological concepts, tools, materials and issues. Artists provided illustrations, research and critique of the Human Genome Project and genetically modified organisms. In 2002 Robin Held curated "Gene(sis): Contemporary Art Explores Human Genomics" at the Henry Art Gallery at the University of Washington. The exhibition was organized around four themes: sequence — the language and structure of the discourse; boundary — the separation and overlap between species; specimen — DNA ownership and privacy; and subject — the reimagining of self. The project was developed over a period of three years. The curator worked with the artists, as well as university scientists and health officials to develop the work and the public programming about the exhibition and its topic.

**III. Shade Tree Discussions**

The history of modernism is intertwined with the idea of the manifesto. In the past, a manifesto was a theoretical statement that defined the edge of culture and the way the signers of the manifesto intended to transcend that edge. The manifestoes created conceptual spaces where artists could work out their ideas and celebrate their success in relative privacy, controlling access to the discourse. At this point, I am more interested in shade tree discussions. Whereas an architectural space controls and focuses your movement over a threshold and into an interior space, the shade tree, say a large oak on a grassy plain, is highly accessible from all directions, provides some respite from the weather and, once identified, becomes a place that can be celebrated for its community of discursive vitality and passionate intensity. Access and egress are free. In the best tradition of democratic discourse, your voice and thoughts are always welcome.

In this final section I will explore a collective discourse (I am sure there are others) about the definition and intention of eco-art practice. Let me provide a little background. In 1999, I was invited to speak at a conference in Los Angeles
along with other eco-artists on a panel organized by Susan Leibovitz Steinman, Jo Hanson and Aviva Rahmani. After the conference, a dinner was provided by the Nancy Gray Foundation. We found ourselves enmeshed in a dialogue that was alternately challenging and nurturing, and at the end of the day we had created a desire for it to continue. Lynne Hull offered to talk to her friend Don Krug, a professor of education who had written extensively about art and ecology for the Getty Foundation. He had previously hosted an eco-art dialogue for educators at Ohio State University at Columbus. Hull wanted to see if an artist-based eco-art dialogue e-mail listserv could be set up. Over the last four years, we have sustained and expanded that original group. Participants log on from all over the world to discuss a wide range of topics. While the name “eco-art” is collectively relevant to many of the online participants [11] it has not yet been collectively defined, although there have been attempts. (See Ruth Wallen below.)

In light of this, as I began to think about this article, I asked some of my colleagues to provide their definitions of eco-art and their philosophical and theoretical positions, as well as some thoughts on the efficacy of this work. ***Here I cite three examples of their responses.***

**Erica Fielder** is an eco-artist living in northern California and working throughout the United States. I consider her to be one of the best artists working on ecosystem knowledge and interface on an intimate person-to-person or individual-to-community scale. She sent me the following comments on the area of practice as she understands it.

Ecological Art is the merging of natural history, ecology and Earth science with art to convey ecological principles to the general public.

I think about environmental ethics constantly and have created a sieve though which forethought of my actions pass before acting. This thinking places me in a context so that I am usually aware of when I am acting like a species and when I am not. By "acting like a species" I mean holding myself in relationship with other species and the natural systems that flow through and around me. My art emanates from that practice. I am impressed with what other eco-artists do but I am not always inspired. I work to find ways to interweave the human into the picture, rather than to create something that humans can stand back and look at from a distance. Thus, my work contains a strong sensory component, since it is through our senses — and at least 53 have been identified and, from my own research, I can most likely identify more — that we experience the world and will fall in love with it.

This focus, of course, gets into how our language, which only identifies five senses, limits our experience of the Earth, and thus, our experience of ourselves in deep relationship to natural systems. I think one of the primary ways we have been able to destroy our biosphere is due to the lack of sensory awareness. How did our language bring us to this? Or, did our language evolve as we began to turn off to our surroundings? When, in history did this happen? What other turns might we have made? I wish I had the time to do the research and think this through more carefully.
Herman Prigann is an eco-artist born in Germany, living in Spain and working primarily in Europe. He has a significant public art practice, with monumental involvement in some of the restorative redevelopment projects in the Ruhr Valley of Germany. Prigann has developed a systems intervention concept to restore lands in Eastern Europe that have been damaged by resource extraction. He call this work "Terra Nova." Herman responded to my questions with the following ideas about metamorphic objects and sculptural places.

Designing the environment is a cultural translation of our understanding of nature. Here the environment is considered and defined as a built — made and planted — mature cultural landscape. Metamorphic objects make sculptural places in the landscape that are related to nature in the landscape, the surroundings of the town and in the town. The object becomes the point of intersection in its surroundings as metaphor and artistic object. In a certain way the object, in the sense of its intention in terms of content, changes everything around it. The inner structure of the objects is developed once on the plane of the material selected, then in the dimension of the concept, in its intentions in terms of content, which emerges from the interplay of the various aspects. Example: Wood ú Earth ú Stone = Slow decay ú twining vegetation = Overgrowing. A concept represented in minimalist architecture, that represents references to our relationship with nature in the material and in its shape. A reference to nature and history is reached logically by the decay and overgrowth that reshapes and dissolves the original architecture and finally take it back into the cycle. The concept of nature is defined and presented here as a process — as time.

A central aspect of the Metamorphic Objects is that they are experienced as space. And thus unlike sculpture, which we experience to a certain extent from the outside by walking round it, here both — an inside and an outside — are produced. In this sense it is an architectonic art-space, which placed within nature constitutes the latter as a cultural transformation.

Art that treats natural events as material and as the place where they make their effect touches and influences the ecological context. This in a variety of ways. Certainly once in the material itself, as here metamorphosis is inherent as a temporal process of decay. Here the ecological context is part of the aesthetic statement of the work of art, or the aesthetic aspect of this combination is shown by a work of art of this kind. Metamorphic objects carry time and transformation in our time as a fundamental aesthetic element. Thus a variety of faces in the course of time. Memories of past architectonic condition are to be seen on the decaying, overgrown remains of the object after the passage of years.

These sculptural places are then ecologically integrated, but still full of memory of the work of art as origin. At this moment nature and work of art are together. These works of art are not preserved and restored, they are entrusted to the ecological process. In the Metamorphic Objects we are conducting a dialogue about the dialectic of nature and culture. Our current "Understanding of nature" is manifest in large scale suppression of these links and has reached a temporary climax in the ecological crisis.
Ann Rosenthal is an ecofeminist theorist and artist most recently teaching as visiting faculty at the University of Maryland. She has a deep and consistent involvement with feminist-based creative communities both online and in various places in the world. Her site and gallery-based installations interrogate how our social constructions of nature have compromised human and nonhuman systems. Her theoretical work on the topic of eco-art and its moral-ethical underpinnings has become essential reading for many of us involved in the area. Her curriculum/guide for a class on eco-art (developed while teaching at Carnegie Mellon University) is one the most thorough and carefully thought through that I have seen on the topic.

Eco-art: Our Common Values

The landscape of eco-art is vast, drawing upon conceptual, activist, and community-based art, informed by ecology, environmental history, social & deep ecology, ecofeminism, postmodern science, landscape architecture and postmodern critiques. Given such diversity, what unites our forms and methodologies? I believe the ties that bind us are the values for which we strive in our work and in our lives. Here are some of the foundational values I’ve identified in our practice:

1. Land Ethic: Recognizing that we are members of an interdependent "community" that includes not only humans, but "...soils, waters, plants and animals, or collectively: the land." (Leopold)

2. Systems Thinking: Visualizing patterns and relationships across disparate information and knowledge systems, and applying the lessons of ecosystems to our human communities. (Capra)

3. Sustainability: Designing our lives, work, products, social systems and relationships to meet the needs of the present without compromising the ability of future generations to meet their own needs. (World Commission on Environment and Development)

4. Social and Biological Diversity: Understanding that diversity among disciplines, cultures and species is a prerequisite for systems health and resilience.

5. Social and Environmental Justice: Insisting that all species have a right to a clean environment that supports our health and the ecological systems that sustain life.

6. Collaboration: Bridging the boundaries between disciplines, cultures, classes, genders, communities and species, respecting what each brings to designing solutions that work for everyone.

7. Integrity: Closing the gap between what we value and how we act in the world.
**Ruth Wallen** is an eco-artist living in San Diego, who teaches at U.C. San Diego and the innovative interdisciplinary arts program at Goddard College in Vermont. Wallen has an undergraduate degree in environmental science and a masters degree in art. Ruth has developed public artworks in California and a series of works on amphibians and environmental change. Wallen has taken it upon herself to work with the divergent interests and voices participating in the eco-art dialogue during a number of face-to-face meetings and follow-up work on the e-mail list. She has developed the following definition.

Ecological art, or eco-art to use the abbreviated term, addresses both the heart and the mind. Art can help develop an intuitive appreciation of the environment, address core values, advocate political action and broaden intellectual understanding.

Ecological art is much more than a traditional painting, photograph or sculpture of the natural landscape. While such works may be visually pleasing, they are generally based on awe-inspiring or picturesque preconceived views of the natural world.

Ecological art, in contrast, is grounded in an ethos that focuses on interrelationships. These relationships include not only physical and biological pathways but also the cultural, political and historical aspects of ecological systems. The focus of a work of art can range from elucidating the complex structure of an ecosystem, examining a particular issue, i.e., a type of relationship, interacting with a given locale, or engaging in a restorative or remediative function.

Eco-art may explore, re-envision, or attempt to heal aspects of the natural environment that have gone unnoticed or reflect human neglect. Through moving visual imagery, humor or juxtaposition of disparate elements, the work may challenge the viewer's preconceptions and/or encourage them to change their behavior. Metaphor is often a key element of ecological art. Metaphors help both to make apparent existing patterns of relationship and to envision new types of interaction.

**Jeroen Van Westen** is an eco-artist living in the Netherlands and practicing throughout Europe. Westen works with materials and tools that suggest a landscape-scale practice. Unlike landscape architects, however, he is drawn to some of the most difficult aesthetic problems of urban nature, from combined sewer overflows to landfills. Beyond this public art practice, Westen conducts an ongoing multimedia practice and inquiry about land, nature and his experiences in various countries.

These questions (of definition, theory, philosophy and efficacy) are of course alive in my day-to-day practice, and yes, I wrote on these subjects several times, mostly internal discussions in my diary, but always in Dutch. It is your last
question (efficacy) that really is important to me. And after much thinking on the subject, I know that the essence of all the different answers to that question is TIME.

Change of attitude, room to (re)create a landscape, understanding for transformation of the position of humankind, everything needs time to come alive. A good design can only be made after defining the right questions. The right questions can only be posed in a layering of research, wondering, asking, concluding, asking again, etc. Answers are only gut feelings in the end. I don’t know, I believe, and invite commissioners to give me their trust, to give it time. So we need commissioners that give time, give access to society, and can guarantee time beyond our lifetime.

The question on philosophical input is one that I find hardest to explain to Americans, we have such a different relationship to nature as well to landscape. Our landscape is beyond nature, it is a continuing story of change and response without nature and people addressing each other. Nature doesn't care about people and people use nature. So, in the Netherlands there are several good philosophers discussing our relation to the landscape, often based on the thinking of Plessner on the essential human quality of being capable to look at ourselves as if we are outside ourselves at the same time that we are acting upon what we see from that eccentric position These philosophers have a kind of watershed on the topic of mediation. If we experience nature through glasses, through electronic devices, do we still observe nature, are we still capable of "sharing" nature? Many doubt such a position and speak about estrangement as the human condition. Others prove their point in how we incorporated machines as an extension of our senses, our reflexes, etc. (cars, e.g.) These two groups team up with different kinds of ecologists. The ecologists that think "backward," actually conservationists, working on restorations, talking about ecosystems. The others more comparable with the preservationists and conservationists in the USA, are looking for incorporation, working on invitations for nature to enter our culture, thinking in processes rather than in systems. I relate more to the second group of ecologists, and do believe in my reading glasses, awaiting the date that I will use a hearing aid, etc., to feel as fully as possible that I am part of nature.

My friends and colleagues provide me with provocative thoughts, clear intentions and a philosophical framework to consider this work. Fielder gently prods me to "act like a species" to become one amongst many engaging with all my senses. Prigann suggests that nature and culture must both be "entrusted to the ecological process." Rosenthal lays out the framework in its full complexity, "land ethic, systems, sustainability, social and biological diversity, social and environmental justice, collaboration and integrity." These are both guidelines for practice and a framework for review. Wallen works with all of us to help us see that the work "may challenge the viewer's preconceptions and/or encourage them to change their behavior." She places a burden lightly but firmly upon our shoulders. Westen reminds us that we can "work on restorations, talking about ecosystems — or — work on invitations for nature to enter our culture." Each of these artists helps me They help me see the complexity of eco-art in new ways, extending my perception of art, nature, culture, phenomena and language. They also provide me with thresholds into concepts, experiences and phenomena that are unexpected but most welcome as I try to understand nature in new ways.
IV. Intention, Efficacy and Policy

Earlier I said that artists change the world through a dynamic mix of lyrical expression, critical engagement and transformative action. I would argue that without all three of these components art loses its vitality and ability to sustain itself. The question that I ask myself is, what does it mean for an artist to be effective? Simply, it is to accomplish a purpose, and I would argue that we could easily find lyrical, critical or transformative purposes. But what does it mean for an artist to work with purpose and intention upon society? We can affect the world in terms of material culture, but artists work under significant economic and material constraint. The social-performance artist Suzanne Lacy is quite eloquent on this topic, commenting upon work she is doing in Kentucky, "People are always comparing apples and oranges around art and change. The apples are an art project done on $20,000, the oranges are the multimillion dollar strip-mining industry. The amount of resources make the efforts very different in scale and effect." (Paget-Clarke, 2002, last paragraph) Yet despite working with the significant resource constraints, Lacy, working with teens in Oakland, was able to affect policy at a local scale. She helped develop a youth policy for the Oakland police force, which was not merely a momentary shift in perception and understanding but a social-political intervention with the potential for lasting consequences. Another voice in this area is the Austrian artist group, WochenKlausur (tr: "weeks of closure"). The group has developed a significant string of successful targeted-policy interventions in Austria, Japan and Kosovo. The artists work with the cultural capital of arts institutions to enter a community, carefully define what it is they see in the community that has the potential to change, then develop a project with local interests around that intention. The work is based in the belief that the unorthodox approach of art "opens doors and offers usable solutions that would not have been achievable through conventional methods and institutions." (2002: Varriant 16). Other artists and projects that I would be remiss in not mentioning here, would be Lily Yeh’s The Village of the Humanities, and Rick Lowe's Project Row Houses. Both artists have adopted and maintained relationships to the communities they work in, engaging in art and cultural practices that provide a stabilizing influence to a community that was beginning to unravel, eventually resulting in alternative development scenarios that enable individuals to seek equity and social-community stability. Both projects are nationally recognized models, well represented in a range of literature, Web sites and journals.

Policy requires immersive knowledge, critical distance and tactical intervention, although I think it is important to think critically about what it means when artists work on policy issues, and what it means to be effective at policy. Policy efforts take time and consensus to come to realization. Long-term and consensus are concepts that are foreign to the visual arts, which are primarily focused upon short-term effort and exhibition impact. The artists listed below have found ways to stay in the loop of policy discussions over time. Some know how to use the cultural institutions as platforms for change, others are in the trenches, at the local, state, national or international level actively working with clear political intent. The ultimate question of efficacy is a complicated topic for another article. If efficacy occurs over time, at different scales and as a process of consensus, it will be very hard to track. The following artists demonstrate an involvement in a larger discourse (beyond art) and have clearly stated their intention to affect policy. Below you will find a brief overview of the work of artists who are working with questions of culture, environment policy and change. This is not intended to
be a complete or thorough list, but rather a sampling of interesting work around
the world that goes to the questions we can define as policy related, at a range
of scales.

**Betsy Damon, The Living Water Garden**, located in the city of Chengdu in Sichuan Province, China, was the first inner city ecological park in the world with water as its theme.

**Betsy Damon**, founding director of the "Keepers of the Waters," has been involved in substantial discussions about water for over 20 years in communities across the United States and in China. In 1998, she completed a six-acre public park in the city of Chengdu at the confluence of the Fu and Nan rivers. The park features a passive water-treatment system, various flow form sculptures and an environmental education system. In 2000, she returned to China to begin work with the Beijing Water Bureau where she has begun several projects.

**Jyoti Duwadi** has a Ph.D. in political science. A self-trained artist from a family of artists and writers in Nepal, he lives in North Carolina. Affected by his relationship with Barbara Matilsky, the theorist and curator of "Fragile Ecologies," and the environmental conditions of Nepal, he began to research the Hindu mythology of the serpent kings — the Nagas Rajas who once ruled in the Kathmandu Valley. Duwadi and Matilsky developed a proposal and exhibition which integrates the contemporary concept of restoration ecology with the ancient mythology of the Nagas. The work is ongoing. The intention is to shape policy and development in the Kathmandu Valley.

**Helen and Newton Harrison** have been involved in significant arts-based environmental research and public-policy analysis for more than 30 years. They have considered the estuaries and redwood forests of the American northwest, offering significant insights on the social, political and economic impacts of current policies. Working with scientists, economists and regional decision-makers, they develop a Socratic [12] dialogue about the potential for change. Since taking early retirement at the University of California at San Diego, they have been involved over the last decade in the Netherlands, Germany and England developing social-ecological projects that present policy alternatives framed within poetic indigenous verbal and visual metaphors. They have just finished work on their largest project to date, a traveling exhibition supported by the European Union and Deutsche Bundes Umwelt Stiftung and the Schweisfurth Stiftung, as well as an array of museums throughout Europe. It presents a study of the effects of restoring the biodiversity of the highlands of Europe so that over time the rivers can once more become the primary European source of pure water. Their exhibition, "Peninsula-Europe," clarifies the limits of environmental resources and the potential for an international program of preservation, conservation and restoration based on a bio-regional model.

**Jay Koh**, an artist-curator who was born in Singapore, is working in Cologne, Germany. Koh studied chemistry and biology at the University of Cologne, and is becoming an artist out of social and political conviction. He has addressed genetic reproduction, and citizen voice and action in his work. He initiates cross-cultural projects within Asia and between Asia and Europe. He is the founding director of The International Forum for InterMedia Art. The work intends to shift the historic-colonial cultural paradigm that over-values the cultural work of
developed countries while undermining the cultural practices and arts of developing nations.

**Littoral, "Grassroots":** A new vision for farming families, the countryside, and the rural economy, after foot and mouth

**Littoral: Ian Hunter and Celia Lerner.** Working from a small village, Rosendale in East Lancashire in the British Lake District, Littoral promotes social inclusion in rural and urban contexts. They use the term littoral (defined as the space where the land and the sea are in dynamic interaction) as a metaphor for a new way of understanding contemporary challenges in the world that are resistant to conventional professional practices. Hunter and Lerner are interested in understanding how to respond to and address social, economic and environmental problems, specifically those moral and ethical issues that remain unsolved. Littoral is currently involved in "The Arts and Agricultural Change," which brings arts and craft practices to agricultural communities as a life- and economy-reinforcing measure for small farmers. They are also involved with Catholic and Protestant bus drivers in Northern Ireland, who, despite sectarian violence, have collectively committed to driving all the routes, on a rotating basis as an essential commitment to their region and their communities.

**Platform: Dan Gretton, James Marriot and Jane Trowell.** Since 1983, Platform has worked to help envision and create an ecological and democratic society, with a primary focus on London and the Tidal Thames Valley. They combine the talents of artists, scientists, activists, economists and concerned citizens to work across disciplines on issues of social and environmental justice. The work is based on a model of long-term active dialogue, exchange, networks, consensus-based methodologies, and ecological concern for materials used throughout the process. Since 1996, Platform has been focused on research and production that addresses the international oil industry and its effects on communities and environments around the world. The artists work on the issue from the personal/familial in terms of performances that address two generations of automobile culture, as well as a scope and scale of environmental inequity that is comparable to some of history's most repressive political regimes. Over the last two years, Platform has developed one of the most significant research databases on the oil industry in England. James Marriot and Greg Muttitt have co-authored significant policy reports with others on British Petroleum's Azerbaijan-Georgia-Turkey pipeline and the Baku-Tbliisi-Ceyhan pipeline, as well as a report on universities and the oil industry.

**Ala Plastica: Silvina Babich, Alejandro Meitin and Rafael Santos.** Ala Plastica is an arts and environmental organization based in Rio de La Plata, Argentina (near Buenos Aires), that develops projects, research, processes and products that deal with social and environmental concerns. Their primary focus is the Rio de La Plata estuary and the social-ecological communities that have developed over time around freshwater rivers and coastal zones. These communities are increasingly affected by changes to industrial and post-industrial economies. There are also affects from global interests that shift polluting systems from highly regulated developed world economies to the urban markets and industrial economies of the developing world that have less stringent environmental regulation. Ala Plastica has worked on native plant restoration in estuaries, bioregional planning and urban tree planting and
organized a community-based survey, rescue and information teams in the wake of the disastrous 1999 Magdalena oil spill.

**Judy Ling Wong** is the director of the Black Environment Network (BEN) in the U.K., an organization with an international reputation as a pioneer in the field of ethnic environmental participation. Wong’s background is in the arts and psychotherapy. She has become an internationally recognized leader in the environmental movement. As the director of BEN, she seeks to stimulate ethnic participation in the environment and works with mainstream environmental organizations to help them act with awareness and effectiveness in ethnic communities. Wong embraces environment and access to nature as an essential condition of life for all people.

"There are numerous artists that have the temerity to lay claim to policy, but few that actually have the power, ability and focus to see it through to conclusion."

In this essay, I have done my best to provide the reader with a sense of contemporary environmental practices. I have tried to integrate environment with society, and to provide an overview of the ecological and bio-genetic issues that are prevalent right now, as well as the range of works that go to environmental justice and issues of policy. I’ve included an artist’s dialogue relevant to the self-definition of practices and methods, theories and pedagogies. And I closed with an overview of artists that I believe are having an effect on policy. The question of policy is a slippery one. There are numerous artists that have the temerity to lay claim to policy, but few that actually have the power, ability and focus to see it through to conclusion. The other side of this instrumental relationship to policy would be that very good ideas have the potential to affect policy without declaring it as a primary intention. And finally, a major part of the ideas of social and environmental art practice go back to Joseph Beuys’ belief that we have to reclaim the creative potential. All of us need to recognize our creative abilities to affect policy at the local level, which may suggest that this is less about me and more about we. The question of authorship is of decreasing import for those of us seeking social and environmental change.

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**Tim Collins** is an artist, educator and theorist thinking about ecological restoration and working on post-industrial public space. He is currently a research fellow in the STUDIO for Creative Inquiry at Carnegie Mellon University, and a Ph.D. candidate at the University of Plymouth in England. He lives and works with his partner Reiko Goto in Pittsburgh, Pennsylvania. They served as co-directors on the Nine Mile Run Project, with Bob Bingham and John Stephen. Creating a series of community dialogues, informed by eco-science studies that took place over three years. The results of that project include a community-based plan to restore nature on 100 acres of post-industrial land and a stream that runs through it. They co-direct 3 Rivers 2nd Nature, a five-year project that integrates art and science in a series of community programs and radical planning efforts.

**References**


Beardsley, J. "Earthworks and Beyond," Abbeville Press, New York, N.Y., 1984


Gablik, S. "Has Modernism Failed?" Thames and Hudson, New York, N.Y., 1984


Held R. "Gene(sis): Contemporary Art Explores Human Genomics" at the Henry Art Gallery at the University of Washington, 2002


Spaid, S., Lipton, A. "Ecovention: Current Art to Transform Ecologies," co-published by the Cincinnati Art Center, Ecoartspace and the Greenmuseum.org, 2002


Notes

[1] While I think it is important to state these issues with clarity, this essay will not address these issues specifically. I think it is important to keep an open mind about the ways of working in a social setting.

[2] Some of my colleagues would argue that trees, rocks and wild things all have a voice.

[3] I will include the built environment as a context and at times an essential framework for the discussion of the natural environment. I do not attempt to address the built environment at any depth in this article.

[4] I offer two definitions. Art Practice: creative inquiry in relationship to media, content and/or discipline; the primary focus of production is on creative authenticity. Art Research: creative inquiry in relationship to society, discipline or disciplines; production is intended to be replicable or applicable by individuals beyond the primary author.

[5] Participants included a theorist studying the performance-based work of Welfare State International, a member of the London artists-group PLATFORM, a Ph.D. candidate focused on art and activist culture, a public artist and two community artists as well as Malcolm Miles and this author, who is currently a Ph.D. candidate at the University of Plymouth.
Reiko Goto is my primary collaborator, project co-director of 3 Rivers 2nd Nature and life-partner. Her personal work is based in a relationship to wildlife, habitat and ecology, she creates for and with "them," following the tradition of Lynne Hull, Helen Mayer Harrison and other artists who seek community in its multi-organism form.


A recent text on the subject, "Earthworks: Art and the Landscape of the Sixties," has just been published by the author Suzan Boettger (2002). It provides an in-depth analysis of the artists, theorists, curators and critics that helped catalyze this movement. I did not have time to review it for this article.

Ecological philosophers have been having a field day with these questions. Edited texts by Gobster and Hull, Higgs, Jordan, Throop and others respond in detail to a specific challenge on the topic provided by Robert Elliot in the book "Faking Nature," as well as a host of other moral and ethical questions that occur when our relationship to nature moves from one of utility without limit to one of limits and essential value.

The commons: the idea that there are "public goods" like air, water, soil and various landscapes that we use and value as a community, a society, a nation or a species - in common interest.

The list is primarily ecofeminist in nature. It is intergenerational and international including some of the original thinkers and activists in the area such as Helen and Newton Harrison, Lynne Hull and Betsy Damon.

The Socratic dialogue uses patient questioning to reach some true conclusion. The method requires knowledge of both the questions and the answers.

The Community Arts Network (CAN) promotes information exchange, research and critical dialogue within the field of community-based arts. The CAN web site is managed by Art in the Public Interest.
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Zeitschrift für Physikalische Chemie (ZPC), founded in 1887, covers the main developments in physical chemistry with emphasis on experimental and theoretical research. It represents a combination of reaction kinetics and spectroscopy, quantum theory, surface research and electrochemistry, thermodynamics and structure analysis of matter in its various conditions. 1954 Zeitschrift für Physikalische Chemie was separated into an East German and a West German Edition. The two editions were reunited in 1991. Other publications in the field.