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Art Ecology and Planning:

Strategic Concepts and Creativity within the Post Industrial Public Realm

by

Timothy Martin Collins

A thesis submitted to the University of Plymouth in partial fulfilment for the degree of

DOCTOR OF PHILOSOPHY

Art & Design, School of Art & Performance. University of Plymouth

July 2007

Timothy Martin Collins

Art Ecology and Planning: Strategic Concepts and Creativity within the Post Industrial Public Realm

Abstract:

The intent of this thesis and its attendant body of practical work was to examine and test ideas and practices that can inform and expand the artists' role in the post-industrial public realm and its environmental context. The general focus was on transformative approaches to contemporary public art. The specific interest (and area of practice) is defined by artwork that takes an interdisciplinary approach to new forms of social creativity in the context of post-industrial environmental change.

This dissertation begins with a broad literature review to understand public art and its relationship to: the public realm, ecology, nature and the environment. The intent was to understand the theory and process that inform answers to questions regarding the artists' ability to affect public policy; the ability to expand the creative act beyond singular authorship and finally the question of can we verify the impact of art? The thesis closes with two chapters describing practical work on 'Nine Mile Run' a project that developed an ecological restoration approach to post-industrial public space; also '3 Rivers 2nd Nature' which focused upon the emancipation of, and a means to advocate for post industrial nature. These projects were developed with the intention to test theory through application and value through outcome.

The goal was to provide a better understand of ideas that define and enable collaborative or inter-relational approaches to transformative art practice. The intention was to make a small contribution to the theoretical framework that informs the conceptualization, experience and valuation of transformative public art practices that intend to affect the material and conceptual forms of the post-industrial public realm.

It is through intellectual study and ongoing practice that the three original questions are addressed with a cautionary affirmative. Other specific findings include the following.

- The ongoing tension between individual freedom and social interaction is best addressed through a moral commitment to creativity in relationship to the emancipation of people, places and things.
- Visual evidence can not be the sole focal point of critical engagement with transformative practice.
- Transformative practices that undertake an inter-relational methodology demand ethical, responsible and distributed outcomes.

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Appendix B 3R2N plans (CD-ROM2)

- 3 Rivers 2nd Nature (2006) *Ecology and Recovery Allegheny County*. Allegheny County, PA: Studio For Creative Inquiry, Carnegie Mellon University. Available from World Wide Web: http://3r2n.cfa.cmu.edu>
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3 Rivers 2nd Nature (2005). Stream Reports; Field studies, map studies, and policy study. Pittsburgh (PA): STUDIO for Creative Inquiry, Carnegie Mellon University. Carnegie Mellon University. Available from World Wide Web: http://3r2n.cfa.cmu.edu

Appendix C (Bound In Copies of publications)

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Appendix D Supplemental Donation to Library

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I dedicate this to my mother Mary Elizabeth Collins, she taught me to love books.

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AUTHOR'S DECLARATION

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Committee.

This study was partially financed through Carnegie Mellon University. It was developed while I was a research fellow in the STUDIO for Creative Inquiry, at Carnegie Mellon University. It was finalized during my role as associate dean for research at the University of Wolverhampton School of Art and Design.

I was in attendance for all required courses in research methods and practice. I was a regular attendee at the research symposia each semester.

Relevant seminars and conferences were attended at which the work was often presented. External institutions were visited for consultation purposes. Several papers were prepared for publication, and various artworks and planning projects were developed during the time of my study.

Publications:

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Exhibitions:

- 2006 Ecological Practices of Contemporary Art. Curator Fang Li, Taiwan: Kaohsiung Museum of Fine Arts,
- 2005 3 Rivers 2nd Nature, in Groundworks, Miller Gallery, Pittsburgh, PA: Carnegie Mellon University. (Collins and Goto with Hefele)
- 2004 Breath Between Shadow and Light, in The Geumgang Nature Art Biennale, curated by Anke Mellin, South Korea. (Collins and Goto)
- 2002 Nine Mile Run and Slag Garden, in Ecovention, Curated by Sue Spaid and Amy Lipton, Cincinnati, OH: Contemporary Art Center. (Collins and Goto with Bingham)

Planning Projects and Public Art:

2004 Riverfront Access Participant – *Thurrock a Visionary Brief*, in the Thames Gateway, General Public Agency, London, UK.

Pittsburgh Hillsides and conservation zoning. A collaborative, interdisciplinary project with Perkins Eastman Architects. Pittsburgh Pennsylvania.

The Tzin River Valley: A Proposal to Restore the Land and Cultural Values Taken by a Phosphate Mine. Curated by Shai, Zakai and The Israeli Forum for Ecological Art, Negev Desert, Israel.

Die Wasserweg (The Waterway) a proposal to create a water quality study and a public dialogue about water in the Riesa-Großenhain region, curated by Heike Strelow, Riesa-Großenhain, Germany: Cultural 21

2003 Participant – Cultura 21, Art and Sustainability in Rural Spaces. Groβsenhain, Germany: Cultura 21

Conferences and Symposia Presentations:

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Introduction

Over the last ten years, I have worked within an arts based research facility—The STUDIO for Creative Inquiry at Carnegie Mellon University, Pittsburgh, Pennsylvania. In that setting I was a research fellow and a principle investigator charged with the development of a self directed programme of research. I worked closely with other research fellows on the production and development of that work, my most frequent collaborator being Reiko Goto, who is both my colleague and wife and partner. I took the role of Project Director; her role was as Creative Director. It was my job to plan, develop and direct the research initiatives that you will read about in the last two chapters of this text. The work takes the forms of text base scholarly research, a mapping and analysis of fields of knowledge relevant to the focus of this thesis. And applied research defined as a process of "systematic investigation with a specific context in order to solve an identified problem in that context" (Brown, Gough, Roddis, 2004: 7). In each case the research demanded an interdisciplinary approach to knowledge; this was developed through collaboration with artists, scientists, humanists and designers. I would plan and oversee the work, synthesize information and clarify knowledge that was being developed then find ways to integrate that knowledge into a meaningful public product. The outputs included photographs, data sets, GIS Maps, papers, texts, reports and exhibition presentations. Project reports were written collaboratively. Papers for publication were most often written alone, although where indicated they were collaborative.

Because of the distance and complexity of this project, I have elected to present the practice based work in the form of reports and texts and an exhibition

catalogue. My role, as stated above, is to synthesize the work. As a result, this full length written thesis is intended to be a synthesis of my interdisciplinary practice and reading in theory through writing.

In the following pages the goal is to make a modest contribution to the knowledge theory and practice of transformative public art. For twenty years or more, artists and critical theorists have been challenging the idea of public art as a relatively passive component of urban redevelopment. The term "public art" is both clear and problematic; it seems open-ended denoting work that occurs in the public realm, yet its connotative reference describes increasingly institutionalized and standardized municipal public art initiatives. My general interest is in the role that the artist plays in the dynamic relationship between society and nature. My specific interest in this thesis is to examine the role of art in contemporary social and environmental change. Other terms to specify include ecology: the science of the environment that is focused upon the inter-relationships between living organisms and the conditions that support life; and planning: the problem of how to make knowledge accessible and effective for citizens and/or experts interested in social change.

The time period of this work is contemporary; the physical context is post-industrial urban landscape. This is an area of art practice that I have been involved in for almost twenty years; it is an area of practice that is over thirty years old. As a mid-career practitioner, I am in dialogue with some of the original thinkers/makers as well as my contemporaries in this area of practice. I am in regular contact with colleagues working in Asia, Europe, and North and South America.

I began this effort by formulating three research questions:

- Can artists working as cultural agents affect the public policies and private economic programmes that mark and define urban places and ecosystems?
- Can artists develop a public realm advocacy that expands the creative act beyond the authorship of the artist?
- Finally, can artists initiate verifiable social change? And is it possible to verify the impact of creative collaborative interaction?

In the pages that follow, the reader will discover a sense of the historic continuum in which this work fits. The thesis begins in section one with a focused review of Lippard and Gablik, whose writing created a breach in the historic understanding of what art was at that time. They helped create a new social and environmental context for making art, an effort that has had a lasting effect. I then carefully chose a small group of well-documented artist's projects and programmes, by Group Material, Martha Rosler and Suzanne Lacy. Lacy, in particular, provided a framework upon which I examine some basic ideas and guidelines for what was, at the time, an emergent alternative to public art practice. The primary narrative that emerges from this literature is a need for a balance between individual autonomy, social responsibility and the question of political efficacy. In other words issues of freedom and ethical responsibility when working beyond the boundaries of the studio. At that point in the research, it was clear that the next step was to read deeper into literature regarding the public realm and environment; both areas remain under theorized in relation to art practice and criticism.

In section two, I examine specific ideas about the social and political context. I work my way through various historic/political models of the public realm, explicating and then building upon Weintraub's model (1997). I insert the catalytic subject of nature and its public realm potential, following the pre-existing feminist format. This is nothing more than an extension of eco-feminist ideas, following Merchant (1983) and Plumwood (1993), into a political framework. I believe that this provides an initial theoretical model that has emancipatory potential. I follow this with an overview of texts, primarily from Deutsche (1996) and Miles (1997, 2000a, 2000b, 2004), which introduce ideas about conflict and conviviality, freedom and responsibility. This overview is intended to provide the reader with some clarity about the public realm question. The next section returns to the environmental issue.

Section three, is an overview of the range of cultural response to changing environmental conditions (a response that I believe is beginning to coalesce across disciplines and in relationship to the public realm issues raised earlier). I then offer an overview of the debate between Berleant (1992) and Carlson (2000) in environmental aesthetics. Berleant's positions challenge the foundation idea of subject-object relationships a radical position that reorients our world view. Eaton (1997) extends that with an aesthetic idea about the perception of health. At the end of this section, I examine the intersubjective and relational aesthetics of Grant Kester (2004) and Nicholas Bourriaud (2002). They provide an important anchor for the project-based analysis in the chapters that follow. Although, the anthropocentric focus does not provide us with the same emancipatory potential found within Berleant's position.

In the final section, I examine two research projects that I have undertaken over the last ten years. I explicate and analyze that work for impact and value in terms of dialogic engagement, instrumental impact on the social and environmental context of its creation and, finally, in terms of contribution to the transformative public practices. My first hypothesis is that art can make a contribution to creative agency and responsible advocacy. My ethical correlate is that art must take new responsibility for practical outcome in that process.

Theory

Theory plays a symbiotic role in advancing the potential and capacity of practice-based work. In this thesis, I have decided to extend my theoretical interests into the areas of ecological philosophy, landscape aesthetics and social political analysis of public space. I have been searching for specific ideas that would enable the development and growth of my own practice. I have carefully selected specific ideas from these areas of knowledge that I believe are essential to an expanded understanding of the world we live in. I will explain why I believe these ideas are relevant to artists who want to work in the areas of society and environment. I will, in turn, test the utility of some of these ideas in my own practice.

Practice

My second hypothesis is that dominant systems can be transformed through changes to the information that informs decisions and close attention to the rules that govern behavior. In light of this intent, I will examine my role as an artist working within an interdisciplinary research facility. For the last nine years, my

primary funding has come from environmental interests that saw the work my team was doing as an effective route to change. I have been initiator and primary investigator of specific projects that seek to externalize or distribute creative authorship as a means to bring about change. Our goal has been to enable public participation in public realm decision making. To inform that process, I have chosen to work with interdisciplinary teams that are prepared to identify, develop and distribute strategic knowledge. The audience is anyone that is interested in issues of nature and public space in an urban setting.

Research Methods

The research methodologies have been developed from practice. My creative inquiry is defined at its core by an interest in water and culture, the public realm, and the ideas of the commons. I sought out specific literatures that addressed my area of inquiry: the post-industrial public realm and its social and ecological condition. I have read widely, and in some cases quite deeply, into much of the literature that attends public art, the public realm, environmental philosophy and specific areas of contemporary aesthetics. As part of my practical work, I have read the literature associated with aquatic and terrestrial ecologies, planning, environmental design and restoration. As a professional practitioner, I am aware of much of the international work undertaken in the integrated sub-area of art, ecology and planning. I am somewhat less aware but attentive to artwork that is driven by social interests alone.

In all of this, I am seeking ideas and methodologies that allow me and my colleagues to experiment with ideas of social change and creative agency. For example in one case, in the area of landscape ecology, we combined standard

theory and methods identified by Forman (1995) with a forest analysis based GIS package and reconfigured it for urban ecosystems. The idea being that we would integrate natural systems ideas with the typical infrastructure and social systems analysis being done within the office of Allegheny County Planning. In another case, after critique by artist colleagues attending a public programme we hosted, I began a series of discussions with academics and practitioners of community planning and facilitation. The question was, 'how to get it right;' the answer was, 'do it over and over again, with humility,' and to understand the actual limitations of human contact. This is very important in relationship to a project like 3 Rivers 2nd Nature, where the spatial remit was huge. At the end of the day, much of this work is fundamentally about responsibility and attention to details.

As you read the following pages, my interest in the application of theory will become quite clear. As I work my way through the literature, and then the practice, I am trying to better understand the differences and similarities between the artist's critical response and the transformative response. I am also seeking ideas that will liberate and enable new modes of thinking and practice, as well as a framework that is relevant to the analysis of this work. The work is complicated by significant temporal duration, interdisciplinary relationships, and the ideal of applied social creativity. Reading Chapter eight and nine, you will see that the work has applied and tested much of the theory that is explored in the thesis. The applied efforts were designed for one project to build on another. My intention being to experiment with successful ideas from Nine Mile Run while working at a much larger scale on 3 Rivers 2nd Nature. With increased time and funding, 3 Rivers 2nd

Nature went deeper into the art, science and social-political context in which the work was ultimately received.

The goal from the beginning was to enable a broader, more informed and politically enabled agency than existed previously. The methods to achieve that goal were to seek strategic knowledge that had the potential to shift concepts and reframe perception. The conceptual was then tested within a practical laboratory of onsite experience and discourse that culminated in collective planning. Our hope was that the exhibition and dissemination of the products of this collective process would result in new values and political interest in the rivers and their attendant ecosystems.

I am interested in instrumental creative knowledge. In this thesis, I have tried to understand the potential for functional impact from the cultural agency that is grounded in art. My points of reference are all archival and text based. I decided it was important not to rely upon limited impressions from exhibitions, ongoing programmes, or primary discourse with colleagues. To develop the context of this thesis, I have examined the historic and contemporary ideas that inform a specific current in public art practice. The sources are primarily a carefully selected group of texts from the past twenty five years that illustrate a public practice that is more process and discourse than product, more critical and transformative than supportive or complicit with dominant social forces. The difficulty to ascertain impact from process is one of the primary challenges of this thesis.

SECTION I – The Art Context

Chapter 1 – Context: Art Beyond the Gallery

Initiating New Ideas and Practices

Writing in 1988, the art critic Patricia Phillips took notice of the fact that many of the manifestations of public art (at that time) were still acquiring their notion of public from their location rather than the intent of the artist. She had other things in mind:

A truly public art will derive its publicness not from its locations, but from the nature of its engagement with the congested cacophonous intersections of personal interests, collective values, social issues, political events and wider cultural patterns that mark out our civic life.

(Phillips, 1988, p. 97)

On the following pages, I will explore twenty-five years of texts and exhibition catalogues that address radical (socially transformative) forms of public art that integrate environmental or ecological concerns. The work that is of interest is not the forms and expressions that affirm urban regeneration. Instead, this thesis explores the critical and transformative practices that put the artist in dialogue-based, collaborative relationship with place-based communities. This can be described in terms of a post-authorship practice or shared-authorship practice, where the 'form' of the work, whether it is a physical product, plan or process, has been shaped by multiple minds, multiple hands, and, as a result, has multiple

advocates. This idea emerges (within the arts) from Joseph Beuys's theory of social sculpture, which is presented in Stachelhaus (1987, pp. 60-78), Kuoni (Ed.) and Beuys (1990, pp., 19-60) and most recently in Harlan (Ed.) and Beuys (2002). These ideas have developed as a clear intention and methodology in my own work, which is conducted with a full awareness of my contemporaries, neo-Beuysian practitioners such as WochenKlausur in Austria and Platform in England, also, my progenitors such as Helen and Newton Harrison of California, Herman Prigann and Vera David of Germany, and Mierle Laderman Ukeles of New York. In the texts that follow, you will see that a transformative way of working is evolving. Artists, theorists and critics are attaining new competencies that are producing radical democratic participation and creative investment in the social and environmental aspects of the public realm. Although my focus is public art, my ultimate interest is in artist-driven initiatives and inquiries rather than institutionalized programmes for the commission, planning, design and/or purchase of isolated works of art.

Throughout the 1960's and 1970's, anything outside a gallery was deemed public. By the 1980's, conditions of place, such as form, space and material; urban and natural environment; and history and local community, all began to affect the intent, process and practice of the public (or community) artist. With books written in 1983 and 1984, the art and cultural critics Lucy Lippard and Suzi Gablik provide us with a theoretical and conceptual framework that critiqued the artworld at that time and delineated alternatives. They were writing in the period after conceptual art, minimalist art and earth art, when not only the artists but also the commercial galleries were open to experimentation in the forms, economics and products (and

by products) of art. Yet, in the quotes below, it is clear that both critics recognized that, while much had changed in terms of the formal context the artists were working in, the artists themselves remained quite marginalized. Art was a self referential playing field with little impact beyond its own borders.

...artists have never questioned the current marginal and passive status of art and are content to work within the reservation called the artworld.

(Lippard 1983, p. 6)

The 1980's so far have led us to the discovery that the craving for unlimited freedom may be ultimately entropic. It deprives art of direction and purpose until like an unwound clock, it simply loses its capacity to work.

(Gablik, 1984, p. 35)

Lippard and Gablik share a critical unease about the artworld as well as a desire for traditions and practices that integrate art, society and the environment. They address this need for new traditions and practices by focusing upon very different periods of time. Lippard focuses on prehistoric landscapes, nature/body images, and earthworks as her points of comparison to contemporary art, whereas Gablik starts with modernism and the avant-garde at the turn of the century and follows its devolution in relationship to late capitalism. Lippard opens the frame to prehistory for contemplation and comparison to art of the time. Gablik takes us for a rigorous excursion through the history of modernism and declares an entropic

end point of modernist art that demands response. Yet their goals are similar as they are both interested in art that re-engages the social, although Lippard is more strident on the environmental context of the social. The basic concept of 'Overlay' is that culture overlaps nature and nature overlaps culture, and that the quest for mastery over nature may be better served by an effort to master the relationship between nature and humanity (Lippard, 1983, p. 228). They both see morality as a function of social responsibility, which has a dialectical relationship to the individualist dynamic that dominates capitalism. Lippard's work is primarily pedagogical, providing examples that illustrate her robust curiosity and intellectual interests. Gablik's work is primarily a cultural critique; she examines not only a period in time, but the means to evaluate that period, and draws conclusions that portend the future.

Lippard integrates archaeology, history and contemporary art through an analysis of human manipulated stone, prehistoric feminine images, representations of earth and sky, narratives of maps, journeys and rituals, as well as homes, graves and gardens. The intent of the author was to better understand the most deeply moving vestiges of the past in relationship to projects of contemporary artists who produce images that are culturally familiar yet somehow lack the depth and resonance of ancient sites. She describes the study in terms of a search for connections between art, religion and politics, or the ways that culture contributes to social life. She links the social to the ecological throughout the text. She defines art as "expression of that moment of tension when human intervention in, or in collaboration with, nature is recognized" (1983, p.5). Lippard is careful to separate ideas of spirituality from contemporary ideas about religion. Here she differs with

Gablik, but the underlying reason for her discomfort is entirely resonant with Gablik's position on an increasingly bureaucratized culture.

...if art is for some people a substitute for religion, it is a pathetically inadequate one because of its rupture from social life and from the heterogeneous value systems that exist below the surface of a homogenized dominant culture.

(Lippard, 1983, p. 7)

It is important to consider the fact that it is the unknowable that drove Lippard's study. It began with leisurely walks in the southwest region of the U.K. Those walks resulted in an awareness of the depth and sensuality inscribed in the landscape the record of relationship between humanity and nature, between body and land. It is this sensuous understanding and, ultimately, a desire for art that has a creative social commitment to place that is at the heart of her contribution. In this case, however, Lippard is reacting to ruins, to landscape scale cultural artefacts that are still visible in the context of the natural landscape but no longer culturally dominant. It is hard to say if the depth and sensuality that she experiences today was part of the intent and experience at the time when the ancient people were struggling to establish and sustain their culture, which was, by necessity, of the land and in turn symbolized by the marks and forms that they made and maintained upon the land.

Gablik identifies 'secularism, individualism, bureaucracy and pluralism' as the core ideas of modernity that drive her critical interests and writing (1984, p.16). Her

critique is based in a fundamental discomfort with the loss of moral authority (also described as a loss of the sense of the sacred), which has accompanied an increasingly rational, individualist and materialist modernist practice that fixates upon the edge between what was done today and what will be new tomorrow. For Gablik this is an entropic condition: anything can be art, and we have no guidelines for evaluation, which ultimately means we have no consensus on pedagogy either. The market becomes the sole entity that drives the discipline. The intellectual content² created by primary practitioners has little authority beyond the gallery, the museum and their relationship to sales. Ultimately the autonomy and creative authority of the artists is subsumed and colonized by the realities of what sells and what doesn't, or by the realities of whether you need to make a living or can exist on savings and investments.

Gablik's solution to modern culture includes the pursuit of a linked sense of autonomy (from the market) and social relatedness. She is clear that the rebellious freedoms that typify modern art need to be rethought within a sense of moral/social constraint. She demands a broad commitment to reconstruct culture and provide alternatives to destructive patterns of consumption and waste. Finally, she asks that we defy cultural conditioning, seek external models and transform what we understand as valid truths and acceptable realities.

The Limits of the Artworld

Art has social significance and a social function, which might be defined as the transformation of desire into reality, reality into dreams and change and back again. I see effective art as that which offers a vehicle for perceiving and understanding any aspect of life...

(Lippard, 1983, p.5)

It can be argued that perception demands conceptualization; you need to be able to wrap your mind around what it is you are looking at to understand it as a class of ideas. In light of that, the role that art plays in perception may have more to do with the emotional understanding than intellectual understanding. By juxtaposing divergent images, symbols and ideas, the experience of art can initiate a reconsideration of the limits of the class of ideas we might have formerly preferred to leave intact. For example, I understand nuclear holocaust because I've read about it. But I fear it because of pictures and films seen that help me understand, they make me feel its destructive force. The social significance and function of one kind of art is indeed to help us grasp reality, in some cases reality that we don't want to face in new ways. From Picasso's Guernica to the critically engaged paintings and drawings of Leon Golub and Sue Coe, art helps us to understand and 'see' things differently. Art does indeed have social significance and function, at least some kinds of art. There is no intent in this thesis to claim or refute that all art does so.

Lippard seems to suggest that art sits between reality and dreams, indeed what she may be saying is that it is a threshold between two divergent worlds. As ideas pass back and forth over the threshold between art and life, ideas and images accrue new meaning; they expand the potential for perception and understanding. I am not convinced that even she can validate a threshold. None the less, I do agree with the basic premise that art has social significance. Defining it clearly in terms of intent, process and effect is the primary focus of this thesis.

Lucy Lippard and Suzi Gablik provide for me (at age 50) the original framework to reconsider the artist's role in relationship to lifeworld rather than in relationship to the artworld itself. The artworld, as defined by Arthur Danto, is actually the conceptual framework that informs our perception of what art is.

To see something as art requires something the eye cannot decry – an atmosphere of artistic theory, a knowledge of the history of art: an artworld. [For clarity he adds that this is,] ...a knowledge of what other works that given work fits with, a knowledge of what other works makes a given work possible.

(Danto, 1997, p. 165)

The lifeworld consists of three dimensions: culture, society and personality. It is defined by Jurgen Habermas as, "...the intuitively present, in this sense familiar and transparent, and at the same time vast and incalculable web of presuppositions that have to be satisfied if an actual utterance is to be at all meaningful, i.e., valid or invalid" (Habermas, 1987, Vol II, p. 131). In more straightforward language, Craig Calhoun states that, "The Lifeworld is the realm of personal relationships and (at its best) communicative action" (Calhoun, 1994, p. 30). Stephen White adds further clarity, addressing communicative action as the means by which the lifeworld is reproduced, "...rationally motivated action orientations are sustained only when the different aspects of sociation are mediated by processes of understanding, in which agents take up a performative attitude toward the different validity claims raised in cognitive interpretations, moral

expectations, expressions and valuations" (White, 1988, p.99). This as the basic framework of life, which is dynamically maintained, deformed and reformed through relationships to other people, culture and other cultures and the myriad forms of society that we encounter. A primary intent to engage the lifeworld reframes the role of art and re-examines the validity claims of its production in an inter-relationship between individual(s), culture(s) and society(ies). In another text, Habermas questions the isolation of science, morals and art asking, "How can they be joined to the impoverished traditions of the lifeworld?" (Habermas, 1996, p. 19)

As the artist moves towards the lifeworld in process and practice, two issues will emerge. First, the counter-argument to Habermas's ideal of rational discourse is Foucault's conviction that all discourse is duplicitous and laced with the desire for power and control. Secondly, Herbert Marcuse's ideas of validity, political relevance and its direct relationship to the autonomous function of art (1978, p. 53) will be significantly challenged, if not reconfigured, as art moves into the lifeword. I will expound on these ideas and their effects upon the practice of art below. I will not attempt to resolve these issues as that would be well beyond the scope and the intent of this thesis.

Lucy Lippard's writing in 'Overlay' resonates with this concept of the migration from the artworld toward the lifeworld. She is adamant that the artwork that formerly helped us understand 'life' was not effective simply by being created, but by being created and communicated within carefully considered contexts (1983, p. 5). She wasn't interested in passive production or consumption. It was the

exchange, the dialogue, which energized her. It is the communities of interest where ideas, perceptions and symbols evolve that give art (and any other intellectual activity) its meaning and purpose. Without it, she claims art was nothing more than another commodity to be manipulated and renewed with every season. The work, the discourse of the discipline had a life of its own, a dialogue of communities of interest which she continues to help form and nurture today.

Lippard not only links human to human through creative dialogue, she links human culture to nature through historic and emergent concepts. She begins with the German critical theorist, Walter Benjamin, who called for "mastery not of nature, but of the relationship between nature and humanity" (Benjamin, 1928, in Lippard, 1983, p. 228). This is complemented by the ideas of the Scottish-American landscape architect, lan McHarg (1971) who is recognized for his text, 'Design with Nature' widely considered to be original work that integrated ecological knowledge with the cartographic analysis of the urban landscape. In the text, he describes an idealized society that he terms, 'The Naturalists;' their primary desire is to understand nature, which is (inseparable from) humanity. This utopian tale narrates the story of a culture that has evolved from both co-operation and competition (not conquest) and knowledge of nature that pervades the entire population. He closes by saying that they look to nature to seek laws and forms of government, the 'way of things' is the basis for their laws. They are committed to knowledge and, "...have in their company not only scientists but humanists who have espoused the ecological view" (1971, p. 125). In this narrative, nature is context, content and a model of utopian culture.

Where Lippard offers historic narratives to describe the artists move into the lifeworld, Gablik provides critical models. Gablik presents bureaucratization as the death of the (late-modernist) avant-garde. Claiming the critical creative impulse is subsumed by the attractions of market culture. Cultural leadership presented by the avant-garde formerly served as a moral conscience, which held the utility minded bureaucratic culture to a moral and ethical standard (Gablik, 1984, p. 55).

If the adversary psychology of modernism originated in the contradiction between a society with corporate values and interests and the kind of spiritual consciousness that can only come from religion and art, what the death of modernism really signifies is that our art no longer sustains and protects this contradiction.

(Gablik, 1984, p. 56)

Success and security, secularism, conformity and mass belief in materialism are all part of the juggernaut of bureaucratization that Gablik believes has undermined the avant-garde. She describes a burgeoning population of artists, the increasing power and dominance of art dealers and the unmitigated struggle for what other sectors might call, market-share. She argues that these values are ultimately hostile to the very nature (I assume she means the social and spiritual condition?) of creative life. She claims that changes in the marketing of art are not only limited to the commercial dealers, but with the disinvestment of public monies, museums are also turning to the market through corporate sponsorship.³

Gablik provides us with a vociferous critical revelation of the artworld and its status quo (circa 1984). As understood through Gablik's case study, it is better named for what it had become: a nascent (in comparison to today) art market, with attendant sales (galleries), publicity (art magazines), banking (museums), and investment sectors (auction houses). In her text, Gablik tells a cogent and defensible tale with references and studies that back up shifts in state support and corporate influence in museums. She also writes of the glut of artists that descend upon New York each year, and the dealers that vie to make a chosen few famous and rich beyond their wildest dreams. Gablik paints a bleak picture: an argument for change, which is ultimately undermined by satisfaction, or complacency regarding the status quo. The case is made for change, but what is the avenue that a rational mind must pursue? Gablik describes the opposition of the avant-garde of the 20th century to the rationalization of culture through scientific planning, social engineering, strategic economics, warfare and resource distribution.

The radical alternative at that time was irrational freedoms, transcendent experiences and overt visual and cultural excess. Gablik described the new values of the bureaucratized artworld of 1984 as, "obedience, dispensability, specialization, planning and paternalism; which undermine the older values of individuality, indispensability and spontaneity" (1984, p. 62). Gablik's positions vis a vis industrialism and the effects of late capital on the arts, isn't it clear by now in the post-industrial contemporaneity that the dominant life-world is actually defined at this time by an irrational meta-narrative? And in turn, isn't it time to consider that the appropriate response by the arts has to be something different than more irrational action? Should we consider a new creative rational responsibility? Can

we make art with instrumental intent? How can we achieve the art of life, in the face of a technological conquest of nature and a demand for resource which seems to have no bounds? No bounds even in the face of anthropogenic changes to global climate? Is this kind of question a fitting one for art of the present time?

And if it is, what are the means to achieve such a goal?

Gablik is not alone in believing that the pluralism of postmodernism is ripe with expansive opportunities. A much awaited respite from the self involved imperative of artistic innovation that typified late modernism. At the same time, she fears that it is in the rush to plurality on the heels of rampant creative freedoms, we will find new appetites for purely aesthetic experience (and market interest) without the commitment to a theoretical, ethical and critical background which might allow us to develop the practices, the processes and the products in a meaningful way. She suggests that traditions are the functional means that sustain cultural continuities.⁴ The question that she asks in the face of the rabid pursuit of creative autonomy is what is the contingency plan? What is the transcendent thought? What are the cultures and values that just might make it possible for a self-referencing discipline to survive the dissipating process of entropy? She provides an overview of historic traditions and relationships in the arts going back to the renaissance that reveal a potent and effective role in the development and presentation of dominant world-view, particularly when compared to the present situation of art. She claims that:

...traditional authority has always drawn its vitality and influence from the belief that its values transcend those of any one individual and go beyond merely personal aims.

(Gablik, 1984, p.80)

In most capitalist democracies individual freedoms and the private enjoyment of life trump social and ecological goals. Gablik suggests that the issue is not to take away freedoms, but rather to insert a sense of responsibility for the application of what have become nothing more than rhetorical freedoms. A goal would be to develop the right idea, or more appropriately a range of right ideas about living. However, isn't this idea of 'traditional authority' exactly the point that we have been running from since the 1960's? Isn't it traditional authority that the intellectual weight of the post-structuralist and deconstructionist philosophers has been aligned against? Is it possible to retain some element of traditional authority and not wrap one self in a hegemonic meta-narrative? These are interesting questions that might be answered by such radical (and potentially authoritarian) ideas as living within limits, or not taking life. Maybe there is a new tradition of older values that we need to reconsider to find clarity on what it means to live well.

Gablik raises the question of morality, which she grounds by references to the sociologist Emile Durkheim who claims, "There are no moral ends except collective ones." (Durkheim in Gablik, 1984, p. 96) The implicit claim is that morality is a social grace that extends and limits the desires of individuality. It is the source of guilt that modulates individual desire for the good of the social well being or possibly ecological well being. Gablik believes that the moral, social and aesthetic are intertwined; yet at the same time, these values are undermined by a culture of specialization. What that means is that we artists are so deeply embedded in our specialized inquiry and practice that anything outside that core

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competence is beyond our vision and sense of control. Typically, Gablik
challenges us to oppose any sense of feeling helpless, to reconsider the

from the world is no more of a solution today than it was in the days of the early

application of morality in all situations and to remember that turning inward away

modernists.

The social situation of today, compels immersion; retreatism and rebellion are as unsatisfactory as submission and conformity.

Resistance remains essentially negative unless it leads the self beyond a mere posture of defiance.

(Gablik, 1984, p. 101)

In this quote she makes it clear that it is not simply resistance that she values, but rather the clarity that can move society forward, with moral intent, in relationship to existing systems or networks that can be used for social change rather than self interest. These are goals of stewardship and responsibility rather than victimization, critique and retreat. She claims that radical consciousness in art has become impotent at the same time that the authority of tradition has been undermined and cast aside. The future has no structure to build upon or react to; no standards to judge our progress or our regress. Success and failure can only be based upon the work of art and we no longer lay claim to knowing what a work of art is. It is with a sense of a tragic critical hindsight that she identifies tradition and authority as the source of purpose and direction to the reaction that was the modernist avant-garde. The freedom and autonomy that was the passion of 100 years of modern art has resulted in a culture of anti-social experts of their own

self-expression, serviced by market interests. The modernist ethic is at odds with what we need today, freedom as it is currently defined in the arts disempowers the artist. At issue is not has modernism failed or not failed, but rather, "...was it appropriate in the first place to reject tradition?" (Gablik, 1984, p. 118) What we have achieved in the culmination of modernism is an art defined by social alienation.

Reconstruction (Restoration)

Gablik claims that much creative work, or practice is 'blind or counterproductive' because of its philosophical principles. Many amongst us don't believe that art will (or should) ever change the world. Just as many amongst us think the world is in dire need of change. Gablik reminds us that the dominant aesthetic tells us that, "to play a useful role would make art merely a tool, no longer a valuable end in itself." (1991, p. 141) Gablik claims that we are at a point where it is becoming clearer that we cannot look at art in aesthetic terms alone. What stands in the way of our radical transformation, may be the 'technology of aesthetics' the dominance of the aesthetic infrastructure. The white cube, the clean artificial space of aesthetic analysis that is the standard of our culture and of our understanding of what art is. The white cube is a monological space, a site of pronouncement, "...individualistic, elitist and anti-social – the very antithesis of social or political practice." (1991, p.150) Gablik claims, this is the very essence of modern aesthetics, the 'rejection of dialogue and interaction.' Gablik provides us with a strong argument that forces us face to face with the idea of infrastructure and its focal point, the market based art product. This is the underlying framework, the organizational structure upon which our world of creativity is based – at this point in time. It is an infrastructure that shapes what we make, how we receive what has

been made, and the values that shape its production. Infrastructure is the cultural investment in the structural underpinnings of dominant ideas. The white space, the galleries and museums that build them, the auction houses that cater to them are all part of the system that defines what we produce by delineating the material context (and value) of that which is produced. This infrastructure is a clear aesthetic boundary that constrains social practice; and it is the physical framework that has most consistently delivered the most important, aesthetic production of our culture. The question that we have to ask ourselves is, does this infrastructure constrain us, does it limit our response to the social and environment conditions of our world today? If it does, then it is worth considering alternatives. This thesis is about considering those constraints and our opportunities, the theories and practices that support alternatives to dominant aesthetic infrastructure. Below Gablik identifies a key that will free us from our constraints; interaction.

It seems clear that art oriented toward dynamic participation rather than toward passive, anonymous spectatorship will have to deal with living contexts and that once an awareness of the ground, or setting is actively cultivated, the audience is no longer separate. The meaning is no longer in the observer, nor in the observed, but in the relationship between the two. Interaction is the key to move art beyond the aesthetic mode: letting the audience intersect with, and even form part of the process, recognizing that when observer and observed merge, the vision of static autonomy is undermined.

(Gablik, 1991, p. 151)

I marked this passage when I first read this book over twenty years ago, "Interaction is the key to move art beyond the aesthetic mode." If the problem is defined in terms of individualist expression (or individual activity) the path out of this is mutual, reciprocal interactivity. In Gablik's terms the nexus is between the artist and the audience. This point will become a focal point for every section that follows. The question that I want to raise is, should we abandon 'the aesthetic mode'? What might this aesthetic mode be? These are important questions to consider. Is she referring to a Kantian common sense about form; or a Greenbergian structuralism? Our hint is found in the interactive form, the discourse that is carried about in relation to the audience, a discourse that demands new aesthetic ideas rather than the removal of aesthetic philosophy. Indeed, to return to an idea stated previously, an intact and useful aesthetic is an essential intellectual tool for right living. The question is what form might that aesthetic take, when subject and object, author and audience are all in simultaneous relationship? This new aesthetic (or more than one aesthetics) must transcend the limits of product. It must dwell in the act of becoming both empathetic and rationally dialogic while remaining spirited and unconstrained, as this is the tradition and indeed the very authority of our own discipline.

Gablik like most of the artists, critics and curators writing in this area is a committed but critical optimist. She understands that the fundamental difference between the present and the past is that industrial culture has produced a disturbing range of means, and quite possibly taken a series of actions that can lead to our own destruction. As a result, she declares her intent to outline a

programme of reconstructive post-modernism as a counterpoint to deconstructive post-modernism. She defines this in the following terms.

Reconstructivists are trying to make the transition from Eurocentic, patriarchal thinking and the 'dominator' model of culture toward an aesthetics of interconnectedness, social responsibility and ecological attunement.

(Gablik, 1991, p. 22)

She juxtaposes this against a very strong critique of deconstructionist tactics and practices. Referencing Roland Barthes, she claims that amongst the deconstructionists; "meaning is not communication (information) or signification (symbolism) but is always in play, always different. Unbalancing the meaning is the only way of avoiding the tyranny of correct meaning." (1991, p.32) She takes a bold stand against the dominant philosophic ideas of the time, although this is generally stated. For more clarity, I refer to Clive Cazeaux (2000) who identifies Yale University, Connecticut as the primary source of these ideas. The 'Yale School of Literary Criticism' included Harold Bloom, Paul de Man, Jacques Derrida, Geoffrey Hartman and J. Hillis Miller. Cazeaux defines deconstruction as one step beyond the idea that any text (or work of art) will generate ideas and associations in the audience that were not planned or intended by the reader. Deconstruction, "...shifts attention to the way in which metaphors, turns of phrase, and distinctions adopted by the author can turn around and thwart intention." (Cazeaux, 2000, p.373) At this point the question of authorship is under question and meaning, which has always been based at some level on shared frames of

reference, was now questioned at the level of primary authorship. Gablik's fundamental issue is with this diffusing effect on shared meaning and author's intention. Shared meaning and artist's intention are foundation ideas for art that seeks dialogic interaction. (This is further discussed in Lippard 1995, Lacy 1996 and Kester 2004.)

If arts function is to articulate a notion of human freedom – if that is what art does – then the problem is how to make the notion of freedom relevant to everybody not just an elite group.

(Ukeles in Gablik, 1991, p. 69)

Where the modernist model holds the notion of freedom as the core foundation of art, Mierle Laderman Ukeles simply reverses or democratizes that value. Freedom is unarguably relevant to all who construct, maintain and give form and function to the world we live in. Those that provide the context and condition for intellectuals like artists to explore the meaning of unmitigated freedom, and its potential — to be shared. It is the question of potential and ultimately the application of freedom that is most consequential here. This juxtaposition does not answer the call to a new aesthetics. It does make it clear in this one example; (there are many more in Arlene Raven's and Nina Felshin's books) artists are indeed looking to political, ecological and social concerns to inform the development of a new creative practice and a reassessment of aesthetic theory.

Gablik and Lippard take us out of the artworld and into the lifeworld. They construct a foundation of history, contemporary practice and theory that makes it

both plausible and exciting to step off the reservation. Gablik walks us through the bureaucratization of the arts and helps us see that the moral response is social, not personal. Finally the knotty critical problem of art and utility is soundly answered with a call for interaction and discourse. This work is the foundation of arts based social and environmental practice.

In conversations with colleagues attending the Royal Society of Arts 'Ecology and Artistic Practice Symposium' in London on April 28, 2005. It was interesting to hear that Gablik's contribution was counterpoised, and then rejected against Felix Guattari's 'The Three Ecologies' (1989, 2000). In terms that are not that far removed from Gablik's work Guattari states, "Structuralism and subsequently postmodernism, has accustomed us to a vision of the world drained of the significance of human interventions, embodied as they are in concrete politics and micropolitics." (2000, p.41) Guattari's text integrates environment, social relations and human subjectivity. It is an important work that complements rather than replaces Gablik's seminal work. Guattari's effort is more erudite in the way that only philosophy can be, although they share an interest in the three ecologies, the environment, the social and the evolution of human subjectivity. Where they differ is in Gablik's argument for the evolution of subjectivity as the basis of moral and ethical standards or social relation; while Guattari pursues it as a function of emancipatory social psychology. There are weaknesses and complementary strengths in both positions.

Chapter 2 – The Art of Engagement: Issues and Case Studies

Can Art Effect the Social Condition?

In spite of the many signs of retreat and withdrawal, most people remain in need of and even desirous of an invigorated active idea of public, But what the contemporary polis will be is inconclusive.

(Patricia Phillips in Lacy, 1995, p.20)

By the 1990's, a new area of socially and environmentally engaged practice began to move and evolve quickly. First with an edited text, 'Art in the public Interest' by Arlene Raven (1989), which took on the challenge of clarifying some of the questions and framing some of the activities. Then by a flurry of edited publications: by Carol Becker, 'The Subversive Imagination' (1994); Nina Felshin, 'But is it Art' (1995); and Suzanne Lacy, 'Mapping the Terrain' (1995). These are important texts that represent widely divergent practices and critical points of view; they provide an essential overview of artist practices and the theoretical positions that informed the work at that time. Contributing authors provided important insight on environmental programmes that ranged from Greenpeace protests to the planning scale work of Helen Mayer Harrison and Newton Harrison. Human health issues were explored with critical analysis of the Aids Quilt and Gran Fury. Social reform was addressed in feminist terms following Suzanne Lacy and The Guerrilla Girls, and in terms of documentation and representation by Martha Rosler and

Group Material. Social reform was also addressed in racial, cultural and economic terms following Gullermo Gomez-Pena, Coco Fusco, Judith Baca. Critics and authors from Linda Burnham and Steve Durland to Suzi Gablik, Lucy Lippard, Patricia Phillps, Donald Kuspit and Carol Becker examined either the practice or the critical questions raised by these new forms of social and environmental practice. On the following pages, The focus is upon artists that write about the process and the product of their work and its contribution to the social aspects of this area of practice. With specific analysis of texts by the artists Martha Rosler, Group Material and Suzanne Lacy. They are first and foremost social practitioners.

In 'Crowding the Picture: Notes on American Activist Art Today' in Arlene Raven's 'Art in the Public Interest,' Donald Kuspit asks if art can actually effect the social and environmental condition? Kuspit takes the best of practitioners, including Haacke and Kruger, to task for what he claims are visually and conceptually attractive, but all too familiar ideas (or myths as he puts it) about the ways that social change is achieved. Following the philosopher and theologian Jacques Ellus, he describes two forms of social action: the propaganda of integration and the propaganda of agitation. Agitation, he claims "...has the stamp of opposition. It is led by a party seeking to destroy the government or the established order" (Kuspit in Raven, 1989, p. 260). The agitational model generally has short lived effects, he claims it is almost a nervous response to a fait accompli. The agitation itself becomes the final form of what is ultimately an age old model. The model includes a sense of creative transgression, a mix of exuberance and a mythology of revolution. A revolution where no one is hurt, where we all gain and the future is more equitable than the past. This poetic social revelry is just one myth of change.

The other is the integrative form; it 'aims at stabilizing the social body, at unifying and enforcing it' (Kuspit in Raven, 1989, p. 261). This is the art of social harmony, the myth of a 'new' status quo. Here he cautions, "The social harmony that such integration propaganda aims at can be as ruthlessly exclusive and as oppressive as the marginalizing structures it seeks to overthrow" (1989, p.261). The collective ideology becomes a safe place to immerse oneself, a place of mutually assured actions and signals that regulate difference. He argues that neither position is relevant; these are simply variations on "...gallery leftism – the establishment of political identity in the artworld that has ambiguous significance in the larger world' (Kuspit, 1989, p. 264). Ultimately Kuspit is searching for artwork that goes beyond signification and embraces immersion in the experiences which he thinks can bring society to another level of engagement. He closes by referencing Sue Coe's work on social atrocities, Bill Viola's work that addresses the individual within the social, and the efforts of Tim Rollins who takes children through the classics in search of an activist voice (Kuspit in Raven, 1989, pp. 255-268).

In 1987, the DIA foundation through the urgings of artist/filmmaker Yvonne Rainer decided to engage the artists Martha Rosler and Group Material to develop projects at the DIA exhibition space in the Soho district of New York. Over the course of two years, Martha Rosler developed a project called, 'If You Lived Here' exploring issues of community, housing, homelessness and representation. Group Material organized a broad collective analysis of the concept and politics that define 'DEMOCRACY.' Both projects included other artists and activists in a series of three changing installations. Both projects developed three public programmes, presented as 'town meetings' in the case of Group Material and 'Open Forums' in

the case of Martha Rosler. Both projects also resulted in a published text edited by Brian Wallis, with original work by recognized authors and critics and a written record of the programme discussions. After examining both texts, it is clear (from the documentation) that the Group Material project (the first of the two) set high and broad goals, but was ultimately less developed than the project by Martha Rosler. Where Group Material set off to analyze democracy in America, Rosler set out to examine homelessness in New York, with a specific focus on the artist's relationship to the issue, vis a vis representation and documentary photography. I begin with a brief overview of the Group Material text before focusing on Rosler.

'Democracy' (1990)

Our exhibitions and projects are intended to be forums in which multiple points of view are represented in a variety of styles and methods. We believe, as the feminist writer Bell Hooks has said, that 'we must focus on a policy of inclusion so as not to mirror oppressive structures.' As a result, each exhibition is a veritable model of democracy.

(Group Material, 1990, p.2)

In their chapter focusing specifically on democracy (Wallis, 1991) Group Material makes it clear that they believe they have unimpeachable democratic intent, wanting to talk about things 'no one wants to talk about' (Group Material, 1990, p.1). To do this, they assembled a list of some of the best voices in radical cultural politics. Participants included the following: Catherine Lord, Dean of California Institute of the Arts; Tim Rollins, Artist (a former member of 'Group Material'); Richard Andrews, the Director of the Henry Art Gallery in Seattle; Leon Golub,

Artist; David Avolos, cofounder of the 'Border Arts Workshop;' Lucy Lippard Artist and Activist; and Michael Callen, Cofounder of the 'People with AIDS Coalition.'

The question is, was this a cogent work of social art with clear political intent and a model of democracy? Or was it simply a sophisticated series of symposia with attendant installations by artists chosen for their political interests? The second question is, who was the audience for these events?

The group was known for producing rigorous installation-based projects that feature theoretical and political topics. The project as stated had a lofty goal (the analysis of democracy in America) which was to be analyzed through installations and town meetings at the DIA galleries in the Soho district of New York. The farranging topics of inquiry (focusing upon the subject of democracy) included 'Education and Democracy,' 'Politics and Election.' and 'Aids and Democracy.' The results of these programmes are described in the words of critic David Deitcher, as 'symbolic events: as manifestations of the vanguard world of art' that ultimately, '...stopped well short of effecting that widespread sense of empowerment that many people in the audience considered to be their goal' (Deitcher in Wallis, 1990, p. 41). But is it fair to expect empowerment from symbolic contestation? Do artists have any significant power that could be distributed? I would suggest that the social artist is better suited to clarify the cause and effect of individual and collective action than to the distribution of power.

We organized this publication very much as we organize our exhibitions, bringing together a variety of voices and points of view to address the issues. In this case, we hope that the results provide a

Art Ecology and Planning: Sections I and II strong analysis of the current situation of democracy in America and suggest possible means for responding to its challenges.

(Group Material in Wallis, 1990, p. 3)

This statement raises more questions: Is it possible to conduct a strong analysis without someone taking the responsibility to frame and focus the questions and identify the primary conclusions? Given the intent of the artists, a rigorous analysis was not possible, at least not by the rational standards of the lifeworld, by artworld standards it may be. Indeed, I would agree with Deitcher that this project was organized as a symbolic battle with the forces that seem to have usurped democracy. Everyone involved was working from the ethical desire not to mirror oppressive structures' (Group Material in Wallis, 1991, p. 2). As a result they ultimately repressed the potential of the social programme by refusing to consider their own responsibility for the project and the means of its impact. As a result the work dissipates into the sum of its parts. In effect the radical autonomy of its individual participants who view democracy as a narrative or series of symbols for critical redefinition rather than a programme of applied social engagement undermine the collective or social ideal of political empowerment. This is a poststructuralist methodology removed from the page and applied in the artworld with obvious limitations. In effect the 'critical reading' of the subject (the symbols) of democracy provide little in the way of desire to sustain the effort that it would take to actually transform the hegemonic entities that the subject signifies. In effect (following Kuspit) 'Democracy' was a mythic event of radical oppositional identity. Its value is to remind us that opposition is alive. Programmes like 'Democracy' assemble the core ideological interests and result in products that can incite new

interests in alternative culture. Given the intent and interests of the artists, it wasn't likely to promote empowerment. Writing in the same text, David Deitcher offers an alternative view from that of my own. Following Louis Althusser he believes that gallery based, symbolic contestation is of direct consequence, indeed it is 'crucial to class struggle' with 'the power to destabilize and hinder the reproductive powers of the dominant ideology' (Deitcher in Wallis, 1991, p. 20).

We can accept the idea that there is a symbolic as well as a material order to dominant culture and its products, the question that remains is where does the artist situate the work for effective impact? Althusser's position addresses forms of resistance to the ubiquitous 'Ideological State Apparatus.' This term is used to describe the cultural systems that are complicit in reproducing the state ideology. The term can be juxtaposed against the idea of 'repressive state apparatus' or the system of the state that function through power and politics. Ideological State Apparatus include: families, schools, trade unions and the various cultural forms such as literature, the arts, even sports. The idea is that all of these social/cultural systems primarily prepare us to reproduce the current conditions of existence and support its ruling class. Is symbolic contestation in an art gallery a contribution to the realm of politics or the realm of art? For Deitcher the gallery is part of the Althusserian ideological apparatus of the state. Therefore the work displayed within it engages the political in its natural setting. While I understand and appreciate the theory, I would suggest it is more striking as a point of cultural analysis than as a rational argument for meaningful social, political engagement. Despite this position, Deitcher's critical analysis makes it clear that the people

attending 'Democracy' wanted something more than the prescriptive auto-aware, alternatives of Althusserian theory.

If everything is political, yet the political act offers no feedback that rewards the effort, what have we accomplished? In this case it would seem that 'Democracy' created an authentic counter-culture moment of some import. It helped sustain the myth of opposition and potentially recruited new members who share a sense of untreatable malaise. As a result, we can argue that 'DEMOCRACY; by Group Material' is a successful social moment reminding us that there is something wrong, although what it is and how it might be addressed lacks clarity. The work as a result does not move beyond critical engagement. It can be argued that 'Democracy' was a project where the topic is out of scale to any realistic (effective) scope of artistic response or meaningful engagement with the audience. As a result the real potential for impact on democratic society, local communities or bodies of common knowledge is both disparate and fleeting. Constrained by theories that undermine intentionality, the work and the text is ultimately a collection of liberal essays on education, race, sex, and the politics of Aids. Ultimately, It is not unfair to state that the entire 'Democracy' programme was a reaction to issues rather than a strong analysis of the meta-narrative of democracy, which the artists stated as their intent in the first chapter of the text.

'If You Lived Here' (1991)

By counterpoint, Martha Rosler's Project, 'If you Lived Here' (Ed. Wallis, 1991) had a clear agenda, a practical statement of intent, and understanding of the scope of impact she might have with the work, (she also had the opportunity to learn from Group Materials effort.) The project focused upon homelessness within the

confines of New York City, providing a more direct spatial-political relationship to the topic in question. She also took a rigorous approach to defining her focus. She begins by providing an overview of the theoretical and philosophical issues, such as Henri Lefebyre's (1991) ideas about the production of space and Frederick Jameson's (1991) and Mike Davis's (1990) understanding of growth and expansion and the effects of economic displacement. She clearly identifies the struggle over public spaces vis a vis the private interests that act through the ownership of property and self-interest to seek authority and control. This fact is in tension with the realities of being 'homeless' with no address, there is no political advocacy, "they are not a constituency; as a result no legislator is answerable to them." (Rosler in Wallis, 1991, p. 23) Rosler goes on to describe activism around housing that occurs on the local, national and international level. As well as various causes of homelessness according to experts. Rosler is thorough in her analysis of the fundamental issues driving the displacement of people from affordable housing. Providing graphs from the U.S. Department of Housing and Urban Development that show low-income housing shortfalls and the shift from a relatively balanced and consistent relationship between the rich and poor from 1962-1982 when the graph diverges and the poor begin to get significantly poorer and the wealthy, get even more wealthy (1991, pp. 28-29). Against this background of rational analysis Rosler makes the following claims:

... a new picture of the city featuring the preservation of intact workingclass and lower-middle-class neighborhoods must be promulgated. The lack of representation of poor and working-class people in our public forums and in the halls of power is reflected in the wholesale Art Ecology and Planning: Sections I and II
erasure of their narratives from the city's history and their neglect at
the hands of public and private planners." [To resolve these inequities.]
"Populist city planning and agitation at the grass roots are required, but
cross-class and cross-neighborhood coalitions are also essential.

Activism requires a wide array of responses, from street actions and
demonstrations to proactive planning, scholarly studies, and popular
books and articles.

(Rosler in Wallis, 1991, p. 30)

Rosler provides us with an incredibly clear problem statement, as well as some of the actions that can be taken to achieve the desired changes. She recommends 'street irritants' such as 'billboards or stencils' and provides examples of such work in both New York and Detroit (although there is no clarity on the effect of these programmes.) On the role of artists, Rosler argues that, 'the social function of art is to crystallize an image or a response to a blurred social picture, bringing its outlines into focus' (Rosler in Wallis, 1991, p. 32). She is fundamentally interested in documentary photography as an evidentiary record of social condition. With a complete understanding of the political limits of documentation and the theoretical strictures that might constrain artists considering the representation of social meaning and its relationship to issues of social justice. She makes it clear that the documentary photographer must acknowledge place and time as a primary condition of real meaning. In the contextual framework, the image is no longer merely an object, but becomes a signifier. She claims the book and the exhibition were planned with the intent of 'using and exploring documentary strategies' (Rosler in Wallis, 1991, p. 33). She claims the fundamental problem that faces any

documentary photographer is how to represent the social issues inherent to life in the city without betraying the people that are targeted to benefit through the work. She feels strongly that the process of 'us looking at them' will always result in a sense of superiority that undermines the intention of the work. Rosler's solution to this is not to photograph people at all, but rather the physical context, the architectonic realities of the built environment which function as the site of an all too obvious - inequitable human habitation. But even from the strength of her carefully thought out personal position she sets up a dialectic on the topic with fellow photographer Mel Rosenthal. Rosenthal was invested in a deep and ongoing visual and social dialogue in the work that he was doing at the time, living, working and photographing in his own community in the South Bronx. These are very different ways of working. Rosler retains the objective distance of the modernist artist, surveying the landscape for a visual record of social inequity that is devoid of any vestige of complicating human relationship. In counterpoint, Rosenthal engages with the social, resulting in an image of personal relationship that is ultimately based upon dialogic relationship rather than a formal socialstructure analysis. Rosler describes this difference in terms of a participatory versus supportive approach to social practice, adding with a clear sense of the differences in practice. 'There has to be room for an interested art practice that does not simply merge itself into its object' (Rosler in Wallis, 1991, p. 38).

'If You Lived Here' like 'DEMOCRACY' before it was segmented into three exhibitions and public programmes. It first focused upon 'Home Front' designed to represent contested neighbourhoods and provide a meeting place for members of those communities to access activist and advocacy based organizations.

'Homeless: The Street and Other Venues' was specifically designed not to reproduce the us and them relationship, but instead to clarify the institutional conditions that make homelessness a fact of life for many of New York's poor and working poor. The final exhibition and programme was titled 'City: Visions and Revisions,' offering a view of alternative solutions to urban problems.

Rosalyn Deutsche contributes a chapter called 'Alternative Space' to the text. She makes the case that Rosler's work was both about the city, and in the city. The intent of the work, although based in a language of documentary photography and its relationship to the social manufacture of space, itself produced an alternative (discursive) social space. (Deutsche, in Wallis, 1991, p. 45) (This would also be true of the Group Material project discussed earlier, and has ties to the values of Althusser, which were raised by Deitcher.) Deutsche argues that Rosler's project "articulated two forms of spatial practice: resistance to the use of aesthetic space and opposition to the dominant construction of the city." (1991, p. 55) Resistance was realized by the rejection of the aesthetic convention of the gallery; opposition occurred in terms of a threat to the seclusion of art galleries by highlighting the gallery relationship to urban conflict as a participant in urban regeneration. (especially in places like Soho, which was once a manufacturing district.) Deutsche points out that embedded in the title of the exhibition is the real estate come-on, 'If you lived here,' yet she also mentions upon entry to the exhibition on the interior wall was another large sign with a quote from Ed Koch, the Mayor of New York at the time, stating "If you can't afford to live here move!" (1991, p.64). In this case, the space of the gallery also takes on a documentary function, revealing a narrative of spatial change in the context of that neighbourhood as

well. Here the agitational model is fully conceptualized, the positions are clearly staked out, the offending voices are identified explicitly.

Where Group Material was general, Martha Rosler was specific. The critique of the work, based upon the texts alone, is not the ideal, none the less it is the record available. Group Material seems to wrest very little control over the publication, short of making the social-connections amongst its participants. In keeping with their exhibition methodology, the work is open, inviting and seemingly unconstrained by any sense of hierarchy. It is hard to tell if the same can be said of Rosler's work, although in the act of authorship (her writing in the text) her intention is clearly stated. Rosalyn Deutsche gives us a clear understanding of Rosler's methods, David Deitcher does the same for Group Material.

The following points seem most salient. Louis Althusser provides a problematic theory that rationalizes cultural actions as politics. Secondly, the Marxist framework seems to constrain Group Material to a critical intent that almost resists the development of creative alternatives. In Rosler's case, the politics are not all that different, yet the social-material realities of documentary production reframe the ideology in such a way that the artist's effort has more focus. This could also occur by the fact that Rosler was a more mature practitioner than the members of Group Material at that time, with a better understanding not only of what she was doing but how it would be represented after the fact. This would be keeping with her interests.

'Mapping the Terrain' (1995)

As organizer, author and editor of 'Mapping the Terrain: New Genre Public Art' (1995), artist Suzanne Lacy worked to understand two things. First, the way that artists had begun to engage with the social and political fabric of communities. Secondly, she was interested in the existing critical language and an analysis of its ability to address this work. To meet her goals, the work began with a series of lectures by ten artists given in non-traditional venues; sites relevant to their subject matter. Diverse multi-cultural places such as, community libraries, public schools, homeless shelters, churches and nightclubs became the setting for presentations by artists who typically create work in these types of spaces. Subsequently a group of curators, critics and artists were assembled for a three day symposium on the critical approaches that could be used to identify and evaluate this kind of work. 'Mapping the Terrain' and its intent of clarifying 'new genre public art' and making it a common art word was the result of these efforts.

Whenever art introduces radically different working methods and challenges reigning tenets the critical task is complicated. The tremendous recent interest in engaged, caring public art demands a context in art history and present criticism. It demands as well a guidance of predecessors who can pass on strategies that allow the wheel to move forward, not suffer endless reinvention.

(Lacy, 1995, p. 11)

New genre public art was presented as an alternative to work that was sited in public places. The new term embraced a political intent. Artists would

Art Ecology and Planning: Sections I and II communicate, interact and engage with audiences about issues "....directly relevant to their lives." (Lacy 1995, p. 19) For Lacy, the term was about a move away from traditional boundaries of media, towards an open sense of experimentation with a focus on public realm issues. The intent is not simply to make art but to actually affect change, to transform culture in instrumental ways. Lacy's argument wasn't that this work was new but rather that it was coming into focus. She was also interested in the discourse that would emerge as artists that had previously been divided in terms of their disciplines, suddenly found themselves united in terms of a critical discourse based upon an interest in a subject area, rather than their media. Some of the specific questions that she intended to address in this text include: What is its relationship to the intent of the artist, or the interests of the audience? Is 'public' a qualifying description of place,

ownership or access?; Is it a subject, or a characteristic of the particular audience?

(Lacy, 1995, p. 20)

The other issue relevant to the author is the emergence of the 'Art in Public Places Programme' at the National Endowment for the Arts, which provided the impetus for the emergence of local, state and municipal public art programmes around the county. She characterized the 1960's and 1970's as a period of 'civic art collection that related more to art history than to city or cultural history.' And, the 1970's and 1980's as the period when "...a new breed of arts administrator emerged to smooth the way between artists trained in modernist strategies of individualism and innovation, and the various representatives of the public sector." (Lacy, 1995, p. 22) The public art sector, with an increasingly bureaucratic system of management, was in full swing by the 1980's. It was further codified (with

reservations by the editor/author) by the publication of 'Going public: A Field Guide to Developments in Art in Public Places' (Korza 1988). The field was evolving with a growing sense of differentiation between work that was simply public art and work that was site specific. It is important to understand that the public art programmes provided amazing potential, a significant economic source for artists with the added benefit (constraint) of juxtaposition of artwork in relationship to architecture. By the late 1980's public art had become a focus of conferences, critical texts and programmes; public art was primarily dominated, however, by formal sculpture and site based sensibilities.7 It was with this understanding in mind that Lacy decided to assemble artists such as Alan Kaprow, Anna Halprin. Hans Haacke, Lynn Hershman, Judy Chicago, Adrian Piper and Judith Baca as artists that were working with a different set of assumptions than most, actively seeking to address the social and at times the environmental in their work.8 Lacy's intention here is to suggest that an alternate history of public art can be presented vis a vis the various vanguard political interests that inform the arts. Groups that are grounded in feminist, ethnic or Marxist positions she says, have common interests in leftist politics, social activism, redefined audiences, relevance for marginalized communities and collaborative methodology. An activist spirit informed much of this work, and disciplinary boundaries were not relevant to the intent of the artists involved.

Lacy describes the feminist artists as being concerned with being effective, with sophisticated ideas about nature and ideas of expanded audience. They had focused upon how to define and reach their audience, how to support its passage through difficult narratives, performances or exhibition, and how to assess

transformation and change as a result. The Marxists were particularly focused upon photography and text as tools to analyze labour and class issues, Lacy claims that the theory (in the latter) was often more developed than the activist practice, "...although the work was comprehensive, it often didn't attempt actual change." (1995, p.28) It is this clarity about the relationship between theory and practice and her focus upon change that make Lacy's text an ideal focus for this thesis. The ethnic contribution is somewhat less developed in the text, described in terms of the struggle to resolve the disconnect between art-school aesthetics and the cultural images, symbols and references that enlivened the visual perception of ghettos and barrios.

With these ideas in mind, Lacy is clear that her idea of new genre public art is "not built upon materials, space or artists media, but rather on concepts of audience, relationship, communication, and political intention"(Lacy, 1995, p. 28). Lacy claims that the practice is built upon the discourse of largely marginalized artists that gained visibility in the 1980's due to specific factors: racial discrimination and violence mixed with a subsequent influx of immigration that brought cultural diversity to the forefront of public perception. Conservative forces were at work to undermine gains achieved by feminist practices. Anti-abortion, sexual harassment and gender violence were all public issues at the time. Forces behind cultural censorship targeted women and ethnic and homosexual artists, attempting to limit the representation of these cultural positions in mainstream culture, (with chilling effects on the increasingly bureaucratized culture of public art.) Finally, burgeoning crisis in human health (in terms of AIDS) and environment (in terms of pollution and destructive land uses) were increasingly part of the daily news. The AIDS

activists were a particularly strong cultural entity, with voices present in the gallery, the streets and (wherever possible) in the halls of mainstream politics. She claims that this new-genre practice is based upon an "...aesthetic expression of activated value systems" (Lacy, 1995, pp. 28-30).

Lacy describes the issues in terms of, "Art's potential role in maintaining, enhancing, creating and challenging privilege. Power relationships are exposed in the very process of creating." (Lacy, 1995, p. 31) The territory of the work is described in terms of consensus, inclusiveness and unity of wildly diverse concerns and issues. The statement by artists Esttella Conwill Majozo and Houston Conwill, describing their work, demonstrates this:

...world peace, human rights, rights of the physically challenged, democracy, memory, cultural diversity, pro-choice, ecology and caring, ... and the common enemies of war, hatred, racism, classism, censorship, drug addictions, ageism, apartheid, homophobia, hunger, poverty, joblessness, pollution, homelessness, AIDS, greed, imperialism, cross-cultural blindness and fear of the Other.

(Conwill Majozo and Conwill in Lacy 1995, p. 32)

Lacy describes this litany of social conflict in terms of an unrelenting optimism of the artists, tempered with political realism. Yet, if the political realism is present as claimed, it is hard for me to see how one might (for example) use the feminist model to define an audience and support its passage through such a minefield of social concerns. There is a confusion here that undermines any intent to ground

this work in responsible practice. It is increasingly clear to me that this kind of unlimited ambition is part and parcel of the bravado that typifies modernist art practice. With the fevered need to break new ground, ambition was the drive, and scale was the method for those seeking to define, and endlessly redefine, the cutting edge of the avant-garde. That ambition has a completely different moral and ethical reality under social art practice. As a result, even as it is used here to be broad, globally expansive and all-inclusive; unrequited ambition ultimately undermines all rational expectations of the responsibility that seems to be at the core of Lacy's ideal for new genre practice. If we are going to take responsibility, we have to be realistic about what artists can synthesize, integrate and act upon effectively.

Lacy claims that the responsibility of the practice demands moral attention to the material intent of the work. She prods us to understand the social context in which we are working and where the line is drawn between images that emerge from the community and images that the artists bring with them into the community. The other aspect that is important is the ideal of continuation either through maintenance of the essential practices of primary authorship, or through the potential to be replicated. This requires creative structures that are open enough for new expression and ownership. Lacy is clear, "If the artist does have stated political intentions... then continuity may be a measure of both the artist's responsibility and the works success." (Lacy, 1995, p. 34) Continuity is important, as a key reference for critical engagement. However, the concept of intention may be more important. Within a modern/materialist approach to art, the 'object' of subjective focus is quite clear, as a result intent is often disparate and difficult to

pin down. With the new-genre practice described above, the work itself is often disparate, requiring a clear statement of intent to focus the viewer's critical attention. If the new genre artist intends to effect culture to achieve a work with social and political consequence the statement of intent is essential to focus the viewers critical attention. If the new genre artist intends to effect culture through social and political consequence, Lacy promotes a clear statement of intent, and the potential for continuity beyond the artists attention.(Lacy 1995, p. 34). Without a statement of intent, the focal point of the work is too easily lost. The other essential element to add is the need for responsible ambition.

The work as defined by Lacy is also about the creation of a discursive space; where the space between artist and audience was once filled with an object, she claims, "In new genre public art, that space is filled with the relationship between artist and audience, prioritized in the artists working strategies." (Lacy, 1995, p.35) We could assume that one result of this working method is a relatively disparate product, which relies on the statement of intent for clarity. Lacy says that the relationship can be realized in terms of exploring differences and similarities, or the development of a constituency invested in advocacy for the topic of discourse, (this builds on ideas, identified previously by Gablik, in terms of empathic relationships and listening). It is interesting to note that Lacy moves into the spiritual vis a vis nature, referring to 'many' new genre public artists she says,

They talk about their habitation of the earth as a relationship with it and all beings that live there. These essentially ethical and religious

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assertions are founded on a sense of service and a need to overcome
the dualism of a separate self.

(Lacy, 1995, p. 36)

Where Lippard sees spirituality as a driving force behind historic creative action, Gablik claims art as the setting for spiritual renewal and self discovery. These are not ideas that I want to pursue in this thesis, but they are an important context within which to consider the social-psychological intent of Lacy's leap into interspecies awareness. This is an idea that I did not expect to find despite previous readings of this text. It is not an idea that is worked out in detail. It simply fits-in with her sense of empathy and relationship, which is a core element of the thesis. She seeks to activate (motivate, enable) the viewer from a receiver of the work to becoming a participant in the work. As this is a condition of real people in real places, it sets the artist on a moral and ethical mine-field of power relationships. There has to be a tension between the voice of authorship and the voice of participant, even when the intent is to share authorship through collaboration. At issue here is power, authority and representation, some of the same issues that Rosler faces in her consideration of documentary work, but complicated by the fact that this new-genre public art practice (at least in its ideal form) intends to create change, not just a record of social-political condition. Lacy identifies questions that any critic or practitioner might want to ask of this kind of work such as what is, "...the quality of the imagery, including the relevance of invention; the artist's intention and the effects of the work, whether measurable or hypothesized; and the work's method of conveying meaning. "(Lacy, 1995, p. 41)

To extend creative practice (to get beyond personal authorship) we must be able to state our intentions, otherwise, we are merely overlaying our personal internalized process of creativity over a social entity. To actually share, and create dialogue we must be able to externalize, verbalize and act – with intent. As creative practitioners, the why of our own participation in the making of art is not important – it is what we do. However when we act with creative dialogic intent it is an essential ethical point to be clear to our potential collaborators or participants about the nature of the relationship we are seeking to have with them and the power we have together to make change. The moral intent of the relationship should be to seek benefit for all involved.

One of Lacy's primary intentions in this text is to examine the critical methods that attend the emergent new genre public art practice. The methodologies are based in discursive interaction. She frames the work on a continuum from private to public practices: in terms of experience (at the end of private), then reporting, analysis and finally activism, which is the culminating point (at the end of) public practice. She claims that one area is not exclusive from another and many artists slide back and forth on the continuum in the work that they are doing. In the experience category, she suggests the artist function as a conduit for the experience and expression of others. As a reporter, the artist frames or highlights essential knowledge. She is less clear about the artist's role as an analyst. If lwe extrapolate, the artist processes information and experience into a provocative response. She makes a point that analytical work often moves from visual imagery to some relationship to text or narrative. The aesthetic value is either in the coherence of the ideas or in the ideas relationship to visual images. The final

practice is activism, which she defines as taking a position on a public agenda, and working within community to ascertain and construct consensual investment. Lacy identifies the skills necessary to do this work, "...how to collaborate, how to develop multilayered and specific audiences, how to cross over with other disciplines, how to choose sites that resonate with public meaning, and how to clarify visual and process symbolism for people that are not educated in art?" (Lacy 1995, p. 177) Interestingly enough, the list describes the skills relevant to the scope and intent of work typical of her early practice, rather than work that she had begun in Oakland, California at the time she was writing the text. ¹⁰ As a result, she primarily provides us with a list of skills that have more validity at the experience and reporting side of her continuum than the analysis or activist end. In the text she really doesn't provide much guidance on the practice of analysis or activism, despite obvious skills in both.

These methods of practice necessitate new forms of critical analysis. She reconfirms the need for statements of artists intent, but qualifies it with a general observation that the inherent problem is that the, "...stated purposes do not express the multiple, including unconscious levels on which art operates." (1995, p. 181) Is this decision to embrace the unconscious (destroying the argument for intent in the process) another example of the arts modernist tendency to embrace complexity beyond the scope of responsibility?" Or is this simply a consideration of the post-structuralist ideology applied in such a way that it negates any possibility of the critical analysis she desires? Is it appropriate (or maybe more important, is it useful) to embrace the full unknown potential of what a work might mean, when trying to define a means of critical analysis? If the work had a history

of cogent analysis this might be a productive means to extend the purview, or answer an increasingly hegemonic culture of critique. However, we are at a relatively nascent stage of critical analysis of this work; therefore it is not useful.

Lacy closes with a statement that intention is the, "...criteria for evaluation which follows, or telegraphs, the 'values premised in the work." (Lacy, 1995, p. 181)

Lacy has made it clear, throughout the text that this work is about relationship and discourse; context, practice and process rather than isolated creative products.

This is important as the work, developed within this new genre public art practice, confounds the typical critical response to the autonomous object. She suggests that both the artist's intent and the critic's analysis should attend to the questions of theory such as:

"What questions does the artwork ask of itself? How does it enter into or challenge contemporary discourse? What questions does it ask of life? [and,] ...is the work a substantive and meaningful addition to cultural or intellectual life?"

(Lacy, 1995, p. 181)

The other major question she identifies for critical analysis is efficacy. We can outline a general overview of her position in a series of points extrapolated from her text. First, were the audience's beliefs or practices changed? Was there a shift in scale? Is the number of people involved significant? Was the community mobilized? (Lacy,1995, pp. 177-185) These are very good questions, but to get the answers is challenging; particularly when you consider that much of the critical

literature is written through a time limited relationship to the work produced. To answer these questions well would demand access to the work during the production stage and research and analysis after the work is completed. Lacy acknowledges this problem and the predominance of conjecture in the critical literature. Where most of us can barely get the funding to do the work, the assessment of impact is beyond the scope of current budgets and, one would assume, societal interest, although it is an appropriate focus for academia. The lack of analysis is a significant problem as this constrains the critical discourse about what we are doing and how it is being done. If we are going to work from the position of aesthetics, society and environment, the work must be analyzed for its interdisciplinary intent and its impact, the question is how to do that?

Engage and Affect

The common ground that Group Material, Martha Rosler and Suzanne Lacy all share is an interest in public space. Group Material focuses upon the social and political definition of democracy and the lack there of. Rosler focused upon depicting the urban environment which functions as the site of an all too obvious inequitable human habitation. Lacy's focus however is upon the evolution of socially engaged 'new-genre' public art practices and the critical and ethical questions they engage. In a span of about ten years, the critical and theoretical ideals of Lippard and Gablik had begun to take form in the practice and self reflection of important artists. The work had begun to develop a directional clarity in terms of public art, although the actual meaning and function of this word 'public' was as yet somewhat ill defined for most artists. The evolution toward ideas of public art had more to do with the availability of public funding. The primary support for artists working with social and environmental concerns was public

funding through sources such as National Endowment for the Arts in the U.S., (British Arts Council in the U.K.), as well as regional, state and local programmes which provided funding for a range of public art activities (Korza,1988; Raven, 1989; Lacy, 1995; Miles, 1997; Finkelpearl, 2000). The National Endowment for the Arts saw its most robust expansion from 1979-1994 with a significant downturn in 1995 and little recovery thereafter. ¹² By contrast the British Arts Council saw a similar robust period of growth, and a similar downturn in 1995, but the U.K. system had a substantial recovery that has only recently lost steam, (St. Paul Pioneer Press, December, 2004). This is the context in which Group Material, Martha Rosler and Suzanne Lacy were working at the time. Underlying the sophistication of these artists was a naïve hope amongst some in the sector that public art had the potential to transform rather than ratify the culture that paid for it. Interest had begun to shift from public space as an alternative context for art work, to the idea of public space as a complex political and environmental subject for the work itself.

The idea of public space as a subject for artist's enquiry was fraught with difficulties. There was some confusion within the discipline over the idea of what it might mean to affect, engage or even share an experience of being in public, never mind what it might mean if one were to place or make art there. Arlene Raven's, 'Art in the Public Interest' (1989) text is notable, as it asks a series of hard questions about public art such as what is the effect of socially conscious art? Does it interest the public? And if so, which public? Nina Felshin editor of, 'But is it Art: The Spirit of Art as Activism' (1995) examined twelve projects that encourage community participation to initiate social change. She defines the work as

essentially collaborative, unconcerned about authorship, and likely to effect change in the agents and actors as well as the participants. On the guestion of 'is it art' she states, 'does it matter?' (1995, p.13) Other important contributions include Harriet Senie and Sally Webster's edited text, 'Critical Issues in Public Art' (1992) which addresses the historical context as well as the theoretical basis and direction of contemporary practice. Erika Doss, author of 'Spirit Poles and Flying Pigs' (1995) examines the controversies in aesthetics, civic identity and political posturing that attend much of public art and its populist role in the public realm. And finally Carol Becker, editor of 'The Subversive Imagination' (1994) and author of 'Zones of Contention' (1996) questions the dominance of the idea that art should, "serve as a challenging source of pleasure, or an intellectual and aesthetic diversion." (1994, p.xiv) She examines the roles and responsibilities of artists to society and society to its artists, advocating for a critical and pubic approach to intellectual, creative practice. Both Lucy Lippard and Suzi Gablik have made important subsequent contributions as well. Suzi Gablik's 'Re-enchantment of Art' (1992) focuses on making an argument for a paradigmatic shift in the arts from objects to relationships. She describes a new ecological perspective that places the meaning of art in a dialogic relationship between the observer and what is observed. Lucy Lippard's incredible output includes 'Get the Message: A Decade of Art of Change' (1984), 'Mixed Blessings: New Art in a Multicultural America' (1990) and 'The Lure of the Local' (1997). The latter provides an argument for a place specific art that takes a critical but fundamentally involved and transformative relationship to 'placed' meaning, whether it is politics or pleasure. She seeks a dialogic approach to art that is based in facilitation and an awareness of the new forms buried in social energies not yet recognized as art.

Returning to Donald Kuspit's contribution to Arlene Raven's text, there is creative tension in the relationship between the idea of critical agitation (activism, or Kuspit's agitational model), which opposes dominant culture, and critical intervention (Kuspit's integrative model), which works within dominant culture to create change (Kuspit in Raven, 1989, p. 260). In sum, both are seeking a shift in the social and political realities of the time. Considered separately, the former denies the validity of culturally invested, dominant social entities, and as a result struggles to clarify the intent and value of the minority voice. The latter accepts the existing cultural structure as a viable foundation and assumes that with access, good ideas and a carefully maintained moral and ethical position that a minority voice can effect change. These are simply interconnected discursive modalities one keeps things honest and imbued with a certain amount of moral and ethical tension—even conflict, the other keeps things productive, imbued with enough consensus and political manoeuvring to assure that the system evolves, or at the least retains some sense of movement and flow.

SECTION II – The Social and Political Context

In the previous section, questions of public art and its practice were gaining clarity. Gablik and Lippard clarified a breach in the existing practices, critiques and theories. Author practitioners, such as Martha Rosler and Suzanne Lacy, were developing clarity about their critical and intellectual approach to the social aspects of public art practices. Various edited texts were mentioned that raised questions, but amongst the range of writing there were few answers. Part of the problem stems from the lack of focal intent and the fact that ideas and theory from outside the arts were not being rigorously applied within the discipline itself. While there was some clarity about public art, there was little or no clarity about art in relationship to public space or the public realm and the related discourses in architecture and planning, philosophy and political science.

Chapter 3 - Public Realms

In the following chapters is a synthesis of materials that define the social, spatial characteristics and environmental concerns that inform and define the post-industrial public realms. The focus throughout this thesis is to understand how artists respond to an increasingly challenging set of questions and whether or not we can ascertain any efficacy or social impact in the work. To inform these questions, this section moves into other literatures at the start of each section as a way to expand the frame within which we consider the discussion that follows.

Post-industrial refers to the shift from carbon based industrial power and production towards a computer based economy of information, goods and services that began to happen in the late 1970's. The question of the public realm is pursued from a broad interdisciplinary perspective: artists, architects, historians, philosophers, political scientists, social scientists, urban planners, they all participate in explicating and theorizing this important area of social, spatial and political action. The public realm has been variously charged through the years as a political entity with the responsibility, if not the political clout, to keep the state bureaucracy honestand the market economy in check. In other cases it is nothing more than a performative zone outside the home where we practice civility. Only recently have ideas of intimacy, reproduction and domesticity entered the discourse.

This chapter integrates and includes a discussion of environmental concerns as well. The text explores the conceptual and experiential meaning of the public realm in terms of the traditional social and political sectors, as well as an

expanded meaning based on space, gender and ecology. Then framing the issue in terms of both the experience and condition of our current period of time.

The Evolution of Ideas

The public realm or public sphere, are inter-relating terms that address a general domain or range of public action, knowledge, or influence. Over the last two hundred years, the public realm has taken on a variety of forms and theoretical constructs. The concept can be quite confusing, primarily because it is formulated in opposition or complicity with the state, private economic interests, or private/personal interests. Following Jeff Weintraub, there is an outline of five dialectical relationships that help us understand the current concept of the public realm.

Public Realm Concept Models (After Weintraub, 1997, pp. 8-35).

II. The Market and The State Model (a capitalist model), which sees the public and private distinction primarily in terms of the differences between the public sector of state administration and the private sector of the market economy. This idea places the state in a position to manipulate rewards and punishments through political coercion and incentives that move the self-interests of the market economy toward greater social benefit.

III. The Active Citizenship Model (a classical approach), which sees the public realm in terms of political community and citizenship that is distinct from both the market and the administrative state. Public life is a political process of active participation in collective decision making which provides a discursive-democratic set of checks and balances upon both the state administration as well as the

market economy. This public realm is a field of discourse and action that emerges when humans act and deliberate in concert. (Arendt, 1958; Habermas, 1995, 1996)

IIII. The Spatial-Social Model (an urban planning model) consists of interaction within a continuum of public, semi-public, municipal, market, corporate and private spaces all contributing to and framing an experience of sociability mediated by conventions that allow diversity and social distance to be maintained despite proximity. This is a realm of civility that has retreated from the idea of collective decision-making. This idea of public realm is in opposition to the private realm of the family and the domestic sphere, but it is also in opposition to the state administration and the market economy, which collaborate to provide the authority and administration of this public realm helping to maintain the opportunity for civility. (Aries, 1987, p. 91; Jacobs, 1961, pp. 29-112)

IV. The Feminist Model splits the social world into gendered domestic v public lines, where the public side includes the state, the economy and the realm of political discourse. This idea is based on a history of patriarchal bias in terms of market-product and the political viability of masculine forms of 'public life'. Following Nancy Fraser, this idea is in direct contrast to a political history that denies women's voice, women's labour, or the viability of issues that are placed behind the veil of privacy, intimacy or domesticity (Fraser in Calhoun, 1994, p. 110). This is a transformative model, intended to critique the patriarchal traditions and the problems of dichotomous thinking about public/private realities.

The oppositional and conflicting aspects of these ideas can be clarified through table number one below. I have highlighted specific terms to reveal the pattern of relationships. State has been bolded, and Economy has been underlined for this reason only.

Title	Public	Private	Authority
Market and State	State Administration	Market Economy	State <> Market
	Political Community	Market Economy and	Citizens <> State
Active Citizenship	and Citizenship	State Admin	
	Social Civility in a	Family and the	State Administration
Spatial-social	Spatial Contnuum	Domestic Sphere	Market Economy
	The State, Economy +	Family and the	Social and Political
Feminist	Civic Discourse	Domestic Sphere	Critique

Table number 1: The inter-relating models of the public realm.

In the discussion of public realm concept models we are trying to understand what public means. It is not so much a site of comfort like the home, competition like the market, or (what has become) equity polling driven management by the state. It may be a site of tolerance and unexpected experiences; or conversely a site of conflict and common experience. It holds the potential for those that occupy urban spaces as well as those that claim expertise in urban spaces to find equitable means of creative engagement and the potential for transformative action.

...By definition a public space is a place accessible to anyone, where anyone can participate and witness, in entering the public one always risks encounters with those who are different, those who identify with different groups and have different opinions or different forms of life.

(Young, 1990, p. 240)

Iris Marion Young is a philosopher teaching political science at the University of Chicago: she provides us with a sense of the complexities that face us once we move away from the theory and towards the reality of life in the present public realm. Young provides a sense of the complex diversity, which has replaced the reductive idea of a public, with multiple publics. The fact being that through history the public realm has never been singular and without contest. It is a dynamic reality with constant challenges to access, representation and authority. Stanley Aronowitz (1993) provides a concise overview of the authors through history who have addressed the question of the public realm. In 'ls Democracy Possible?' John Dewey (1927), writes about the complexities of a democracy that has transcended the scale of personal relationship, replacing it with a mediated continental nation state held together without political bonds. Walter Lippman (1955), has argued for an expert public that services a phantom public of citizens. Each of these authors saw no easy path to an articulate public realm, equipped to cope with complex issues. Jurgen Habermas (1996), faced with similar challenges in post-war Germany, developed a theory of communicative action that provides a means to resolve structural barriers to understanding. His theory outlines an open dialogue amongst scientists, politicians and the public; it is based upon the human capacity for rational communication. Its weakness is in its modernist view of a singular public. This has been the subject of study, by authors such as Seyla Benhabib (1992), and Nancy Fraser (1992). They have reviewed Habermas's theory of communicative action from a critical post-modern and feminist perspective, interrogating ideas of multiple and competing publics. Bent Flybvjerg (1998) integrates the ethical intention of Habermas discourse theory with Foucault's analysis of power in a recent article that is quite useful as we consider current

conditions of global power, unrestrained capitalism and environmental impacts of global proportions.

Given the recent history, Weintraub's framework is good as far as it goes. But he only begins to scratch the surface of the problems raised when feminist theory and new political philosophy begin to unpack the bias inherent to the public/private dichotomy. Mary Ryan (1994) tells a history of women constructing an alternative civil society, with women-only institutions, voluntary associations and philanthropic and moral-reform societies. Street protests and parades were the site of action for women excluded from participation in the legal, political and economic life of the public realm. Women, labour unions and civil rights activists are just some of the historic groups that have worked in opposition to singular and dualistic ideas of the public realm. Commenting upon the ongoing success of the feminist movement, "The movement of women into the public is a quantum leap in our public life; it both expands membership in the public and articulates vital aspects of the general interests that have hitherto been buried in gender restrictions and disguised as (issues) of privacy" (Ryan, 1994, p. 286). Iris Marion Young, looks directly at political theories, and the tendency to reduce diverse political subjects to singularities and to value commonness or sameness over difference. She says that, "Social justice requires explicitly acknowledging and attending to those group differences in order to undermine oppression." (1990, p. 3) These emergent political philosophies uncover a public realm that is moving away from singular or dualistic conceptual constructs and towards ideas of complexity and diverse publics as both a reality and a social ideal.

It is not unreasonable to consider that the state, the market, civic discourse, multiple publics and diverse family constructs are all dependant upon a metapublic sphere called nature. Remove nature, and human society will find nothing more than a vacuum, with no potential to support life, commerce, politics or intimate relationships. It could be argued that this statement is so obvious it's not worth saying. But then again, let us consider what the effect might be of not stating the obvious. First, the idea of nature, like the idea of women and diverse publics, has been and continues to be denigrated. Nature is in a position of subservience without equitable representation. The issues are simply not on the table, or if they are, the power and voice of the representatives cannot compete with dominant interests. But let me take a moment and provide an overview of why nature should be included in the historically anthropocentric concept, spatial framework, and discourse about the public realm.

Nature is the context and source for all human experience and material production. Living systems or 'nature' cannot be easily replaced once lost, nor can they be manufactured with the existing knowledge and tools of agricultural, industrial or post-industrial societies. Fertile soil, pure water, clean air and biological diversity are all disappearing, environmental economics tell us these are capital goods, they are not income that can be spent with an expectation of replacement (Prugh, et al., 1995). It is a bit of a stretch, but one could say that nature has been repressed. It has been included in the public realm equation only in terms of its material relationship to capital. Nature is, and has been, a primary focus for the construction of ideas of shared spatial uses as well as shared resource. British common law is the basis for American common law, and they

both support hydrological systems as public rights. We have specific water rights: the right to access, to use, as well as rights to purity and consistent delivery. Clean air laws and clean water laws have all been written in this century, in response to the impacts of industrial economies. To date, the rights of nature have been confined to the rights of specific species not to become extinct.¹³

Following the eco-feminist argument in history, nature and women have been pushed aside and constrained from the conceptualization of the public realm (Merchant 1982, 1992, 1996; :Plumwood 1983). Women, have continued to captured their place; today nature demands both advocacy and voice. Like the architectonic context of the spatial social model and following the critical and transformative intent of the feminist model, it is essential that we consider an ecological model of the public realm by reconfiguring the outline.

Public Realm Concept Models (After Weintraub, 1997, p. 8-35)

- I. The Market and The State Model (a capitalist model)
- II. The Active Citizenship Model (a classical approach)
- III. The Spatial-Social Model (an urban planning model)
- IV. The Feminist Model (gendered domestic v public)

V. The Ecological Model is a co-evolutionary paradigm that recognizes the human culture co-evolves in relationship to nature. The private sector, the public sector and the intimate sector of familial relationships have historically operated in a parasitical relationship to nature. The city is a node of pure consumption that must borrow carrying capacity and energy from elsewhere (ex-urban agricultural lands

and forest lands) or from the past, in terms of fossil fuels. The development and sustainability of public, semi-public, municipal, market, corporate and private spaces are all in a parasitical relationship to nature. Without ecological representation at the table of the public realm, the enlightened self-interest of capital and complicity of the state, influenced by global capital, have the potential to kill the host. As such, there appears to be a clear moral impetus to consider this model. We can add this model to the table provided previously as in table number two below.

Title	Public	Private	Authority
Ecological	Social and Ecological		Limiting Factor
	Citizenship	State, Market, Family	Natural Capital
	Nature: biosphere, bioregion, landscape, ecosystem, organism		

Table number 2: An integrated social/ecological model of the public realm.

But what does it actually mean for nature to have political representation? This is a complex and highly contested area of discourse in more than one body of literature. It is not possible in this their to offer a solution to the moral imperative at this point, instead what follows is a overview of three areas of related discourse.

First there are radical positions couched in a hyper-responsible form of deep ecology that demands an end to the unsustainable procreation of humanity. There has been a project that took action in the legal interest of trees. (Stone, 1988)

There is a range of literature on the ethical, social and political issues that might inform an idea of political rights of/for or with nature, Regan (1983), Singer (1985), Nash (1989) and Midgley (1983). The former while rational, is not actually tenable in application. The cause and effect awareness of human procreation rates are not likely to change behaviour. The latter is fascinating; initial reading in the area

suggests that this is a highly conflicted and detailed argument that works in terms of metaphor, concept model, and regulatory potential. It has various means to work within the dominant culture to create change. This is a discourse that is evolving over the long term, with critical awareness growing by leaps and bounds. It is also a minefield of conflicting ideas and approaches.

Another discourse explores the link between ecology, psychology and cognition. Gregory Bateson (1999, 2000); Felix Guattari (2000); Humberto Maturana and Francisco Varela (1980, 1987) are amongst the authors in this area. Guattari's 'The Three Ecologies' is one text that has been a focus of attention. It is based on a psychological integration of social ecology, mental ecology and environmental ecology. Claiming that scientific ecology obscures the complexity between humans and their environment, he calls for a return to an aesthetic, a "...common ethicaesthetic discipline" (2000, p. 69) whereby the self is made relational, social again without any loss of difference. The collective is individuated (and sustained) through micro social processes of experimentation. Guattari calls for the 'reconquest of aesthetic autonomy' as a means of forging and renewing humanity's confidence in itself (2000, p. 69), and in turn resolving the numbing effect of mass media subjectivity. The position is a mix of environmental responsibility, liberation through transversal psychology, libidinal investment and the evolution through social subjectivity based in ecology. Guattari does not take us into a realm of political representation but rather into a realm of nature/culture confluence vis a vis the mind, the social body and the nutrient/kinaesthetic context of life. His interest is in subjectivity and the potential to reveal the transversal (overlapping) potential for subgroups within hegemonies to claim power.

Another point of reference is found in actor network theory, most specifically in Bruno Latour's, 'The Politics of Nature' (1999) which includes a critique of the separation of fact (the domain of science) from value (the domain of politics). He discusses the power and political effect of facts which undermine appropriate political (value-laden) discourse. Another way to think about this is the social/scientific construct that we understand as nature actually denies the political viability of nature. In response, he calls for a new multi-naturalism whereby a community of humans and nonhumans are all represented as 'a congress of things' and given due process. Traditionally, the unvoiced are given due process through advocacy, but this is the approach that Latour argues against in his somewhat confounding text which is based on Actor Network Theory. Actor Network Theory can be described as the dynamic inter-relationship between ideas and things. Latour's proposal sees subject and object as equal 'actants' in the network. Cognitive and intentional agency is given the same weight as nonintentional agency in an analytic framework that is based upon an analysis of systems of signification.

As discussed there are presently emerging a number of ways of addressing a new ecological public realm concept model. The struggle to normalize the idea as a natural evolution of moral and ethical rights and values is gaining traction. In the end it will be questions of representation, voice and appropriate advocacy that will be argued for decades to come.

The Experience

The public realm can be defined at two scales: in relationships between individuals as public space, and as the more encompassing social-ecological-political concept of a shared commons. It is easy to think about being 'in' a public space. Public space has both its spatial and discursive forms; public space has a perceptible boundary. We choose to either participate or not participate in public space activities. In contrast, the commons have no real boundary; it is part of the experience of place. The commons are a shared experience that is processed through a social-political lens. Public space is to the commons as skin is to breath in the body. The skin is a clear and perceptible public-place of our body; we are aware of its condition, its visibility and its cleanliness. Breath is the body-commons which we all share; it sustains life. The breath we breathe gets less attention than our skin; we are seldom aware of its chemical condition, its cleanliness or even its ability to support life – until it is too late. The former is an obvious physical artefact that we are well aware of, the latter a ubiquitous necessity easily overlooked until compromised or removed.

The experience of public space is framed by place, articulated by architecture, urban design or landscape and hydrology, and defined by social-political action. It is planned and constructed taking the form of sidewalks, streets, roads and parks. It can be preserved or conserved as in forests, ponds, estuaries and natural ecosystems. It is managed and regulated in the form of oceans, lakes and rivers of all nations. Public space is an environmental continuum of human constructs and natural systems, which are theoretically both essential and available to all. Public space is supported through a range of social-political constructs, which are based

upon long-term protection, but include opportunities for legal advocacy and public oversight. The idea of public space is constantly evolving, and a number of authors suggest that it is actually in a period of significant decline or outright hostile take-over. They see a public realm caught between the self-interests of capital and the mediated spectacle of consumerist desire; they include Aronowitz (1993), Davis (1999), Schiller (1989) and Sennet (1974). Other authors like Brill (1989) and Carr, Francis, et al. (1992), as well as Marcus and Francis (1998) suggest that the old forms of dense European cities are simply giving way to a diversity of new forms, and that public space is simply evolving with new relationships to the state, capital, and diverse publics and politics. It is interesting to note the pattern of sociologists in the former set and designers in the latter. The point is, what you think is often tied to what you do and what you understand in your day to day work life. Whether it is the critical theorists that are aloof, removed and reactionary or the designers that are idealistic, engaged and promotional remains to be seen. In the pages that follow the focus will primarily be upon the theorists, rather than the designers.

Another public space is framed and defined by voices of citizens engaged in discussion about shared aspects of life and the issues of the day. Two voices in dialogue create this space, which can be casual and convivial (personal) or critical and targeted (civic). This discursive form of public space is considered by many to be the bedrock of an equitable democratic society, a site worthy of significant oversight and constant critical engagement. Authors like Arendt (1958), Dewey (1927), Habermas (1995), Lippman (1955) have all developed significant texts on the subject that point to decline or crisis. Their texts seek to understand the

reasons for decline as well as strategies for restoration. Arendt and Habermas have become key points of reference for a new generation of post-modernist writers interested in the move from singular notions of public toward diverse publics with diverse relationships and access to power.

Throughout history, interested and powerful parties have captured both the spatial and discursive forms of public space for a range of invested interests. Spaces can be fenced, policed, monitored, or otherwise secured to stop, block or deny access. Access to discursive and spatial forms of public space has been controlled, managed or denied throughout history. Civic discussions can be captured and redefined to reflect powerful interests and minimize the voices of less powerful interests (Benhabib 1992; Fraser 1992; Sennet 1992; Young 1990).

Public space is an intimate experience in comparison to the commons. The commons are diverse and ubiquitous resources, which are perceived as too dynamic, too diffuse or too well integrated into the fabric of human life to have the kind of value that needs to be defended. Where the experience of public space is intimate, the experience of the commons is expansively diffuse. Despite the collective ubiquitous and multiple benefits of the material commons, (and the organisms and resources that inhabit the commons) they can and have become the target of desire for powerful interests.

There is no greater financial opportunity than wealth extracted from a ubiquitous once-public common good re-defined as a desirable market resource. For this reason, the meaning, form and function of the commons is constantly under

scrutiny and shifting in relationship to forces of capital. For example, two centuries ago, rivers were considered unalterable natural commons. In the last century, industrial tools allowed us to re-define their function and manage them as resources and infrastructure for industrial production, minimizing their ecological values (Cioc 2002; Haglund 2002; White 1995). With the emergence of radio and television technology, the airwaves were discovered and targeted as a public good to be controlled by federal interests (Aronowitz 1993; Schiller 1989). In the coming century, inner space is the commons of speculative desire with our worldwide genealogical heritage becoming the focus of new bio-industrial economies that seek to market plants, organisms and natural systems that were previously considered part of our ubiquitous common heritage (Shiva 1997; Fukuyama 2002).

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 (Shiva 1997; Fukuyama 2002). In the sum of these two examples we find a range of meaning, form and function, which radically redefines 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

Art Ecology and Planning: Sections I and II interdisciplinary arts practices can result in creative engagement and potential social-political return.

The forms for actual change in our society are yet to be created, though created they must be, for affective forms for change will be tooled from the actual conditions and historical location of our cultural space and consciousness.

(Kosuth, 1993, p. 171)

Chapter 4 – Art in Critical Engagement with Public Realms

In the previous chapter, I examine literatures of planning and political science to try to elucidate the changing forms of the public realm. The chapter reveals a mobile and dynamic concept that evolves with human understanding of what is public and what is private. It clearly illustrates the power of moving ideas from one context to another not as simply an intellectual exercise but with the intent to motivate change and to capture incredible wealth. Furthermore it provides us with a physical or experiential model of the public realm which is primarily spatial by definition, a site of struggle between public and private interests. The other important idea is that of the commons which is primarily based in concepts of resource, and the struggle between those that would act out intrinsic values and those that claim utilitarian values. In light of this the public realm and the commons are always a site of dynamic exchange.

Returning to the most general definition, the public realm, or public sphere are inter-relating terms that address a general domain or range of public action, knowledge, or influence. An important addition to this idea is Young's ideas about difference; it is in the public realm that we encounter those that see the world, or actually live in the world differently than we do.

Returning to the container, the context for these experiences. The public realm has both spatial (architectonic) forms and discursive (social) forms (after Lefebvre,

1974, 1991). To provide an example, cities, buildings and exhibitions can frame public and private spaces. But a true public space is open and accessible to all. Taking this discussion back to art, a work of art is seldom primarily public (in either the discursive or spatial form), although art can initiate a discursive public space. This takes place when a group of citizens gather to take up a discussion of its (arts) meaning and impact upon society. In turn, a space that is public is not always discursive, although it always has the potential to be discursive. A space that is private has very little opportunity to become discursive unless its private use impinges on other private spaces or explicitly public spaces and uses. Or, in the case of squatters, for example, a private space that is underutilized by the interests of capital can be seized by a minority public interest that has the will to capture it and the social and political stamina to defend it and retain it over time. These are all conditions of the public realm, which itself is broken down into modernist (some claim masculine) unitary forms and post-modernist or poststructuralist forms of radical (and oppositional) diversity. I will frame and elucidate these ideas about the public realm and the tension between modernist and poststructural forms in the following section on emergent ideas in art and the issues of the public realm

Don Mitchell (2003) describes two forms in conflict, providing one of the more straightforward interpretations of public space. The first is described by its dynamic and discursive social function it is a system on the brink of disorder. The second of Mitchell's forms is spatial, socially managed and controlled in the interest of specific (dominant) users.

Public space is taken and remade by political actors; it is politicized at its very core; and it tolerates the risk of disorder as central to its functioning. [And a second form.] Public space is planned, orderly, and safe. Users of this space must be made to feel comfortable, and they should not be driven away by unsightly homeless people or unsolicited political activity.

(Mitchell, 2003, p. 128)

In Mitchell's descriptions we see, once again, a tension between disorder and control, between spaces of difference and discourse and spaces of similarity and comfort. Here we begin to see the relationship between a dominant public, which Mitchell suggests has "access to private space to retreat to (so that publicness can remain voluntary)." (2003, p. 132). And a critical and agonistic sub-public or minority interest that does not have the same access to power (or private space), as a result finding themselves with more investment in occupying public space. Yet at the same time, the minority interest has less impact upon the politics that attend to or maintain those spaces. This is the basic structure which has primarily occupied the discussion in the public art theory and practice.

Rosalyn Deutsche is one of the primary arts based, critical authors on this topic. She claims that most of us "equate public space with consensus, coherence, and universality and relegate pluralism, division and conflict to the realm of the private" (Deutsche, 1996, p. 281). In 'Agoraphobia,' she describes the conflicted nature of the public realm as a dynamic entity that cannot be pinned down. For once it is secured and held by an interested public, it is lost and no longer public until

conflict emerges again. For her, conflict is the very condition that indicates the presence of the public realm. This is the ultimate point of clarity in her thesis, at the same time it is a point of weakness.

Writing in 'Evictions: Art and Spatial Politics' (1996) Rosalyn Deutsche considers the meaning of the public and the artist's role in public space. She defines the focus in terms of a discourse about art, architecture and urban design in relation to theories of city and its social and public spaces. She suggests the terms 'urban aesthetic' or 'spatial-cultural discourse' to describe the area and claims that while the discourse was not new, the relative interest and intensity of the discourse is increasingly significant (Deutsche, 1996, p. xi). Deutsche labours to make a single and very clear point: that conflict is the defining element, the very condition of existence for democratic public space. At the same time, she lacks clarity on the differences between discursive public space, urban forms of institutionalized public space, and what Patricia Phillips declares to be the 'left-overs' from commercial and residential development. Deutsche's claim is that public space is not the unified social entity that we want it to be. It is the site of a dynamic social contest raising issues of authority, control, exclusion and access precisely because it is public, rather than private. Deutsche critiques the ideal of impartial, consensus driven public space as a masculine model that ultimately intends to master difference. As a result, the argument is that "public space is produced and structured by conflict." (1996, p. xxiv) This is a challenging idea that I have fundamental agreement with. At the same time, I would argue that most of us, when given the choice, would avoid conflict if it doesn't have some primary relationship with desire. I will be searching for an indication of the potential of the

public realm that Deutsche describes to elicit meaningful interest and commitment to change through some element of desire.

The Primary Issues

Deutsche addresses the political context of her text and her understanding of public space. Referencing the French political philosopher Claude Lefort she defines democracy as "...the disappearance of certainty about the foundation of public life" (Deutsche, 1996, p. 272), and, "...social space where, in the absence of a foundation, the meaning and unity of the social is negotiated – at once constituted and put at risk." (Deutsche, 1996, p. 273) In this reference to Lefort, she describes democracy as a radical historic shift from the authority of god and king to radical ideas of broad civic responsibility instituted by 'natural rights' that belonged to everyman. What she describes is public life defined by citizenship and discourse, but at the same time defined by uncertainty and dynamic change. Her essential point is that the idea of public space is defined by implicit conflict and social risk. In counter point the social and political aspects of the public realm are negotiated. The discursive public space described here is about relationships, and relationships are ultimately about the negotiation of trust and the ultimate risk negotiated amidst relationships to power. To define this important site of human endeavour as nothing more than a site of conflict is to ignore the larger questions of the desire that informs conflict as well as the outcome that has sustained this relational pattern of conviviality and conflict for centuries.

To reinforce her position, Deutsche cites the post-Marxist political theorists

Ernesto Laclau and Chantal Mouffe, stating, "Antagonism is the experience of the

limits of the social." (1996, p. 274) By extension we might assume that there is no authentic sense of what is inside the boundaries of the social without an awareness of the conflict and antagonism amongst interested parties that defines it's edges. Deutsche claims that it is the ability to question claims to power that is at the heart of our civil rights as members of a free democratic state. It is when that (discursive, public) voice is made quiet that we can assume that the public realm has disappeared and democracy is threatened. Public space is increasingly appropriated (again following Lefort) by the authoritarian state invested in incontestable meaning. This can occur in public spaces when particular use is deemed self-evident, economically essential, or a principle of long term economic, social, technological or environmental consequence. According to Deutsche, once a public space has such a meaning, it is no longer functioning as a public space at all. Public space imbued with normative function has been effectively occupied; non-conforming users become in effect intruders and as a result public meaning is lost (1996, pp. 276-277). But in turn, (and this is the brilliance of the model she works from) in that very loss the opportunity for conflict arises again, and with it the potential for discursive function, the potential for change through social and political discourse about the redefinition of physical space and its function. Another way to think of this is that the discursive (and political) function of public spaces lies dormant without competing human desire and interest. And while discursive function is lost and laws and regulations may be guiescent, (or misapplied) they still maintain the spatial (and legal) potential for openness and access.

But Deutsche has no sense of the critical optimism, that is characteristic of this author. She characterizes the problem of public space in the U.S. in its movement

toward authoritarian control in two steps. Deutsche's position is that first, public space is unified through dominant municipal schemes such as implied needs of the resident population, historic condition and its value, and claims of objective moral value. Secondly, public space is unified through the exercise of state or quasi-governmental authority in these spaces (Deutsche, 1996, p. 275). Let me provide some examples in terms of the former; cities in the U.S. are increasingly using 'eminent domain,' a legal tool that is used to undermine private property rights, with the intent of creating broad parcels of urban land for the public good – embodied in economic redevelopment. In terms of the latter, one of the best examples would be the Central Park Conservancy, a 'public private partnership' composed of an assembly of citizens who have taken an economic interest in the maintenance, care, restoration and stewardship of the park. They are now ostensibly in control of the Central park web site, have a significant voice in the use and care of the park itself, and ultimately serve as 'a club' of public advocates who take a primary interest in that specific urban public space.

Deutsche has theoretical clarity here, but the practical application of this ideological position is somewhat more complicated and problematical. From her point of view, the spatial form of the public realm is under significant attack and the options are very limited. She believes that democracy, "...stems from the people but belongs to nobody [and that] democracy is instituted and sustained by the dissolution of markers of certainty" (Deutsche,1996, p. 274-5). Furthermore, following Laclau and Mouffe, her goal is to create an antagonistic criticality amongst the public that forges an awareness of the exercise of power in the social

and physical forms of public space. The question that follows is: what does antagonistic criticality actually accomplish?

Problems in Discursive Forms

Jurgen Habermas is referenced in Deutsche's text as the primary voice of a modernist, or homogenous public sphere. His vision is one of rational social discourse, where political community (citizens) assemble and take a critical relationship to the market economy and state administration (represented in terms of the 'Active Citizenship' of public space described in the previous chapter). Habermas defines a process of stepping beyond private interest to embrace common concern and the need for consensus. Deutsche simplifies Habermas's ideas of non-coercive-consensus as an avoidance of conflict. She is critical of Habermas's focus upon the enlightenment ideals of rationality, the notion of a unified public sphere, and what she describes as a lack of scepticism, "...about the innocence of either reason or language." (1996, p. 287) Modern interpretations of Habermas's position are an important theoretical and ethical counterpoint to Deutsche's project. In the years since 'Evictions' and the chapter on 'Agoraphobia' was published, the post modern or post structuralist argument against Habermas's notion of a unified public has been critiqued, reformed and extended by authors such as Seyla Benhabib (1992a, 1992b), Nancy Fraser (1992) and Bent Flyvbjerg (1998). Benhabib compares Arendt's ideas of 'civic virtue' and 'legalistic forms of public space' provided by Bruce Ackerman to Habermas's 'discourse model' and find Habermas the most compatible with current social trends and, "the emancipatory aspirations of the new social projects, like the women's movement." (Benhabib in Calhoun, 1994, p. 95) Fraser's position is less favourable and more in line with Deutsche, in that she critiques Habermas for his lack of attention to the

ways different 'publics' are enabled and empowered, and finally in the way that the weak character of these publics deny 'public opinion of practical force.' (Fraser in Calhoun, 1994, p. 137) Finally, Flybvjerg examines the ethical rationality of Habermas against the strategic analytic of Foucault. He ultimately values models of participation that are practical, committed and ready for conflict over models that are discursive, detached and consensus dependent. At the same time he claims that, "the tension between consensus and conflict" is essential to modernity (Flybvjerg in Douglass and Freidmann, 1998, p. 185). In both Benhabib and Flybjerg's post-Harbermasian positions the potential for rational discourse is examined with an awareness of the power, tension and inequity that makes the public realm possible, dynamic and worth participating in.

With her fixation on conflict, Deutsche's public realm is primarily defined as a space of dissonant struggle. Its value is actually undermined by convivial experience, which she equates with the onset of dominant norms. There would seem to be no moment (within the scope of her definition) where the assembled interests can accept the success of that struggle, one must be always vigilant. Yet, she retains the concept of public sphere and does not altogether dismiss the Habermasian contribution. She states that the introduction of the concept of the (discursive) public sphere fractures boundaries in the arts such as those between public and non-public, institutional and non-institutional presentations and state sponsored and privately sponsored projects. To simplify this, artwork always has the potential to create a discursive public sphere, whereby the work instigates (or facilitates) a gathering of people. They either gather to engage in political

discussion or outright struggle in relationship to issues (public /private, institutional, non-institutional) that the work itself references.

Public art can be viewed as an instrument that either helps produce a public space or questions a dominated space that has been officially ordained public.

(Deutsche, 1996, p. 288)

Throughout this text, this author has struggled with Deutsche's overt cynicism and sense of critical vigilance. Oddly, Deutsche has made a case for vigilance and conflict throughout the text, but the final conclusion is not built upon conflict, on the contrary, it is based in vulnerability. She claims that it is in public space that we must construct identity and shared meaning. It is the desire for the social, that we recognize that democracy is ruined by any attempt to quench that desire.

Deutsche claims that totalitarian societies destroy democracy by:

...closing the gap between state and society, suffocating the public space where state power is questioned and where our common humanity – the 'basis of relations between self and other' – is settled and unsettled.

(Deutsche after Derrida, 1996, p. 326)

The question that that Deutsche leaves unanswered however is what drives us to enter that conflicted realm? Is it realistic to think that we have some innate drive, a libidinous need for the social construction of identity and meaning? Or is there

another argument that is missing here? Deutsche describes a two-part path; one of conflict that analyzes and dispenses with inequities in power relations. The other is one of subjective vulnerability; acting in public requires a peculiar strength that risks loss for a social gain that can not be realized alone. The ultimate application of the theory requires a balance between the critical practice of conflict that she describes and elements of ethical awareness and utopian desire for a rational social life which she does not recognize.

Design, Planning and Cities

Where Deutsche focused on the specifics of power, conflict, vigilance and criticality, Malcolm Miles writing in 'Art Space and the City' (1997) focused upon expanding the self-referential discourse of public art into the interdisciplinary dialogue about discursive approaches to urban planning and design. In later books, such as 'The Uses of Decoration' (2000) 'Urban Avant-gardes' (2004) and edited texts such as 'Urban Futures' (2003) and 'Interventions: Advances in Urban Futures' (2005) he retains an interest in creative approaches to society, but then expands the framework to include the role of everyman in expressing the visual life of the city. He is increasingly occupied by the history of what it means to be avant-garde, the shift from radical creativity and revolutionary intent to critical creativity with transformative intent. The work provides an important view into another way of looking at the creative development of cities at a human scale. Throughout his writing, Miles leverages the scope of the public realm and its dialogue through forays into a range of disciplines that relate to cities, including planning, sociology and geography, as well as critical/culture theory and environmental philosophy.

In his first major book, 'Art Space and the City,' Miles took a critical approach to the process and product of public art. His goal was to speculate on the role of the artist and designer in the manifestation of urban futures, while remaining sceptical of the contribution that art can make to the redevelopment of cities. Miles claims that the practice of public art was isolated from theoretical debate about cities and, at the same time, was considered a marginal area of art practice.

Having little appeal to curators, dealers and critics for whom it lacks the autonomy of modernist and contemporary art and offers few opportunities for the manufacture of reputations, accumulation of profits or demonstration of taste.

(Miles, 1997, p. 1)

Miles goes on to explain that public forms of art in the United States and England are primarily a government funded or mandated affair; a common element of urban development and as a result complicit (or unquestioning) of privatization, surveillance and control of public space. Miles suggests that the definition of public art embraces everything not in the gallery or museum and includes a range of work, from monuments and narrative bronze works, to urban and industrial residencies, public performances, community media, the range of traditions in mural painting and interactive experiments with new electronic technologies. Some of the more critical and transformative work is generated by artists themselves and often supported by systems outside the dominant public art networks in the U.S. and the U.K.

Recognized for his work detailing the range of oppositional and critical approaches to public art, in his later book on the avant-garde he formerly abandons that interest. He claims that public art was an idea that had transformative potential. but it had been 'subsumed back into the mainstream.' He sees the current work of creative change in cities as no longer directly oppositional or the exclusive product and programme of elite forward thinking artist and professionals, but rather as a broad cadre of divergent interests and disciplines working at the edges of dominant systems. He claims this new diversity and interest to be a 'source of hope' and one would assume inspiration. Miles has examined issues of art, representation, monuments and memorials in western cities. He has travelled to Northern Africa and India to better understand the range of relevant cultural production, and, in turn, the limitations of western European and American views of these questions. He has examined the development of cities and the diverse disciplines that work to create alternatives in a world that is dominated by a homogenizing global economy and its culture. In the end, Miles is interested in what causes change in the world and how we might critically engage those changes to decide for ourselves if things are better or worse. Miles focuses his critical analysis upon dominant ideologies. From the masculine impact in public space, to the hegemony that is embodied in most monuments, to the complicity of institutional art, design and planning programmes with development and redevelopment interests. Miles provides an overview of the range of oppositional efforts that occur in relationship to these areas of conflict and change. He counterbalances the overview of dominant systems with insight into the strategies of minority resistance, the restoration of the feminine voice and other diverse voices in public space, criticism, history and theory. Throughout his analysis he

seeks to uncover, to understand, explicate and distribute creative ideas and practices that challenge the dominant culture of today and have the potential to reveal paths to the freedoms of tomorrow.

Returning briefly to the question of art, in his earlier work, Miles took two approaches to art in cities. The first is the common ideas of public art or work that occurs outside of a gallery or museum setting. The second is described as the making of the 'convivial city'; this is defined as discursive and inclusive approaches to city planning, city design and city making. These ideas and interests are informed by the idea that cities are socially produced. Yet, city form embodies the ideological intent of dominant interest. In broad generalities Miles suggests that artists dream ideal (utopian) cities, architects plan future cities, planners seek order and the 'we' that the city is actually composed of – more often than not find change set upon us. The question that Miles asks is how to empower urban dwellers with their own creativity? He claims that: "...the value of theory is at least in part in its application, and of criticism in its construction of possible futures of greater freedom" (Miles, 1997, p. 39).

On these points Deutsche and Miles are in agreement. As a matter of fact they share many of the same points and references. Where they differ is in the degree of interest in conflict as a primary theoretical strategy and the level of validity they place on rational discourse. In his work, Miles is more influenced by ideas typical of Herbert Marcuse and the Frankfurt School of Philosophers and the evolution of that literature. In turn, Deutsche is more influenced by ideas of agonistic pluralism as described by Ernesto Laclau and Chantal Mouffe. In the former case, the

pursuit of freedoms is achieved through critical attention to the social structure. In the latter case, the pursuit of freedom is for all essential purposes a state of awareness and a preparedness to enter into conflict as a means of defence. One is a democracy of discourse, the other a democracy of disagreement. These are not divergent or exclusive separate interests because, Miles and Deutsche share these references. One question arises, is freedom the quintessential transformative issue in a globalizing society where consumer choice and the potential for self indulgence are part of the cultural framework? Can a sense of individualistic freedom engender the social responsibility and traditions that were outlined by Gablik? Can a convivial society emerge from freedom alone? Or is it merely one component of a larger more complex project that we must pursue?

Another important point worth mentioning is Malcolm Miles's critical appraisal of the planning views of cities. His work focuses on a human scale. This is both a critical framework and an aesthetic preference for him. In 'Art Space and the City' he introduces this position by comparing the effects of plan view, (the planners gaze) to the objectifying gaze of the physician as described by Foucault (Foucault in Miles, 1997, p. 3). The planner, with his fixation on height, scale and plan view, ignores the complexity; the very humanity of urban existence. This is an idea serves better as a cautionary narrative rather than a differential position, I will explain why. With each shift in scale, say from 1-25, 000, where one inch of map equals one thousand feet, or 1-125,000, where one inch of map equal two miles, we see different things. Miles would argue that what we no longer see in either scale is human existence. Complicating this however are ideas such as, at what scale are human lives most significantly affected? And, at what scale do

individuals feel that they have some control or affect upon decision making? And, ultimately what scale do they feel comfortable thinking at? With distance and shifts in scale come increasingly complex and sophisticated levels of symbolic representation and meaning; symbolic knowledge which is easily misunderstood. What you see and conceptualize when an inch equals two miles are very different from what you see and conceptualize when an inch equals one hundred and fifty feet (1-2,000 scale) and your domicile is still visible, for instance. While Miles is right, that the view at scale is progressively less aware of and therefore less responsible to the individual and, as a result, more objectifying with changes in scale. However we also see landscape systems, hydrological, topographical and weather systems more easily at scale, not to mention infrastructure, transport and industry, or airstreams and pollutant loading. Over the last 200 years, the industrial issues that affect our individual sense of quality of life are not always visible at the human scale of the home and neighbourhood. The issue is not that focus changes with scale. The issue is who has access to that view, and how are they using it, sharing it or controlling it? In a world where impacts to quality of life are often occurring at the level of landscape or region, the reservations about plan view can be counter-productive if taken as anything more than a caution. We all need to understand how the world is changing around us. We can all learn a lot about the systems that affect us and where our creative and critical voices may be essential by looking at maps and thinking and acting in our own interests, and the interests of our communities at a planning scale.

Following this line of thought, Miles also engages the ideas of the social ecologist, Murray Bookchin (1992) who would claim that the issue at hand is not just urban

public space, but much deeper than that: an issue of failing ethical relationships, brought about by capitalism. Part of the argument is the relationship between the city and its extraction of resource from the exurban landscape. In this setting, the issues become bio-regional and an issue of sustaining resources, as well as an issue of attending to access and the control of space goods and ultimately labour. Miles describes the urban site analysis of public parks and gathering places done by William H. Whyte (1980). Here is an important tension between Murray Bookchin's scale analysis and Whyte's more intimate social analysis of sites. First the real spatial differences raise important questions about the means of experiencing, and conceptualizing these spaces. The scale of Bookchin's ideas demands a map scale analysis or a systems or material flow analysis. The questions raised are by their nature about the quality of life in cities. But the issues are about the distribution, ownership and access to public and private land, those things we hold in common such as air and water, as well as the material production, cost and flow of the commodities into and out of cities. These are abstract ideas that are most often defined in terms of textual, numerical or visual representations of data. Whyte's programme (a counterpoint to Bookchin's) focuses upon the experience of real people in real places, processed through a social science methodology. Both of these 'environmental' studies rely on techniques and/or technologies that are not typical or common knowledge, for either citizens or artists. Although Whyte's representation of human experience is probably closer to the baseline understanding of common knowledge, it is definitely more in keeping with Miles's bias against the planning scale. Questions that follow include: are there limits to the artist's social and environmental purview? Is real human perception more valid than the perception and abstract

representation of geographic scale information? Is the fact that abstract data is the primary purview of dominant interests an issue? And finally, do we need a new approach to the education of artists that are interested in questions that are framed at the planning scale? In a world where dominant interests are increasingly global, we need to work from both ends of the scale while retaining a sense of ethical humility—what Malcolm Miles might call a responsible yet humble commitment to the contribution of knowledge about cities. The focus of this text is empowerment, or as Miles puts it, "...the development of social processes... which enables non-professionals to work on an equal basis with members of the professions of the environment and city authorities in making underlying decisions about development" (Miles, 1997, p. 199).

To achieve this goal, Miles offers a critical overview of scientific planning, the city form in relationship to the pursuit of profit, destructive consumption, citizen knowledge and advocacy planning, and action planning. He closes with the thoughts of philosopher Aaren Gare, who suggests that we must know "what stories we are a part of" (Gare in Miles, 1997, p. 140). The value of the non-professional at the table (one might assume) is to counterbalance the dominant interests of capital with the day to day realities of life in cities. Miles outlines the forms of planning practice that are open to non-expert opinion. The most challenging aspect of all this however, is how to 'know' where we fit, what stories we can take part in, what data is accessible, what is there that helps us understand our relationship to resources, economies and development? Most studies are initiated to benefit development and growth. It seems obvious that we need to expand the critical and liberal use of these systems of societal guidance

for purposes of creative liberation, counteracting their value as tools of control.

Knowledge is power. We must always interrogate the source of data that informs knowledge and its validity, or need for alternatives. We also need to interrogate who has that knowledge and why it is or is not distributed to the widest community of potential users possible.

Miles sees the public forms of art as having two primary forms, first in terms of integration as participants in the design of the built environment. And, secondly in terms of interventions into what is understood as the public realm. He offers an additional form which is simply the presence of artists in any city as cultural workers and participants in civic life. Following Patricia Phillips (1988) he claims that the interventionist practice moves the location of arts from its previous confinement (and definition) in relationship to physical site to an increasingly politicized relationship to the public realm in both its spatial and discursive forms (Miles, 1997, p. 207). This is obvious in the work referenced previously which raises cogent public realm issues about social, cultural and ecological topics. These are topics that put significant demands on artists. We can describe these demands in terms of awareness of the theories that can inform the artist's role as a catalyst for empowerment. And in terms of an awareness of the knowledge and tools that inform knowledge at the planning scale. And finally in terms of a generous and distributed creative authorship, where knowledge and creativity is shared, and ideas are shaped and clarified (often through conflict) in ways that result in diverse advocacy.

Within the wider questions of what constitutes a city and for whose well-being it is produced, are questions of public space, urban design, and the articulation of the public realm; if art is socially beneficial, it is in the extent to which it addresses the need of urban dwellers – by liberating their imaginations, contributing to the design of public spaces, and initiating social criticism to articulate the public realm – that such benefits can be identified.

(Miles, 1997, p. 189)

Miles has a focused interest in the relationship between theory and the construction of futures of greater freedom. He is also interested in the theory and practice that attends the artists, planners or designers role in social empowerment. By this (in 1997) he means enabling or supporting others in the pursuit of their own interests and approaches to diverse futures. He characterizes the future in terms of a post-structuralist disorder, a diversity that will make consensus problematic, yet at the same time rejuvenate democracy through the critical contestation (after Sennet and Mouffe) that keeps it alive (Miles, 1997, p.190). Miles is fundamentally interested in the need for critical analysis while at the same time he remains determined to find 'a new model of collaborative dwelling.' (1997, p. 208) In 'The Urban Avant-gardes' (2004) he states an interest in critical intervention, which he defines in terms of "...radical forms that irritate those (dominant) institutional structures" and where, "...practitioners were willing to engage in conversation and to answer questions that were not restricted to appreciation." (2004, p. xi) Miles is less interested in what has been made at this point, he is instead increasingly

focused on the nature of the discourse and the relationships that occur between those that are speaking.

Conclusion

In the previous pages, I have tracked the evolution of public practices from Lippard' and Gablik's original analysis theorizing artists that were moving away from the artworld and into the social and environmental aspects of the lifeworld. In the process of doing this, I have been seeking clarity on the theory and methods that social and environmental practitioners have used in the past. There are two major ideas running through this; the first is freedom, which isn't as simple as we may think when we consider the term at face value and contemporary context. The other major idea is critical clarity leading to the potential for ethical action. The idea of freedom is alternately defined as a valid ideal for all and as a limiting factor in the modernist theoretical paradigm. An open democratic society demands freedoms for all, the dominant and subordinate forces of culture. What we are talking about here is the freedom to be heard and the freedom to effect change. The freedoms we need today are not the artistic freedoms of the last century. Gablik has argued that classical artistic autonomy constrains social impact. The institutions and culture of art provide an alternative (a cultural) infrastructure that portends freedom while it actually constrains impact and action. In effect the artworld has become a placebo for freedom. A shadow world where the ideology of freedom can be performed but never enacted. This is of course in complete opposition to the Althusserian argument that validates resistance to ideological state apparatus.

What is the moderating adjective that will clarify the concept of freedom that will transform a self indulgent highly technological and increasingly global consumer society? What are its relevant reference points in this time of pluralizing cultural identities? Technology has always been the dominant means we use to transcend the limits of environment and culture. Artificial intelligence, virtual realities and the engineered genome are all about freedom. Freedom has become the Holy Grail. the defining condition of science. Creative scientific freedoms are supported by multi-national corporations that are motivated by a relationship to the least regulation, the fewest taxes, and freedom to pursue the greatest profit. In the face of such realities, what does freedom mean for the creative and critical practitioner of today? Thomas Keenan suggests that one idea of freedom is found through the public realm in proximity to otherness and the resultant uncertainty about a sense of self as measured by a distanced and objectified knowledge (Deutsch, 1996, pp. 325-326). Diversity is both context and content that defines life – if there is a mistaken impression of the last 100 years it is the assumption of similarity over difference.

What critical ideology must we embrace to succeed? Deutsche presents a rigorous Marxist analysis of power and dominance focused upon dissidence and the liberation of minority interests. This is counterpoised against Miles's analysis which is primarily couched in the Frankfurt school and ideas of liberation through rational discourse. It is not within the scope of this thesis to resolve or even properly examine the subtleties of the breach between these divergent schools of Marxist thought. Both texts are extremely important to the understanding of public realm practices. I have pored over and marked up both Deutsche and Miles with

the same level of interest and intent that I brought to Lippard and Gablik more than 20 years ago. For me, Miles is closer to finding a balance between the vigilant analysis of power and the desire for rational discourse. Where Deutsche (following Mouffe) offers us conflict and opposition as the definitive experience of a phantom democracy, Miles describes a convivial city that appears in the breach between the reoccurring conflicts that authorizes the public spaces we care about. In his latest work he describes an evolution of disciplines and a convergence of diverse interests in aspects of cities that are not being served by global capital, local markets or the interest of the state. He crafts a structured ideal for our consideration. The lack of attention to the ideal in Deutsche is a significant mistake; Although, her insight about conflict and contestation to be incredibly clear and an essential point for anyone thinking about these issues. Conflict is a condition of change, in any struggle between 'I want' and 'I have' there is an inherent antagonism. But at the end of the day, there has to be a moment of wonder that will drive us forward to fight the good fight time and time again. Without the sensual rewards of conviviality and robust debate in common interest, the purpose for conflict over public space (phantom of otherwise) is going to be difficult to sustain.

Art Ecology and Planning: Sections I and II

NOTES

¹ Brown, B., Gough, P., Roddis, J., (2004) Types of Research in the Creative Arts and Design.

² In terms of both the products that result from practice, as well as the content that results from research.

³ See Sharon Zukin, 'A Museum in the Berkshires' in her 1995 text 'The Culture of Cities' published by Blackwell Publishing, Malden MA and Oxford, U.K.

⁴ Like William Jordan III, whom I will discuss in the third section. Jordan writes from a more traditional religious basis, but with a non-traditional application of his moral position.

⁵ Gablik's contribution has been unfairly maligned for its style of writing (without footnotes) and its spiritual presumption, but the fact that it is still discussed or criticized at public events is a testament to the validity and import of the work. 'Has Modernism Failed' was just released in its second edition in 2004.

⁶ Artists included Marie Johnson-Calloway, Newton and Helen Mayer Harrison, Adrian Piper, John Malpede, Mierle Laderman Ukeles, Judith Baca, Alan Kaprow, Lynn Hershman and Suzanne Lacy.

⁸ I assume it is the relative paucity of federal funding that constrains Americans from regularly engaging artists from other nations. Localize foundation and state funding is not predisposed to international cultural exchange. Typical of all of Lacy's work, the conference programmeme and text was both diverse and inclusive by design. The best of the European social artists: people such as Lorraine Leeson, Peter Dunn and Conrad Atkinson, (who moved to the San Francisco Bay Area in 1992, to take a job at U.C. Davis) or the German artist Joseph Beuys, were referenced in a compendium of artists later in the text. (Joseph Beuys had of course, passed away in 1986.)

⁹ The efficacy of Aids related artwork is the subject of specific discussion in the text 'Democracy in America: A Project by Group Material' (1990) David Deitcher claims that over time, it became increasingly clear that nothing short of direct action was considered a viable solution to this tragedy of such significant loss of life. For further thoughts on this topic see the following, authors Douglas Crimp 'Melancholia and Moralism: Essays on AIDS and Queer Politics' (2002) and Simon Watney 'Policing Desire: Pornography, AIDS and the Media.' (1997) Searchable online resources include Robert Atkins text in the 'Queer Arts Resource' and Craig Kaczorowski's text in 'The Encyclopedia of Gay, Lesbian, Bisexual, Transgender and Queer Culture'.

¹⁰ From 1990-2000 Lacy had begun a series of deep-dialogues with Oakland Youth and the police of that community. The work resulted in a series of thoughtful performance actions and programmemes that resulted in changes to practice, policy and regulation enforcement in that divided community. I have been in attendance, with Lacy presenting this work. I have listened as colleagues took her to task on the basis of a Marxist critique of power and her decision to work with the police. The artists personal conviction about the ethical value and ultimate need for the work despite all the criticism continues to inspire me.

¹¹ While there is a body of Freudian literature that explores the preconscious, the conscious and the unconscious, if the author is not prepared to examine that literature for its contribution to the project at hand, why include it?

¹² Reductions were based upon the 'culture wars', the attack upon the NEA and its funding of independent artists and exhibitions by conservative interests in the U.S. Congress. At issue was a sense of 'appropriate' expression versus freedom of expression given the investment of public dollars. Prior to this the last significant period of federal support for the arts in the U.S. occurred from 1934-1943 (Cruikshank and Korza, 1988, p. 5) (Lorrance, 2004)

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http://www.stateline.org/live/ViewPage.action?siteNodeId=136&languageId=1&contentId=96421)

¹³ In western cultures the courts are the primary sites of action when the question of rights are considered. In eastern and mid-eastern countries, religion can provide the authority for rights of nature.

¹⁴ The U.S. Supreme Court examining the use of eminent domain in New London Connecticut decided that cities have the right to take land from homeowners to benefit large scale corporate development which produces higher tax returns. I provide links to two very different views on the topic below. "Eminent domain looks less imminent House passes bill that could prevent private industry from using land seizures." November 4, 2005: 7:27 AM EST, By Shaheen Pasha, CNN/Money staff writerhttp://money.cnn.com/2005/11/04/news/economy/eminent_domain_bill/ Thursday, March 16, 2006, "Eminent domain outcry pierces statehouses" By Fred Lucas, Special to Stateline.org

SECTION III – The Emergent Context

In the previous section ideas relevant to art and the public realm were analyzed. On the following pages is an analysis and synthesis of literature that can inform the relationship between art, nature and culture. This provides a range of ideas that illustrate the changing relationship between humanity and nature; introducing an overview of informed multi-disciplinary and inter-disciplinary art practices that seek to integrate nature and culture. In chapter six, new ideas in aesthetics are explored. Traditional aesthetic philosophy has lost the interest of many practicing artists; the discipline itself identifies its marginal status (Passmore, 1951) and is reportedly taking a turn towards issues of ethics and the social function of art (Deveraux, 1996). On the following pages, I will address emerging issues in environmental aesthetics and intersubjective aesthetics; the latter focusing upon social exchange and its potential for creative practice, the former focusing upon an aesthetic systems as a framework to consider human creative output.

Chapter 5 – Ecological Restoration and Art

Earlier versions and variations of this chapter have been published in:

- Collins, T., Goto, R., (2005) An Ecological Context. *in* Miles, M. (Ed.) *New Practices/New Pedagogies: Emerging Contexts, Practices and Pedagogies in Europe and North America*. Lisse, Netherlands: Swets and Zeitlinger.
- Collins, T., (2003) Lyrical Expression, Critical Engagement, Transformative Action:

 An Introduction to Art and the Environment. Burnham, L. (Ed.)Community Arts

 Network: Reading Room, (online).
- Collins, T., Goto, R., (2003) Art, Landscape, Ecology and Change. Hall, T., and Miles, M. (Eds) *Urban Futures*. London: Routledge.

Preservation and Conservation

Preservation and conservation emerged in the years around the turn of the 20th century in response to the tools and economies of the industrial era and growth and development in the American West. Preservation began with the aesthetic/scientific interests of botanizers and gardeners in the subject of trees. Organized groups at that time helped to establish 'Arbour Day' and promoted a plan for national forest preserves. This interest in nature was fuelled by the writings of the naturalist authors Emerson, Thoreau and Muir. A popular movement, preservation was soon balanced by a more practical and scientific voice. The project of conservation has been described by Samuel Hays as, "...efficiency in the development and use of all natural resources" (Hays, 1959, p.123). Established during Theodore Roosevelt's presidency, conservation was defined by Gifford Pinchot and others as a rational approach to land management. Conservation theory was rooted in an engineering approach to applied

Art Ecology and Planning: Sections III and IV knowledge. The ultimate goal was to inventory all natural resources, then to make a rational plan for development with the intent to achieve efficient use and minimize waste. This is still the focus of conservation biologists worldwide who inventory natural communities and track wildlife movement and then manage habitat so that select species (either migratory or non-migratory) will prosper. Conservation and preservation are programs that are driven by a reaction to human disturbance of natural systems. Conservation projects today involve large habitat areas, nesting areas and numerous migration areas where landscapes are managed to the best advantage of a single species or groups of similar species.

Preservation and conservation were a reaction to the perception of encroaching physical limits within the United States. Preservationists believed that wilderness was in a state of grace, beyond the limits of human habitation. Nature was something to be preserved and contained for future generations. Conservationists believed that wilderness was a resource bounty to be managed and controlled for long term economic benefits. Both of these philosophical and political positions placed nature (in the form of wilderness and land-resource) well beyond the limits of cities or towns.

The project of ecological restoration (like preservation and conservation before it) requires critical and radical (socially transformative) cultural components as well as pragmatic and rigorous science if it is to succeed. The project of restoration seeks to shift the environmental dialectic from a culture that sees utilitarian value in nature—with preservation as the critical solution to industrial landscape changes, to a culture that sees intrinsic value in nature—with restoration as an essential response to post-industrial legacy pollutants and global impacts. On the pages to follow the role of art,

Art Ecology and Planning: Sections III and IV design and aesthetics in the contemporary project of ecological restoration are discussed and described.

Restoration Ecology: The Cultural Aspects

The emergent area of knowledge known as restoration ecology is a logical response to the post-industrial era at the turn of the 21st Century. Restoration ecology is a new way of thinking. It links citizens and experts, as well as cities and wilderness, in a broad program of ecological awareness and action. It is a community of disciplines synthesizing a continuum of diverse cultural practices. On one end lie the arts and humanities, in the middle are the design professions, at the other end, science and engineering. Restoration ecology has been touted as a new relationship to nature, one in which the old reductionist paradigm is reversed. Scientists are charged with reassembling a working nature from the pieces discovered over the last 200 years, while taking it apart. While the machine metaphor was useful in the disassembly and analysis of nature, it is less useful when reassembling nature. The aesthetic roots of restoration ecology can be found in the urban-nature design projects of Frederick Law Olmsted (particularly the Fens of Boston, 1881).² The roots of its science can be found in Aldo Leopold's work restoring the lands of the University of Wisconsin-Madison Arboretum in the 1930's (Jordan, 1984). In Jordan's original document, restoration ecology was interpreted as a mixture of cultural and scientific efforts, "...active as a shaper of the landscape, yet attentive to nature and receptive to its subtlest secrets and most intricate relationships. The restorationist is in this sense like an artist and a scientist, impelled to look closer, drawn into lively curiosity and the most intricate relationships" (Jordan, 1984, p.24). After Leopold, Jordan is clear that restoration is about restoring a "whole natural community, not taking nature apart and

Art Ecology and Planning: Sections III and IV simplifying it, but putting it back together again, bit by bit, plant by plant." He also states that this is, "....the ecologist version of healing" (Jordan, 1984, p.23). Jordan commented on the import of restoring whole communities in this text, but he also recognized the import of restoring (reclaiming) industrial sites, referencing the noted biologist Anthony Bradshaw's pioneering work on coal mining sites in England.

Jordan sees the Arboretum as a research laboratory for work that shall see increasing demand in the future, due to the fact that the industrial revolution has provided humanity with the tools, pollutants and toxicant loads to affect all that is natural (including humanity) and to consume land and change air, soil, water and even our climate world wide.

Restoration ecology attempts to both define and reconstruct nature while staying aware (and respectful) of the complexities of the process, its ethical context and the social potential of its performative aspects. Restoration ecology is an important new area of thinking and acting. It provides us with experience and knowledge that can transform the human relationship to nature.

Art and Ecology

For clarity, it is important to describe art's relationship to ecological restoration in divergent yet complicit terms. First, it is a fine art activity with a relationship to the critical and intentionally socially transformative components of the historic avantgarde. It is also a design activity, which is about the organization and application of content within a known context with clarity of intent that produces form. The former is based in a tradition of creative autonomy. It has more propensity for a critical and radical stance. The latter is based in a tradition of creative responses to the needs of

Art Ecology and Planning: Sections III and IV a client. Design is framed through critical knowledge but ultimately remains complicit with dominant interest. It is in the relationship between these two ways of working (and many of us wear both hats) that the arts serve nature and culture, and the project of ecological restoration.

Earth Art and Environmental Art

The historical relationship of sculpture to landscape is different than that of painting. It is only with the advent of the minimalist era of modernist sculpture in the 1960's that landscape began to play a sustained and primary role in the sculptor's thinking.

John Beardsley, Thomas Hobbs and Lucy Lippard are the primary authors on the subject of earth art. Beardsley's (1977) 'Probing the Earth: Contemporary Land Projects' and later, (1984) 'Earthworks and Beyond' provides the authoritative view on the originators of earth art. Hobbs's (1981)'Robert Smithson: Sculpture' is the best reference on that artist's works and writing. Lucy Lippard's (1983) 'Overlay' described earlier, is a key contribution as well. Beardsely and Lippard both describe a post-studio inquiry and practice that integrates place, form and materials. The earth artists engaged landscape directly. Earth was the material and the form that oriented the viewer to the material and the place of the work. Earth art challenged the purpose of art as a collectible object. Earth art was a return to cultural practice that was about reestablishing a sensual human interface to the land often through the use of industrial machinery and architectonic structure.

Herbert Bayer, Walter De Maria, Michael Heizer, Nancy Holt, Mary Miss, Isamuu Noguchi and Dennis Oppenheimer were just some of the original practitioners that Art Ecology and Planning: Sections III and IV 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. 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. (Morris, 1979,1993)

Ecological-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 by 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. In 1972 Haacke explored plants, natural phenomenon and the water quality of the Rhine River in Germany. In 1972 the Harrisons secured a 'Sea Grant' at the University of San Diego and studied the life cycle of crabs and the

Art Ecology and Planning: Sections III and IV function of estuaries, leading to works on 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 in 1978. Agnes Denes developed 'Wheatfield' at Battery Park City, beneath the shadows of the twin towers of the World Trade Center, in 1982, this was 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. These ecological artists were the first to claim to act in the greater interest of nature and the commons. In 1974 Jack Burnham wrote an important book, 'Great Western Salt Works,' with one chapter that developed an initial approach to systems aesthetics (Burnham, 1974, pp.15-24). Alan Sonfist edited 'Art in the Land' (1983), a selection of texts which addressed the range of artists working in relationship to environment at that time. Both texts are essential references

Eco-art

The phrase 'eco-art' is a term used by many, although its definition and intent is variable. Art critic Lucy Lippard defined it as having an "emphasis on social concern, a low profile, and more sensitive attitude toward the ecosystem" (Lippard, 1983, p.229). Recently others have begun to work through the meaning and intent of this way of working. One of the most consistent thinkers and authors on the subject is Ruth Wallen, a San Diego, California practitioner with training in both art and biology, and a former student of Helen and Newton Harrison. Wallen's text (2006), developed with members of an international (online) Eco-art Dialogue Group³⁴, makes it clear that the artist's role is based in values and advocacy for an ethical ideal of collective

Art Ecology and Planning: Sections III and IV networked relationships that reintegrate the social and the ecological. Another text that might shed some insight on this evolving area of practice has been developed by the art historian and author Linda Weintraub working with artist Skip Schuckmann. The initial idea presented in the form of a manifesto. The text, while not developed collaboratively, was initially presented with a request for participation, revision and development.5 Weintraub and Schuckmann's (2006) manifesto extends Wallen's effort in important ways. Where Wallen retains the frame of the ecological system, Weintraub and Schuckmann name the components of the ecosystem, both the 'living' and the 'non-living,' extending recognition to other species. The two texts share a primary interest in sustainability, with Wallen making it clear that she believes that "...current patterns of consumption and resource use are dangerously unsustainable" (Wallen, 2006). Weintraub and Schuckmann's approach is more prescriptive (yet simplistic) with a guideline to use "indigenous materials and locally generated energy sources." (Weintraub and Schuckmann, 2006) Finally it is important to state what it is these authors claim that ecological artists actually do. First, they claim that eco-artists provide an awareness or understanding through the design, planning and/or the creation of isolated objects. In addition, Wallen claims that eco-artists can, 'address core values', (and) 'advocate for political action.' Weintraub and Schuckman raise one additional issue, the idea that we (our bodies) are linked to the environment through issues of health.

Ultimately this work is about public realm advocacy, advocacy for communities, organisms and entities that are not represented in the political and economic discourse that shapes our world. The ecological artist's role is to develop interface and new knowledge that explicates the complex meaning of nature and culture, as

Art Ecology and Planning: Sections III and IV well as the relationship between nature and culture, in affect acting as an agent of change. Like my colleagues above, I believe it is our function to reveal concepts and experiences that might otherwise be overlooked. As a result, one can define the practice as a creative process that results in interface between natural systems and human culture. It recognizes the historic dialectic between nature and culture and works towards healing the human relationship to the natural world and its ecosystems. Where much of the art (specifically the avant-garde art) of the past has focused on a critical relationship to culture, ecological and environmental art practices focus upon a critical responsibility for the reintegration of nature and culture.

While there are some similarities in the intent to restore nature, it is important not to confuse the work of scientists with the work of artists. The difference is that artists primarily work on restoration at the level of perception, conceptualization, experience and value; our colleagues in engineering and the natural sciences are working on restoration with knowledge developed through replicable experimentation. Their focus is upon the renewal of structural systems and interacting networks of nutrients and organism. The actions of our colleagues are about a successful, replicable, and practical restoration of health to complex systems. The actions of these artists call into question the cultural relationship to nature. And, at times we use the tools of science to give strategic, or an example form to our cultural interests. We also rely upon the work of ecological and environmental-philosophers who are instrumental in clarifying the increasingly complex moral and ethical issues that define the nature and culture relationship at this point in time.

Art Ecology and Planning: Sections III and IV Current Exhibitions and Relevant Texts

Ecology remains primarily outside of the arts mainstream, with the exception of people like Mark Dion, who works with natural museums as a point of reference; Alexis Rockman, who has an incredible command of painting and a critical view of our changing relationship to nature; and Nils Norman, who integrates ecology into critical/utopian work (through illustrative narratives) on cities. Various curators, critics and authors have begun to address the work through exhibition, catalogues and critical texts. Barbara Matilsky curated the exhibition 'Fragile Ecologies' (1992), an analysis of the area of practice with an accompanying catalogue. She provides an excellent overview of the historic precedents for this work, as well as some of the most important work of the first and second generation of ecological artists. A text edited by Bylai Oakes, 'Sculpting with the Environment' (1995), is unique and guite valuable as a reference; he asked artists to write about their own work and the text provides some very good insights. 'Land and Environmental Art,' edited by Jeffery Kastner, is an international survey of both types of artist's projects, 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. In 1999 Heike Strelow curated 'Natural Realities' at the Ludwig Forum in Aachen, Germany, this exhibit was an international overview that expanded the concept of ecological-art and its range of effort to include the human body as a site of 'natural' inquiry. The accompanying exhibition catalogue 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 first exhibition to attempt to address instrumental intent within ecological art occurred at

Art Ecology and Planning: Sections III and IV the Contemporary Arts Center in Cincinnati, Ohio. Sue Spaid and Amy Lipton (2002) co-curated 'Ecovention: Current Art to Transform Ecologies.' The accompanying catalogue explores the artists role in publicizing issues, re-valuing brownfields, acting upon biodiversity and dealing with urban infrastructure, reclamation and environmental justice. In 2004, a new book, 'Ecological Aesthetics' was initiated by Herman Prigann, a German ecological artist. Curator Heike Strelow and Prigann's partner Vera David edited the text. It provides an excellent overview of the range of work that is occurring today in both Europe and the United States. In 2005, two major exhibitions, 'Beyond Green: Toward a Sustainable Art,' curated by Stephanie Smith; and 'Groundworks: Environmental Collaboration in Art,' curated by Grant Kester, provide two views of the work with a slightly different set of choices informing the artists involved. In Smith's curatorial project she references Kester's works on dialogical aesthetics and Bourriaud's idea of relational aesthetics but the curatorial focus is upon the artist's relationship to design and critical practice (Smith, 2005. p.16). The result is an exhibition that has a primary relationship to material products that elucidate socially critical positions. Inherent in these projects is the intent to transcend cultural norms, but the response is always embodied in artefact. This differs from Kester's curatorial project, which is primarily based in dialogue. "The audience's engagement is no longer defined primarily through distanced visual contemplation, actualized by reading or de-coding an image or object, but through haptic experience actualized by immersion and participation in the process" (Kester, 2005, p.20). As a result Kester's exhibition focuses on records and documentation of creative social practices, documentation of critically informed dialogue that intends from the outset to create change, not artefact.

Consider the term interface as an analogy for art. Think of interface as a common boundary, the interconnection between systems, concepts, environment and people. Interface is the art, the physical manifestation of the creative relationship between humanity and the natural world. The concept of interface is appropriately open. Its form is undetermined but its intention is explicit: it defines the art of ecology without closing out its options. Perception is the awareness of interface or awareness through interface. Human values are the target or goal of cultural agents. Ecological artists manipulate the attendant metaphors, symbols and narratives of the nature/culture interface to shift human perceptions around the dual subjects of their inquiry, research and production - affecting valuation. These are the strategic points of political engagement for the ecological artist - interface, perception and human values.

As a practicing ecological (or environmental) artist with an interest in philosophy and theory, I am interested in form, content and symbols as well as the concepts and theories that inform and sustain the practice. I would argue, after the Harrison's and Sonfist, (Auping, 1983 p. 99), that ecological art is fundamentally interdisciplinary, in that we can not rely on the art world as the only point of engagement and interpretation. Furthermore, the artists involved in this practice can't confine their learning or production to art alone. We must reach out across disciplines to build a platform of knowledge and practice. In the interdisciplinary model, artists find critical social space to expand their practice by moving outside their discipline and its institutionalized relationship to society. In this way, we find opportunities, both

Art Ecology and Planning: Sections III and IV intellectual and creative, that we cannot find within our own discipline (which like most other disciplines has turned inward upon itself). Interdisciplinary practice breaks the form of discipline specific institutions. It expands the combined disciplines and provides the artist with a new path to social engagement. Inherent in that path is the responsibility for the artist to educate him/herself in several disciplines. In turn, the work needs to be received and evaluated for the totality of its intention.

Complicating the Meaning of Nature

In a controversial article with ongoing repercussions, philosopher Robert Elliot claimed that the practice of restoration ecology was nothing more than counterfeit nature, as egregious (and worthless) as a counterfeit of a great painting or sculpture. He declared that wild-nature had an irreplaceable natural quality, as irreplaceable and authentic as a fine-art masterpiece (Elliot, 2000, pp.71-82). He further declared that the practice of restoration ecology when applied at a policy level allowed developers and extractive industries to destroy authentic nature. For example, mitigation policies for wetlands lost to development have been disastrous. There is little attention to wetlands typology or its topographical/hydrological context when defining what is lost, or what the replacement might be. Furthermore, oversight of replacement wetland design, construction and maintenance has been spotty (Mitsch and Gosselink, 1986).

Replacing natural authenticity and intrinsic value with a counterfeit or restored ecosystem calls into question our moral, scientific and creative potential, can we only save or destroy nature? Eric Katz, Andrew Light and Cheryl Foster have all addressed this question of counterfeit nature in different ways. Katz states that, "the natural is defined as independent of the actions of humanity," which in turn results in

Art Ecology and Planning: Sections III and IV his position that, "we do not restore nature, we do not make it whole and healthy again." (Katz, 2000, p. 90) In the same edited text, Andrew Light answers by granting Katz the claim that it is impossible to restore nature (as Katz has defined), but he contends that we still have a moral obligation to improve and refine the technological and cultural projects of restoration, restoring what he calls "the culture of nature" (Light, 2000, p.108). In contrast, Cheryl Foster addresses the question of authentic nature from an environmental aesthetic position. She suggests that within the United States, a cultural tendency towards hyper reality and the simulation of nature will consistently plague the authenticity and trust in restored ecology, geology or nature in any form. The author explores the restoration and maintenance of 'natural-wonders' at parks and national recreation areas (Foster in Gobster and Hull, 2000, p.77). Four philosophers who carry three views of nature, the first and second accept nature only in its independence from humanity. The third seeking a culture of nature; and the fourth pointing out that not only do we have to deal with the natural and the restored, we also have hyper real nature. Light calls for a culture of nature, and Foster describes a nature of culture, which bends the meaning of the former in ways that are only constrained by the imagination.

Most people have strong feelings about nature. We arrive at these feelings through a range of 'natural' experiences and cultural training. Can we know nature without compromising its independence? Environmental restoration challenges this understanding of nature in odd ways. Is it enviro-technical or is it enviro-medical? We can approve of medical intervention for humans, pets and livestock, we even perform wildlife rehabilitation in most of the major cites in the country. We can approve of technical soil remediation, species selection, pesticides and ambulatory plant care for

Art Ecology and Planning: Sections III and IV desirable agriculture (like lawns in Las Vegas). But the idea of restoring nature and usurping its wild integrity generates a passionate defensive position in the most liberal corners. We are in the dark-ages when it comes to restoring nature; the passion that is elicited to defend disappearing ecosystems, disrupted landscape ecologies and their related organisms against a loss of authenticity truly puzzles me. The tools and economies of the industrial age have left us with an awesome ability to shape, mold and transform nature into the material goods of culture. Industrial by-products that exist in the air, water, and soils physically compromise natural authenticity.

Conceptual authenticity (wildness) is compromised as we discover, name and catalogue the genealogical complexity of nature. What we can't get to physically and conceptually the global climate change will. Given the inalterable fact that at this point with global climate change, nature has been compromised by our action, do we have an ethical duty to preserve, conserve and restore what we can? If we do, how can aesthetics help us in this expansive project?

Art Nature and Traditional Aesthetics

Nature has been a fundamental subject of artistic practice and aesthetic inquiry throughout history. Nature has filled the artist with fear, awe and wonder. The material product of the artist or artisan is the primary subject of the philosophy of aesthetics. Since the 18th century, the dominant western philosophy of aesthetics concerned itself with the appreciation of things deemed pleasing, or things with the potential to evoke an experience of the sublime. In minimal opposition: Marxist aesthetics has been more concerned with the social relationships inherent to production and reception. The operative word here is things, isolated objects that exist independent of context and those that view them. The concept model is simple, a human

Art Ecology and Planning: Sections III and IV appreciator and a thing, framed in a neutral manner, which is then appreciated. The means of appreciation was primarily visual; the objects of consideration were carefully bounded to separate art from daily life. The viewer was expected to be properly (empirically) disinterested in the object of contemplation. These things were analyzed for beauty, paying attention to their unity, regularity, simplicity, proportion, balance, measure and definiteness (Beardsley, M., G., 1966, Thompson 1999). Alternatively, works could be analyzed for their relationship to the sublime; the feeling of sublime emerges when a viewer considers an object that sets up a tension between imagination and reason. In the contemplation of the finite object we find an experience of expansive grandeur, wonder or awe. In this historic model of aesthetics, the world is left to its own rational utility. These ideas of beauty and wonder are exclusive, properly separated from that world and confined within reductionist laboratories that let us see the work without the corrupting influences of social-political or environmental conflict. The white walls of the museums, the raised stage of the symphony, or the frame of the painting all provide us with a clear understanding of where we go to look and contemplate objects for their inherent aesthetic value. Modernist aesthetics have little value for artists that have embraced post-studio practices. Artists with an interest in environment, social or political issues; working with objects, texts or actions do not easily fit within this classical method of aesthetic analysis. Ecological-art relies upon experiences enmeshed in complex process and natural systems. Authorship lies on a fine line between action and concept. Relevant form rarely stands alone, more often form is extracted from the context itself. Complicating things immeasurably, there is a whole social-political element of the work that cannot be ignored. The elite, disinterested root of aesthetic

Art Ecology and Planning: Sections III and IV philosophy would seem a long way off from art practice focused upon strategic engagement with interface, perception and human values.

Chapter 6 – Environmental Aesthetics

An earlier version of this chapter has been published in:

Collins, T., (2004) Aesthetic Diversity in Strelow, H. David, V. (Eds.), Herman Prigann

– Ecological Aesthetics: Theoretical Practice of Artistic Environmental Design,

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Introduction

There are a number of important thinkers in the area of environmental aesthetics, Jay Appleton, Ronald Hepburn, Rachel Kaplan, Stephen Kaplan, Jack Nasar, Cheryl Foster (mentioned earlier) and Marcia Muelder Eaton are just a few. There are f two primary voices in this emergent area: Arnold Berleant, author of 'The Aesthetics of the Environment' (1992), and Allen Carlson, author of 'Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture' (2000). In a co-edited volume of the 'Journal of Aesthetics and Art Criticism' (Vol 56, No 2, September 1998) they define environmental aesthetics at face value, "the application of aesthetic concerns to environment". This concept is almost the polar opposite of the traditional aesthetics outlined earlier. First the term environment qualifies aesthetics in important ways. It is inclusive and expansive, opening this philosophy to consider a range of ideas and conditions that wouldn't be considered under the exclusive methods of traditional aesthetics. Qualifying aesthetics with environment also raises the idea of application. Once aesthetics accepts the challenge of finding the means and methods of describing aesthetic value in complex and diverse environments, the application of that knowledge is likely to follow. In the combination of environment and aesthetics, a reconstructive postmodern path is drawn out of what could be described as a

Art Ecology and Planning: Sections III and IV reductionist endgame seeking a truth that has decreasing relevance. In environmental aesthetics, the full range of nature-culture manifestations is opened up to multisensual perception, emotional/intellectual analysis and social-aesthetic evaluation. What was once simplified in the pursuit of empirical truth has become complicated and complicit with the world once again. The question is, can environmental aesthetic philosophy handle the complex experience of dynamic systems with intellectual tools developed over the last two centuries studying static self-referential objects of fine art and the experience of the sublime?

An Aesthetic of Engagement: Subject Object Collapse

Berleant is a philosopher and a trained musician interested in both the theory and application of his work. Since 1970, his provocative and bold writing is intended to expand the focus and purview of aesthetic philosophy. In 'The Aesthetics of the Environment' (1992), Berleant outlines aesthetics of engagement, which seeks ultimate unification of nature and culture, declaring, "there is no sanctuary from the inclusiveness of nature" (Berleant, 1992, p.8). In this model, Berleant outlines a radical aesthetic theory that casts aside the subject-object? relationship for what can be described as an integrated systems analysis approach to aesthetics. In this theory nature and humanity are one field, artefacts (the material product of culture) are no longer isolated and the disinterest that has marked two centuries of aesthetic philosophy gives way to passionate engagement with contextual experience. Berleant references the post-studio move into space and place as a direct challenge to the visual, where the viewer is immersed in a somatic experience of the complex and dynamic aesthetic field. He declares, "If conventional aesthetics impedes our encounters with the arts, it obstructs even more the appreciation of nature." (Berleant,

Art Ecology and Planning: Sections III and IV 1992, p.166) The contemplation of nature is viewed as a space and place question devoid of boundaries or frames. But more importantly he states, "Nature, in the sense of the earth apart from human intervention, has mostly disappeared." (Berleant, 1992, p.166) He describes nature as a cultural artefact, through both action and conception, which is further fractured by a diversity of cultures and the different ways they act upon and conceive of nature.

Berleant claims that, "The aesthetic is crucial to our very perception of the environment. It entails the form and quality of human experience in general. The environment can be seen as the condition of all such experience, where the aesthetic becomes the qualitative centre of our daily lives." (Berleant, 1992, p.57) He works to provide an aesthetic paradigm intended to open the world to a "full perceptual vision of aesthetic, moral and political conditions." (Berleant, 1992, p.60) He seeks to close the gap between disinterested aesthetics, claiming it evolved into a distinction separating art from life. His proposal is based on the following three points: The continuity between art and life, the dynamic character of art, and the humanistic functionalism of the aesthetic act. He applies these ideas to the city, working to develop what he calls an aesthetic paradigm for urban ecology. The components and focal points of his paradigm are:

- Integration of purpose and design as typified in a sailing ship.
- Integration of fantasy and spectacle, subhuman and human as revealed in the circus.
- Communion between heaven and earth, sanctuary and steeple found in a cathedral.

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Union between individual and celestial, organism and cosmos
 found in a sunset

(Berleant, 1992, pp.62-69)

These four components are described as dimensions of a city that are overlooked, subsumed or ignored by contemporary urban development. As I wrote out these four strategies, I found myself surprised and delighted by their poetic delivery. Berleant provides us with a strategy, an aesthetic program using models and metaphors from the oldest and most delightful human experiences. As much as I enjoy the reverie, it occurs to me that what he has left out is any sense of a critical-social, or creative-social approach to art and urban ecology. He has moved aesthetics into the present but left art in the past. There is no sense of the artist as a strategic cultural agent acting with full awareness to shift the symbols and metaphors of a culture invested in the power of state and capital that are, in turn, invested in utilitarian approaches to cities. He closes with the following statement,

It is through creating an urban environment that is a dynamic synthesis of the practical and aesthetic, where need and awareness are equally fulfilled, that function is both most complete and most humane, and where enlightened aesthetic judgment can become a social instrument toward a moral goal.

(Berleant, 1992, p.81)

To create a true aesthetic of engagement, enlightened aesthetic judgment has to open itself to critical and creative social-art practices. The historic components

Art Ecology and Planning: Sections III and IV presented by Berleant provide us with a historically referential framework for a culture that integrates the aesthetic with the functional; it does not give us the right tools to achieve those goals in contemporary culture. Glorious sailing ships, spectacular circuses, breathtaking cathedrals and cities oriented to the sun emerged in cultures that put primary value on those things. The integration of the subject-object provides us with a new conceptual framework. But, the components of the paradigm are passive, more likely to conform than transgress. Integration, communion and union are based on relationship. The culture of capital and its utilitarian approach to city building are the dominant economic and political power. Re-establishing humanisticaesthetic values in a culture of capital will require a strategy that is both cognizant of that power and able to develop strategies to achieve the desired relationships. Artists and aesthetic philosophers who are committed to an aesthetic of engagement are going to have to get realistic about the application of their ideals. This will be the challenge of both the art and the aesthetics of engagement. Although one can add two components to his paradigm to open up that potential.

the unification of society and art, aesthetics, morality and equity
the recognition of the relationship between places, people, need and
limits

A Natural Environmental Aesthetic: Subject Object Retention

Carlson's (2000) work in 'Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture' is a more deliberate approach to environmental aesthetics. The depth and rigor of his analysis is quite remarkable, this is reflected in his conceptual organization of the issues and models for aesthetic appreciation of

Art Ecology and Planning: Sections III and IV nature. Answering the what and how questions is one of his essential preconditions for genuine aesthetic appreciation. He begins by defining the scope of environmental aesthetics in terms of 'what' - from pristine nature to human art. He also defines the environmental aesthetic 'scale' - from objects to bounded properties and forests. He does not identify ecosystems or the ubiquitous natural-commons, such as air or water. He identifies the range of experiences from mundane to spectacular and goes on to talk about the complex experiences that can be found in even the most common forms of nature. His stated goal is to create a set of guidelines for aesthetic appreciation that will allow 'serious and appropriate interpretations' of nature. He describes two basic orientations when we attempt to appreciate nature aesthetically. The first he describes as subjectivist or sceptical, whereby the viewer is frustrated by nature's lack of frames, design and designer. The viewer does not know what or how to appreciate the unframed landscape. His second point is described as objectivist. "In the world at large we as appreciators typically play the role of artist and let the world provide us with something like design" (Carlson, 2000, p.xix). If I understand him correctly, within the recognition of pattern, we can then set boundaries which allow us to define the what which then provides the question of how to appreciate nature. He provides specific ideas about categories or models that can inform the

Models for the aesthetic appreciation of nature. After Carlson (2000, pp.6-8).

appreciation of nature.

The first makes the case for an environmental aesthetic by neglecting normal experience, and the second raises the question of the nature-culture relationship. He considers neither to be plausible contemporary models.

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- The formal object/landscape models The appreciation of identifiable objects within a landscape or as a scene carefully framed and chosen for consideration.
- 2. Metaphysical imagination model Aesthetic appreciation as deep meditation and wild speculation; an attempt to understand the essential realities of nature and learn our place within it.

This next grouping provides the working set for his thinking and aesthetic decision making. The third, the intellectual is qualified by the fourth, the emotional, and the fifth, a (modified postmodern) pluralist model provides permission for qualified consideration of a range of approaches to knowledge.

- 3. The natural environmental model An appreciation for nature based on the natural sciences, that accommodates scientific truth and our day to day understanding of nature.
- 4. The arousal model To appreciate nature through emotional and visceral arousal, an approach to nature that does not engage scientific concepts.
- 5. Pluralist model Accept the postmodern range of ideas that attend nature, qualifying them with careful interpretation.

The final grouping is considered out of the question for Carlson. These are models that help define his understanding of the limits of aesthetic appreciation. Briefly, the sixth identifies a need to retain the subject-object dichotomy, because its loss negates aesthetic interpretation, the seventh clarifies the point that you can not appreciate

Art Ecology and Planning: Sections III and IV what you do not know, the eighth is merely self cancelling, and finally he deems the ninth unworkable due to open ended multiple source interpretation without qualifiers.

- 6. The engagement model Absorbs the appreciator into the natural environment. This model is intended to remove the traditional dichotomies of subject and object
- 7. The mystery model –The only appropriate aesthetic experience of nature is based on its mystery, an appreciative incomprehension which can only come from separation from nature.
- 8. Non-aesthetic model –Based on the view that aesthetic appreciation is directly tied to human artifacts, therefore the aesthetic appreciation of nature is impossible.
- 9. Postmodern model Art, experience, knowledge, literature, myth, science and stories all inform our aesthetic appreciation of nature, with none weighted above or below the other.

Carlson concludes that the natural environmental model and its close ties with scientific knowledge is the right approach. He sees its roots emanating from a tradition of thinkers like George Bernard Marsh, Henry David Thoreau, John Muir and Aldo Leopold etc. Qualifying the aesthetic with the scientific adds a cachet of objectivity that he believes is important if aesthetics is to have any impact on practical environmental assessment. He is quite clear in his position, "...appreciation must be centred on and driven by the real nature of the object of appreciation itself. In all such cases what is appropriate is not an imposition of artistic or other inappropriate ideals, but rather dependence on and guidance by means of knowledge, scientific or otherwise, that is relevant given the nature of the thing in question." (Carslon, 2000,

Art Ecology and Planning: Sections III and IV p.12) In this bold statement Carlson makes his own definitive leap for aesthetic philosophy, distancing it as far away from art as possible.

Synthesis

Berleant and Carlson are diametrically opposed in their positions on the appropriate model for aesthetic appreciation of nature and the environment. Berleant claims that there is a need to collapse the subject-object dichotomy to integrate nature and culture once and for all. Carlson claims that aesthetic appreciation is actually reliant upon the subject-object dichotomy. He claims that if you can not define the object you can't achieve the goal of serious and appropriate aesthetic interpretation. I want to take a moment and think about an integrated subject/object experience and test this claim. Five years ago, I was in Tokyo, Japan. I emerged from Shibuya station with my sense of personal space intact – only to be thrust into a sea of humanity. I have walked and considered numerous cites around the world but nothing prepared me for the experience I was about to have. Waiting at the sidewalk for the lights to change, I stood in the densest crowd of people I have ever experienced. All piling up against the barrier of the street, rush hour pedestrians were blocked from crossing a road by rush hour traffic. As the light changed I was amazed, amused and somewhat concerned when I realized that two opposing waves of humanity (literally thousands of people) were surging forward about to engage in the middle of a large urban crosswalk completely hemmed in by idling automobiles. As we moved forward the crowd adjusted, ebbing and flowing like a school of fish simply making room for twice the population to occupy the same space. I stopped in the middle of the crosswalk and just watched as this phenomenon engulfed me. Upon exit from the train station onto the sidewalk, I had entered into a public space where I the appreciator became

Art Ecology and Planning: Sections III and IV part of a field of objects, which I was experiencing. The subject/object relationship was completely dissolved. Yet I witnessed this event with a certain amount of disinterest, and was able to retain my sense of who I am and what it was outside of myself that defined the experience I was having. Indeed not only did I emerge with my subjectivity intact but, I would submit that I was equipped to arrive at some serious and appropriate aesthetic interpretations exactly because of the collapse of the subject/object relationship. Indeed, in comparison, an aesthetic philosopher with his subjectivity separate from the object of consideration, peering into this dynamic sea of humanity from a high rise building above this intersection, will likely miss important elements of the sensual, kinesthetic, social, cultural and scientifically informed experience of being on the ground as an object amongst like objects. Based on this experience, one can assume that the collapse of the subject-object dichotomy can occur at the level of experiential and conceptual understanding of the object without undermining the process of aesthetic appreciation. I would even suggest that a welltrained philosopher (or artist in my case) could retain a sense of intellectual distance from the collective intent (commuting) of such an environment. These thoughts make me wonder if Carlson's defence of the subject/object dichotomy doesn't say more about the latent authority of critical appreciation as it relates to a separation between the making and thinking about artefacts than it does to the actual process of appreciation. With that said, its important to state that I agree with Carlson's position, but not his definition of the natural-environment model. In an increasingly complicated world where industrial residues from decades past have built up to the point that they affect the global commons, the air, water and soils that sustain life, we must seek rigorous knowledge to inform the experience and appreciation of environment. Scientific knowledge is a primary choice to inform experience but Carlson's decision

Art Ecology and Planning: Sections III and IV to negate other forms of knowledge is short sighted. It is empowering to integrate aesthetic philosophy with science after its long relationship to art. The long-term challenge is to provide a new way to see, feel, perceive and appreciate the world. The focus on a science-based aesthetic is not likely to liberate society, or aesthetic philosophers; it simply puts aesthetics in service to science. Following Berleant and his interest in the engagement model, I would say that the integration of subject and object with the sensual, kinesthetic, social, cultural and scientifically informed elements of environmental appreciation is essential. This is a challenge for artists, philosophers and scientists, it is a challenge that must be met on both the expert and non-expert levels. Aesthetic philosophy has the potential to reconnect to society through environment. Reconnecting through science simply puts aesthetic philosophy in service to society through science. The cultural intent of science and art are different, and in important creative tension. Theodor Adorno (1997, p.231) has said, "Art is not an arbitrary cultural complement to science but rather, stands in critical tension to it. When, for instance the cultural and human sciences are rightly accused of lack of spirit, this is almost always at the same time a lack of aesthetic discernment." Philosophy needs to attend to and synthesize this difference, or we are simply framing the project of environmental aesthetics in a manner that is incomplete.

As a practicing ecological-artist and theorist, I believe that we must allow for Carlson's standard of significant and appropriate interpretation, carefully choosing the knowledge, which informs aesthetics. But we must also allow for Berleant's aesthetics of engagement. Without a collapse of the subject-object relationship, we sit too far outside nature to understand the potential and moral imperative for integration.

Art Ecology and Planning: Sections III and IV Aesthetic-Systems and Health – Empathic Values

Throughout this section, the goal is to clarifyi the challenges that occur as we move from the industrial into the post-industrial and humanity, or culture, becomes aware of the pernicious impacts upon the essential commons that support life. In one century, we have gone from the need to preserve and conserve to an era where the ability to restore nature will become a paramount challenge. How do we appreciate (and act upon) the complex nature-culture systems of post-industrial nature? Traditional aesthetics would constrain us (the subjective viewer) to what can be known through direct visual experience of the object of contemplation, primarily the static formal qualities. Berleant's environmental aesthetic approach unifies nature and culture through the collapse of the subject-object relationship, while Carlson's informs culture about nature through collaboration with science.

Another way to approach this question is to leave environment behind for a moment and go back to the question of aesthetics and beauty. Marcia Muelder Eaton in 'The Beauty That Requires Health' suggests,

Aesthetic experience is marked by perception of and reflection upon intrinsic properties of objects and events that a community considers worthy of attention... anything that draws attention to intrinsic properties of objects and events can be described as aesthetically relevant.

(Eaton, 1997, p. 88)

In this definition, she opens the door to senses beyond the visual and provides room for dynamic experiences by considering both objects and events. This definition is Art Ecology and Planning: Sections III and IV part of her ongoing work in philosophy and has been used in a number of her texts. I first came across it in a book edited by Joan Iverson Nassauer called, 'Placing Nature: Culture and Landscape Ecology.' Eaton's chapter raises (but does not resolve) the integration of beauty and the perception of ecosystem health as a concept relevant to aesthetics. Admitting that the idea of health is general and poorly understood at the level of natural organisms and ecosystems, Eaton suggests a general policy to "...label ecological function with socially recognized signs of human intention for the landscape." (Eaton, 1997, p.94) She relates this idea to our learned ability to read the urban landscape for patterns that indicate abstract concepts like social or economic stability. She discusses aesthetic inventories and aesthetic examples as one way to inform the question of healthy natural systems.

Nassauer extends this idea in her own chapter, 'Cultural Sustainability: Aligning Aesthetics and Ecology' (1997, pp.65-83). She notes that ecological function is an increasingly dominant 'intention' of public land but is still not part of the aesthetic that informs the design and management of private lands. Nassauer identifies the idea of 'sustained attention' and the evolution of care (interface) as the path to new aesthetic knowledge and appreciation based on concepts of health. Her position is couched in rigorous knowledge of landscape ecology as a key concept in the aesthetic restoration of health in 'settled landscapes.' She provides a helpful comment in relationship to Carlson's over-investment in scientific knowledge. "Every possible future landscape is the embodiment of human values. Science can inform us; it cannot lead us." (Nassauer, 1997, p.5)

Art Ecology and Planning: Sections III and IV What is environmental health and why should we care? There are two scales of health to consider-the organism and the ecosystem. There are three ways to think about health. One is the general perception of health through knowledge gathered over time. We learn through regular interaction and experience to recognize a pattern of behaviour that indicates the health or illness of both organisms and systems. The second way to think about health is in terms of "...a measure of the overall performance of a complex system that is built up from the behaviour of its parts." (Costanza, 1992, p.242) This follows a fairly typical but complex and challenging systems modelling process. The third way to think about health is in terms of autopoeisis, defined as a transliteration from two combined Greek words meaning self-making. The reason to care about environmental health is essential to Berleant's concept of engagement and it is embedded in Carlson's idea of a natural environmental model. Understanding the lack of care and paths to change is embedded in the struggle over the meaning of nature and its counterfeits, which have roiled the philosophers and practitioners interested in environmental philosophy and restoration ecology. These environmental aesthetic theories emerge from a gnawing feeling that our natural and cultural systems are out of balance. That lack of balance is palatable and perceptible in experience but it lacks what Carlson calls serious and appropriate interpretation. I will discuss the general perception of health, which I believe we arrive at through pattern recognition and aesthetic analysis.

The relative health of a landscape, organism, ecosystem, or even a technological construct is a concept that most contemporary humans have experience with. While we may not be able to go into the details of systemic health, we share the zeitgeist of the term. We all know what a healthy person looks like. Many of us recognize factors

Art Ecology and Planning: Sections III and IV that indicate a disrupted family unit. Failing communities, even failing management systems are obvious to most of us. Most of us even know when our computers or automobiles are getting 'sick.' We recognize health, or the lack of health, through intimate multi-sensual experience and knowledge gained over time. Of course, there are numerous points of specific conflict in the application of the term health. Because of this, it requires a well defined and carefully contextualized statement to provide a clear communication of the conceptual continuum in which health (or the lack of health) is communicated.

The second aspect of health is in terms of measured performance. This following definition was developed as a result of a series of interdisciplinary meetings on ecosystem health at the Aspen Institute in Maryland⁹, "An ecological system is healthy and free from distress syndrome if it is stable and sustainable - that is, if it is active and maintains its organization and autonomy over time and is resilient to stress" (Haskell et al, 1992, p.9). Environmental economist, Robert Costanza compares the knowledge of ecosystem health to human health:

Assessing health in a complex system–from organisms to ecosystems, to economic systems–requires a good measure of judgment, precaution, and humility, but also a good measure of systems analysis and modeling in order to put all the individual pieces together into a coherent picture.

(Costanza 1992, p.252)

Costanza proposes a general index of ecosystem health which measures the relationship between vigour, organization and resilience. Costanza points out that the range of knowledge (reference data) and diagnostic tools for human health far

Art Ecology and Planning: Sections III and IV surpasses what we know about natural systems. Without significant investment in research, it is still difficult to tell when we will be able to quantify a healthy natural environment. Returning to our aesthetic focus, the intent of a quantitative system of measuring health in ecosystems is primarily outside the realm of aesthetics. However, quantitative health measurement could confirm or deny the value of pattern recognition as a relevant alternative approach to the question of health.

The third concept of environmental health is contained in the concept of autopoiesis, a relatively new idea only a little more than a decade old. Lynn Margulis and Dorian Sagan describe it, "...to be alive, an entity must first be autopoietic – that is, it must actively maintain itself against the mischief of the world" (1997, p. 56). This is a dynamic and reactive concept of health. The basic idea is that an autopoietic organism or an autopoietic ecosystem must have the ability to reproduce and sustain itself in terms of both structure and biochemical integrity. Autopoiesis can be perceived in terms of aesthetic pattern. It is easy to see when an organism has lost its physical or material integrity, harder but not impossible to see when an ecosystem has lost its physical, biochemical integrity, or when the organisms that define the system start to fragment and begin to lose their interactive complexity. Autopoiesis complicates both the general and the quantitative model of health, it embraces disturbance and reacts to it. This suggests a different sort of understanding and relating to what are typically considered to be objects in nature. It introduces ideas of vitality, potential for recovery and the potential for systems failure with no hope of recovery. This is not the way we normally speak about things.

Art Ecology and Planning: Sections III and IV Following Eaton, an aesthetic of health is an essential concept. We are an organism that relies on ecosystems, understanding the healthy patterns of that ecosystem and our relationship to it is in our own best interest. According to the three models, health can be a general-aesthetic appreciation, it can be an expert-quantitative understanding, and in the autopoietic lies the potential for the integration of the two. The process and method of the first two models are clear. It is more difficult to ascertain a loss of autopoietic integrity or potential. This adds a level of responsibility and complexity in the decision to collapse or retain the subject-object relationship. Earlier, I suggested that the 'what' could be left to the appreciator; this works for the autopoietic as well as the first two models. 'How' is the question that is less clear, defining what to consider would require a judgment about the state of the relationship as well as the state of the individual systems. This is a very specific and theoretical area of inquiry. Understanding the science is a matter of attending to the patterns and indications of healthy relationships. Art and aesthetics can participate at the level of both theory and interpretation.

Conclusion

The question of nature is increasingly addressed by a range of radical interests, radical in the intent to either reveal or change the social relationship to nature. The theorists and practitioners that have informed this section describe specific problems of the nature-culture relationship. Jordan describes restoration as an intimate relationship, where we become privy to 'secrets' about nature. Elliot and Katz suggest that there is nothing that can be done with those secrets. Light and Foster provide us with critical insight on integration and how it differs when viewed from either end of the statement, as a culture of nature and a nature of culture. Berleant and Carlson

Art Ecology and Planning: Sections III and IV provide us with philosophical frameworks that either transcend the separation of nature and humanity, or clarify the import of responsible outside perspective (objectivity) when we advocate for nature. Costanza, Eaton, Margulis and Sagan provide us with an overview of the aesthetic perceptions of health, which can be informed by empathic attention, careful monitoring of life signs and attention to organisms and systems ability to reproduce and sustain themselves through autopoiesis. These ideas are evolving as we grapple with the nascent perception and understanding of the health of nature as a mirror of our life condition. Or to put it another way, as we begin to realize that the thinking subject is not bound by the body alone, nor are the 'things' formerly considered to be separate from the body—all that separate.

The ecological artist has incredible potential to participate in the post-industrial project of restorative ecology. Humanity has lost its relationship to nature. Nature has faded into the background, with few exceptions it was nothing more than raw material and a sink for waste during the industrial period. We are seeing significant losses to a range of landscape typologies from wetlands to forest cover and fundamental impacts upon air, water, soil and climate. What is the role the arts can play in response to these losses and impacts? Artists with a knowledge and passion for new cultural concepts have always been on the forefront of metaphorical and symbolic knowledge.

Contemporary artists are comfortable with complex ideas and their affect on human perception. Artists understand the impact and value of systems with a clear symbolic, or metaphorical interface. Perception can be enabled or constrained by interface and human values follow perception, framed within concept models. Like the contemporary aesthetic philosophers, artists have to slip some of the bonds of history

Art Ecology and Planning: Sections III and IV and think carefully about how to define interdisciplinary practice and what it means to act upon these ideas within culture. In a culture dominated by science, which expands and defends what is known, based upon a foundation of tested and proven knowledge, the arts have to develop new critical and strategic tools to act upon contemporary society. We need to create a supportive interdisciplinary community of creative individuals that are committed to, and take responsibility for, positive shifts in the 'culture of nature.' We also have to be responsible for the knowledge and impact of our work across disciplines. In the interdisciplinary model, we find new reasons to think about the efficacy and impact of the artist. At the same time we must consider how we make these arguments in the context of a discipline that retains a dynamic approach to foundation knowledge. The cultural value of art lies in its ability to question the canon, rules, principles and standards that confine the thinking of other disciplines. The unorthodox approach to knowledge in the arts often opens unexpected doors. Shedding daylight upon options, issues and solutions that would not be considered or pursued through more tradition-bound disciplines, conventional social programs or political and economic institutions. This idea is common in the area of practice, but most clearly stated by WochenKlausur in their response to the question; "Is there something like an artistic quality in activism?" (WochenKlausur, 2006, FAQ). This is not an issue of comparative values, but rather one of complementary and coexisting values.

Chapter 7 – Intersubjective Aesthetics

It seems clear that art oriented toward dynamic participation rather than toward passive, anonymous spectatorship will have to deal with living contexts and that once an awareness of the ground, or setting is actively cultivated, the audience is no longer separate. The meaning is no longer in the observer, nor in the observed, but in the relationship between the two. Interaction is the key to move art beyond the aesthetic mode: letting the audience intersect with, and even form part of the process, recognizing that when observer and observed merge, the vision of static autonomy is undermined.

(Gablik, 1991, 151)

Predicting the evolution of work that gains strength and focus ten years later, Gablik makes it clear that we must move beyond the aesthetic mode. Gablik's challenge raises questions about the previous chapter and the chapters that follow. There is no doubt in my mind that we must move beyond the classical aesthetic ideas of commonalities in the perception of beauty. It is also clear to me that the current laboratory approach (gallery, museum, stage) where artwork is held in temporal and cultural stasis, then aesthetically examined demands rethinking. The previous chapter reveals significant potential in the environmental areas of aesthetic development. It reframes the context of what we know and how we know it. The primary focus is upon the idea of the subject-object relationship, which if retained provides a logical basis for claims of truth, but if imploded, reframes our fundamental relationships, our subjective understanding of the world must expand, finding new experience and

Art Ecology and Planning: Sections III and IV responsibility in the process. This philosophical discourse is somewhat tangential to the dominant discussions that are occurring in the arts. It provides us with minimal points of direct reference and senses none of the social/institutional realities of art (realities that I would define as increasingly conservative and reactionary). In counterpoint to the previous chapter, what follows is a brief overview of the work of Grant Kester, Nicholas Bourriaud and one of their primary foils Claire Bishop. Where the philosophers interested in environmental aesthetics frame their analysis in terms of subject-object, by comparison the arts based historians and curators frame the analysis in terms of individual and social subjectivity and inter-subjectivity.

Kester's Dialogic Aesthetic

Grant Kester constructs a significant historical and theoretical framework, which reflects Gablik's intuition on future directions from 1991. In 'Conversation Pieces' he provides a critical aesthetic framework for artists that define themselves, "...through their ability to catalyze understanding to mediate exchange and to sustain an ongoing process of empathetic identification and critical analysis" (Kester, 2004, p118). In a well argued text he explicates the historical struggle against this kind of practice, as well as the intellectual structure to support the practice. He stakes the intellectual basis of his work in Mikhail Bakhtin's ideas about subjectivity formed through dialogic interaction. His method evolves from the ongoing dialogue about ethics and rationality vis a vis the contemporary critique of Habermas. He also make a cogent counter argument against the critical pundits that claim (on the basis of irresolvable power relationships) that dialogic interaction is not a viable means of defining community. At the core of Kester's project is a critique of the historical fixation on singular authorship and autonomous objects. He refocuses our attention upon conversational or dialogic

Art Ecology and Planning: Sections III and IV artworks, concentrating upon the aesthetic values of carefully planned interactions by artists such as Adrian Piper, Suzanne Lacy, Helen and Newton Harrison and Fred Lonidier from the U.S.; to British artists such as Stephen Willats, Lorraine Leeson, Peter Dunn; and the Austrian group WochenKlausur. He claims that the criticism of such works, should carefully analyze the "interrelated moments of discursive interaction within a given project" (Kester, 2004, p.189). This is a significant proposal, as it means the critic needs to sustain a working relationship with the process, or rely upon the artist's record of the process to define the validity and consistency of those moments of interaction.

Kester provides a framework and methodology to engage with work that intends a discursive approach to creative practice. First, the work is based upon listening and a dependence on intersubjective vulnerability; furthermore, it is focused upon the generation of local consensual aesthetic knowledge rather than universalized knowledge. Kester's critical method follows three points of critical analysis; the context and process of the dialogue, the quality of the intersubjective exchange and indications of empathic insight (Kester, 2004, pp. 107-115). As understood, dialogue is the methodology, the nature of the approach. Intersubjective ethics and empathic insight are the methods that we must embrace to be effective at facilitating a creative and transformative dialogue. It is important to say that while artists take a range of positions vis a vis this work, few of them pursue it from the position of complete objectivity. In every case, there is a focus, and in the best work, there is a clearly stated intent. Without that intent, the work is an act of facilitation, or potentially transactional analysis rather than art. That is not to say that artists working in this

Art Ecology and Planning: Sections III and IV area are not availing themselves of ideas in these areas of structured and transformative social interaction

Kester's dialogic aesthetic is developed from the Kantian idea that in consideration of the aesthetic we are relieved of practical interests and instrumental intent. In other words, we bracket needs and desire for a moment and consider the relevant experience for what it is, in relationship to what we understand about the world. Aesthetic experiences have transformative potential; they encourage us to think beyond the utilitarian realities of day-to-day life. After aesthetic experience the assumption is that we are left more open and receptive. The question Kester asks is, can we experience this type of aesthetic appreciation in our relationships with other people? (Kester, 2004, p. 108). He argues that transformative experience is not constrained to things alone, and once we accept that functional reality, there is no reason to ignore discourse, collaboration and process. The dialogic practitioner develops a social-interaction that results in a state of co-experimentation with the potential for intersubjective transformation. This is a significant shift from object to viewer experience to agent-to-agent discourse.

He differentiates this intersubjective dialogic aesthetic in terms of two main ideas. First, unlike traditional aesthetics, there is no need for a universal or objective aesthetic. The dialogic aesthetic is based upon consensus that is arrived at locally. This is a huge leap from the predominant notion that aesthetic perception has to be linked to universality through transcendent authority. Transcendent authority throughout history has been defined in relationship to God through mysticism and faith, and to reason in terms of the defensible (or replicable) truths that still guide

Art Ecology and Planning: Sections III and IV Allen Carlson's work in environmental aesthetics today (See chapter 5). Secondly, the entry into aesthetic perception is traditionally individualistic, and once the experience has been processed the viewer is prepared to enter into discourse vis a vis the shifts that have occurred in subjective perception and (potentially) understanding. Kester suggests that discourse is not a one-way tool to be used to communicate what has been experienced. We can enter into an aesthetic discourse, which has the potential for inter-subjective communication that can result in shifts to perception and understanding. To synthesize the understanding here, the dialogic aesthetic is an aesthetic of diverse consensual knowledge, which is dynamic and linked to a discursive network or public. A condition of the formation of that discursive network or public is the potential for intersubjective transformation through discursive

inter-relationship.

His analytic framework for dialogic art includes the idea that the function of art is to serve as an "...open space within contemporary culture: a space in which certain questions can be asked, certain critical analysis articulated, that would not be accepted or tolerated elsewhere." The other approach involves an identification of those "...salient characteristics and linking these to aspects of aesthetic experience that have been abandoned or redirected in some way during the modern period" (Kester, 2005, p. 68). The specific areas that interest him are a critical temporal sensibility and spatial imagination. In simpler terms, he also identifies this as the "...ability to comprehend and represent complex social and environmental systems" (Kester, 2005, p. 69). The foundation of knowledge in the arts is a point of constant critical discourse and conflict. As a result, we accept a wider range of ideas than other disciplines that are more invested in defensible and replicable truths. This is both a

Art Ecology and Planning: Sections III and IV fundamental strength and a weakness of art. But what Kester is referring to here is not a latent potential but rather a fundamental extant in the work. This raises a number of questions that follow, such as the means of engagement, the quality of the engagement as well as the outcomes of the engagement as stated in the artist's intent. The idea of salient characteristics is also quite specific, referring to the means by which the artist represents complexity in the work.

Bourriaud's Relational Aesthetic

Nicholas Bourriaud's text was not written with the same purposeful intent of Kester's. A collection of previously written articles has been reworked into a provocation, of contemporary aesthetics. He defines his aesthetic as, "...judging artworks on the basis of the inter-human relations which they represent, produce or prompt." He defines the work in terms of "...human relations and their social context, rather than independent and private space" (Bourriaud, 2002, pp. 112-113). He is interested in the viewer's immersion in the work, the nature of the dialogue that the work may engender, and the potential for the viewer to occupy the same space as the work itself. He claims that art challenges the a priori notion of what we perceive, and that meaning is the result of interaction between the artist and the observer. This is the baseline upon which he examines the relational practices of artists such as Liam Gillick, Rikrit Taravanija, Carsten Holler and others. In a chapter on the 'Policy of Forms', he clearly states his intent to retain a commitment to aesthetic value without getting waylaid by the politics or validity of the social critique (Bourriaud, 2002, p. 80-92). He proposes a relational aesthetic, "...taking as its theoretical horizon the realm of human interactions and its social context, rather than the assertion of an independent and private symbolic space" (Bourriaud, 2002, p. 14). Bourriaud's

Art Ecology and Planning: Sections III and IV primary thesis lies in the shift from representation, its production and reception, to a more interactive relational concept. Another way to consider this is as a move from delineating the culture that unfolds before us, to the development of alternate universes and relationships. He sees this as a shift in the social, economic and institutional function of art. He refers to a 'growing urbanisation' of art practice, a cultural shift from acquisition, maintenance and display of possessions in a museum or gallery, a space to be 'walked through,' versus the idea of city space, a framework of intersubjective space and time that is 'lived through' (Bourriaud, 2002, pp. 14-18). (This may be a condition that has more validity in Europe where state funded biennale's are part of a larger agenda to bring art into relationship with society.)

Bourriaud is not offering a major shift in the artworld or aesthetic philosophy, merely an alternate space of creative endeavour. This is a strategic framework, developed so that the older institutional models do not constrain the work and the ideas that inform its reception. This is the strength of the hypothesis.

Bourriaud's aeshetic is framed within Felix Guattari's (1992) ideas of subjectivity as something that is formed in social inter-relationship. He is primarily interested in liberation of subjectivity, a release based on Guattari's social analysis. Developed within a state hospital, the concepts are based in a structural analysis of power and its points of transverse connection to that hierarchical structure. Guattari is interested in the relationship between subjects in isolation (a condition of neuroses) and the development of subject groups where the ability to make a statement is both heard and verified. Genosko provides clarity on this, "The joining of a subject group enables a patient to become a signifier in a communication system whose members are interdependent, yet simultaneously in a relation of difference, but nonetheless totally

Art Ecology and Planning: Sections III and IV involved in a collective process which frees one from the individuated hell of isolation" (Genosko in Guattari, 2000, p. 124). This psychological framework, developed within an institutional setting is considered to be a radical shift in ideas of subjectivity; Genosko and Bourriaud both claim it as the basis for a new form of social creativity (Genosko in Guattari, 2000, p. 151) (Bourriaud, 2002, pp. 88-92). But, the following statement is also telling of Bourriaud's relationship to that foundational principle. "Guattari's concepts are ambivalent and supple, so much so that they can be translated into many different systems" (Bourriaud, 2002, p. 86). In this reference Bourriaud gives us an indication of the complexities and the vagaries of Guattari's writing. With its references to liberation through creativity, the development of new forms of being that link the mind, the body, and the social, ecological and political, it is both a beacon of desire and a difficult body of work to understand. By my reading, it is uncomfortably close to the contingent and equivocal definition of art itself.

Bourriaud differs from Grant Kester in that he grounds his relational aesthetic back into the materialist tradition (Kester stays focused upon the intersubjective process). The physical product remains the fulcrum of aesthetic consideration in Bourriaud's contribution, although it is the relational impact that he seeks. Ultimately he sees the artists as, 'An entrepreneur/politician/director.' Furthermore, he states that, "The most common denominator shared by all artists is that they *show* something" (Bourriaud, 2002, p. 108). It isn't objects that he envisions in this statement, but rather constructed spaces for encounter, often spaces that are indicated by or created from within museums and urban places. We can think of these projects as laboratory experiments in the discursive forms, or the setting for public realm discourse. Kester describes this way of working and its critical analysis as attending to the, "...mise-en-

Art Ecology and Planning: Sections III and IV scène for dialogic interaction" (Kester, 2004, p. 189). This is the articulation of the space in which the dialogue occurs.

Bourriaud's fundamental position is not one of discourse, but the meaning and function of form when it is framed and defined by the intention to engender dialogue. His means of validation harks backwards rather than forwards; the work "...has to be judged in a formal way: in relation to art history, and bearing in mind the political value of forms" (Bourriaud, 2002, p. 82). Bourriaud seems to occupy that difficult seat on the fence, or possibly he is simply more pragmatic and realizes that until more take it upon themselves to realize that there is a fence worth peering over, to leap over it is a dangerous proposition. Kester and Berleant are boldly willing to leave the infrastructure of the dominant aesthetic behind, while Bourriaud moves into the new subjectivity with more discretion. Despite this equivocation and the care he takes to bridge the past with the present, the work is subject to the claim that it lacks formal resolution and has weak historic precedent. In response he states.

Forms are developed one from another. What was yesterday regarded as formless or 'informal' is no longer these things today. When the aesthetic discussion evolves, the status of form evolves along with it and through it.

(Bourriaud, 2002, p. 21)

This is another way of saying that we see what we can conceptualize. More importantly, within this framework exists a major shift from the ideas of a classical aesthetics as a philosophy of things, primarily visually perceived and valued in common, to an evolutionary philosophy that sees aesthetics as a discursive process

Art Ecology and Planning: Sections III and IV of social and spatial evolution through a dialectic of perception and conception. In the relational aesthetic we start to see those things that connect rather than those things that define the edges of that which is perceived. This is the strength and the import of Bourriaud's text. The new aesthetic ideas in subjectivity are no longer reactionary but revolutionary, they have the potential to help us 'see' the path that we are in pursuit of.

Bishop's Critical Counterpoint

Kester and Bourriaud are amongst the authors considered in an ongoing series of critical articles by Claire Bishop: 'Antagonism and Relational Aesthetics' (2004) and 'The Social Turn: Collaboration and its Discontents' (2006). One of her key points is made with a reference to Rosalind Krauss's demand for media specificity. This is considered essential; if the work is to have appropriate criteria for evaluation it must "...have conventions against which it may self-reflexively operate." Bishop claims this standard as the "...holy grail of criticality" (Bishop, 2004, p. 64). While Bishop covets the importance of that holy grail, she does not confirm the specifics of that position, (as Krauss's statement undermines her own interest in installation). She embraces its intention to claim critical authority.

Bishop's interests run to media complexity, specifically in the area of installation art.

Her interest in that work is focused upon the experience that is produced through the work in relation to the viewing subject. Where she parts with Kester, in particular, and Bourriaud, only in more general terms, is their move away from the material reality of the work toward the political and social discourse that the work engenders.

Bishop does not ignore this area entirely; she references Deutsche and her insights

Art Ecology and Planning: Sections III and IV about conflict, using that position to interrogate power in relational art works in the first article. There is common interest in intersubjectivity, although there is not common critical basis for its analysis. Bishop's interests are based in an agonistic approach to relational practices, following Deutsche, Laclau and Mouffe. Kester's approach is more firmly routed in the discursive approach typical of Habermas, Bahktin and Levinas. Bourriaud comes at the question of intersubjectivity through the radical psychology of Guatarri, with specific references to 'the three ecologies'. Below is a quote from Bishop that clarifies the common ground she does share with Kester and Bourriaud.

The tasks facing us today are to analyze *how* contemporary art addresses the viewer and to assess the *quality* of the audience relations it produces: the subject position that any work presupposes and the democratic notions it upholds, and how these are manifest in the experience of the work.

(Bishop, 2004, p. 78)

The 2004 article primarily focuses upon Bourriaud's text and his critical insight. She takes him to task for his unremitting interest in the structure of discourse, the scene of dialogic encounter, and what she perceives as a weak political point of view. She is particularly critical of Bourriaud's interest in convivial relationships that have dubious political intent.

There are three issues for Bishop. First, the political, moral and ethical standards of the work are simply not tough enough, not up to her agonistic standard of critical inquiry. Secondly, she claims that the work is predicated upon a false modernist ideal, the concept of a whole or singular public, a homogenous sense of community. Finally

Art Ecology and Planning: Sections III and IV the emergence of moral and ethical judgment in art troubles her, as there appears to be some fear that it will replace what she refers to as "higher criteria" (Bishop, 2004, p. 78). In the end, she stakes her ground, "The work of Hirschhorn and Sierra is better art not simply for being better politics (although both of these artists now have equally high visibility on the blockbuster art circuit.) Their work acknowledges the limitations of what is possible as art... and subjects to scrutiny all easy claims for a transitive relationship between art and society" (Bishop, 2004, p. 79). In addition she asks, "But does the fact that the work of Sierra and Hirschhorn demonstrates better democracy make it better art?" (Bishop, 2004, p. 77). One problem occurs when Bishop demands a standard of diverse publics, yet at the same time retains a highly specialized and singular view of democracy. Other problems occur as she occupies the high ground, declaring herself to be the arbiter of 'better art' and 'better democracy'. On one level this is what critics do, on another level her validating reference to the 'blockbuster art circuit' and agonistic democracy are limited at best. She has clarity about what has to be done; she even claims that the links between artistic quality and political efficacy need better integration, yet she is willing to give very little room to explore those relationships within her standards. For instance, while the political intent of the relational art argument is weak, it isn't because it lacks agonistic application, it is because it is not political, it is primarily social. In turn, the work that Bishop venerates reveals and manufactures public realm conflict. The art creates an agonistic spectacle, a fetish indulgence in manufactured conflict that contributes little to the social-political context in which it is presented. The critic does not recognize the need for the convivial or consensual approaches that are the counterpoint to public realm conflict and the source of passions that encourage transgressive intent.

Art Ecology and Planning: Sections III and IV Bishop returns to her interest with more clarity and a bit more of an ideological position in the essay that follows. The main point of contention in this article is the ethical and moral turn in criticism. Empathetic approaches to collaboration and social practice are tainted in her mind by relationship to the community arts tradition. Clear and singular authorship is important to her critical world view (in the same way that media specificity is essential to Krauss), and anything that undermines that is suspect. Reviewing Kester, she seems to miss the point of his effort with her admonition that reviewed through his standard, "...a collaborative art project could be deemed a success if it works on the level of social intervention even though it founders on the level of art" (Bishop, 2006, p. 81). The critical distinction she seems to have missed here is that his aesthetic treatise is specifically targeted towards dialogue, with a clearly stated intent to ignore material content of the work. So the art can't be something that is separate, unless of course she deems him to be incapable of making that decision. While there is much to her critical view that is worth considering, her bias against distributed authorship, her need to patrol the boundaries of aesthetics and limit new approaches to subjectivity ultimately undermine her substantive critical perspective. The sense that the work cannot be defined by consensus and agreement alone gets lost in what is ultimately a conservative reaction to new work and criticism.

She closes her article with the following admonition:

As the French philosopher Jacques Rancière has observed, this denigration of the aesthetic ignores the fact that the system of art as we understand it in the West – the 'aesthetic regime of art' inaugurated by

Art Ecology and Planning: Sections III and IV
Friedrich Schiller and the Romantics and still operative to this day – is
predicated precisely on a confusion between art's autonomy (its position
as at one remove from instrumental rationality) and heteronomy (its
blurring of art and life).

(Bishop, 2006, p. 183)

I see no denigration of the aesthetic in the work of Kester or Bourriaud. A muchneeded update to an area of knowledge that has vociferously exclaimed its own limitations is instead revealed. Mary Deveraux has stated that "...aesthetics has benefited from 'an ethical turn': a revival of long-standing debates about the moral function of narrative and the social impact of the arts" (Deveraux, 1996). She refutes the claims of timelessness and universality that Bishop relies upon, suggesting that the discipline is only now emerging from the doldrums of the past. Where Berleant and Eaton forge new ways forward in subject-object relationship, where Kester experiments with radical creative inter-relationship and Bourriaud considers the material space of discursive relationship, Bishop is more worried about quality and the formal structure that allows for impeccable defence. I am not convinced that defence is what is called for when fundamental critical principles are slipping far beyond the social, political and aesthetic realities of our life in this time. Bishop relies on two points: a sense of overt agonistic criticality in the work, and the retention of oppositional dialectic positions (such as autonomy and heteronomy), as she searches for her own 'holy grail of criticality.' I am not sure it is there to be found.

As I have argued throughout this thesis, the equivocation and contingency that is typical of art, its curatorial activity and criticism do not serve us as well as they did at

Art Ecology and Planning: Sections III and IV the turn of the 20th Century. Where it might have been a radical act 100 years ago to sit upon the fence between autonomy and heteronomy, today this validating principle is increasingly a point of constraint. That seat upon the fence provides us with little room to help us develop and understand new theory and its critical relationship to practice. Yet Bishop's critical contribution is essential to the development of new ideas. She provides an important critical relationship to Kester and Bourriaud. If we are to move ideas about this work and its validation forward, we need authors like Bishop to take these issues up in august publications such as October and Artforum. These are not the typical sites for this kind of discussion. The struggle in all of this work will be to see how long it takes for the 'aesthetic regime' she refers to, to catch up to new practices and theories. Bishop has also said, "Political, moral and ethical judgments have come to fill the vacuum of aesthetic judgment in a way that was unthinkable forty years ago" (Bishop, 2004, p. 77). In the sum of this work, these are important indications of a change. From convivial discourse to agonistic criticism, art has begun to move beyond the 'aesthetic mode' as Gablik predicted it would back in 1991.

SECTION IV - Strategic Ideas and Creative Practice

My specific intent in the previous pages has been to examine the role of artists in contemporary social and environmental change, then to understand the philosophical and critical ideas from different disciplines that can support or inform that work. The goal in the sections that follow is to provide an overview, analysis and critique of the applied research that I have been doing over the last ten years.

The work that follows was developed in the context of artist's responses to environmental degradation and its related human condition. Similar works include Alan Sonfist's 'Time Landscape', an artwork which placed an exemplar or a living model of native forest in Manhattan, And Joseph Beuys project '7,000 Oaks' for Kassel Germany whereby 7000 Oak trees were planted throughout that city; a final work in a life that was committed to the artists role in social and environmental change.. Other original contributors to this area include, Helen and Newton Harrison, artists who have made a continuous commitment to recognizing, preserving, and restoring the cultural and material value of exemplary ecosystems all over the world. Merle Laderman Ukeles, focuses upon New York waste issues; the effort integrates the human, the system and the landscape. Similarly Herman Prigann's work has focused upon the ecological restoration and reclamation of human-nature relationships in waste-lands produced by resource extraction, he works throughout Germany. These are artists who focus upon Lifelong artworks that pursue an original idea in an inquiry that is sustained over an extended period of time, artworks that make a fundamental commitment to a place and its ultimate transformation. Others that work in this way include: Ala Plastica, who focus on the Rio de La Plata estuary

Art Ecology and Planning: Sections III and IV in Argentina; Ichi Ikeda in Tokyo, the collective Platform, working in London; Projects Littoral, in Lancashire.

In the case studies that follow, I will look at the ideas, processes and practices that I have used with interdisciplinary collaborators over the last ten years. My academic role in this process was defined within the STUDIO for Creative Inquiry as principle investigator charged with the development and direction of a programme of art-based research. It included the theoretical and practical conceptualization of projects, the writing of grants and project management. I wrote the statements of intent and the work plans for contracts with associates and consultants. I was ultimately responsible for day-to-day production and analysis as well as the practical efficacy of the work right through to dissemination.

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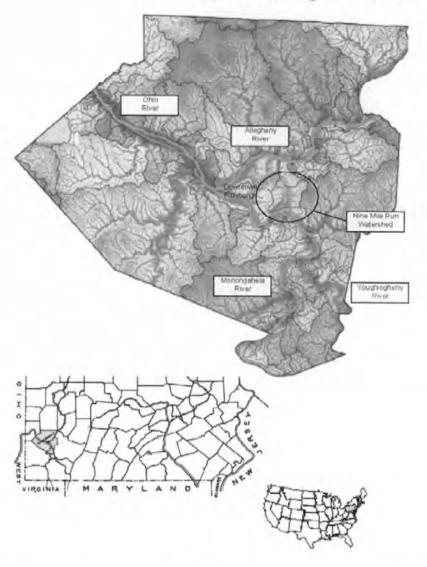


Illustration one: Location Map: Allegheny County, Pennsylvania, USA. GIS Map Image by 3 Rivers 2nd Nature, STUDIO for Creative Inquiry, Carnegie Mellon University, 2005.

Programme	Orig	1997	1998	1999	2000	2001	2002	2003	2004	2005
Nine Mile Run Project,										
STUDIO for Creative Inquiry										
Development Proposal	1996	100								
Ample Opportunity										
Ecology of a Brownfield										
The Brownfield Transformation										
Wood St Gallery Exhibit										
Final Concept Design										
Business Plan										
Miller Gallery Exhibit										
NMR Watershed Association										
Established	2000									
Oversight of Restoration							The second		25	
Upper Watershed Projects						-				
Braddock Avenue Entry Design										
US Army Corps of Engineers,										
Stream Restoration Project										
planning										
construction			1							133
Allegheny County										
Consent Agreement										
Sewer Infrastructure Mapping										
City of Pittsburgh and Urban										
Redevelopment Agency										
Housing Concept Design	1993									
Final Plans for Development										
Site Grading and Infrastructure						1000				
Private Development										
Housing Design				10000	B	-				
Housing Construction										

Chapter 8 - Nine Mile Run, 1997-2000

To review a full set of reports and plans from the Nine Mile Run Project see the CD Rom "Transforming Nine Mile Run" (2000) In Appendix A.

Earlier versions and variations of this chapter have been published in:

- Collins, T., (2003) Postindustrielle Landschaft-Nine Mile Run: Interventions in the Rust Belt: The Art and Ecology of Post-Industrial Public Space Genske, G.D., Hauser, S., (Eds.) Die Brache als Chance: Eing Transdisziplinarer Dialog Über Verbrauchte Flachen, Springer-Verlag, Berlin,
- Collins, T., (2002) Conversations in the Rust Belt, in Herzogenrath, B., (Ed.). From Virgin Land to Disney World: Nature and Its Discontents in the America of Yesterday and Today. Amsterdam and Atlanta: Editions Rodopi.
- Collins, T., Savage, K. (1998) Learning to See Assets as Well as Liabilities, opportunities as Well as Constraints. In the Public Works, Management and Policy Journal. Vol. 2, no. 3. January, 98.

I will begin with excerpts from a statement of intent and then a round of initial analysis that occurred after a years work. These documents clearly state the questions that we wanted to answer and the artists and theorists that were informing our nascent collective methodologies at the time. I will follow that with an overview of the process relative to the project and the results and outcomes that continue to flow from the project to this day. I will then write an analysis and draw some conclusions about this body of work before going on to Chapter 9, a case study of 3 Rivers 2nd Nature.

Art Ecology and Planning: Sections III and IV The Nine Mile Run Greenway Project was a project of the STUDIO for Creative Inquiry, Carnegie Mellon University, U.S.A. Primary funding was provided by the Heinz Foundation and various other sources. Nine Mile Run is a place named by its proximity to a stream with the same name in the former steel-industry city of Pittsburgh, Pennsylvania. Nine Mile Run consists of over 200 acres of post-industrial, urban brownfield at the bottom of the Nine Mile Run watershed. The stream drains five municipalities, flowing through the wooded Frick Park and then into the urban brownfield which dominates the bottom of the watershed. Nine Mile Run drains into the Monongahela River. It is nine miles from the Point in downtown Pittsburgh where the Monongahela and Allegheny Rivers join to form the Ohio River. Nine Mile Run is a mountain of steel mill slag, as much as 20 stories high in places. It is visible as you enter the city on interstate highway number 376, just before you enter the Squirrel Hill Tunnel. The slag mountain is on the left, and Frick Park is on the right. The slagdump completely overshadows the creek as it drains into the Monongahela. The original flood plain, identified by Frederick Law Olmsted Jr., in 1910 was to be zoned for a new city park. It was instead purchased and used by the steel industry for a dump, just prior to the zoning ordinance. Roughly 240 acres of wetland and floodplain, identified by Olmsted for their "ample opportunity for a new city park" (Olmsted Jr., 1910) that was to serve the working class populations of the East End of Pittsburgh, were covered by slag over a fifty-year period. Dumping ended in the 1970's.

In 1993, Pittsburgh City Planning presented a brownfield development proposal, a concept plan for houses and open space on this mound of industrial waste. The initial proposal called for a flat development site which would be achieved by burying what

Art Ecology and Planning: Sections III and IV was left of the stream under 150 feet of slag. (Plans to obliterate the stream and the valley were an outrage that even the steel industry couldn't accomplish.) The development team expected a twenty percent increase in land available for housing through radical re-grading that would fill the remnant valley and the streambed. Full grading costs were to be paid by the city with support from the state and the federal government. A nationally recognized landscape design firm (known for its attention to ecological design) made the final argument to bury the stream.

In response, in 1996 a team of artists and an attorney gathered in the STUDIO for Creative Inquiry, a research facility in the College of Fine Arts at Carnegie Mellon to begin a dialogue in response to the plan. After initial site-tours and a series of discussions with colleagues, such as the noted architect. David Lewis and the environmental historian, Joel Tarr, we had an informal meeting with John Rahaim, assistant director of Pittsburgh City Planning. We decided to propose to local economic development officials that a team of academics and design professionals become developers of the open space of a 240 acre brownfield. It was the only proposal that separated public space from private space. It was the only proposal that saw the site as an environmental asset. It was the only proposal that arrived without significant financial backing. The proposal was rejected, subsequently another proposal, a program of research to reveal the 'ample opportunity' of the site was presented to, and then funded by the Heinz Endowments. The project team was to begin a series of discussions called 'Ample Opportunity: The Community Dialogues' to define the form and function of public space on the post-industrial brownfield site known as Nine Mile Run.10

Art Ecology and Planning: Sections III and IV Intent and objectives,

I will provide a brief overview of the intent of the project by excerpting sections from 'The Nine Mile Run Project Philosophy' and 'The Conclusion of a Years Work', which were originally published in 'Ample Opportunity: A Community Dialogue' a final report, by Bingham, Collins, Goto and Stephen (1998). These texts provide the reader with insight about the project, our intent, and our struggles in that first year.

The Nine Mile Run Project Philosophy

The primary goal is [was] to explore the potential for an issues-based public discussion that would produce a motivated and informed constituency prepared to participate in public decision-making about open space opportunities at Nine Mile Run. Our program method is [was] informed by theoretical ideas in the arts and philosophy, as well as by practical examples from early brownfields reclamation. We outline some of the precedents for our approach in the following paragraphs as an introduction to this report.

The unifying theory of the NMR-GP [Nine Mile Run Greenway Project] is [was] reclamation as an integrated ecosystem restoration that embraces the complex goal of 'nature' in the context of contemporary urban culture. Do we identify the 'original condition' and return our brownfields to that standard? At Nine Mile Run, the question of original condition is answered by millions of tons of slag dumped upon a broad floodplain. We need [needed] to work within the community to identify a socially acceptable

Art Ecology and Planning: Sections III and IV solution that is economic, aesthetically rich, and ecologically sound. We must define what nature means within the context of our urban community. The immediately adjacent model is Frick Park. The NMR-GP would suggest that the baseline for our work is circumscribed in the flora, fauna, soils, and the remnant natural hydrology we see in Frick Park. The starting point and comparative bio-data can be found in the variation of plant succession that is occurring on the slag and shale slopes of the property today.

Our artistic intent is [was] informed by evolving contemporary ideas of socially based art practice and the last 30 years of environmental art. Our process is [was] rooted in ideas of reconstructive postmodern practice as described by Suzi Gablik. This paradigm shift is also described in the context of evolving artist media and expanding public practice, as new genre-public art. The history of this work is [was] rooted in some of the early ideas of "social sculpture" developed by the German artist Joseph Beuys (1921-1986).

Community Dialogue defines our final theoretical approach. Our process is [was] based on the philosophy and ideals of democratic empowerment through discourse. Jurgen Habermas, author of a groundbreaking work on the historic evolution of the public sphere (Habermas, 1962) he suggests that the autonomous self emerges and democracy is enabled by participation in the discursive context (public discussion). "This notion of autonomous self or 'public man/woman' has been suggested by some

Art Ecology and Planning: Sections III and IV theorists to be a psychological function of humanity increasingly lost to modern culture. (Sennet, 1972)

(Bingham, Collins, Goto, Stephen et al, 1998, pp. 3-7)

After a years work

The following excerpts are from the last section of the report, 'Ample Opportunity: A Community Dialogue' (1998). It provided an overview of the first years work.

Our process was primarily discursive, although various ephemeral manifestations of art and restoration ecology permeate the onsite efforts, the public tours and the four public events. In other words, the work was about ideas and the cultural context in which they were presented. The art and the ecology were not physical 'on the ground' products, but rather ideas and data.

The question we are [were] trying to answer is [was], "How can we use aesthetic awareness (informed by scientific analysis) to shift contemporary cultural values?" The Nine Mile Run team is [was] working to model an integrated art program of awareness, social responsibility and opportunity-based analysis. The product of the artists' work is [was] integrated with the goal of social change through collaboration with environmental professionals. We are [were] beginning to understand a program that expands [expanded] the artists' traditional role of critique into the realm of shared creative inquiry. We focus [focused] upon critical

Art Ecology and Planning: Sections III and IV analysis and resolution of social and aesthetic ecological (systemic)

inequities.

The following issues will [would] be addressed in future work:

What form will this greenway take?

How will grading affect the greenway?

What will it take to achieve a clean stream?

How can we appreciate the lessons of the NMR valley?

(Bingham, Collins, Goto, Stephen et al, 1998, pp. 280-294)

The Nine Mile Run Program

Our program addressed the perception and value of the Nine Mile Run brownfield property, which was owned by the City of Pittsburgh. Our goals were simple:

Create opportunity for experience.

Expand the intellectual content and the discourse about public space.

Enable alternative dialogues providing access and a context to speak.

Develop consensus – a concept design that was a result of dialogue.

Infuse the results of the design with the power to move forward.

The project is described in the text that follows in three steps that reflected the

process as delineated and developed in our year-to-year activities.

Year One: Ample Opportunity: The Community Dialogue

Year Two: The Ecology of a Brownfield

Year Three: The Brownfield Transformation

Art Ecology and Planning: Sections III and IV
Nine Mile Run was, and is, a post-industrial landscape abandoned 25 years ago by
the slag disposal industry. The experience of a dump is not an intimate one for the
vast majority of the public. It is knowledge by proxy, a concept understood at a
distance, a concept which maintains distance. Yet, from a distance, it was impossible
to see the complex opportunity of the remnant stream channel or the diversity of
plants, which were starting to emerge from the slag. The process of restoration began
with a walk—an intimate sensual experience, seeing the site with the eyes of an artist,
biologist, or engineer begins the cultural process of restoration. Restoration does not
occur in any landscape without attention, and attention leads to care.

I think the part of it looking different is that... from a far away vista it looks real ugly to see the barren parts but when you get there and see the wildflowers coming up you think, 'WOW!' You know - those particular flowers are more valuable because they are so unusual. You see clover all over the place; you don't care about clover. But when you go there and see clover close-up, your think *oh yes, its clover!*

(St. John, in Bingham, Collins, Goto et al, 1996, p. 157)

Everyone working on the project realized that the best ideas languish if there is no advocacy and expert knowledge behind them. The questions that we needed to answer if we were to develop an empowered response were: Could a group of academic-artists build a program of post-industrial change built upon emerging reconstructivist aesthetic principles? Could we satisfy the demands of our academic positions by developing an objective research approach to these emerging public realm issues? Our final approach, outlined earlier in relationship to Joseph Beuys'

Art Ecology and Planning: Sections III and IV and recent theories of reconstructive postmodernism, could also be defined from an urban planning point of view. Leonie Sandercock defines a social learning and communicative action approach to planning:

The emphasis is less on what planners know, and more on how they use and distribute their knowledge; less on their ability to solve problems and more on opening up debate about them. In this model planning is about talk, argument and shaping attention.

(Sandercock in Friedmann and Douglass, 1998, p. 175)

The Process

Year One, Ample Opportunity: The Community Dialogue

To meet the first three of our stated goals, we developed a workshop program we called, 'The Community Dialogues'. To define that program, we put together an advisory board consisting of academics and experts who had shown an interest in our original development proposal. The questions that we brought to them were very simple; first, what were the issues on site and how could they be clarified and communicated for public discussion? Due to the complex post-industrial condition of the site, the workshops focused on four topics: history context and public policy, urban stream remediation, soil slag and habitat, and sustainable open space. Our audience was to be a diverse group of municipal officials, artists, architects, hikers, bikers, dog walkers, botanizers, birders, planners, environmentalists, community representatives and other stakeholders. The workshops followed a five step process:

1) Distribute a background document on the topic.

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- 2) Conduct onsite tours with experts to explore the issues first hand.
- 3) Provide expert overviews of the issues and alternative approaches to the problem.
- 4) Conduct integrated professional/citizen community dialogues.
- 5) Analyze and represent citizen comment and expert comment with equal weight.

Each dialogue was preceded by the publication of a short document identifying the opportunities, the issues and relevant stakeholder organizations. Presenters were prepared for the diversity of the audience and encouraged to keep professional jargon to a minimum. The workshops were convened onsite, on the slag heaps and in and along the stream. Shelter, in the form of a trailer with sanitary facilities, was provided as an onsite-classroom by Carnegie Mellon University, enabling us to accommodate groups of people at the site comfortably. Nearby, community centres were identified and utilized for more formal presentations and discussions after onsite events. A variety of experts, stakeholders and academics were engaged to expand the concepts that had defined and, at the same time, confined the range of options for development of the site. National experts were engaged to delineate a wider scope of opportunities and describe innovative, state-of-the-art solutions that were functioning in other regions and nations. Local professionals and academics defined the historic values, emerging issues, options and alternatives for the site. Given this substantial investment in intellectual advocacy for the site, it would not be easy for the developers or the interested citizens to ignore the import and potential of the landscape, the stream and its corridor. First hand experience of the place had an enormous effect on people as we collectively considered the common perceptions of the site as a dump devoid of value. The transformation of this site from dump to a

Art Ecology and Planning: Sections III and IV potentially valuable public space occurred within the dual realms of information and experience.

Community dialogues were arranged for each of the four topic areas. The program featured tours of the site by four or five experts (academic, professional and community) with an intimate knowledge of both the site and a robust understanding of the scope of the opportunity. After a 1-2 hour walking tour, refreshments were served either onsite or at a nearby community centre. The formal program began with a professional overview to clarify the issues at the site. The group then broke-out into community dialogue working teams. A STUDIO team facilitator was placed at each table to maximize involvement from each of the stakeholders and to guide the process toward key points of agreement. Typically three to four tables were filled with 10-20 people discussing a specific issue from that day's topic. For instance, the second topic: Stream Remediation, broke out into tables on, Water Quality Regulation and Reality, Stream Ecology and Aesthetics, and finally, Stream Banks and Floodplains. The breakout sessions were designed to reflect the range of interests someone might bring to the issues. At the end of this process, specific values and opportunities would often begin to emerge.

Year Two: The Ecology of a Brownfield

The goals of the second year were specific; to build on the work of the first year, follow through with expert studies to define the range of opportunities, and begin to develop them as a set of design alternatives. Our advisory board changed shape to better reflect the range of stakeholders invested in the project site. They would oversee and comment upon the development of our work. Working with the Heinz

Art Ecology and Planning: Sections III and IV Endowments and the state of Pennsylvania, vis a vis the City of Pittsburgh, we proposed to develop a study that would provide some real data about how dirty the water was, what plants were actually growing there, what creatures were actually found there and how the system compared to other areas? This study would provide a baseline upon which further work on the ecosystems and the infrastructure affecting them could be judged. It also provided important content to inform design alternatives in year three. Our effort was defined in Pennsylvania State terms as a 'River Conservation Plan', yet our intent was primarily restorative; for the most part, the land and available organisms were not healthy enough to benefit from conservation tactics.

A broad and intellectually diverse team was developed from Carnegie Mellon
University, Pennsylvania State University, the University of Pittsburgh and the
Carnegie Museum of Natural History. The team studied the site's history, to
understand the state of 'green' and 'grey' infrastructure." Terrestrial systems such as
landscape ecology, and botanical and entomological biodiversity were studied.
Aquatic systems from wetland function to stream geomorphology, as well as an
analysis of the water quality problems and biological indicators were conducted. The
STUDIO artists defined the research initiative and worked with the City of Pittsburgh
to secure the funding to meet the goals. We hired the academic specialists, and
worked to keep the team functioning in an interdisciplinary manner. The charge was
to generate a data set and a community consensus about changes at the Nine Mile
Run Site. This would inform public-space development alternatives, which could be
used by the community in subsequent years to advocate for final decision on the
conceptual design of the valley.

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The period of expert analysis was not devoid of public process. Funding from the State Department of Conservation and Natural Resources demanded an ongoing public program. As we studied the site, we set up specific dialogue events that were more instrumental and less open-ended. The core project team would begin these events with an overview of some of the decisions and direction provided in the first year. The experts from the various disciplines would then provide the latest findings and expert conclusions from the site. Community members at these meetings helped the team weigh the value of the topics, sub-topics, and issues they were studying, and identify the opportunities which held the most social import. Citizen comments were integrated into the 'Nine Mile Run Watershed Rivers Conservation Plan' report, which resulted from that year's work. The final report began with a section on issues; then land resource, water resource, and cultural resource. The report closed with a series of management options that embraced the art and the science of restoring ecologies and a culture of nature in the Nine Mile Run setting. This final chapter clearly stated a set of missions and goals, defined the range of meaning which would accompany the planned ecological restoration project and set some guiding principles for the last year's work. Community positions were primarily presented in a chapter on issues, concerns and constraints, then in a chapter on management options. Community input was also integrated into other areas of the text as comments that ran in the margins.

At the end of the second year, we had acted on community consensus from the first year, providing expert studies which illustrated the exact nature of the opportunities and onsite constraints. As of November, we still needed to initiate the interdisciplinary

Art Ecology and Planning: Sections III and IV design process with its focus on design alternatives. This proved stressful for the expert team. Language differences hampered the discussion, and design alternatives ran against the discipline specific best-solutions more common to expert culture and its practitioners. Each individual felt a need to define and control the discourse as we worked our way through the issues and opportunities of each alternative. One fear was that in final presentation, the artists would not fully qualify the nature of each potential solution. Even amongst the scientists themselves there was some conflict—with divergent views on the 'right' approach to solution. Ultimately, the discussions allowed each of us to work out our ideas in relationship to one another and begin to see the range of knowledge and the bias of our own areas of knowledge as we approached a final synthesis. More importantly, the artist team learned important lessons about the scope and limits of interdisciplinary communication. This would serve the project team in its third and final year of work.

Year Three, The Brownfield Transformation

In the final year of the Nine Mile Run project, we were developing the design alternatives to inform community decision making that could lead to consensus. We needed to produce a series of images, texts and related site specific experiences. Concurrently, we needed to develop an institutional and economic plan which placed our alternatives in a realistic light, and provided the program with the inertia and support to move forward. The final year's effort was focused upon the following goals. Develop community consensus – a concept design evolving from dialogue.

Art Ecology and Planning: Sections III and IV We needed to present design alternatives to the community, finalize a design guideline, and develop an economic and institutional plan. The core project team made a transition in this year: the academic collaborators in the sciences were replaced by consultants in the areas of integrated ecological restoration (a firm employing a range of experts): an urban planner/public policy expert, a non-profit administrator/facilitator as well as a landscape architect who was adept at graphic design. Each of these collaborators was chosen for their ability to help us mold our process into an effective proposal. We clearly understood that, in this final year, we had to communicate our options to the community with great clarity if we were to arrive at a publicly authorized final design. We also realized that the final design was not going to be worth the paper it was printed upon if we couldn't weight the program with the recognition and support from decision-makers, the local foundation community, and a range of regulatory and institutional interests. We chose a downtown non-profit gallery as the site of our final presentation and community dialogue. To provide a clear sense of this stage of the project, I will separate the exhibition/final dialogue program from the concurrent institutional and economic plan and discuss each aspect of the final program separately.

Year Three, The Exhibition and Final Dialogue

I will provide the actual press release from the exhibition and final dialogue. It clearly defines the range of materials developed for this final community dialogue, a multimedia exhibition entitled, 'Conversations in the Rust Belt: Brownfields into Greenways'. The project was presented at the Wood Street Galleries in downtown Pittsburgh. This event, and its gallery context, allowed us to surround our 'working audience' [the community members who had worked alongside us on the project for

Art Ecology and Planning: Sections III and IV three years] as well as our desired audience of decision makers with a full range of sensual and intellectual products that addressed the post-industrial opportunity, challenge and context. The exhibition was laid out over two floors to illustrate, 1) the industrial history, and 2) the post-industrial present.

The goal of the Nine Mile Run Greenway Project was the transformation of a distressed brownfield area into a green space with a clean running stream. This project was intended to be a model for addressing the decaying infrastructure and industrial waste that impact the ecological, economic and cultural viability of post-industrial communities throughout the region. Below is the press release from the final exhibition and community dialogue presented at the Wood Street Galleries, in downtown Pittsburgh, PA.

Wood Street Galleries

Press Release

PITTSBURGH, PA – The Nine Mile Run Greenway Project Team exhibits 'Conversations in the Rust Belt: Brownfields into Greenways' at the Wood Street Galleries from July 10 through August 15, 1999.

Conversations in the Rust Belt at the Wood Street Galleries reflects the issues facing all cities emerging from industrial histories. The exhibit integrates images and texts of the changing industrial landscape using the public venue of the gallery as a site for public discussion and collective design. It utilizes one of the two floors of the gallery to give

Art Ecology and Planning: Sections III and IV insight into the historic industrial era which produced the slag-filled site, and the other floor to present the struggle to define the post-industrial present. The industrial presentation included images from public and private archives throughout Western Pennsylvania. The post-industrial floor features a slag garden and interactive video presentations designed to immerse the viewer in a community discussion. Complex ideas on the relationship of nature to culture and public to private are presented in multiple media. Design options for the development of the greenway were also presented.

A final community workshop will be held July 23-25 at the Wood Street Galleries to develop consensus on the design guidelines for the greenway.

We knew that this final exhibition and dialogue had to follow our programmatic plan of integrating new information and experience. The experience of large-scale photographs, spoken site narratives, and a video with interviews of some of the people that attended the dialogues illustrated the humanistic relationships to the site. This event was the end of the STUDIO based creative effort and the beginning of the public phase of the Nine Mile Run institutional and economic plan. Previously this 'business planning team' had spent three months working out the relative costs of our design alternatives, identifying the institutions that might support the soon to emerge final community-consensus concept plan, and the various funding mechanisms which might support the final design and ecosystem restoration.

The purpose of the business plan was to develop an implementation strategy of institutional advocacy and economic options for the Nine Mile Run Greenway Design. Our business and planning team were integrated into the exhibition plan. They used the gallery for breakfast briefings, tours and meetings with the decisions makers who could make or break the future of the design. From the beginning we were clear that we had a responsibility to move the initiative forward, once we had arrived at point of reasonable consensus.

The primary goal of the institutional plan was to propose an integrated and comprehensive management program. A secondary goal was to participate in the implementation of the conceptual design guidelines which would emerge from the final dialogue. Responsibilities and geographical scope needed to be confirmed in concert with the appropriate city agencies, the Pittsburgh Parks Conservancy, and other relevant community stakeholders. Funds were needed for capital construction and management. Capital construction costs would include engineering, design and construction. Programmatic costs would include ongoing ecological restoration, environmental education and cultural programming. It was recommended that a Watershed Alliance be formed immediately to keep the Design Guidelines in the forefront of the City of Pittsburgh's Frick Park planning agenda as well as the other parallel activities occurring in the area. It was also recommended that the ecological-corridor be managed as a landscape unit. This area nominally contained the 100 acre Nine Mile Run Greenway, the 150 acre Frick Woods Nature Reserve overseen by the

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Frick Environmental Centre (FEC), and the semi-natural stream corridor along Falls
Ravine linking the two areas.

Many members of our advisory board, as well as other regional decision makers, either attended or sent someone to participate in the final consensus-design dialogue. Subsequently we met with our advisory group one last time, to review the final outcomes and assure that we had achieved consensus. We had not. One community had not come to the final dialogue based upon what they saw as essential conflict with other communities over the location of a ball field. The Pittsburgh Parks

Conservancy, at that point a recently confirmed Pittsburgh Parks oversight group, refused to accept the design based on their understanding of problems and costs in the existing parks. Otherwise the majority of our stakeholders and advisors were in agreement on the final outcome. Many of them went on to found the Nine Mile Run Watershed Association, which was outlined in the business plan and is solvent and active to this day

After three years of community dialogue, intensive research by an interdisciplinary team of STUDIO experts, and the development of multiple creative design alternatives for five nodes along the stream, community participants and other stakeholders reached a somewhat conflicted, but none-the-less realistic democratic decision on the project by August 1999. Final design guidelines were established by community agreement and developed over the next three months into a final design program that was then ratified by the project steering committee in December 1999 and accepted by the City of Pittsburgh. Specific designs, with initial budgets and

Art Ecology and Planning: Sections III and IV plans, were chosen for the stream and five nodes along its corridor. The proposed institutional plan was also initiated by volunteer action of the steering committee.

Some of the key points that the participants wanted to make clear included the following: The Greenway carried clean water and filthy water, sewer pipes lined its banks, and the rational repair and redesign of that infrastructure had to be a primary condition of the restoration of plan for a clean healthy stream running through an urban park; The Greenway would become a model that would serve as a place for enjoyment of the natural environment as well as a site of significant recreation, research and educational resource about ecosystems, urban infrastructure and restoration; The Greenway would provide the adjacent communities an important walking and bicycle linkage that would take people along the stream and then along the river into downtown Pittsburgh.

Conclusions from Nine Mile Run

As Nine Mile Run wrapped up, we had two points of absolute clarity. The project was defined by consistent and evolving platforms for discourse. We sought and received funding throughout the three years of the program to assure that we could develop, manage and follow through on the consensual discussions we had initiated. The other point is the means of leveraging change—what we came to call 'strategic knowledge'. As we got to know more about Nine Mile Run, we began to see the scope and intent of the knowledge base that was informing decision making. If you don't want to clean up a stream, you assume it is filthy, dead and beyond repair. Strategic knowledge requires convincing quantitative or empirical data, but its application is holistic and aesthetic. We used strategic knowledge in relationship to our community dialogues to

Art Ecology and Planning: Sections III and IV enable consensus and advocacy for systems ignored by the predominant development discourse.

Returning to the primary questions raised by this thesis: Can artists acting as cultural agents affect policy and create change? The secondary question asks, can artists develop a public realm advocacy based upon an expanded idea of authorship? And finally, can artists initiate change that can be proven after the fact?-The theory that supports this type of practice relates to ideas previously discussed about the relationship between freedom and inter-sociality. There is also the tension between conviviality and conflict in the public realm. And finally, emergent ideas about ecology which are socially transformative and have the potential to inform an evolution of aesthetics away from the strict subject object construct which reinforces the separation of art, nature and humanity.

First, on the questions of public policy, the conclusion (following Meadows, 1997) is that dominant policies and programs can be transformed through changes to the information (strategic knowledge) that informs decisions and close attention to the rules that govern behaviour within the institution in question. In rare cases, specific innovation can be encouraged by nurturing experiential and intellectual diversity in the organization of the entity you wish to affect. The question of authorship is framed by the social and political realities of being an artist as well as the moral and ethical issues of discourse, voice and representation. The question of proof of affect is one of ongoing residency, tenacity or persistence of interest after the fact. I will discuss these issues as I work through the conclusion to the section on Nine Mile Run.

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The intention of the work at Nine Mile Run was to explore the potential for an issues-based public discussion that would produce a motivated and informed constituency prepared to participate in public decision-making about open space opportunities. The work wasn't just focused upon open space; from the beginning, the intention was to examine the site as a setting with the potential to reclaim and restore ecological value in the region. From the beginning our interest was clearly based in a need to understand 'nature' in the context of this post-industrial landscape. Nature became the focus of a three year program of tactical scientific and artistic inquiry linked to public dialogue. The public dialogue included opportunities to define and focus the research in year one, to review and comment on its process/progress in year two, and decide about the form and function of the greenway in year three, based upon the presentation of multiple options. In the years after the project ended, members of our advisory board and communities of interest have developed and supported a non-profit institution to continue the work.

From the perspective of freedoms, we were not facilitating an open interest discussion; we did not come with the intent to 'simply listen'. Our intent was to inform and enable a critical discourse about nature and public space. We sought funding to do that, our proposed process was sufficiently open to allow those attending our 'community dialogue' to shape the content, comment upon the method and inform and decide upon final design. Yet, because our program was circumscribed there was some conflict with members of the community that wanted more out of us than we were able to provide. In a letter included in the 'Nine Mile Run Watershed Rivers Conservation Plan', Peggy Charney asks the team for a critical and public response to the development plan and action on the slag-toxicity question (Collins, Dzombak et

Art Ecology and Planning: Sections III and IV al, 1998, p355-356). With our goal of transforming public space, any critical or oppositional approach to dominant forces (with whom we had to collaborate) needed careful attention. We also had to attend to our goals, the real limits of our abilities as artists, and the demands that were being made.

The challenge is finding the comfort zone between critical engagement and the desire for transformation. Too much of either and the success of the project falters either through conflict or complicity. The window of opportunity is very small and the focus needed for success is quite difficult to get right. We believed that the questions with the potential for the widest impact were based in the design of public space and a new understanding of its relationship to post-industrial nature. We felt that a public critique of the development plan took us away from our intended goal of public space advocacy. We wanted to coalesce a focused community with proactive long-term interest in nature and public space. Critical engagement with a development project is by its nature a short term exercise with circumscribed potential for rewarding returns. We felt a public insurgency, while romantic and exciting, would constrain the discourse to a discussion about development interests and public outcomes. We were more interested in shaping and expanding the public realm potential.

We did address specific questions related to the development and its direct impact upon the public space. In bi-weekly meetings with Pittsburgh City Planning, we would address issues of storm water plans and sewage lines, roadways and planting schemes. We did not, however, take any kind of stand on the design or intent of the housing development—it wasn't in our primary interest and we felt our affect upon it would be minimal. The issue of toxicity¹² is more complicated. It is highly emotional, a

Art Ecology and Planning: Sections III and IV 'hot button' issue that is scientifically and medically challenging. After a review of the issue we understood that a plethora of state and federal support was available to (and being accessed by) members of the public. Pursuing these questions further, we discovered the costs for medical/health/toxicology expertise in this matter were prohibitive. As a result, we decided against getting involved in this discussion, as we felt we had little to offer in terms of new ideas or resource to engage experts. Dealing with these questions, we had to ask ourselves whether our role had any opportunity for informed creative potential. If it did not, we were hesitant to begin a discourse couched in critique.

Freedom can be defined in terms of the ability to be heard, the freedom to affect change, the manifestation of freedom as a mix of autonomy and social relatedness. Gablik has described the limitations (the entropy) of what can be described as an institutionalization of rebellious freedoms in the artworld that has resulted in obsession with originality and newness. She makes it clear that we need to rethink what freedom means at this point in time—suggesting a structure of moral/social constraint as a necessary component. Meirle Laderman Ukeles is referenced for her suggestion that one way to resolve this dilemma is to make freedom a condition for all, not just artists. The Nine Mile Run project set to promote freedom to be heard and to make creative change within a specific area of the regional (post-industrial)I development discourse. We were interested in philosophical and ecological ideas, and a recent history of transformative art practices as a means of creating change. The decision of what to do and how to do it was a carefully evolved strategy developed in responsible relationship to our funders, our partners and those we engaged through the 'community dialogues.' At Nine Mile Run, foundations that

Art Ecology and Planning: Sections III and IV invested in our vision paid us to succeed. To do that required focus and outcomes. We were also responsible to our partners and members of the local community that had invested time and personal interest in the 'community dialogues.' I would argue that post authorship practice demands responsibility for outcomes beyond creative process. To ignore the responsibility to those that invest money, personal time and political interest in radical social forms of creative practice is to miss the true nature of the dialogue and, ultimately, the essential point of the work—a satisfactory outcome.

In the culmination of the first year we were working to be as creative and as rigorous as possible. We had fully embraced an ephemeral approach to our practice; the dialogical ideal of our philosophy became a focal point of our effort. Restoration ecology became the framework for our discussion. We had transcripts from every formal dialogue, which allowed us to analyze our discursive relationships, which were then displayed in column relationships in the final year's publication. The transcription was an imperfect process at best, further complicated by the mass of work that was undertaken. The column layout revealed the discursive relationships vis a vis identification of each speaker as members of the project team, the community or government. (See illustration three.) Furthermore we used a line by line analysis of the transcripts from 'community dialogues' to track the participation of members of the project, the community and government during the first year effort. This resulted in a graph that told us about participation at each event and the discursive relationships that existed between all parties, in other words, who spoke and who listened in relationship to time, described in terms of total lines of text. (See illustration four.) The decision to transcribe also raised a number of questions. Should we transcribe in a word for word verbatim style? Should we edit out the conflict that occurred during

Art Ecology and Planning: Sections III and IV discussion? (Nine Mile Run Greenway Project, 1998, p293) By a strict reading of Habermas's ideas about communicative action, (1995) one might suggest that all voices and content are welcome in open discourse. Following Deutsche (1996) conflict is the indication of a functioning public realm. However, in the end we decided to publish the texts with a slight edit to remove sections where the speakers were clearly in open conflict. Passions ran high throughout the program. Some of the infighting weighed down our goal of collective creativity and consensus leading to creative change at times. The demands for attention to the issue of toxicity in the first year were no less challenging than one community's disagreement over a proposed nearby ball field in the third year.13 As a result, the record of enmity was deemed unnecessary. In those cases where the discussion became unnecessarily confrontational, a description of the issues of conflict was retained in the documentation (and in all subsequent documentation). This decision was not objective, nor did it follow the strict tenants of theory. On the level of facilitated dialogue and respect for all participants participating in the discourse, it was the right decision. The published record would show the participants at their best, contributing a wealth of ideas, often engaged in disagreement and critical dialogue but ultimately as productive participants. Some of the most difficult participants spun off from our dialogue to develop focused programs of their own, specifically 'Citizens for the Responsible Development of Nine Mile Run', an activist group comprised of adjacent homeowners. Their work was later referenced in a 2003 New York Times article for having taken a strong stand on issues that were subsequently resolved by the developers. That article is currently displayed on the website for the development group (Erman, 2003).

Art Ecology and Planning: Sections III and IV What was new and exciting in year one, became a somewhat more ponderous responsibility in year two and an almost overwhelming challenge in year three. Our practice and its theoretical grounding reinforced a sense of accomplishment in our ability to encourage imagination, to develop critical discourse and work with others to initiate new ideas. But the day to day realities of managing the project, staying on top of the consultant's scientific studies and keeping the trailer open were taking their toll. In the third year, the tensions between making art for the exhibition and overseeing the business plan and final design were significant. We were learning rapidly and we were gaining national and international attention for the work we were undertaking; as a result, fissures began to show up amongst the project team. We had initiated the project to reflect an ideal collective activity, but that was before we began managing budgets of \$200,000 and more. One of the divisive realities about the project was economic, not everyone had full funding. As a result not everyone spent Monday through Friday working on the project. Complicating things further, we all spent our Saturdays and Sundays keeping the trailer open, effectively working at minimum six and often seven days a week. By the second year, it was clear that we were in a position to affect change but the question was, could we sustain the level of activity the work required and follow through to bring the work to a satisfying conclusion? The conviviality that initiated the project had grown to a much wider circle of people; the issues and the range of response that we could pursue had become circumscribed by our own success and its demands. In year one we were responsive, in year two we were responsible, and in year three we were accountable.

Analyzing discursive relationships during the Ample Opportunity Workshops

The transcription was an imperfect process at best. There were a number of significant technical problems. This was further complicated by the mass of transcription that was undertaken. Different people transcribed different texts. although each roundtable was transcribed by a single individual. The decision to transcribe also raised a number of questions.

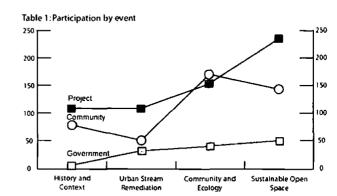
- 1) Should we transcribe in a word for word verbatim style? After extensive discussion we decided that word for word translation was an important intent, although we needed to make allowances for clarity and concise nrecentation
- 2) Should we edit out the conflict that occurs when people enter into passionate discussion? Initially we did not edit out the conflict. We eventually changed this decision, editing out the unnecessary argumentative language that seemed excessive or berating. We did our best to retain the often passionate and relevant content that may have led to the conflict
- 3) Should we clarify misperceptions and questions that couldn't be answered in the roundtables? In a few cases we decided to add specific references.
- 4) What should we do about technological glitches creating gaps in the recordings? When we faced technological problems we considered the important of the discussion based on notes taken at the table. In some cases we went back into the text by calling community members and advisors to clarify important items missing from the record.

For the purpose of this final document, the STUDIO team worked closely with the graphic designer to develop a presentation that would enable some inquiry into the relative quality of the conversations which occurred in the Ample Opportunity roundtable discussions. We decided to break our discussions into three specific groups: project team, community and government. Our relationship between groups during the discussion (who was taking to whom.) As we developed this formatting technique it began to occur to us that we could also graph the participation of the groups by counting the number of lines of text for each group involved in the event. It is important to note that these analytical techniques are not based on a controlled scientific experiment, but are an analysis after the fact. The relative truth and important of this analysis is mitigated by four issues:

- 1) Each group had a different set of leaders and discussants:
- 2) The enumerative process of counting text lines ignores the difference between a person who speaks succinctly and a person who wanders in their presentation

- 3) The relationship between the total attendance and roundtable attendance was not confirmed on site:
- 4) Roundtable three, of the four dialogue, was an anomaly in the process. Concurrent dialogue created significant complications in the transcription process Ulamately the transcript could only focus on one of the three sub-groups. With these qualifications clearly in mind, we feel the analysis provides a means to consider the cause and effect of our program as we attempted to enable public

Looking at Table 1 below, we see that project team participation increased as advisors and research assistants returned for subsequent events. The community line moves up and down illustrating the decreased attendance at the second event and a dip in attendance at the final contribute to this perception.) The government participation increased in a steady curve with growth through the final event.



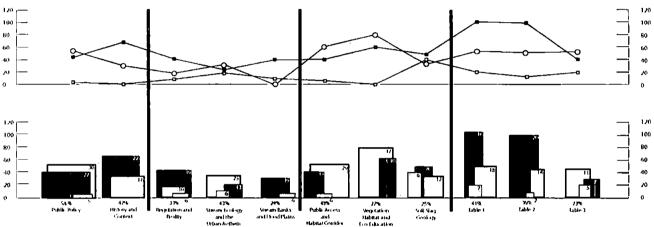
Dialogue, Final Report.)

Illustration Three:

Analyzing Discursive Relationships,

Year One, Nine Mile Run.

STUDIO for Creative Inquiry, 2006. (Originally in 'Ample Opportunity' A community



Community and Ecology

History and Context Urban Stream Remediation

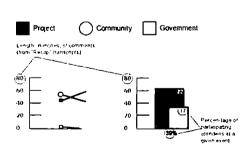
Looking at Table 2 above, we see a graph illustrating the participation changes (based on lines of text) over the four events among our three groups, project team, community, and government. We also see a percentage of participation developed from the total count of participants at the tables divided by the number of representatives for each group. The following observations flustrate difference and similarties between the three groups.

It is interesting to note that three of the four high points of community participation all occur in groups led by core STUDIO members, discussing subject matter that is based on environment, education and aesthetics.

Su project learn spikes occur during discussion of more technical subject matter. This was expected as professional advisors were brought in to address subject issues of history, land and water policy.

Government input stayed fairly consistent with spikes in the soil, stag and geology roundtable. This spike is a result of the city providing a speaker to address ongoing questions about the side to tockly analysis.

Looking at integration and equitable distribution of speaking time, we find three roundtables in three events where the project, community and government groups strike a productive and equitable balance.



Sustainable Open Space

Report.)

illustration four: Attendance

and

Discourse,

Year

One, Nine

Mile Run.

STUDIO for

Creative Inquiry, 2006. (Originally in 'Ample Opportunity' A community Dialogue, Final

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In the first year, we had developed a satisfying means of 'community dialogue.' Now
the challenge at hand was how to provide support for their passage through a series
of complex processes leading to final design. This proved to be a challenge for the
core team, for the consultants, and those that participated in the 'community
dialogues.' In each cluster of relationships, we had moments of incongruity. The
consultants struggled with the interdisciplinarity. The core team struggled to retain the
idea of the whole project and where it was going in terms of their individual practices.
The participants in the community dialogues struggled with the time commitment to
follow the project and its series of creative interactions. The core team (and its
primary funder) realized that we had to imbue the planned consensus design with
additional authority or risk it being ignored. We were asked to initiate an institutional
plan for an organization that would have the strength and vision to carry on the work.
We had to develop a social-political framework that would enable success once we
stepped back from the project.

But to do that we had to first rediscover a consensus amongst ourselves. By late summer in the second year (1998) there was tension between the team's desire to express themselves and the responsibility to develop a rational design. The art of Nine Mile Run was feeling lost to the science and planning. Members of the team wanted more time for their own work, for solitary inquiry and expression in relationship to the project. At the same time the pressure to succeed and the workload at Nine Mile Run was increasing. Intellectually we were deeply invested in the ideas that informed the work from its outset: creating experiences instead of products, concepts instead of things, and relationships instead of audiences. But what we were actually doing was developing concept designs, illustrated ideas that provide

Art Ecology and Planning: Sections III and IV a practical overview of the project and its direction. A key question, which I will take up in a moment is, can you represent a plan in a singular image? We had a number of discussions about individual inquiry, authorship, expression, project representation, and the recognition of all team members and their various contributions to the project. In the midst of this creative struggle, we were preparing for the year ahead. The need to mount an exhibition, clarify the design options for a final community consensus discussion, then oversee a challenging economic and institutional plan in relationship to the finalized concept designs.

The final dialogue, at Wood Street Galleries, featured a range of sculptural and interactive artworks, photographs, video projections and plans laid out in an installation style presentation. The works focused upon the history of degradation at the site counterpoised against the contemporary issues with water and land reclamation. The discursive process and citizen voices were presented through new technologies and maps and plans of the site development alternatives. At the end of the exhibition a large meeting was held to seek consensus on final design. From October to December we developed those final designs and presented them one last time at the Miller Gallery at Carnegie Mellon University. In the years that followed, the U.S. Army Corps of Engineers began a \$6.2Million stream restoration, which was brokered by Joan Blaustein at the City of Pittsburgh Office of City Planning. The final ecological and hydrological studies and designs reflected the Nine Mile Run Project's consensus design that was produced in August 1999. In 2001, the Nine Mile Run Watershed Association was established and William Jordan III, noted author and educator on the subject of restoration ecology, gave the inaugural lecture. A brilliant young biologist, who showed up in our offices for a discussion about art, ecology and

Art Ecology and Planning: Sections III and IV change, fresh from her MA degree in environmental science, currently directs the Watershed Association. The organization has stayed engaged with the highly politicized restoration project from the beginning (Smydo, 2004). In 2006, phase one of the Nine Mile Run stream restoration is complete (Weisberg, 2005) and the Watershed Association has just contracted the noted artist and designer Herbert Dreiseitl of Uberlingen, Germany to develop public workshop based designs for the Regent Square Gateway (Jones, 2005). This is a project identified and developed to the level of concept design by the Nine Mile Run Team working with Rocky Mountain Institute (Jones, 2006) (Ferguson et al, 1998). Members of our project team and the stalwarts from our community advisory team have had a role on the board of directors since it was founded. The Nine Mile Run Watershed Association has a website worth visiting http://www.ninemilerun.org/. The original research project website is at http://slaggarden.cfa.cmu.edu.

Returning to the point of dissonance that began to upset the project team in 1998. The question of a definitive object, image or combined text and image that defines the work is what Newton Harrison refers to as 'prima facie evidence' of the creative act (Harrison, 2006). However the nature of this work (NMR) is that it occurred at a planning scale; it was fundamentally about dialogue and interdisciplinary ideas about ecological systems. Newton's idea is simple: if the work is going to gain the attention of the artworld it demands a product that either validates the ideas behind the work or makes those ideas self-evident. Newton feels that ecological art is all too often ignored and more often than not represented within the artworld by a narrow band of practices I want to ignore the artworld for the moment and examine the idea of the prima facie image. The Nine Mile Run team had developed a series of images that

Art Ecology and Planning: Sections III and IV spoke to the history and the philosophy of our work, (see illustration five) but in the end the 'design', the story of the artist led transformative outcome, was never developed at a level of prima facie evidence. Instead we relied on a series of well-designed planning boards and images that defined aspects of the various levels of research that went into the development of the plans. (See illustration six) While we were all invested in alternative practices, methods and contexts in which to think and make work, at the end of the day, the majority of us on the core team were are all trained and employed as artists/academics. Socially and politically our careers are built upon creative output and response from art-based critics and institutions. Even if one were to be theoretically correct and engaged in exemplary practice, the artist cannot survive if the work is ignored by the discipline. If the work is to be sustained, it must be validated. The question is, given a profound disinterest (on the part of the dominant artworld) in this kind of work, where might appropriate validation come from and what are the standards of that evaluation?

Suzanne Lacy asks three significant questions regarding the standards of evaluation. What is the quality of the imagery in terms of beauty and invention? What was the artist's intention and the affect of the work? And, what is the method and means to convey meaning? I would argue that a critical viewer will have no problem finding answers to the second and third questions through the various publications and websites that are still available on Nine Mile Run. That is not to say that the project does not have dozens and dozens of images that illustrate that dual sense of beauty and invention, but in the end there is no singular image that defines the final collective design ethos of the project. Again, the images focus on the site as it is, not in the discourse of what it was 'becoming' and there in lies the challenge. How might one

Art Ecology and Planning: Sections III and IV represent a social and ecological transformation? It is simple to say that we were acting as planners in this case not artists. But then again, we could also sit amongst the humanists engaged in the discourse of restoration ecology. Intuitively I believe we must stay mobile, moving from discourse to discourse because the answers are no longer reductive and contained by any one area of knowledge. On another level, I can't help but wonder if we aren't constraining art practice with this fixation upon images. Or maybe it is my misreading of these ideas... as images.

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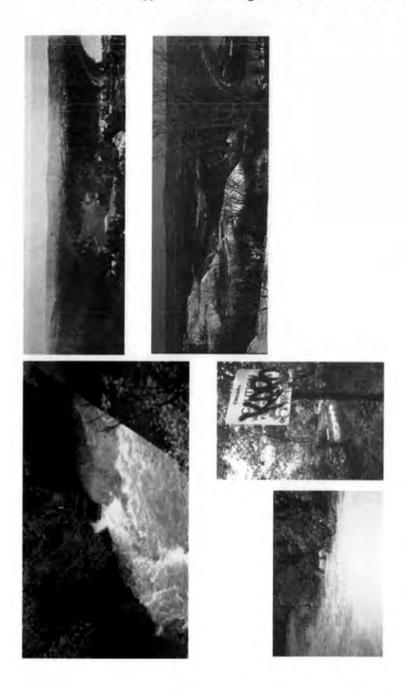


Illustration Five: Images from Nine Mile Run, the historic conditions. Raging storm water at the mouth of the culvert, historic comparison, pre-slag and post slag by B. Bingham, sewage warnings, and overflowing sewers in the park. Nine Mile Run, STUDIO for Creative Inquiry, Carnegie Mellon University.

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-Illustration six: The evolving status of Nine Mile Run. The trailer as a focal point for experiments and public discourse, the 'Community Dialogue' vision, the scope and intent of the design, five nodes from park to brownfield, restored wetlands and post restoration site tours with the Nine Mile Run Watershed Association. Nine Mile Run, STUDIO for Creative Inquiry, Carnegie Mellon University.

Art Ecology and Planning: Sections III and IV Prior to Lacy's publication, and long before my recent conversations with Newton Harrison, Suzy Gablik has stated, "Interaction is the key to move art beyond the aesthetic mode: letting the audience intersect with, and even form part of the process, recognizing that when observer and observed merge, the vision of static autonomy is undermined" (Gablik, 1991, p. 151). The complete quote and its larger context is discussed in Chapter 1, 'Art Beyond the Gallery' in the section on 'Reconstruction (Restoration).' I have always found that quote to be provocative. Gablik predates Berleant's idea of subject object collapse (Chapter six), as well as the work of Grant Kester and Nicholas Bourriaud (Chapter seven). Gablik suggests that we put aesthetics to the side and move towards a focus upon creative change. I would argue that Kester and Bourriaud labour to develop an alternative aesthetic, in Kester's case based on discourse theory and in Bourriaud's case based on psychological theory (discussed in Chapter seven). Kester provides us with an intellectual framework relevant to transformative practices; he provides guidance, but he doesn't help us resolve what we might call the 'art-gap' between Lacy's standard of beauty and invention and the depth and breadth of discursive practices. What he offers is a new aesthetic principle that refocuses our attention upon the process of dialogical exchange versus the outcome. Kester's critical method can be broken down into three points of critical analysis: the context which includes the speech acts and process of the dialogue, the quality of the intersubjective exchange, and indications of empathic insight. Bourriaud provides eloquent insight into the politics and process of contemporary subjectivity as mediated through art, but ultimately provides us with less critical structure than Kester. The artist group WochenKlausur suggests that there is no such thing as this 'art-gap'; the product or process of the artists labour is not a priori art or non-art. "It becomes art through its recognition, and that comes

Art Ecology and Planning: Sections III and IV about within institutional mechanisms...Every art remains a fully harmless raw material until these mechanisms take this raw material and circulate an opinion about it" (WochenKlausur,2006, FAQ). Following this theory, some of the work will become institutionalized and validated as art, some simply never will.

If we examine the Nine Mile Run project from within Kester's principles, we find a structured program designed from the outset to enable rational and creative democratic discourse about change. Defining the quality of the intersubjective exchange or the level of empathic insight, however, are tall orders. The project was more obsessive than most in documenting the discourse that led to the process that defined the practical research questions and the scope and intent of the design. In the end, a complex transformative project relies upon discourse, but also systems of democratic representation. If the program is going to evolve over time, it demands attention to the potentialities as well as the limitations and responsibilities of sustained discourse with citizens. On the Nine Mile Run project, that meant a combination of open community dialogues that were then reinforced by a consistent and regular series of advisory board meetings where citizen leaders, city planners and non-profit group directors all sat and reviewed the work and its future plans. We also provided open access two days a week through the onsite trailer. Written notes, audio and/or video were taken at most meetings. The intent of the project from the beginning was to recognize citizen voice, along with expert voice in the initial planning and overall design. The project made a rational attempt to follow discourse ethics, but in the end the Habermasian ideal does not fully embrace the process and effect of interest politics. Some of the most capable participants were also the least likely to consider issues beyond their own self-interest, or were simply disinterested in compromise.

Art Ecology and Planning: Sections III and IV Compromise was perceived as an indication of failure. Success was determined on their issue alone. Another element of the speech act that Kester refers to can be defined in relationship to power. Part of the process of learning that the project team went through was how to facilitate discussions so that every voice was heard. In the end these are moral and ethical ideals, good practices that don't take into account the dynamic passion and complication of actual discourse. The actual strength of discursive decision making lies in the collective commitment to the setting itself. At the same time, the intent of that discourse, and its setting must be clear from the beginning.

I am not sure we were especially empathetic in our program, although if you extend that empathy to the plight of recovering natural ecosystem you could draw that conclusion with ease. Much of the work was intended to resolve the bias against recovering urban nature, using quantitative science as the means of validating that claim. If empathy can be construed as a consistent commitment to listen, we did return time and time again to talk with anyone that asked for our attention. For example, returning for another public meeting with the community that resisted a fundamental compromise in the project. If I was asked by a city planner why I would subject myself to more conflict. My response was simple; there were some among them still interested in compromise, as long as we returned, that opportunity remained valid. Using Kester's critical framework, it is clear that there are issues with its application, at least in terms of the Nine Mile Run Project. At the same time its application provides insight that we would not have discussed otherwise in a critical art based analysis. This is the point of his treatise, as understood. The aesthetic

Art Ecology and Planning: Sections III and IV critical dialogue is not a historic megalith that we have to defend; it is a living dynamic organism that we co-create through practice and theory.

Returning to Lacy, on closer examination her body of work does not always easily parse into her own critical framework. Her projects from the 1980's 'Whisper, The Waves the Wind' and 'The Crystal Quilt' best reflect the position (described by Kester) as a setting for dialogic interaction. In these works, her attention to the quality/beauty of the imagery and the inventive inter-relationship between the dialogue and the site for dialogue is guite clear. In the work from the 1990's and after 2000, remnants of this aesthetic show up in the staging of works like 'Code 33' but the bulk of the work is more dialogic and oriented upon process and outcome than imagery. [Lacy, 2006] Likewise, the odd project or two in this area of transformative practice might hit Newton Harrison's standard of prima facie visual evidence. In a conversation recently, to review his work with Helen, he agrees that 'Future Garden Part 1: The Endangered Meadows of Europe (1996-1998)' stands up well to his own standard. The verticality of the bright blue spires of the architect Gustav Peichl's design of the Bonn Musuem sets up an important iconographic tension between the built environment and the Harrison's brilliant (horizontal) rooftop exposition on ecological aesthetics and biodiversity. Other work in the mid 1990's, such as 'Vision for the Green Heart of Holland', has some of the same visual cues vis a vis the architectonic context of 'Future Garden.' Older projects like the 'Lagoon Cycle' (1974-1984) have iconic images describing elements of the process. There is nothing in that series that represents the overall intent of the work. It integrates through the accompanying text. Newton and Helen both claim that the recent work in 'Santa Fe Watershed: Lessons in Genius of Place" has a palpable sense of prima facie which can be seen in the

Art Ecology and Planning: Sections III and IV complex social inter-relationships—the network of activists that continue the work in Santa Fe.

Returning to prima facie visual evidence and the standards of beauty and inventiveness outlined by Lacy, I submit that the vast majority of projects like these simply don't lend themselves to such critical standards. At Nine Mile Run, the primary focus was upon ideas that informed experience with the intent to enable a creative dialogue with people about the reclamation and recovery of natural systems. Looking back upon this work, it is clear that a dialogue based process operating at a social, or ecological planning scale is going to be very hard to capture through images alone.

The effort we all put into the work demands critical engagement and the validation that comes from exhibition, publication and critical discourse. Kester, Lacy, Miles, the Harrison's and others recognize the value of artists writing for themselves. The most appropriate means of validation ultimately becomes publication and subsequent critical response amongst colleagues and peers that understand the complexities of this area of practice. Part of the problem is the practice is difficult to understand and more difficult to sustain long enough to learn to do it well. The practitioners that have an interest in it are more intent in doing the work than spending time in academic analysis, review and publication. The few academics that engage with the area struggle to retain their practice and develop a context of knowledge that is appropriate and useful as a frame of reference. That work is nowhere near completion. The work demands the interest and critical engagement of those beyond the artworld. Planners and architects, designers and scientists, philosophers and historians have all taken an interest, and often a role, in these kinds of projects. They come as equals

Art Ecology and Planning: Sections III and IV interested in applying research with the shared intent to creatively change the world. Engaging them in a discourse of mutual evolution and growth is an essential developmental step.

I would argue that Harrison, Kester and Lacy all provide us with appropriate concepts that delineate a potential relationship of long term, planning scale work to the artworld. We must continue to give this consideration wherever possible; however, it is essential that visual evidence does not become the singular critical threshold for the development of transformative practices. The work is ill suited to this kind of iconic, image-oriented critical engagement. The work is simply too complex in authorship, process and outcome. Of course, this critical understanding does not remove the fundamental desire for the recognition of ones work by the institutions and critics that dominate the discipline; I would argue that we need to look to more than one discipline for the appropriate discourse.

Returning to the three practical questions raised by this thesis in relationship to this chapter, I have to say that the Nine Mile Run team was able to create change by instigating agency, but were not able to set policy. The regulations and guidelines that defined post-industrial redevelopment and planning did not change. It is also clear that we worked to an expanded ideal of authorship, although the creative content was clearly delineated from the outset and maintained across the three years of development. The recent restoration project and subsequent planning can be visually and conceptually linked to our consensus plans; this makes it clear that artists can initiate change.

Art Ecology and Planning: Sections III and IV Reviewing the project over the three years, the first was the most exciting and creative time for the project; we had begun a protracted creative public discussion, one that would unfold over years. The first year was about new ideas, collective ideals and experiments, an approach which was not atypical of an artist's practice. In the second year, we worked to develop an interdisciplinary plan with consistent input through our 'community dialogues.' This was about setting a cohesive scope of work and a protocol for information exchange and marshalling it forward. This was more of a challenge for the team. In the third year, consultants dominated our discursive relationships and advisors helped us to oversee and critique the development of design options, as well as an institutional plan. At the same time, we were all involved in the creative production for the exhibition. In the third year, our roles had solidified and we worked to bring the project to fruition under the best of all possible conditions given the workload and production necessary to succeed. In year one we were responsive, in year two we were responsible and in year three we were accountable. Another way to frame this is to suggest we were artists first, planners second and, in the end, we were and continue to be agents of creative change.

Chapter 9 – 3 Rivers 2nd Nature, 2000-2005

To review a full set of reports and plans from 3 Rivers 2nd Nature see the following CD Rom documents in Appendix B (CD ROM 2) 'Ecology and Recovery – Allegheny County' (2006) and 'The Allegheny County River Dialogues: Watertrails' (2005) and (CD ROM 3) the scientific studies 'Allegheny County Stream Reports' (2005).

Introduction

Following work on Nine Mile Run, a Heinz Endowments Environmental Program associate asked me what the team might consider doing next. I described a plan to take the strategic knowledge approach to advocacy for public space developed at Nine Mile Run to another scale, where we would attempt to impact regional waterfront development and its public resource commons using some of the same methods. One of the primary questions on my mind as I described this project was, could a deep dialogue like the one we developed at Nine Mile Run be conducted at a larger scale? The surprise reaction to this proposal wasn't the offer of five-years of funding, but rather the request to take up a primary relationship with the newly founded Three Rivers Wet Weather Demonstration Program Inc. (Three Rivers Wet Weather, 2006, www). The Three Rivers Wet Weather Demonstration Program was developed with federal funding as part of an Allegheny County response to the U.S. Environmental Protection Agency's 1997 legal action against 50 communities in Allegheny County. The issue was the presumption of water pollution due to aging and inadequate infrastructure resulting in sewage overflows during wet weather events. The Allegheny County Sanitary Authority (Alcosan) and the Allegheny County Health Department joined forces to create the Three Rivers Wet Weather Demonstration

Art Ecology and Planning: Sections III and IV program; a federally funded non-profit intended to help municipalities address the sewage overflow into the rivers and streams of the region. The goal of Three Rivers Wet Weather is to help municipalities find long-term cost-effective solutions to the regions water quality program. Alcosan is the regional authority charged with the "...collection, transportation, treatment, and disposal of sewage" (Allegheny County Sanitary Authority, 2006, www). The authority's service area includes Pittsburgh and 63% of the municipalities that make up Allegheny County. The Allegheny County Health Department mission is, "To promote individual and community wellness; prevent injury, illness, disability and premature death; and protect the public from the harmful affects of chemical, biological and physical hazards in the environment" (Allegheny County Health Department in Three Rivers Wet Weather, 2000).

John Schombert, formerly Chief of Water at Allegheny County Health Department and a key ally on the Nine Mile Run Project, directed the organization. While this arranged partnership provided new and potentially interesting strategic relationships, it also undermined a fundamental principle of Nine Mile Run—to retain autonomy from parties with a primary interest in the outcome. On the following pages, I will describe the project and its evolution over six years (subsequent funding sustained the work over an additional year), then provide a critical analysis of the work in terms of a range of outputs in the areas of water, land and transformative art.

Intent

The plan of 3 Rivers 2nd Nature was to focus upon the idea of green infrastructure as a subject of integrated interdisciplinary analysis and public discourse.¹⁷ I have argued

Art Ecology and Planning: Sections III and IV repeatedly on the Nine Mile Run Project, and in various publications and in reports that attend this project, that restoration ecology, land preservation and species conservation are important tools for rust-belt cities like Pittsburgh that struggle to recover social, political and economic vitality. Nature was subsumed and ignored during the height of the industrial economy; part of the challenge to recovery involves a restoration of the visible aesthetic vitality, the quality and relationship between people, post-industrial urban lands and the natural environment.

From the Original Proposal

The goal of the project is to conduct an analysis of the green infrastructure which provides social, aesthetic, ecological and economic benefit to the Three Rivers Region. The program will complement the 3 Rivers Wet Weather Demonstration Project's efforts to implement innovative technical and institutional solutions to 'grey' infrastructure problems (storm water and sewer systems) and the wet weather discharges which soil our rivers. Combined, these grey and green programs will reawaken the public interest in the natural benefits which sustain, define and complement life in the cities of the Three Rivers region .(3R2N, Heinz Grant, 2000)

<u>Aesthetics</u>

We decided to work from the premise that human value is the sum of experience in relationship to perception and conceptualization. Our primary approach to experience was through our outreach and River Dialogue programme. We also decided to

Art Ecology and Planning: Sections III and IV address conceptualization through our expert scientific field reports and innovative maps. The goal was to provide people with 'on the water' experiences which they may not have had before. It was our hypothesis that these river activities had the potential to reconfigure the aesthetic perception of the rivers. The view from any one of these rivers reveals the recovery of the natural landscape, at the level of the floodplain and on the surrounding steep slopes which line the river valleys. While the view from the roads adjacent to the rivers still reveals a predominantly post-industrial/architectonic aesthetic that separates the viewer from the river. The principle of this aspect of the project is that value and care are generated in direct relationship to experience, perception and the potential for common interest.

The Public Realm

As we began this initiative I had begun to develop an understanding of the regulation and oversight of infrastructure and land use, as well as some familiarity with the individuals that had an invested interest in that regulation. Through the work with the scientists, the project team had a collective understanding of the failure of that infrastructure and its effect upon the river ecosystems. I was most interested in the regulatory interests, the definition of the problem and the range of solutions. Two things were clear to me: there was no data available to inform decision making, and the advocacy and support for clean water and recovering ecosystems in the region was relatively non existent. Furthermore, land use regulation was not taking into account the recovering landscape and its long-term environmental and aesthetic potential. These were the fundamental points of public realm engagement for the project.

The 3 Rivers 2nd Nature Project (following the Nine Mile Run model) was designed to address environmental questions through strategic knowledge and platforms for discourse. Strategic knowledge is information that was previously missing from public discussions, in this case about land use and environmental protection. Carefully chosen strategic knowledge can transform the operative value systems that inform decision-making. When publicly distributed, it has the potential to reinforce democratic process. The framework for this idea is based upon system theory.²⁰ The team completed eighteen reports over the life of the project. (See illustration seven.)

We continued an interest in the culture, perception and understanding of public space, as well as its relationship to nature and rivers in a post-industrial urban setting. The focus of this new work was the systems and resources that occupy a hydrological or ecological relationship to Allegheny County's rivers and streams. The project laboured to understand and establish a quantitative scientific baseline for such systems for three reasons: First, baseline knowledge of environmental conditions provides us with a yardstick for measuring improvement; secondly, in the act of establishing a baseline you can discover data that reveals opportunities and constraints that were previously invisible; thirdly, the recovery of nature is an aesthetic goal based upon complex systems perception processed within a framework of ideas that is often informed by science. Our goal was to privilege natural (green) infrastructure remnant ecological systems that can be found in all cities.

Our goal in this work was transformation through discourse. There are two ways to discuss this, first in terms of the team's method of social engagement and process of speaking, listening and responding. The second point of discussion involves the social political responsibility for these dialogues and the strategy of plans, reports and publications that the team developed to strengthen the advocacy for nature in the region.

By comparison, our work on the Nine Mile Run watershed was intimate. Its relative scale allowed us to work as artists in residence. We were able to focus on the project-in-place, and develop a deep dialogue with nearby residents for three years. In contrast, 3 Rivers 2nd Nature was geographically expansive, forcing us into a transitory approach. As a result, the planned program of River Dialogues were initially outlined as a migratory series of shallow dialogues that achieved efficacy through the project team's attentiveness to citizen interests and the expert/decision maker focus of our partners at Three Rivers Wet Weather.²¹ We were excited to experiment with this new relationship and the expertise that Three Rivers Wet Weather brought to the public realm questions that face water and waterfront lands.

The work on 3 Rivers 2nd Nature involved the co-development of platforms for discourse, in this case 'River Dialogues', with partners. We planned and organized four to six hour days, where citizens and decision makers assembled to hear an expert seminar about the rivers, then to experience and discuss the rivers on a boat. Upon return to the dock we would all eat together then assemble around working

Art Ecology and Planning: Sections III and IV tables for protracted, recorded and illustrated conversations about a particular stretch of riverfront. Each table had a facilitator, a planner, a note taker and one or more drawers (that encouraged everyone to pick up pencils, pens and markers) to unpack the days experience and record the opportunities and constraints connected to post-industrial use of our regional waterways and waterfront. The record from those sessions appeared in our yearly reports. They became the basis for the river trail plan http://3r2n.cfa.cmu.edu/new/planning/watertrail/index.htm.

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Illustration seven: Year to year reports by 3 Rivers 2nd Nature on water quality, water, ecology, forest cover, geology, history etc. 3 Rivers 2nd Nature, STUDIO for Creative Inquiry, Carnegie Mellon University.

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Illustration eight: Images from 3 Rivers 2nd Nature. The Post Industrial Condition, dirty water and aging industrial infrastructure; interested parties and potential advocates on the rivers and at the public design tables. 3 Rivers 2nd Nature, STUDIO for Creative Inquiry, Carnegie Mellon University.

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Process

The process of developing 3 Rivers 2nd Nature was tied to the partnerships and the funding that enables the congregation of academic and professional talent that defined the project. The program began in year one with an expansive proposal to the Heinz Endowments for a five year project. The program was partially funded and initiated on 1 January 2000. The process included grant reports at the end of each year on the previous years work prior to submitting a new grant proposal in July for funding the following January. I will begin the section on process by first providing a sense of the partners, then providing a year-to-year overview of the struggles that occurred within the partnership from years one to five. I will follow this with a conclusion where I examine the outcomes and products from three major study areas of the project: aquatic, terrestrial, and cultural.

Program Overview

We were attempting to define a baseline of natural (green) infrastructure throughout Allegheny County Pennsylvania. Natural infrastructure includes aquatic and terrestrial systems that support urban ecosystems and in the process provide myriad benefits to urban dwellers. Natural infrastructure cleans air and water. It has the potential to absorb excess nutrients, pollutants and flows while providing a habitat for urban wildlife. Natural infrastructure adds diversity to the aesthetic experience of urban dwellers whose primary experience might otherwise be confined to the built environmental and its (grey) infrastructure: the architectonic landscape, with its networked transportation, utility and energy systems. These systems are the primary focus of the social and political systems typical of a dense urban environment. As the project director, I outlined a set of general methods for the project in its first years. We

Art Ecology and Planning: Sections III and IV worked with colleagues in the sciences to conduct rigorous field studies to understand regional water quality and riverbank conditions (soils and trees). We would work with colleagues in planning and history to understand changes to property ownership, zoning and regulations. Finally we were interested in probing the regional potential to preserve and restore natural systems through citizen involvement in the normative programme of assessment in relation to regulation and enforcement. Post-industrial riverfronts provided the stage for our efforts. Individual curiosity and care for a natural recovery of rivers and forests was the point of potentially dynamic public agency that we sought to engage.

To accomplish our goals, we needed to enter into an interdisciplinary dialogue to establish a scientific protocol and then pursue it without significant change for four years until all the data had been collected. Where Nine Mile Run was contained within a 6.5 square mile watershed, Allegheny County was 730 square miles, a vast multimunicipal political entity comprised of many watersheds. Working on Nine Mile Run, we were focused upon two miles of open stream. In Allegheny County we were going to be working on 90 miles of rivers (180 miles of riverbank) and up to 2000 miles of streams. We divided the 90 miles of riverfront into roughly 25-mile sections and began the work to establish our data baseline. Our focus was terrestrial conditions (botany and geology) and water quality (aquatic life and pollutants) in and along our rivers and waterways. We were seeking to establish a baseline of knowledge that would allow interested parties (in the future) to ascertain if conditions were improving or worsening over time. We were also seeking to develop a program of aquatic-recreation and green-infrastructure planning concepts into areas that have been largely ignored by municipal interests and state investment (as well as the range of

Art Ecology and Planning: Sections III and IV non-profits focusing most of their energies at the heart of the city, or far beyond the urban core, but not in between). Our methodologies included extensive data gathering to inform conceptualization—embodied and communicated as 'strategic knowledge' and a series of intellectually and experientially informed River Dialogues, which would unfold each year in different places around the county. (See illustration eight.) Through these two programmes we believed that we could expand the concepts that frame perception and provide experiences that would lead to a discourse about access and support for nature as a primary condition of post-industrial redevelopment.

The Means of Empowering Discourse

It was never completely clear to me why the Heinz Endowments insisted on funding our project through Three Rivers Wet Weather, as it went against the previous model where economic autonomy allowed us to sustain critical distance. I believe it was done with the intent to strengthen our political position and our efficacy amongst the decision makers of the region. Three Rivers Wet Weather is a federally funded non-profit institution developed through the collaborative efforts of the Allegheny County Health Department and the Allegheny County Sanitary Authority. These are two highly politicized and powerful public institutions; one is charged with environmental management of waste water and the provision of sewer infrastructure while the other is charged with the protection through regulation and enforcement of issues that can affect public health. Three Rivers Wet Weather is funded through U.S. Congressional action with the intent to broker agreements between the U.S. Environmental Protection Agency and the myriad local municipalities in relationship to the Allegheny County Health Department and the Allegheny County Sanitary Authority. 3 Rivers 2nd

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Nature entered into a relationship with Three Rivers Wet Weather with the intent to
address questions of clean water and the preservation, conservation and restoration
of nature. We would soon discover that everyone else at the table was primarily
interested in sewer infrastructure first and clean water as a distant second. Our
partners were focused upon the politics and economics of developing new sewers in
exurban and riverfront industrial properties and maintenance of existing regional
sewer infrastructure. Both elements were considered essential to growth and
development; both elements would demand federal investment if they were to
succeed. Federal interest was predicated upon clean water.

As a result, we understood that we needed to establish a separate basis of social and political strength if our voice was going to be heard. Our strategy was to assemble a technical advisory team of some of the best and most open minded thinkers from diverse disciplines and a range of academic, professional and state institutions. We included senior representatives from Three Rivers Wet Weather, Alcosan and Allegheny County Health Department as well. This technical advisory board would help us to define the methods in the first year. We believed that this would be a foundation of social, political and scientific strength, which would be shared as we entered the more discursive elements of the program. We wanted to introduce knowledge which would improve the quality of discourse concerning the natural form (forested edge) and function (clean water and healthy fisheries) of the public realm as it occurs in and along our rivers and waterways. In the following years, we added an outreach advisory board made up of regional environmental, community and public policy advocates to further empower the process and potential outcomes of our program.

The initial proposal to the Heinz Endowments was submitted (at the request of the Heinz Endowments) through the newly formed 3 Rivers Wet Weather Demonstration Program. As stated in the first year proposal to the Heinz Endowments, the partnership between an artist led research program and its politically powerful allies would be built upon shared goals and programs. Like any new relationship, the planning document was filled with promise and high aspirations.

The goal of the project is to conduct an analysis of the green infrastructure which provides social, aesthetic, ecological and economic benefit to the Three Rivers Region. Green infrastructure, when identified and integrated into an ongoing program of urban redevelopment, can provide significant multi-benefit returns on investment. The program will compliment the Three Rivers Wet Weather Demonstration Project's efforts to implement innovative technical and institutional solutions to "grey" infrastructure problems (stormwater and sewer systems) and the wet weather discharges which soil our rivers. Combined, these grey and green programs will reawaken the public interest in the natural benefits which sustain, define and complement life in the cities of the Three Rivers region.

(STUDIO for Creative Inquiry, 2000)

The initial proposal called for a relationship between aquatic and terrestrial research, as well as an analysis balanced within our discursive approach to community

Art Ecology and Planning: Sections III and IV planning, described for the purposes of this text as social and cultural activities or 'River Dialogues'. However, once the grant was received in November, it arrived with a 28% reduction in the proposed budget. This outcome forced a decision about what to do with available funding. It was decided that the primary need was to instigate the pursuit of new data through the research project in year one and seek outside funding for substantial 'River Dialogue' programming in year two.

2001:The River Dialogues are Initiated

Overview: In the second year of the project, yearly funding was increased to an amount that was closer to the original planned five-year budget request. We also secured an additional grant which provided dedicated funds for outreach, so we were prepared to make up for lost time. We were excited to be able to focus and move into the program we had outlined. In the second year, we re-established a working relationship with Rocky Mountain Institute water expert Richard Pinkham. We were very excited to begin to focus upon the recovery of lost streams through a technique known as stream daylighting.²² We also began the first significant year of River Dialogues, which included a program focused on the stream daylighting program. Finally we were able to submit a proposal to bring a team of aquatic ecologists onto the team.

Water: In 2000, we had been able to instigate a study that revealed chronic water quality problems in streams. This initiated a discussion with Three Rivers Wet Weather about the range of pollution typologies and what life we might find in those streams.²³ Our goal was to link ecological health, healthy communities of insects and fish in urban streams with a driving desire to resolve the problem of urban pollution.

Art Ecology and Planning: Sections III and IV
This was part of an effort to bring ecological expertise into the project. In one of the
finest moments of the project, we worked with 3 Rivers Wet Weather and the
Allegheny County Health Department to submit a proposal to the ecology section of
the local branch of the U.S. Army Corp of Engineers.²⁴ If the project was supported,
they would pay 50% of the costs of bio-assessment of the streams of Allegheny
County. Bio-assessment, in this case, refers to a scientific account of what lives in a
stream. Some organisms are more or less tolerant of various urban pollutants, so this
also tells us how clean or how healthy the water is, in terms of its ability to support
life. The project was funded and up and running by late spring 2001.

The daylighting program refers to the practice of returning long buried streams to a healthy surface relationship with sunlight. In the beginning of 2001, we asked Pinkham to work with us over a period of four years to help us clarify what streams are lost in the region, what streams we were losing, and how we might begin a program of active stream preservation and recovery. Pinkham began his work with an initial outline of study (Pinkham, 2001) and participation in a public program about streams that were lost in city parks. We also began thinking about regional streams that were beginning to flood with more consistency. Following Spirn's (2002) work on the West Philadelphia Landscape Project and in particular her studies done on Mill Creek that use map analysis to show the affects of buried streams on wooden frame houses. We began thinking through ways to use computer aided mapping to identify lost streams. A concept plan and methodology was published by fall 2001. After presentation and discussion with Three Rivers Wet Weather, we planned to add a storm water engineer to the team in 2002 and begin the practical analysis.

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Land: The core landscape team hit two insurmountable problems in year one. First, the botanist we contracted with was released from her position as curator in the Carnegie Museum of Natural History. The project funding was not enough to sustain her, but it was more work than she could afford to undertake while seeking a new position. Secondly, the landscape architect decided she was better suited to design than quantitative landscape analysis. After much support and extended discussion they both agreed to step down from the project. In their place we hired a research professor in biology at the University of Pittsburgh and a recent PhD from the University of Pittsburgh, Geology Program. They were better equipped to manage the scope and scale of the project, the time commitment necessary to do the field work and the significant database requirements. They did need to return to the site of the year one study and work with the previous team to be sure that the protocol would remain consistent. In the end, they made slight changes, which were reviewed and approved by the technical advisory committee.

Dialogue: The outreach program at Nine Mile Run had focused upon citizen tours, and discussion to clarify the problems. Citizen initiated questions included issues such as, why the water quality was so bad? They also expressed concern regarding whether anything can grow on steep slope soils. These issues were the impetus for our decision to hire scientific experts. The outreach program of 3 Rivers 2nd Nature focused upon 25 mile sections of river at a time, sections of river defined by locks and dams. In 2001, we began the public outreach program in the area in and around Pittsburgh—although the scientists had moved up the Monongahela River and were now working from the City of McKeesport Marina. Scientists were encouraged to develop simple overviews of the issues and opportunities clarified over the previous

Art Ecology and Planning: Sections III and IV summer. We ran the first program out of an existing river-rowing centre, where water quality was a significant issue with daily human impact. The second program took off from a newly vegetated waterfront public park, which had been recovered from a steel mill by the City of Pittsburgh in the 1980's. The third program focused upon analysis and discussion of a city park, where a stream had been buried years before. The discussions focused on water and ecology, land and its forest cover, and finally infrastructure, streams and the possibility of daylighting, or bringing the water back to the surface. A fourth dialogue held in a downtown non-profit centre capped the program. We brought in Malcolm Barton from Groundworks U.K. and Andy Wilmer from the New York/New Jersey Baykeeper to talk about water, land and change, in a public dialogue called 'It is my river.'

Conflict: As we were developing these new projects in the late winter and early spring, our team was also busy editing reports from the year before. As we prepared reports for review by the technical committee, there was lots of excitement. After having the work reviewed and approved by that committee, we got a phone call from the Alcosan Manager (Three Rivers Wet Weather Co-Director) that attended those meetings. She told me that, although there was no problem with the water quality work, it would not be made public, as it was done in their laboratory. I took this up with the executive director of Three Rivers Wet Weather, who set a meeting at Alcosan with the Executive Director to discuss the issue of public access to water quality information, a fundamental precept for our funders. We all made our best arguments and in the end the Alcosan Executive Director decided to approve all future reports. She also promised long-term laboratory support for the work. In the

Art Ecology and Planning: Sections III and IV years to come the Alcosan laboratory personnel were to prove to be ideal allies in developing working methods and managing the production of samples and data.

2002: Land, Water and The Politics of Power

Overview: In the third year of the project funding was reduced again. It was hard to tell if it was simply the downturn in the economy or the effects of a competing proposal that resulted in a second loss of funding in three years. None the less, in a round of discussions with STUDIO for Creative Inquiry leadership and the executive director of Three Rivers Wet Weather, there was only one option—to cancel the most recently begun program, which was our stream daylighting research with Rocky Mountain Institute.

Conflict: Interestingly enough, in March it became clear that Three Rivers Wet Weather had sponsored a successful proposal to the Heinz Endowments for a stream daylighting strategy to be developed and managed by Alcosan working with a local engineering firm. I was eventually invited to be an advisor to this program and strongly encouraged to offer my water policy expert as a potential consultant to that team. Complicating things further, in June, after technical committee review and approval of our outcomes and draft reports, I received another call. The Allegheny County Health Department official sitting on our technical advisory committee called to tell me he had now decided to block publication of the water quality report, and he was also threatening to withhold all future bacteriological lab work. The pattern of approval within the technical advisory meeting then personal confrontation after that meeting was clearly designed to exert authority and control. At issue was a point taken up and roundly discussed with the assembled experts, engineers and scientists

Art Ecology and Planning: Sections III and IV in the technical advisory meeting; the issue seemed resolved to most of those assembled. It took a full three months of discussion to understand and resolve this impasse.

Dialogue: In 2002, we added an outreach advisory committee to the technical advisory committee. We planned to meet twice a year, providing input on the method and means of creating a public discourse about the restoration of rivers, access, water quality and attendant ecological systems. The outreach advisory board gave us an alternative venue for the discussion of the work and an opportunity to engage a group of entrepreneurial non-profit interests with more of a stake in change than in protecting the institutionalized status quo. The latter was a condition that was increasingly obvious amongst certain members of the technical advisory board. The results from this committee included a newly focused and committed River Dialogue program, with a focus on a community approach to planning 'River Trails.' (See illustration ten.) We worked with multiple non-profits involved in the planning and development of the program. These non-profits would continue to work with interested parties in the community to develop the ideas long after the work on 3 Rivers 2nd Nature was finished. This was a very exciting development in our work. It allowed us to develop a very specific set of river recreational plans on the basis of dialogue with either active users, or those that were interested in the evolution of the resource away from the historically dominant use as an industrial transport network and sink for waste.

The third year proved to be the most difficult in that we had to come to grips with the shifting political realities of Three Rivers Wet Weather and its founding entities. We

Art Ecology and Planning: Sections III and IV were experiencing significant power inequities which had now begun to have a significant emotional and economic impact on the project and the project team.

2003: Field Work, Autonomy and the Monongahela Conference

Overview: In the fourth year of the project, funding came in as requested. In addition, we received funding for the 'Clean-Streams project' and additional funds to finish the 'River Dialogues', which were developing into a significant four year, three river, regional water recreation plan. The final bit of good news came from an arts funder who gave us money to run the first 'Monongahela Conference.' Described in more detail in a section to follow.

This was the fourth and final year of the field work. Both the aquatic team and the field teams were highly experienced, incredibly effective and driven by their own interests. The Ohio River data that was coming in had everyone involved quite excited—working on the water had become part of a treasured summer routine for all involved. The community River Dialogues focusing on water trails were working out better than expected. By the end of 2003, we would have developed integrated citizen/expert plans for sections of the Allegheny and Monongahela Rivers. A final Ohio River program planned for the fall of 2003 was moved to Spring 2004 due to scheduling conflicts.

Water: We planned the 'Clean-Streams project' to try to solidify our working relationship with Three Rivers Wet Weather. The work effort was designed to result in a water-testing program and a policy report that they could support as our project came to an end. Our allies at the Alcosan laboratories came through with a testing

Art Ecology and Planning: Sections III and IV device that we could set up in the STUDIO for Creative Inquiry offices. We bought other equipment to ensure a relatively uninhibited program that was scientifically rigorous yet usable by a wide range of interests. 3 Rivers 2nd Nature would set up and plan this project, while Three Rivers Wet Weather would act to apply the new data in the context of the ongoing policy discussions with municipalities and regulators. This was an exciting and straightforward project with strategic data that would have significant impact. The goal was to develop a cost effective field study that could be replicated by citizen groups. We would develop, test and distribute the protocol in one year, all the while producing data that could be used strategically within the municipal planning and regulatory environment by Three Rivers Wet Weather. We saw the project as an excellent fit to our moral and ethical interests, as well as our belief in the value of accessible strategic knowledge and public discourse. This was a solid creative solution to a difficult problem.

Land: By December 2003 the project had finished all field studies and was moving into a final year of analysis. The terrestrial teams needed to consider their work in the larger context of regional decision making. How could the 'strategic knowledge' be put to best use? In the proposal for the following year we planned to shift the team from a predominance of scientists to using the scientists as advisors to a range of design and policy based activities.

Dialogue: The community based water trail planning effort moved up to the Allegheny River. The project had developed significant interest amongst the non-profit community. One of our partners hosted a dinner and boat tour the night before so that our scientists, non-profit activists and various municipal officials could all discuss the

Art Ecology and Planning: Sections III and IV issues and experience the river prior to the next days activities with citizens. The most exciting change to our work effort was the first 'Monongahela Conference', with 23 artists and theorists assembled from the U.S. and the U.K. to discuss the methods and means of creating change. This was the first of several art, design and planning events that would occur during the last years of the project.

The fourth year of the project was defined by a move away from our primary relationship with Three Rivers Wet Weather and a recovery of some sense of the artistic autonomy that was important to us. We retained our long-invested interests in data collection and supportive laboratory work through Three Rivers Wet Weather. We planned to work closely with them on the application of the Clean-Streams project and our final policy analysis in the fifth and final year.

2004: Reports and Monongahela Residencies

Overview: As described in the previous section, the last year of the base funding would move the project away from the previous years processes towards work in design and policy. Another way to think about this is that it was a year of moving from dialogue and information gathering to a year of final planning and action. To accomplish this, we shifted our team of scientists to an advisory role and hired an urban designer, an environmental planner and two policy experts. One with expertise in water the other with expertise in land-use policy. In the final year, we shifted our attention from our technical advisory committee to our outreach advisory board to work more closely with the advocates in the region. We developed designs and action plans that linked with that advocacy network in appropriate ways—while trying to

Art Ecology and Planning: Sections III and IV maintain our connections to Three Rivers Wet Weather through careful dialogue on water policy.

Water: The 'Clean-Streams project' provided funding to hire a policy expert on issues of environmental law and regulation. The remit for the environmental policy effort was to examine citizen-based approaches to water quality monitoring and to analyze existing national models for impact on water quality improvement. Furthermore the policy expert spent time to understand why a regional water quality database was non-existent, despite over thirty years of federal and state legislation that mandates clean water.²³ The primary questions explored in the final years policy study were: who should be doing ongoing water quality studies after the project ends, how might the data be applied in the highly politicized regulatory context, and who might pay for it?

Land: The question of action on terrestrial systems was resolved by attending to the system-wide geographical database and its use in the planning and management of development and/or advocacy for open space. To extend and complement the work done to date, we hired an urban designer and an environmental planner to develop a landscape ecology study based on watersheds and stream valleys. We had good place-specific data on urban river edge conditions and a first pass of data on urban stream conditions. The first question that had to be answered was how would this information be tied together. We would contextualize the existing 3 Rivers 2nd Nature field study data within a map based analysis of landscape ecology, and then use this to ascertain separate preservation, conservation and restoration schemes for the

Art Ecology and Planning: Sections III and IV County. Finally, we would develop an illustrative concept design and an action plan for restorative redevelopment of the public realm resources and publish the results.

Dialogue: The last year focused upon a final 'River Dialogue' targeting a river trail discussion with local community members living in the midst of one of the most industrialized areas of our region. These discussions had become familiar and welcome territory with teams of experts and citizens working together to sort out public access and recreational use of the rivers, as well as other social and cultural opportunities.

In June 2004, the Monongahela Residencies took place. This was a month long art/design residency program with 12 artists in three communities focusing upon urban social and ecological activities. This program would insert regional and national artists into challenging post-industrial communities, with the request to 'initiate change.' Artists residing in Western Pennsylvania were paired with outside practitioners to enable understanding about regional history and context as well as a potential for dialogue about local moral and ethical perspectives. The project was described in the following terms, "The Monongahela Conference [and its residencies] is based in the belief that art and creative vision have the power to effect traditional political procedures by welcoming the ideas and participation of every citizen." (3 Rivers 2nd Nature, 2004) The artists and 3 Rivers 2nd Nature team members provided staffing in a library, a storefront and a municipal office five days a week. Each Friday we hosted a project dinner, followed by a public lecture-discussion about the issues the artists had become involved in. Municipal officials and citizens were always invited (and did attend) these events.

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The goals of the 2004 Monongahela Residencies were to examine integrative approaches to art nature and culture and to understand and distribute the range of ideas the practitioners would bring to the work. The programme would facilitate the understanding and distribution of art that addresses perception, value and voice. Finally, participants would develop artworks/plans/actions for exhibition and publication, as well as potential application and use. In their contracts however, the artists were simply asked to use their creative skills to catalyze change.

2005: Final Reports and Exhibition

The last year of the project involved the development of final reports, studies, policy and planning tools and their release to a range of citizen based non profit environmental interests. We also worked with Jenny Strayer, Director of the Miller Gallery at Carnegie Mellon, and Grant Kester, curator of the 'Groundworks' exhibition, to finalize the planning, design and programming of the 'Groundworks' exhibition and conference. This will be discussed more completely in the section that follows.

Programme	2000	2001	2002	2003	2004	2005	2006
3 Rivers 2nd Nature STUDIO for Creative Inquiry							
Water							
Scientific analysis							
Stream Daylighting (Pinkham)							
Stream bio-assessment (USACE) begun							
Stream Daylightng canceled							
Clean Streams policy (Luneburg)							
Land							
Scientific analysis							
Science team reconfigured							
The Pittsburgh Hillsides Project							
Ecology and Recovery' Published							
Dialogue							
River Dialogues						-	
First Monongahela Conference							/
Monongahela Residencies							
Groundworks Exhibition							
Groundworks Catalogue							
Groundworks 'Monongahela Conference'							
						-	

Art Ecology and Planning: Sections III and IV

In Allegheny County, the gift of a relationship to water is a historic public good and a natural right that was compromised during the last century. The recovery of water quality, natural riverbanks, public access, and recreational uses of our regional rivers and streams is good for the economy and our communities. It is an investment in the future of our children. A draft proclamation in support of the waters of Allegheny County · Create a direct relationship between people and the water · Upgrade all water quality to the standard for swimming · Find the source, cause, and solution to water quality problems · Stop downstream pollution, that affects other communities Provide watershed education and information for all citizens · Work with local communities to monitor local water quality · Treat wetlands and streams as economic and ecological assets · Preserve natural riverbanks, wetlands and streams Conserve diversity of plants and wildlife in and along rivers and streams of functions of riverbanks and wetlands · Remember and restore the best of pre-industrial access and use of · Accommodate and celebrate the public's right to use the rivers Redevelop with intent to be ecologically and economically 3Rivers = sustainable · Work with communities to restore and enhance the culture along the rivers http://gran.cla.cmu.edu I would like to sign these principles as an individual I would like to sign these principles representing I made changes to the principles prior to signing A draft proclamation in support of the waters of Alleghany Caunity

Illustration ten: In 2002 The 3 Rivers 2nd Nature outreach advisory board developed this proclamation in support of the regional rivers.. STUDIO for Creative Inquiry, Carnegie Mellon University.

Art Ecology and Planning: Sections III and IV Critical Analysis of 3 Rivers 2nd Nature

To analyze the complexities of the 3 Rivers 2nd Nature project it is broken down into the sum of its parts. Separating the cultural programmes, the Monongahela Conferences and Residencies of 3 Rivers 2nd Nature from the environmental programmes. I will begin with an analysis of the water and land based programmes.

The project consisted of water, land and dialogue based research initiatives. We wanted to impact the ideas and experience that informed the aesthetic perception and related public policies that defined water and land in the region though a process of strategic knowledge and public dialogue. The project team sustained three levels of discourse throughout the project. We had internal dialogues, which are common, relatively balanced power relationships, speaking in a means of critical but convivial interest amongst like-minded academics. We had dialogues with Three Rivers Wet Weather and its initiating institutions, based in convivial relationship, but actually loaded with power issues. As a result, this forced us to rethink our goals. We had dialogues with citizens where we spoke, we listened and we recorded what they had to say. We sought input on their perception, understanding and interest in postindustrial waterways. Many returned for all four years of the programme, creating a sense of fellowship amongst river advocates. These river and river trail dialogues were negotiated with the support of a range of non-profit activist groups who gathered with the intent to act upon issues of common interest. Finally we initiated two policy reports at the end of the project which are now applied through the action of our nonprofit partners to produce change in the region. We also organized an art theory and practice dialogue through the Monongahela Conferences and the 'Groundworks'

Art Ecology and Planning: Sections III and IV exhibition in the fall of 2005. I will return to the overt cultural aspect of the project in the section that follows.

The plan of 3 Rivers 2nd Nature was to focus upon the idea of green infrastructure, our forests, wetlands, streams and rivers as a subject of integrated interdisciplinary analysis and public discourse. Our work was intended from the start to reveal and enable desire for nature and water based recreation in the region. The team had a clear understanding that within the region, recreational desire was in conflict with current environmental management practice, their impacts, and industrial transport usage. In light of this, we provided a set of public advocacy tools that would help anyone with an interest to develop an appropriate argument and action. In this, the work was designed to contribute to the function and discourse, the desire and the conflict, which is typical of the post-industrial public realm.

On one level, we saw the rivers and the burgeoning forests as a natural aesthetic opportunity that was wrapped in a social, political problem. Following Eaton, the aesthetic condition of the rivers was one of ill health. As a public resource, the challenge was to, 1) initiate and sustain a culture of care, 2) reveal the actual condition of health, 3) clarify the range of response to the pathology. In the case of the forests, a miraculous recovery had occurred. The question in that case was to identify the social and political actions that could undermine that recovery, and develop a creative response to that challenge. The questions of rivers and water, trees and air link into subject-object aesthetics. The questions raised by the project on the rivers and forests link into the discourses typical of the public realm literature, as well as the analysis of intersubjective aesthetics and attendant ethics.

Art Ecology and Planning: Sections III and IV

The products of 3 Rivers 2nd Nature can be characterized in different ways. If we are speaking to artists, we explain that we have developed a process of discourse and tactical analysis that results in strategic knowledge and platforms for discourse. Supporting that process includes the development and creation of images, concepts and narratives that describe the potential for aesthetic evolution and a devolution of authorship over the course of the project. As the content becomes more focused, our grasp on it weakens. Actual material outcomes will be created after we vacate the project. Our interest in concepts (data) and the empirical experiences that inform perception creates the basis for new metaphors and social narratives to take hold. They have the potential to become the foundation of social and political interest that leads to physical change.

In discussion with artists, the practical elements of the work are often challenged. In discussion with planners, the question is how applicable the work might be, what resources are available to realize the ideas. In discussions with decision makers, it is the claim to fact, or truth (most often through science) that is the path to validity and potential contribution.

Water

As we began work on the water program of 3 Rivers 2nd Nature, we found ourselves immersed in a highly politicized and hierarchical culture. We entered this world somewhat naively with the belief that our idea of strategic knowledge would have rational impact. Based upon experience at Nine Mile Run, we assumed, at the least, we would be able to diversify the regional discourse about nature, water and land in

Art Ecology and Planning: Sections III and IV our region. These are systems that suffer from the regional propensity to rely upon the exclusive presence and gaze of the engineer. Engineers are assumed to be the scientists best equipped to quantify and confirm the efficacy of plans and actions. Engineering, finance and legal expertise were the dominant focus within the culture of Three Rivers Wet Weather. The finance and legal experts being best equipped to manage regulatory oversight, the legalities of enforcement, and fee structure, grants and loans for related improvement and maintenance costs. These are highly codified disciplines that are ill prepared to consider creative alternatives. The material problem was regional in scope, yet constrained by limited resources to act. In response, the problem was widely perceived to be one of unwanted federal oversight, rather than an issue of public health or environmental responsibility, or the emancipation of our

rivers from the usurious domination of powerful interests.

What we discovered was that where science was often the privileged language of the discourse, it was just as often biased and at times simply ignored, roundly questioned or buried through legal action. What we thought was a simple question of rational but strategic contribution was tied up with complexities of power, authority and political control of the content and the context of the discourse. Without going into too much detail, let me explain why the rivers and streams are a difficult laboratory. The natural conditions of weather and flow, access and sampling methods make it difficult to control experiments, at which point the authority of the scientific method (which is invested in control and replication) is ultimately open to a never-ending series of challenges and questions. This is complicated by legal oversight of the data and control over its distribution with the intent to limit regulation and enforcement. In January 2003, I wrote 'Information and Authority: The Perception of Water Quality'

Art Ecology and Planning: Sections III and IV (Collins, 2003), a general overview of the science, the politics and the public realm issues attached to water. I presented an illustrated version of the paper to a local regional engineering conference. A year later, the issues raised in that text became a focus of a request for funding. I used excerpts from the paper, to make an argument to hire an attorney who wrote, 'Where the Waters Converge' (Luneburg, 2004). Lunenburg's paper analyzes the local, state and federal system of regulation and enforcement for its lack of regional efficacy. He recommends alternatives used in other areas of the United States, options that would effectively diversify the range of voices and interests that dominate the discourse at this time. Both texts are available on the 3 Rivers 2nd Nature website, under water policy.

The issue continues to be unresolved; in a recent publication by the Urban Age Institute in San Francisco, Gordon Feller interrogates the water and sewer crisis in the region. John Schombert, Executive Director of 3 Rivers Wet Weather clearly describes the problem in two quotes in that article. "I agree that water data and other performance data should be in the public domain, but it is unlikely that public facilities will want to deposit their data in a system that is maintained by the Riverkeeper concept" (Feller, 2006, p. 65). His discomfort is related to a fear of environmentally motivated interests that could use this data in legal action at the state and federal level. In this case 'Riverkeeper' has become a straw man for the dominant institutional position.²⁷ The broader regional issue can be described in terms of the lack of action on the part of local and state regulators (they do not enforce). As a result, the federal government takes legal action against the sewer authority and all the smaller municipalities. They defend by collecting no data, and/or releasing no data. Everyone is complicit and complacent and no change in regional water quality is

Art Ecology and Planning: Sections III and IV the result. The 3 Rivers 2nd Nature water quality database is the most widely referenced water quality database in the region; yet neither the state nor the federal government will accept that data into public databases. Later in the same article, Schombert is referenced for his support and interest in the Luneburg report, which defines the problem and outlines a range of solutions that have been tested and applied elsewhere in the country (Feller, 2006, p. 74). If one were to compare the information available on water quality on the Cuyahoga River in Cleveland, Ohio (the only river in America to have once caught fire) you would find an in depth public database. Comparing that data to what is available today in Pittsburgh Pennsylvania, you would think that western Pennsylvania was either an undeveloped country or that it had somehow missed the political and legal impact of the American Clean Water act passed in 1972 and amended in 1977.

It is worth noting that Three Rivers Wet Weather had and continues to have best intentions. The organizational focus is upon technology, finance, education and partnership. The 3 Rivers 2nd Nature focus was upon ecosystems, strategic knowledge and democratic discourse. The missions are similar, the intent and context for operation is different but the most important point is that the former was grounded in a belief in the efficacy of institutional response and a relationship to the resource based upon technology and engineering. The latter was grounded in a belief in the transformative potential of institutional alternatives and a relationship based upon social and scientific approaches to ecology. More importantly, the former cannot tolerate the latter; this is a question of power and authority. The latter assumes a critical coexistence with pulses of both conflict and conviviality. In the end, the metagoals of clean water and a healthy environment are exactly the same.

<u>Land</u>

Our land based activities began with a focused four year study of river edge conditions. Where the water team faced conflict throughout the program, the land team found that the institutional and public response to their process and outcomes to be less of a point of contention. More often than not, the work was accepted as an inspirational rallying point that opened a sense of regional opportunity. During our River Dialogues, the presence of forest cover and our ability to describe it and locate it in great detail was of much interest. Photographs of forested sites and large trees elicited a sense of pride and wonder at the resilience of nature. The impact of these studies and the confirmation of a nascent idea of recovery were reinforced by the experience of being out on the river. The view from the river is of an open space framed by trees on the banks and steep slopes beyond; it was a point of significant interest for all involved. From the roadways that parallel the rivers, the post-industrial dereliction, screened by the riverbank forests, dominates the view. From the river, an image of ecological recovery is a salient counterpoint to the historic industrial condition. The citizen input into the land based program was more difficult. In the end, primary input was in relationship to the river trail plans and the access and egress issues from land to water.

As the project began in 2000, a collaborative interdisciplinary team led by an artist, with a botanist and a geologist began work. They focused upon the acquisition of images and information about river edge forest cover and the bank slope and berm conditions. Our goal was to provide a scientific overview of forest tree species, forest density and the dominant plant community, as well as a review of invasive plants and

Art Ecology and Planning: Sections III and IV desirable wetland indicator plants (wetlands can be protected through delineation and federal government legislation). A geology study of berm (the edge formed by normal low water) and bank (the edge formed by high water/flood) conditions and materials complemented the botany. Ultimately the team wanted to understand soil/forest relationships and be able to provide guidance on systems worthy of preservation, organisms deserving of conservation interest and areas with restoration potential.

This team was providing important specifically located information about natural systems that were under development pressure. To understand the scope and scale of this effort, the reader has to understand that the riverfront was broken up into 1/10mile increments on a computer (GIS) map file that was downloaded to a global positioning system (GPS) receiver that we took out into the field. Each section required two to three very slow passes along the shore in a boat to get all the necessary information for the database. Wherever bank berm/slope condition changed, physical samples were taken. The terrestrial team worked on 50 miles of riverfront each summer, for a total of 200 miles of waterfront over four years. This mapped database has the potential to inform municipal land use controls. development interests, landscape design and activists interested in promoting the protection of natural systems. In the fourth and fifth years of the project, we began a series of computer mapping (GIS) studies to ascertain the relationship of existing forest cover to watersheds, steep slope lands, municipal boundaries and zoning, areas of economic need, areas of open space need, and connections to the river edge conditions mapped previously. We were trying to get a sense of the scope and scale of remnant and recovering forests throughout Allegheny County.

Art Ecology and Planning: Sections III and IV I hired an urban planner and an environmental planner; they began working closely with me to review the theories and methods of landscape ecology analysis. We were particularly interested in the work of landscape ecologist Richard Forman (1995). Working from his treatise and an existing GIS forest cover package, we were able to develop a process that was adjusted for, and useful in, an urban condition. We wanted an analytical method that would explicate the recovering forest conditions and give us a sense of the cause and effect of management action. We ran GIS studies that told us about the places where forest cover was healthy and areas where forest cover was poor. Furthermore, the work helped us identify places like the economically deprived Monongahela River Valley, where huge swaths of forests and steep slope lands revealed remnant or recovering forests. When we analyzed the map for the amount of parks and managed open space per person in each watershed area, the Monongahela River Valley was also in the lowest percentile. The questions were, who owns this land, and could it be preserved, conserved or restored in any way? Following guestions include, what were the methods and means at hand to act upon such an idea? Ultimately action is predicated upon resource and working models.

By 2004, we had a significant series of map analysis well worked out. Using the watershed as our primary spatial framework, we ran studies on the remnant and recovering ecosystems of the region, as well as on the social and natural configuration within the region. We wanted to find out who benefited from what and why. We also ran a study on regional zoning trying to understand if the policies of the day either enable or constrain natural recovery. We had hired a recently retired university law professor with a focus on land use and environmental law to work with us. We began a series of discussions about zoning, and mapping, and the levels of

Art Ecology and Planning: Sections III and IV ecosystem study that had been undertaken. At this point we had integrated the forest cover studies and geology along the riverbanks, bio-assessment of streams and the watershed based GIS mapping project into one single map database. We spent a month or so in meetings discussing the content and its application in a planning and policy context. The attorney began to draft an outline with us. We finally settled on a program of analysis that would provide a one-stop-shopping list for anyone interested in land use intervention. The results were almost 18 months in development. 'Ecology and Recovery Allegheny County' was published and released to the public by the STUDIO for Creative Inquiry in early Spring 2006. The intent of the report was to examine, value and rank the remnant and recovering forest ecosystems that support the natural health of the rivers and streams of Allegheny County. To activate that knowledge, we analyzed techniques for preserving, conserving and restoring these systems through both scientific and political methods. Two of our outreach advisory board members, representatives of the Allegheny Land Trust and the Pennsylvania Environmental Council, are currently using the report as a reference and a guide for conservation project development.

In April 2004, we got a call asking if we could reapply our work at a tighter scale within the City of Pittsburgh and look at steep slope land and zoning with the Perkins Eastman Architecture firm and Allegheny Land Trust. This 'Hillsides Project' was a fast track effort with a member of Pittsburgh City Council ready to act on the ordinance, a politically powerful citizens committee prepared to make a recommendation to City Planning and quite a lot of work to be done. In an odd turn of events, the architects elected to go with a more empirical urban design based argument while the artist led ecology team went with a carefully argued objective

Art Ecology and Planning: Sections III and IV position based on quantitative data reinforced by the legal argument. The result was two concurrent reports rather than a singular report. The synthesizing element was a legal overview by the same attorney who was the 3 Rivers 2nd Nature land use consultant. In the end, the two reports provided essential and complimentary results.

The Hillsides project was difficult, the time period was challenging, the work intensively interdisciplinary, multi-institutional and dialogic. We resisted that work initially as being too applied, then decided to begin that work with the intent to build systems for democratic discourse about land use. The controversy that initiated our work began when zoning that was once used to protect hillsides land was about to be changed to enable development. Plans were subsequently made by the Pittsburgh Urban Redevelopment Agency for new development on steep forested slopes on Mt. Washington, A group of citizens, led by Lynn Squilla and the Mt. Washington Community Development Corporation, wanted to protect that land as open space and decided to challenge this. Subsequently, the 'Hillsides' citizens committee made their own recommendations (based on our study) to City Planning, and the proposal was put forth for approval by City Council in August. The City Urban Redevelopment Authority blocked that proposal. In December the proposal finally passed, and the first steep slope city park was established in December 2005. More land was added to the park in March. I have email from Squilla who recognized our contribution in her own success (Squilla, 2006). There is an online account of the expansion of those interests to a full scale park in 2006 by Roy Kraynyk, a partner in the project on the Allegheny Land Trust website (Allegheny Land Trust, 2006, Pittsburgh Park). I have another email note from a board member at Allegheny Land Trust who wrote an opinion for the editorial page of the Pittsburgh Post Gazette (McShea, 2006). The

Art Ecology and Planning: Sections III and IV work was done in intensive consultation with all involved over a period of eight months.

Transformative Art

Our interest in this work (and our potential contribution) was always to move public discourse from divergent and inchoate forms towards a sense of clarity and focal intent. This is tied to a sense of instrumental responsibility, which is both the strength and the point of critical weakness in the work when it is examined as art.

In 2002, we began planning to initiate a series of dialogues that would help us clarify and better understand the meaning, form and intent of transformative practices. We were seeking to engage our regional colleagues: artists, environmentalists and those that seek change in a dialogue about creative agency and transformation. We also wanted to serve our area of transformative art practice. Following our responsible dialogic model, we wanted to arrange opportunities for discourse, carefully record that discourse, then provide public feedback in the form of Internet or text based publications. Finally, we wanted to ratify the import of this work through international exhibition, to provide at least one point of reference in the U.S. to recognized artists that have made deep and consistent commitments to change based practice from all over the world. An initial grant to the Pittsburgh Foundation requested funding for the creation of a 'social sculpture', a closed seminar and two public lectures that we titled the '2003 Monongahela Conference'. This was followed by a larger proposal to bring groups of artists into Allegheny County for a period of a month or more in the 2004 Monongahela Residencies. The final event was an exhibition of work from all over the world; 'Groundworks' was curated by Grant Kester of the University of California, San

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Diego. It was complemented by the 2005 Monongahela Conference, which opened
the exhibition.

For the 2003 Monongahela conference, we proposed to gather 15-20 participants to discuss the intent, the methods and means of this area of practice. The entire 3 Rivers 2nd Nature team got involved in identifying artists and theorists and reviewing and making copies of documentation of their best work and its relationship to social and environmental change. We were interested in a diversity of ideas and approaches. The conference intended to initiate a specific structure and attempt to clarify it through dialogue. We asked the delegates, 'what do we as ecologically and socially minded visual artists bring to an urban place that reveals, enables or initiates change?' Artists were chosen for what they do, but also for their ability and previous success in working with others. The conference was an experiment; it provided a seminar environment that would allow us to learn from one another. We also spent a brief amount of time exploring small post-industrial river towns in the Monongahela River valley: Braddock; Homestead; and McKeesport, Pennsylvania. We knew that the artists and theorists identified for participation in this conference had unique and even divergent practices, yet we believed they shared basic commonalities. First, we assumed common ground on philosophies and the application of theory in their work. Secondly, we assumed that they would be willing to discuss the practical application of arts processes and practices. In the first day we were interested to see presentations of their work and to hear answers to questions such as, how do you do your work, what are the goals and intentions? And, what are the methods and means you use in your work? In the second and third days, we were hoping to find some clarity in the way that these transformative practitioners influence and act upon public Art Ecology and Planning: Sections III and IV places and public discussions. We put forth the goal of assembling a transformative practices toolbox that might promote and guide transformative practices. Finally, we were interested in a closing discussion about externalizing creative authorship. The complete record of the first Monongahela Conference, along with all the papers from the participants, as well as detailed notes and a final synthesis that I wrote following the discussions can be found at http://moncon.greenmuseum.org/index.htm. Below is a brief overview of some of the key ideas raised during the conference.

I should preface this by saying in the days following this conference, we were all excited, overwhelmed and struck by the idea that we had been through a weekend of intense discussion. The high points of the conference included public lectures in the Carnegie Museum of Art theater by Dan Gretton and Jane Trowell of Platform the first evening, and panel discussion with Suzi Gablik, Grant Kester and Malcolm Miles the second day. The low point was a disappointing turnout for a community dialogue in Braddock on the last day.²⁹ There were two points of conflict within the conference structure itself. First, artists are deeply committed to their unique differences and the suggestion of common methods challenged that idea. Secondly, the word 'tool' became a focal point for dissension. Some insisted that tools were only used in instrumental endeavors that had nothing to do with art. Others felt that any attempt at clarity was reductionist and undermined divergent practice. Others felt that artists use all sorts of tools, and if we are to teach this 'alternate practice' we need to clarify a common (but not limiting) set of ideas and techniques that can be taught and then expanded upon. Revisiting the topic a day later, the group came up with eighteen tools for transformative practice. There are two separate records of this interaction in the Friday Morning and Saturday Morning discussions that the reader can refer to on

Art Ecology and Planning: Sections III and IV the Greenmuseum web site. This can be found at:

http://moncon.greenmuseum.org/notes/indexNotes.html.

Important points made during the Friday discussion include:

- Suzi Gablik reminded us that the primary tool that we all share is a commitment to the discourse that we carry on amongst ourselves.
- Nicola Kirkham identified our creativity as our common ground, reminding us that it is also the very thing that divides us. Unique difference is the very foundation of who we are as social and professional beings.

Gablik's point is an important one for this area of practice. With a relatively small group of critics and theorists interested in this area, it is up to the practitioners to sustain dialogue amongst ourselves. Following Kester, the best of the work does not need a critic, but the artists that follow will benefit from a historical record. We will benefit from the opportunity to share, compare and further develop what we are learning. Kirkham reveals the fundamental issue that will continue to divide us even as Gablik encourages us to gather. Despite a new awareness of collective, collaborative and interdisciplinary practice, systems of support and reward remain focused upon primary authorship. This is particularly true within the academic learning environment, somewhat less so amongst the institutions that provide professional opportunities. Similar to the convivial and conflicted forms of the public realm described earlier, the transformative art practitioner must embrace this tension between unique and social approaches to creative practice.

Art Ecology and Planning: Sections III and IV The 2004 Monongahela Residencies were intended to insert artists into three communities that had been severely affected by the economic downturn and social impact of the post-industrial economy. The focus in this program was to support the artist's work. To accomplish this, the entire 3 Rivers 2nd Nature team reconfigured themselves and their office equipment to support three public studios through research, outreach and project development. In addition to the normal project team, we hired a young landscape architect and two recently graduated artists who had a proven ability to develop and promote public meetings and events. The 2004 project team consisted of myself, our creative director Reiko Goto and our research associates, an artist and two architects (the three of them served as site managers). They were each set up with the complete 3 Rivers 2nd Nature database, image store and contact list. Each site had computer support, mapping software, a printer, digital camera, internet, telephone and various analogue office and creative production support sytems. The landscape architect and outreach coordinators were on call and available to each office with some advance planning. We had spent months preparing the infrastructure and human resources to enable the success of the artists. During the month of June 2005, twelve artists, designers, and architects were placed as artists in residence in Braddock, Homestead, and McKeesport. We expected that they would generate public discussion about the relationship between cities, nature, regeneration and social/environmental change. Seven artists who lived outside Pennsylvania were brought into the region to work alongside five artists living in the region. The artists were given one task: to initiate change. The artists and 3 Rivers 2nd Nature team members worked from a library, a storefront, and a municipal office five days a week. Each Friday we hosted a project dinner, followed by a public lectureArt Ecology and Planning: Sections III and IV discussion about the issues the artists had become involved in. Municipal officials and citizens were always invited (and did attend) these events.

As we developed the plan for the project, the question from many in these communities was, how much time would the artists spend and how serious would their commitments to these places be? The response was to tell the truth, reveal the scope of the funding, the contractual requests for their time and make it clear that the budgets would likely result in nothing more than illustrated ideas (concept plans) and an opportunity to discuss these places with interested outsiders, artists that were interested in collaboration, social creativity and change. From our point of view, the question was, could the unorthodox potential of art create a small breach in the rational day-to-day realities of life in these places? Could the artists help initiate or develop a creative nexus in these communities? The artists from out of town created excitement, and the artists from within the region gave the local citizens and leaders confidence that a greater commitment was brought to the work. All of the artists went well over their paid time to do this work; many remain in dialogue at various levels of interest even today. A few have sustained a deeper interest and are seeking funding to support long term working relationships. The 3 Rivers 2nd Nature research assistants ably facilitated the artists, helping to set up meetings with citizens and officials, planning travel, site tours and boat tours. They also provided in depth support in computer mapping, design and photographic rendering.

Reviewing this project eighteen months later, the question is, was this a process of engaged creative dialogue that inspired people? Or, was it merely another project where artists parachute in and then out with their fee in hand? The solution to the

Art Ecology and Planning: Sections III and IV in/out scenario had two variables. First, we placed recognized regional practitioners in relationship to the artists from outside the region. Secondly, we worked closely with public officials, non-profit agencies and interested parties that saw the benefit of artists in their midst. It should come as no surprise that there were a range of outcomes in the end. Some artists simply moved in and out of the region, their lives complicated by other projects, teaching or personal issues. Others retain a longer term interest, although to sustain that will require clarity from the artists in terms of what they will do next, possibilities for funding, and an opportunity for further engagement. Some of the artists are better than others at developing their own projects, some of the artists are so successful and in demand that they simply move from project to project.

In McKeesport, the Mayor helped the artists Jackie Brookner, Stephanie Flom and Ann Rosenthal find a focus on the trails along the rivers. They also had significant support in this matter from the Monongahela Trail Council, as well as a local community activist. The Mayor threw the full weight of his office into the project, gave the team a highly visible place to work in (a municipal building) and provided access to the Town Manager and his personal assistant to set up meetings with citizens that would either be interested in or critical of such an idea. One of the artists continues to work through his office to seek funding to take the trail to final design and construction. In Braddock, there was interest but less of a desire to manage the six artists beyond locating them in the historic Carnegie Library, one block from a planned highway that bisect the town. The Mayor came to a series of meetings, as did a local foundation director to help the artists get oriented to the specific challenges of this community. A link with a young activist who became mayor in the 2005 election

Art Ecology and Planning: Sections III and IV has resulted in an ongoing discussion with Ground Zero members, Jonathan Kline and Christine Brill. Their project has made the location of the highway a performative reality within the community and a sculptural focal point for activist interests. Kline and Brill developed a carefully rendered model which featured an 'eminent domain' pull out section, where houses, community centres and a new pre-school are all replaced by a six lane highway. Performances occurred within the community, the model was displayed throughout the region.

The final site was Homestead Pennsylvania. This site was the hardest to get established. Or, it may have been that we simply ran out of steam trying to put the program in place. This project team was semi-adopted by the Monongahela River Arts Council who provided a storefront workspace, which became the central point of all our Friday evening activities and a gallery space that tracked the development of the project. The artists gravitated towards a highly contested development site just down the road from Homestead. A six hundred acre forest had gained 'special development status' and was the site of a proposed coal-mining project that would eventually become a horse racing track and housing development. Significant connections were made with the Sierra Club, Penn Future and a group of community activists who were seeking support for alternative visions. Tom and Connie Merriman were appointed as research fellows in the STUDIO for Creative Inquiry in 2006, where they continued their work developing images, maps, texts and website materials in support of the Hays forest. In December 2006, the allies working against the development reported that the Pennsylvania State Department of Environmental Protection had denied the application to mine coal.

Art Ecology and Planning: Sections III and IV The GROUNDWORKS exhibition and 2005 Monongahela conference were the final steps in the project. Curated by Grant Kester of the University of California, San Diego, the exhibition was planned with the intent to recognize new modes of environmental practice and aesthetic experience. Kester's interest is focused upon the history and theory of human relations and the creative potential that lies within a combined critical and convivial discourse. There were four additional authors in the catalogue, including Maurine Greenwald, who provided an overview of environmental history and the role of artists in the environmental conditions of Pittsburgh. Andrew Light, an environmental philosopher, provided a social and political overview of environmentalism before focusing in on his interest in the ethics and process of interrelationships between people and ecosystems. Maria Kaika, an urban geographer, discussed the desire to remain outside nature, then focused upon her interest in nature, cities, questions of power and the production of environment through lived experience. Malcolm Miles, who has been discussed previously, offered a green aesthetic based in a mixture of theoretical propositions from Kant and the Frankfurt School.

The exhibition was set up in the traditional gallery format, where the work could be easily compared, contrasted and synthesized by viewers. The exhibition covered three floors of the Miller Gallery at Carnegie Mellon University. GROUNDWORKS provided a visual overview of fifteen major collaborative projects. Eight additional new-media works were presented in a ground floor media centre. Seven of the projects were presentations by artists that had been involved in the previous Monongahela Conferences. This was to be the culminating presentation of their work effort. We opened the exhibition on a Friday and then held a two-day conference. We

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Art Ecology and Planning: Sections III and IV planned the conference to elucidate and question the role and function of art in social change.

Keynote speaker Tom Finkelpearl author of 'Dialogues in Public Art' (2000) initiated the conference program with a brief overview of Bob Marley's life and music. Tom's presentation on Marley was intended to initiate a discussion about the role of art and music in social cohesion, social struggle the integration of conviviality and conflict.

It was inspiring to hear the artists from all over the world talking about their projects, the issues that initiated their creative engagement, and the process and methods that they brought to the desire, as well as the need to respond. Rafael Santos provided an overview of his work as a member of 'Ala Plastica' in Argentina. He provided us with a context and the impetus for their work, the recovery of public space from 15 or 20 years of military control. The presentation focused on their efforts to achieve new public realm equities and ecological sustainability as well. Speaking of his work on the Monosegawa River in Japan, Ichi Ikeda offered a unique and visually stunning approach to a public dialogue about the problems of water and society. This provided a potent counterpoint to Helen and Newton Harrisons' provocative proposal 'Fecal Matters', an innovative and bold alternative storm water system they had designed for Braddock and North Braddock, Pennsylvania. Navjot Altaf's work focused upon developing a discourse of design and interaction between and across communities of people separated by a historical caste system; she provided another view of art, culture and environment that was local, oriented towards the feminine and responsive to need. There was a clear point of comparison between the work done in Mckeesport Pennsylvania by Brookner, Flom and Rosenthal to work done in Elkhorn City Nevada

Art Ecology and Planning: Sections III and IV by Lacy, Steinman and Kobayashi. The conference provided an important sense of displaced contextual consciousness, a clarity of the commonalities of our interests yet the fundamental differences of our social and political realities. Grant Kester closed the event with an overview of his understanding of the practice and its ideals. He sketched out the history and the current theoretical struggle over the validity of this work, describing the work as an essential meta-institutional response to those things that the state and market simply do not attend to, in these places that these artists choose to initiate and carry out their work.







Illustration eleven: The Monongahela Conference Programs: Grant Kester provides the closing keynote for the 'Groundworks' conference, Friday night dinners and public meetings from the Monongahela Residencies and finally, the 'Greenmuseum' website/archive from the first Monongahela Conference. 3 Rivers 2nd Nature, STUDIO for Creative Inquiry, Carnegie Mellon University.

Conclusions

In the process of developing this body of work, I discovered that intimate proximity and sustained relationship to rivers, land and natural systems was an essential precept for aesthetic interest and value. For those who enjoyed intimate and regular experience, the opportunity and its aesthetic condition is easily understood; at the same time there is little understanding of the complex problems that impact these systems. I would argue that problems of natural systems in an urban setting cannot be defined by science alone. Elements of the water problems, for example (such as fecal coliform counts (a sewage indicator), or benthic organisms as indicators of ecological health), can be defined by science. To define the larger systems problems, the cause of these effects is an interdisciplinary effort. To visualize it or conceptualize an issue like this and its positive and negative impacts is a challenge worthy of art and science collaboration. The question is, in whose interest shall we labour on these questions? Who pays? Who benefits from the output? Those that manage the systems as infrastructure (water source, coolant, sewer or sink) for industrial or municipal interest; or should we benefit nature (ecosystems and biodiversity) itself? How about the subordinate recreational users, and advocates of the natural elements of the system?

Our project team was consistently able to engage citizens and activists on the broader realities of these issues in terms of dialogue and intersubjective experiences on regular boat tours. We found that there was much shared empathetic insight amongst all involved (even those that opposed us) once the issues and opportunities were clarified. While there was not always agreement on direction, the individual care

Art Ecology and Planning: Sections III and IV for the resource was quite inspiring and consistent. However, the dominant institutional and municipal interests that control the regional water policy discourse remain invested in defensive legal positions and political and economic stasis. In the last discussion I had with the assembled members of this dominant group of institutions, I asked, what would break the stasis? They all claimed that the federal government was going to have to pay before they would take any significant movement towards change. There was no sense of responsibility for the failings of the sewer and storm water systems or the lack of transparency or access to information through public institutions in Pittsburgh, Pennsylvania. Equivocation is a tool of power, not liberation.

We recognized the need to engage colleagues in a deeper dialogue about what we were intent on accomplishing. The project team sought to move our practice forward in both theory and creative method. While we were tuning our own practices in our Monongahela Conference symposia, we were also disseminating the spirit of this work to others. In the first Monongahela Conference, Jane Trowell and Dan Gretton of 'Platform' held the audience in rapt attention in an evening lecture in the Carnegie Museum Auditorium. They entertained and amazed us with their careful analysis of the social and economic relationships of the industrial economy and the pure unremitting avarice that effort required. The following night, Suzi Gablik, Grant Kester and Malcolm Miles sat in those same seats, for another night of discussion. A year later I sat in a conference room with twelve people in the Braddock Library as Helen and Newton Harrison and Jonathan Kline and Christine Brill worked through the social and political approach to lost streams and storm water in relationship to the economic hardships of Braddock. With a clear understanding of the economic

Art Ecology and Planning: Sections III and IV impossibilities, the Harrison's began to unpack an alternative to the utter amazement of the municipal planners, the architects, real estate professionals and engineers at the table. I watched as Walter Hood and Alma Dusolier sat at a long oak table in the Library with a child from Braddock and dreamed an alternative future with him, getting his hands into the illustrative designs. I heard his voice, later talking with friends and family speaking with confidence about ideas that were confirmed by the presence of these Californians. The following question is whether or not his confidence would be sustained. New leaders are emerging from within his community, and he may find his way forward into a future that he has a transformative voice in.

Following Kester, it is possible to outline a framework and methodology to engage with work that intends a discursive approach to creative practice. First, the work is based upon listening and a dependence on intersubjective vulnerability. Furthermore, it is focused upon the generation of local consensual aesthetic knowledge rather than a universalized knowledge. He is interested in three main points of critical analysis: the context, which includes the speech acts and process of the dialogue, the quality of the intersubjective exchange, and indications of empathic insight (Kester, 2004, pp. 107-115). These methods are applied by Kester to ascertain the nature of the relationships that develop between artists and citizens.

Regarding listening and intersubjective vulnerability; our interactions were always oriented toward the artistic development of a discursive public realm. But the work was not confined exclusively to citizens; on this project we were more focused on the bureaucrats and decision makers during the development stages. Although the outcomes were intended to contribute to citizen led interests and an informed public

Art Ecology and Planning: Sections III and IV sphere. Part of the challenge of this project was the steep learning curve; on one level artists and citizens alike entering a primarily scientific discourse carrying a certain amount of vulnerability in relationship to those with expert knowledge. But what Kester is getting at here, is not vulnerability but rather the shared openness that comes with strength and confidence in the discursive setting. Maybe a better way to think about this is in terms intersubjective reception, rather than vulnerability. My experience of teaching tells me that people learn best when they have some confidence in their own developing worldview. A good listener, is not someone that is vulnerable, but rather someone that is comfortable and receptive to new ideas.

Regarding the idea of local consensual aesthetic knowledge, the project, in its water, and conference phases, was intended to return new ideas that informed aesthetic knowledge and its relationship to value. Subsequently, we developed programs to help reveal tactics that would allow those that were interested enough to act through existing social, political and regulatory programmes. From our point of view, we were functioning as artists in that our interests were aesthetic, defined in material terms as clean water and healthy forests, each with an experientially rich attendant ecology. In conceptual terms, the work intended to create a shift in the frame of perception.³¹ Through that shift in perception we hoped to initiate a creative discursive and democratic dialogue about the changing form, function and value of nature, art and democracy in Allegheny County Pennsylvania. The work on 3 Rivers 2nd Nature occurred at a different scale than that of Nine Mile Run. As a result, the context was different and in the end, it did not seem as readily accessible from a public or radical democratic perspective. The work on this project was focused upon decision-making and policy, with the public perspective and access primarily provided by non-profit

Art Ecology and Planning: Sections III and IV institutions that guided us in the development of the research and its output. As a result, the work was focused upon a bureaucratic discourse rather than a democratic discourse, although the intent was to provide access to bureaucratic systems through strategic knowledge. As discussed, this had both successes and failures.

Again (as with Nine Mile Run), the questions raised by Kester of the quality of the speech acts, the process of the dialogue, and the indication of empathy is a complicated analysis to apply. The speech acts varied from project area to project area, and also in terms of the process of the intent of the discourse. As a general rule, all dialogue was recorded in some form or fashion. I, for instance, kept detailed notebooks on all meetings and discussions that I attended.³² Advisory board meetings used large paper pads to document the process of discussion and decision-making; the public meetings included recorders at every table who were asked to record quotes and names to insure a public record of important and provocative ideas. The recorder worked in tandem with the person taking notes on the large pads; as the discussion progressed the oversize notes were placed on the wall for review making it clear what was heard and what had been recorded to inform the public record. What is important to remember is that in a complex multi-year project it is improbable that anyone can follow a consistently strict theoretical, moral or ethical guideline about speech acts. That is not a reason to ignore them, it is simply a point of reference; the more we attempt to use these ethical guidelines the better we become in applying them in new and unusual circumstances. It was clear to us as the project developed that the discursive reality was significantly more complicated than the theoretical and moral guidelines that informed us.

Art Ecology and Planning: Sections III and IV The idea of empathetic identification goes beyond Habermas's ideas of rational discourse, where each person in a public dialogue embraces their own position and that of the discussant as they work toward consensus. Empathy suggests that we subsume our own interests and ideals while sublimating the interests of one's discussant partner. Rather than simply validating this idea, we must consider that our culture is filled with empathetic agents. There are whole disciplines that are trained in the highly developed systems that focus and enable empathetic identification with ones employer, or client. These disciplines and the capitalist framework they operate within train people to identify with and act upon the interests of others. I don't think that is what Kester intended in his treatise. He wanted to make the point that the arts, deeply invested in self expression, has developed a range of practice that is moving away from the interests of the individual author toward shared creative authorship. This is significantly different in that it distributes responsibility, interest and effort—at least in theory. The problem with the application of this theory is that responsibility. interest, and effort are often sustained or undermined by the costs involved. This is true in terms of the production and participation sides of the dialogue. But it is not just cost; interest and effort are also sustained through the rewards of meaningful experience and a sense of efficacy in participation.

Working on 3 Rivers 2nd Nature, we accepted this responsibility; at the same time, we made it clear where we were going and what we hoped to accomplish. For some, this kind of instrumentality would undermine any sense of empathetic identification. . We constantly worked towards a sense of collective public interest. To accomplish that, we needed to make our intentions clear, recognize the validity and import of the

Art Ecology and Planning: Sections III and IV collective gathering and activate the best and most meaningful outcomes of collective interest.

If I examine 3 Rivers 2nd Nature against Nine Mile Run, one difference is defined by the lack of a physical gathering point, a space of public gathering and discourse. This idea is presented (and intentionally ignored) by Kester as the. "...mise-en-scène for dialogic interaction" (Kester, 2004, p. 189). The idea has more aesthetic validity for both Lacy (1995) and Bourriaud (2002). In hindsight, this idea of a focal point for discursive interaction could be thought about as infrastructure that supports the inter relationships which sustain a programme of collective interest. That focal point does not necessarily need to be physical it can take the form of an organized social space, a space of publication, or an internet community.

The other thing that is important to consider is that we didn't fully understand the depth of conflict that surrounds scientific facts and their political representation. When artists identify breaches in the rational truth about land and water, what can be done about it? These are the fundamental issues that occurred in the final years of the project. There are two approaches to this kind of problem: one is to work closely with the people that know the system best to identify a solution to the problems in that system; the other way involves a sense of clarity that the disciplines that dominate the system also constrain the range of solutions. From my point of view, critical distance was key on the 3 Rivers 2nd Nature water programme, as well as the land programme. Empathetic intimacy was more important on the Monongahela Conference programs, although the reality of funding and time made that intimacy a real challenge to accomplish. From a more general point of view, I would suggest that

Art Ecology and Planning: Sections III and IV transformative art needs to embrace critical and empathetic methodologies concurrently. Where hegemony is in place, criticality and a commitment to sustained rational discourse is a key methodology. Where there is little or no hegemonic interest in place empathy is a key methodology. But this is simply a generality; the realms can never be exclusive. For example, reconsidering the highly conflicted water project, I realize that more empathy might have helped me find a less conflicted path. I fully embrace the failures of the water program partnerships and the conflict and struggles with colleagues that emerged in the process. At the same time, I cannot help but wonder if the hegemonic intent of that regulatory sector may simply demand a critical, agonistic approach at this time. I believe it is going to take a social and political breach, a shift in democratic support, and intellectual avarice if that sector is to take responsibly and re-engage the public realm and public interest in a meaningful way.

The work on 3 Rivers 2nd Nature is not primarily visual, it includes conceptual and collaborative process that were dialogic by intent. The work was planned with the intent to initiate change and following Lacy (1995) this is the focal point upon which to concentrate ensuing critical analysis. Each and every effort was predicated upon understanding, learning and disseminating ideas about change. The work was a tiered collaboration throughout the process, with the team carrying out dialogues with experts, institutions and citizens all at the same time. The work resulted in a cascade of papers, reports, articles, catalogues and studies that have validity in the realm of informed public dialogue. The work presented here has been taken before City Council and a range of local, state and federal agencies by our colleagues, our acquaintances and ourselves. If we desire to expand the experience of creative discourse, we must enable understanding and insinuate and establish new platforms

Art Ecology and Planning: Sections III and IV where that can occur. If we want to enable transformative practice, it is quite clear to me that it is our responsibility to disseminate and activate the ideas and the outcomes from this work.

A complimentary set of questions that might help us evaluate dissemination and dialogic activation within a transformative art project might include the following: 1. Is there evidence of original thinking and unique language (visual, verbal, written text, symbol, narrative or metaphor) in the dialogic exchange that attends the work? 2. Does the work subvert the dominant consciousness, and elicit a sense of creative social connectivity amongst its collaborators, participants or viewers? From the beginning of the project, the name 3 Rivers 2nd Nature was chosen to suggest that the Rivers of Allegheny County were more than industrial infrastructure. They were not only a set of watery pools that controlled river transport through locks and dams; they were remnant ecosystems that had incredible aesthetic and ecological value. Indeed that aesthetic value was (and is) directly tied to the ultimate health of the attendant terrestrial and aquatic ecosystems. Furthermore, a functioning urban ecosystem provides economic value to a region in terms of natural infrastructure services. recreational commerce and a setting that promotes housing value (Farber, 2004). At the same time the eco-aesthetic condition is in a dialectic relationship with the remnant industrial culture that sees the rivers as a sink for wastes and primarily as infrastructure for large scale transport. This was the fundamental focus of the dialogues that we undertook with our institutional partners, our collaborative colleagues, and the citizen participants in the River Dialogues, or amongst artists and designers on the Monongahela Conference programmes. Returning to the first evaluative question, 3 Rivers 2nd Nature embraced the language of a range of

Art Ecology and Planning: Sections III and IV disciplines, although the images and concepts produced were original in their synthesis and in their dialogic engagement within the region. Arguing from an artworld point of the view, the work, while original in its scope in relationship to significant scale and rigorous method, was not an original contribution to art in the same way that Sonfist's 'Time Landscape' was, or Merle Laderman Ukeles work with the New York Department of Sanitation continues to be. It is a contribution within a a recognized area of art practice, in the same way that a painting is.

The final question asks if the work subverts the dominant consciousness, creating a sense of social connection amongst participants? I would not make a claim of 'subversion' of dominant consciousness without a significant sample of the participant population using a contemporary social science polling method. Although I would argue that a limited sense of impact upon the dominant consciousness and the social connection amongst participants can be ascertained through the review of various published reviews and texts. Maurine Greenwald discusses the work on Nine Mile Run and the Monongahela Conference residencies in her article in the "Groundworks" catalogue (Greenwald in Kester, 2005, pp 36-47). Cynthia Robinson reviewed the 'Groundworks' conference for the Community Arts Network (Robinson, 2005). Mary Thomas reviewed the exhibition and attended the conference for the Pittsburgh Post Gazette (Thomas, 2005a, and 2005b). The work is difficult to review from the position of art criticism. The critics typically attest to the areas of knowledge that are essential to the work, they also attest to the range of impact that the work has had on its exhibition or conference audience, and in Greenwald's case, upon the environmental culture of Pittsburgh (Greenwald in Kester, 2005, p. 46). Robinson accepts the work in the context of new genre public art practice and examines the

Art Ecology and Planning: Sections III and IV spirit and intent of the 'Groundworks' artists that worked in an overt community setting, which is the focus of that online publication. Thomas is a mainstream art critic. She has been following the work of the STUDIO project team for over ten years. She is always attentive and caring as she examines the work in the context of what is presented, as well as in terms of what was done previously. I don't think I'm being unfair when I say that she has struggled to reveal the work for what it is, to provide a context for her readers, to understand it and to defend its validity as artwork. In addition, Thomas does not shy away from the difficult questions. She comments that 'Groundworks' is the "...kind of exhibition that often leaves visitors scratching their heads and asking whether what is displayed is art" (Thomas, 30-11-2005). She provides an overview of Kester's catalogue essay and references the text written by Reiko Goto and I where we implicate the viewer in the dialogue as to whether or not the work is art. Her simple answer is to accept it, understand the context in the arts from which it has developed, and examine the veracity of its claims. In the end, she comments:

It's problematic to present all of the information compiled during and essential to such projects, or even to streamline their complexities, so that they are appealing to the visitor who's neither eco-artist nor conservationist. But such exhibitions are here to stay, and should be as long as artists are expressing themselves in this manner.

(Thomas, 30-11-2005).

The 3 Rivers 2nd Nature project does demonstrate impact upon the dominant consciousness and a sense of creative social connectivity amongst its participants. I would make that argument on the basis of the preceding critical literature and the

Art Ecology and Planning: Sections III and IV references to our work, discussed in the previous sections on water referencing Feller (2006) and our work on land issues referencing Squilla (2006), McShea (2006) and the Allegheny Land Trust (2006).

Art Ecology and Planning: Sections III and IV Many of my friends and colleagues have offered me critical appraisal of the 3 Rivers 2nd Nature project. Some say that art isn't intended to 'do' anything, others say why abandon one discipline specific context for another? One argument is that the value of the arts lie in an essential 'otherness' in the separation of creativity from practical realities; in this separation (following Marcuse, 1978) the arts retain the potential to renew society. While I think it is important to consider and discuss these issues, at the same time I think it is important to point out that these arguments are the basis upon which transformative practice is excluded from the dominant discourse. Another point of critical engagement with colleagues results in a criticism that we were too far within the system, too deeply invested in the useful when the proper domain of the arts is the antithesis of utility; indeed, many would claim that the intrinsic value of art is unto itself. Within this critical framework, there isn't much room for issue specific practice. Yet, most of my friends and colleagues are driven by an attention to the world and take pride in their positions on issues; they simply take a less instrumental approach to those issues in their artwork. In the second year of my doctoral studies, I sat in a seminar room as five socially engaged practitioners argued back and forth about the validity and import of their respective ways of working. As I listened to the self-

important bickering, I began a series of small drawings, which I presented to and

discussed with a colleague, Nicola Kirkham. To put this as simply as possible, artists

Art Ecology and Planning: Sections III and IV use lyrical, critical and transformative approaches to make art in a social setting; when these three approaches are envisioned within a venn diagram, the overlap and inter-relationship becomes clear. There isn't one dominant value; there are three methods that more often than not overlap in practice. In addition most artists find themselves working in multiple areas throughout their creative lives. Some stay focused in one area alone.

The body of work discussed here was deeply embedded in an intent to develop and test transformative methodologies. We were working within a funding structure that expected new knowledge to be coupled with strategic and effective outcome. As a result, we had to delve deeply into the system if there was to be any hope of addressing the intent that initiated the work. In the projects described in the last two chapters, we have simply taken art and juxtaposed it against ecology and public

CRITICAL EXPRESSION

CRITICAL EXPRESSION

Terms/Modes of Practice Intermediate Inte

Illustration Twelve: The inter relationship between lyrical, critical and transformative practices. Tim Collins and Reiko Goto, (2004) space. Two of these areas of knowledge then become integrated and extended in relationship to arts practice. At the same time, Interdisciplinarity demands attention to all areas of knowledge. To be honest, when I started this work, I never thought I would spend as much time as I do making the case for my role as an artist. I regularly defend my contribution across other

disciplines, now I also find myself making the case for the work, within my own

Art Ecology and Planning: Sections III and IV discipline. I think it would be wrong to dismiss these questions. The work is based upon thirty years or more of relevant histories, it is not new, but the lack of material product and the focus on process demands extended attention from anyone that wants to fully understand the work. If you were a young academic, or an art critic with a reputation to defend, there is not going to be significant return for an interest in this area of practice. Most that engage the work initially are somewhat overwhelmed with the problem of what to focus upon and upon which history to test its mettle. The artworld primarily functions in relationship to objects and the institutions that contain them. As a result, I believe this work will retain a sense of otherness for decades to come.

I have also answered to criticism that we reinforced the function of dominant systems and were dangerously close to the hegemonic systems of command and control, which are the ultimate definition of any policy or regulation, and in its most active form, enforcement. Should artists that claim an interest in emancipation be involved in such hegemonic realities? What is the impact of punitive laws in the face of the economic strife that is all too prevalent in Western Pennsylvania? These are important ethical points that deserve careful consideration. I would argue that hegemony is an evolution of dominant interest. Its counterpoint is critical and transformative conflict. But that simply defines two ends of the spectrum, the question is, can you shape dominant systems, can you insinuate new ideas, or a diversity of ideas that define the dominant entity, while retaining an ethical intent to do no harm? Is there a point short of open conflict where creative rational discourse has an opportunity to shape the work? In the terrestrial effort on 3 Rivers 2nd Nature, the

Art Ecology and Planning: Sections III and IV answer is a resounding yes. In the aquatic work, the answer is no. In the conferences that dealt with art and change, I would say absolutely.

The history of emancipation has always occurred in strategic relationship to dominant and hegemonic powers. From the enlightenment to abolition and suffrage, the process of liberating and enabling the voice of those that are subservient to dominant interests demands knowledge of and access to hegemonic systems. The negative complement to such access is defined by the potential to be co-opted and seduced by relationships with the interests of power. Emancipation demands a who or a what to focus upon. We can set people, creatures, places and things free from controlling or dominating influence if we have the power to do so. 3 Rivers 2nd Nature focused upon the natural ecosystems of post-industrial public space in the context of the social and political milieu of Western Pennsylvania. As a result, the more complicated question is one of policy, regulation and enforcement of environmental standards; standards that will demand economic expenditures if the goals are to be met. This is the issue that was at the heart of all the problems with the water program. Those in control felt they were managing the impact of federal regulators and their lawsuits. They did that by limiting what was known about the problem, secure in their own perception of the problem and what had to be done, as well as their understanding of the moral and ethical impacts of the engineering costs of what they deemed to be an appropriate response. In counterpoint, we did our best to diversify the way that the problem was defined, to offer alternatives in analysis and solution and involved the public in the consideration and potential participation in the process of redeveloping infrastructure and restoring ecosystems. In the end, post-industrial aesthetics may reveal new ideas about costs and benefits. How much should we spend on traditional grey

Art Ecology and Planning: Sections III and IV infrastructure designed to solve a single problem and how much should we spend on protecting green infrastructure, which by its veritable living infrastructure and multifunctionality provide a slew of desirable aesthetic, environmental and social benefits?

Regarding our cultural programs, the deliberate intent to reveal the structure and methodology within the area of practice came under critical attack more than once. The ideas of clarifying method and means of transformative practice was deemed homogenizing, reductionist and too deliberate by some. This is not an unexpected response from within a discipline that promotes a relative and equivocal premise. Although I would claim that my own search for a less inchoate position in no way challenges, constrains or injures that fundamental premise. In turn, that position is fair ground to enter into critical dialogue with this work. We have much to learn, and it will require the voice of many, to get it right.

Notes:

Perhaps the most striking opportunity noted for a large park is the valley of Nine Mile Run. Its long meadows of varying width would make ideal playfields; the stream, when it is freed from sewage, will

¹ Arbour day occurs in the last Friday of April in America. It is a holiday begun in 1872 to encourage the planting and care of tree's.

² The argument for this was made by Anne Winston Spirin during a pre-conference discussion on Healing Nature at the Brown Fields and Gray Waters Conference held at the Harvard Graduate School of Design on November 9, 2001.

³ The ecoartnetwork is a loosely organized group of arts professionals, that are dedicated to the practice and discussion of ecological art. http://www.ecoartnetwork.org.

⁴ Other Eco art Dialogue members contributing to this definition and guideline include Lynne Hull, of Colorado, one of the most consistent practitioners of 'trans-species' art, or work with/for animals and wildlife. Aviva Rahmani of Vinalhaven, Maine has spent nine years restoring a tidal wetland on property she owns there. Susan Liebovitz Steinman of Oakland, California, has recently finished a large collaborative ecological restoration and planning project working with the U.S. Park Service. Artists Ann Rosenthal of Massachusetts, Jackie Brookner of New York (Steinman's collaborator on the Park Service Project.) and the curator Amy Lipton of New York have provided additional input and support for this effort and its realization.

⁵ "The eco-art manifesto is a mini 'bang' intended to elicit a perpetual volley of bursts and blasts of creative engagement. We solicit your interpretations, commentaries and assessments. ...Pleae contribute your thoughts by becoming a collaborator. This eco-art manifesto is intended to define the genre of eco-art and enhance its potential to induce social change. Send your revisions to: Linda Weintraub, 28 Olsen Road, Rhinebeck, NY 12572, (artnow@juno.com)." http://www.landviews.org/articles/micro-lw.html.

⁶ These formal standards were the fundamental precepts of Plato and Aristotle's 'aesthetic of beauty.' (Beardsley, M., G., 1966, Thompson 1999)

⁷ I am using the standard dictionary definition of philosophical subject: that which thinks, feels, perceives, intends etc., as contrasted with the object of thought, feeling etc.

⁸ I refer to general systems theory that helps us see the complexity of a problem as an interacting collection of parts which function as a singular whole.

⁹ In 1990 a three day meeting was held at the Aspen Institute. This definition was accepted by the workshop participants. It defines health in terms of four major characteristics relevant to complex systems, sustainability, activity, organization and resilience

¹⁰ In 1910, Frederick Law Olmsted Jr. was invited to Pittsburgh to consider the development and planning of the city. In a report, titled 'Pittsburgh Main Thoroughfares and the Down Town District: Improvements Necessary to Meet the City's Present and Future Needs' he had a special section on park opportunities.

be an attractive and interesting element in the landscape. .

(Frederick Law Olmsted Jr., 1910)

- ¹¹ Green Infrastructure: as it was used in the original proposal was defined by using the following quote from the former governor of the State of Maryland. "Just as we must carefully plan for and invest in our capital infrastructure our roads, our bridges and water lines, we must also invest in our environment, our green infrastructure our forests our wetlands, our stream and our rivers." (Glendenning, 1999)
- We fully recognized the import of the questions about toxicity in post-industrial land and monitored the discourse with great interest. We had a soil scientist and a geologist with some understanding of the issues on our team, as well as an engineer/advisor with expertise in chemistry. They made it clear that the issue demanded a significant commitment of resources to understand the material science of what the potential sources of contaminants might be. The physical realities of 20 stories of slag spread over 200 acres made certainty a problem. However, the most significant complicating factor was the pathways of contaminants into the human body and the nature of the bio-chemical reaction within the body. We attended a number of discussions on this matter and it became clear that a cogent discourse would demand detailed bio-medical science informed by statistical analysis. Our opportunity to contribute to this discourse was limited. The resolution of this issue put forth by concerned citizen activists living adjacent to Nine Mile Run demanded a total of six public health consultations from the Pennsylvania Department of Health, and the U.S. Agency for Toxic Substances and Disease Registry, Division of Health Assessment and Consultation. The complete text of that report and its findings of 'no hazard' when dust from earthwork is contained can be found at the ATSDR website. http://www.atsdr.cdc.gov/HAC/PHA/ninemilerun/nmr_p1.html.
- ¹³ It is interesting to note that the most vociferous and insistent advocates were men who held positions of significant economic and political power. There seemed to be a sense of entitlement in terms of not only being heard but giving orders. The project did not reflect that structure back to them, so at times the levels of frustration became paramount. In the final consensual dialogue the parties to the slag question were in attendance. The parties involved to the ball field controversy were not.
- ¹⁴ In a subsequent discussion with Newton Harrison and Helen Mayer Harrison, we began to talk through the idea that artists can help unpack primary cultural ideas that are nascent but a dominant unspoken subtext in a region. At which point the artists role is to provide a platform by which ideas can become clear, where simplicity and metaphor can add to the general understanding of a topic. This is a variation of Newton and Helen Harrison's idea of prima facie. The alternate idea emerged during a phone conversation on 5, June 2006. Rethinking that conversation, I proposed that it might be best described as prima sententiae, latent first feeling or emerging opinion that underlie changes to perception and the emergence of new general truths. I would argue that the work at Nine Mile Run tapped a whole range of unconscious ideas and feelings about landscape and recovery. The work at 3 Rivers 2nd Nature, attempts to do the same at a much larger scale. This is taken up in more depth in the conclusion.
- ¹⁵ Prominent artists working within the environmental sector of the artworld predominantly focus upon the production of artifacts or installations that allude to (rather than act upon) social and ecological transformation. Some of the most visible and important contributors include the painter and naturalist Alexis Rockman; the installation artist known for interrogating the scientific methodology and classification of objects within natural history museums, Mark Dion; and the artist/raconteur Peter Fend who claims that he is an artist/businessman and an international proponent of applied environmental research. Artists with an interest in ecology and sustainable systems include Nils Norman who describes his projects as a means of 'distributing propoganda' about alternate environmental

technologies; and Dan Peterman who manages a recycling facility in Chicago but is known for artwork that reveals the life cycle, function and waste that is found within urban environments.

- ¹⁶ The restoration of the Nine Mile Run stream channel upstream in Frick Park necessitated the 'taking' of a community ballfield. In response a condition placed on the entire project, was a need to replace the ballfield further downstream on a roadside property that had been an open field. The neighborhood nearest the proposed ballfield site were resistant and insistent that it be accommodated elsewhere.
- ¹⁷ Green Infrastructure: as it was used in the original proposal was defined by using the following quote from the former governor of the State of Maryland. "Just as we must carefully plan for and invest in our capital infrastructure our roads, our bridges and water lines, we must also invest in our environment, our green infrastructure our forests our wetlands, our stream and our rivers." (Glendenning, 1999).
- ¹⁸ We took people out on the river in large boats that can accommodate 30-50 people, these are comfortable glass lined catamarans which are now used throughout the region as water taxi's for events and public programs in the region. We would typically hire two to three boats for every event. Events typically ran twice a year.
- ¹⁹ A report titled "Alcosan Long Term Control Plan" addressed sewer and storm water infrastructure and chronic illegal discharge into regional rivers. The report recommended that 1 Billion dollars be spent on improvements, on the basis of presumptions about the nature of the problem, and the efficacy of the approach. The actual Alcosan Long Term Control Plan was never released publicly; a critical response to that plan and its presumptive basis for investment is publicly available on the following website. http://www.ross.pa.us/pdffiles/Peer%20Review/peer%20review%20word%20perfect.pdf>.
- ²⁰ My favourite text on systems intervention is a very short article in Whole Earth magazine by Donella Meadows. She was a former student of Dr. Jay Meadow of MIT, one of the first to apply systems theory to urban issues and settings, applying it to social and economic behaviour. You can find the article -- Meadows, Donella, H., (1997) *Places to Intervene in a System*' originally published in, ,Whole Earth' Magazine, Winter 1997 at http://www.rmi.org/sitepages/pid790.php>.
- ²¹ At Nine Mile Run we conducted a deep dialogue over three years, with an onsite trailer open every weekend, and outreach to community groups, schools and others. We ran frequent community dialogue events both onsite and in community centres around the area. With 3 Rivers 2nd Nature, we knew we had to develop an alternative approach. We focused on two events a year, always in a different community to keep pace with the science team moving through the region. Our goal was to initiate a dialogue with colleagues from non-profit organizations who had the potential and the interest to act over the long term in these areas.
- ²² Our work on Nine Mile Run brought us in contact with two of the foremost experts in the area of innovative urban stream restoration policy Richard Pinkham of Rocky Mountain Institute in Colorado and Anne Riley of the Waterways Restoration Institute in Berkeley California. Anne's (1998) text is a standard reference for practitioners restoring natural stream channel functions. Pinkham (2000) has authored a number of white papers that provide an excellent overview of the practice of daylighting and its relevance to ecological, economic, urban and rural areas. The publication includes case studies from the U.S. and Europe. It is available from the Rocky Mountain Institute Web Page. http://www.rmi.org/images/other/Water/W00-32_Daylighting.pdf. The work he did for us on buried streams in Pittsburgh is available at http://3r2n.cfa.cmu.edu/new/policy/lost/index.htm.
- ²³ There are five typical water pollution types: First, does it appear clean? Second, does it have the physical/chemical characteristics that can support life? Third, is the life that occurs in this body of water

diverse, indicating ecosystem health? Fourth, does fecal matter from humans affect the body of water? Fifth, do industrial pollutants affect the body of water? Water is protected by laws, by zoning and by building codes, by local, state and federal regulators and a range of institutions charged with environmental monitoring and protection.

- ²⁴ Michael Koryak, along with his U.S. Army Corp of Engineers lab partners Linda Stafford and Rose Reily were key allies. Michael is widely considered to be one of the best scientists in the region, with a deep knowledge of existing ecological conditions, and comfortable with new ideas about restoring ecosystems. Michael was a friend and colleague since Nine Mile Run, a member of our technical advisory board and the person that initiated this grant idea. Michael retired from the USACE in 2003, and focused more of his attention on the 3 Rivers 2nd Nature project. He continues to be a regional leader, an informed advocate for water quality and ecosystem recovery.
- ²⁵ This is a complicated regional reality. In the last five years there have been two major reports. Both begin with statements describing the lack of data. Both reports also reference the 3 Rivers 2nd Nature team efforts in this area.
- -Investing in Clean Water: A Report from the Southwestern Pennsylvania Water and Sewer Infrastructure Project Steering Committee, The Allegheny Conference on Community Development. (2002) http://www.campaignforcleanwater.net/report.html.
- -Regional Cooperation for Water Quality Improvement in Southwestern Pennsylvania, Water Science and Technology Board, National Research Council of the National Academies, Washington D.C. The National Academies Press, (p.3). http://darwin.nap.edu/books/0309095247/html>.

William V. Luneburg's report for 3 Rivers 2nd Nature, identifies a series of case studies and makes specific alternatives to the problem of data collection and realistic environmental regulation. http://3r2n.cfa.cmu.edu/new/policy/water/index.htm.

- ²⁷ Riverkeepers are part of a national effort initiated by Robert Kennedy Junior organized under the Waterkeeper Alliance. The website describes the mission of Waterkeeprs in the following terms: "Each Waterkeeper program reflects the needs of the waterbody and community it represents. The common thread for each Waterkeeper program is a full-time person who serves as the Waterkeeper, the public advocate for that body of water." For more information see http://www.waterkeeper.org.
- ²⁸ . The goal was to make a case for a zoning change that would protect steep slope lands. The artists, the architects and the scientists all agreed that the question is essentially an aesthetic one. The geologist got us talking about landslide prone soils. In the process of that discussion, he referenced a United States Department of Agriculture survey used to ascertain geological substrate and its potential for catastrophic failure. The attorney assured us that a zoning code written on the basis of public safety (due to the potential for catastrophic failure and landslide) was an iron clad legal argument.
- ²⁹ The third day of the conference was billed as a 'community dialogue' at the Braddock Public Library. Braddock is an economically deprived community with a primarily African American population. The final programme was poorly planned and resulted in only one member of the library board/community choosing to participate. He lectured the conference participants and the artists, architects, community and environmental activists that normally attend 3R2N events on the history of well meaning outsiders that had done little for that community.
- ³⁰ <u>Personal Tools:</u> Trust, Caring, Respect, Humility, Listening, Visioning, Cheek, Moxy, Humor and Wit. <u>Social Tools:</u> Play, Discourse, Risk taking, Strategic Knowledge, Information/research, Imbedded

knowledge, Oral history- anecdotal. <u>Material Tools:</u> 2 Dimensional (painting, drawing, printmaking, computer graphics, www); 3 Dimensional (sculpture, landscape, performance); Time Based (video, radio, narrative); Scale based (maps, GIS, GPS). Excerpted from: 'Reconsidering the Monongahela Conference' By Tim Collins http://moncon.greenmuseum.org/recap.htm.

³¹ The project sought to act upon the understanding and leveraging of diverse voices in relation to water issues, a critical understanding of the potential for democratic discourse in relationship to changing land use and to expand and at the same time clarify the discourse surrounding transformative art practice.

³² All notebooks, records and resources from the project are now held in the University of Pittsburgh Library in the 'Archives of Industrial Society'.

Art Ecology and Planning: Conclusion

The thesis research began with the following questions:

- Can artists working as cultural agents affect the public policies and private economic programmes that mark and define urban places and ecosystems?
- Can artists develop a public realm advocacy that expands the creative act beyond the authorship of the artist?
- Can artists initiate verifiable social change? And, is it possible to verify the impact of creative collaborative interaction?

The Conclusion:

The intent of this thesis and its attendant body of practical work was to examine and test ideas and practices that can inform and expand the artist's role in the post-industrial public realm and its environmental context. The focus was upon transformative approaches to contemporary public art this includes critical methodologies that challenge the idea of public art as a passive component of redevelopment interest. The area of interest (and practice) is defined by public art and its relationship to the public realm, ecology, nature and the environment. The work undertaken in this thesis will be re-examined for contributions to knowledge in this conclusion.

This thesis began with questions concerning the impact of artist agency on policy and development, the potential for expansive (shared) creative authorship, and the challenge of verifying the social and political impact of artist initiated change. The goal was to make a small contribution to a theoretical framework that informs the

Art Ecology and Planning: Conclusion conceptualization, experience and valuation of transformative practices that intend to affect the post-industrial public realm. To accomplish that, it was necessary to review a range of literature and test key ideas in practice. Following the questions that framed the beginning of this project, this thesis has been planned and developed with an intentional mix of scholarly and applied research (following the definitions set out by Brown et al in 2004). It is through intellectual study and ongoing practice that the three original questions are addressed with a cautionary affirmative. Other specific findings include the following:

- The ongoing tension between individual freedom and social interaction is best addressed through a moral commitment to creativity in relationship to the emancipation of people, places and things.
- Visual evidence can not be the sole focal point of critical engagement with transformative practice.
- Transformative practices that undertake an inter-relational methodology demand ethical, responsible and distributed outcomes.

Working within the scholarly research model, the interdisciplinary field was mapped, reviewed and analyzed for existing texts that describe the theories, methods and models relevant to the specific area of practice. The intent was to inform the response to the initial research questions through readings in art, ecology, politics and aesthetic philosophy. It is through a synthesis of knowledge from these divergent areas that a contribution to knowledge is made within the area of practice. The scholarly activity is also linked to an applied interdisciplinary research programme. In this, a natural feedback loop was established, whereby the limitations of existing knowledge as well

Art Ecology and Planning: Conclusion as the impact of theories developing in the scholarly work were tested through original experimental application. This author chose to commit to a place-based project where one could experiment with ideas of cultural agency with the potential for literal rather than symbolic impact. The integration of the scholarly and applied research culminates in Section IV – Strategic Ideas and Creative Practice, consisting of case study overviews of Nine Mile Run (1997-2000) and 3 Rivers 2nd Nature (2000-2006). In the conclusions to the case studies, I examine the issues that emerge in the exchange between the scholarly and applied research methodologies.

Scholarly Research

Framing the broader question of a historic and critical approach to transformative public art, the thesis examined the following artists, critics and theorists to understand the essential contributions that set the stage for the emergence and development of this work: Becker, 1994, 1996, 2002; Danto 1997; Deutsche 1996; Doss 1995; Felshin, 1995; Finkelpearl 2001; Gablik 1984, 1991; Jacobs and Brenson 1995; Korza 1988; Kramer 1996; Kuspit 1989; Kwon 2002; Lacy 1995, 2006; Lippard 1983, 1998; Miles 1997, 2000a, 2000b, 2004; Phillips 1988; Raven 1989; Senie and Webster 1992.

The thesis also examined texts by artists and authors, critics and curators that contribute material relevant to specific interest in ecology and the environment as a focus of transformative public art practice: Beardsley 1984; Burnham 1994; Heartney 1995; Harrisons 2001, 1998, 1995, 1993, 1984; Kastner and Wallis 1998; Kester

Art Ecology and Planning: Conclusion 2005; Matilsky 1992; Oakes 1995; Smith 2005; Smithson 1979; Sonfist 1983; Spaid

and Lipton 2002; Strelow 1999, 2004; and Wallis 1990, 1991.

With an interest in expanding both the theory and the practice, the thesis examined emergent ideas that address the changing relationship to nature vis-à-vis science and the humanities. Relevant authors include: Bookchin 1974, 1980, 1982, 1992; Bradshaw 1995; Costanza 1992; Elliot 2000; Hardin 1968; Jordan 1987; Kaplan and Kaplan 1998; Katz 2000; Light 2000; Marturana and Varela 1987; Merchant 1983, 1992, 1996; Midgley 1983; Naess 1989; Plumwood 1993; Sessions 1995; and Throop 2000. Similarly, some of the literature that defines the critical discourse about the form, function and meaning of the public realm include: Arendt 1958; Benhabib 1992; Calhoun 1994; Dewey 1954; Flybvjerg 1998; Fraser 1992; Habermas 1989, 1992; Levebvre 1991; Mitchell, 2003; Mouffe 1999; Weintraub 1997; White 1988; Whyte 1980 and Young 1990.

The next step was to come to understand changing ideas in the area of philosophical aesthetics. In this case, interest and experience guided the work toward the emergent areas of landscape aesthetics as well as new ideas in human inter-relationships, as defined in contemporary artwork. Relevant authors include: Adorno 1997; Berleant 1992; Bishop 2004, 2006; Bourriaud 2002; Carlson 2000; Eaton 1997; Guattari 2000; Kester 2004; Marcuse 1978; and Nassauer 1997.

Applied Research

The applied interdisciplinary research occurred over a period of five years. The researcher's academic role in this process was defined within the STUDIO for Creative Inquiry as principle investigator charged with the development and direction of a programme of research. The primary element of the work was developed with the intent to promote a greater range of public input into regional waterfront planning and regulation. Each report and study was developed with the intent to democratize or diversify a specific discourse. An additional element of the project planned to contribute to the discipline through a series of project conferences, which culminated in the development of an international exhibition and a catalogue, curated by Grant Kester. This exhibition is an outcome of the project, but not a contribution to knowledge by this author. Grant Kester and this author share common interests in the work, but he is primarily a historian and a theorist who has expertise in curatorial practice. As a result, he is the author of the exhibition and a major contributor to the catalogue, as well as the editor.¹

The physical site of applied research was the City of Pittsburgh, Allegheny County, Pennsylvania. The post-industrial, public realm defined the theoretical site of inquiry, with a specific focus on its environmental condition and its aesthetic perception. The public realm, as described in the preceding pages, is a site of both spatial interaction and rational/convivial public discourse (Arendt 1958; Habermas 1989, 1992; Lefebvre 1991; Miles 1997, 2000a). It is also a site of ever present conflict and struggle. (Deutsche 1996, who follows Laclau and Mouffe 1985; and Miles 2004). Following this literature, the public realm has three essential conditions: conflict, discourse, and

Art Ecology and Planning: Conclusion consensus, which is nothing more than staking a position in the centre of a continuum of ideas. Flybvjerg supports this idea (1998), making a link between Habermas's position on rational discourse and Foucault's obsession with the dialectics of power, arguing that, if the public realm is to actually function, there is a need to contest power, invest in discourse and stretch the creative potential of social consensus.

The public realm has also been identified as a space of social-environmental value, where commonly held public goods are often the source of a range of values that include social, environmental and often unexpected economic benefit. This has lead to conflict, a range of public advocacy, and attempts to capture nascent values by private interest. This author had to read strategically in these areas and decided to focus upon: Botkin, 1990; Everenden, 1992; Hays, 1959; Hardin, 1968; Higgs, 2003; Jordan, 2003; Latour, 2004; and McHarg, 1971.

An exciting evolution of aesthetic philosophy has emerged in relationship to the emergent (post-industrial) social and environmental condition of the public realm. This has resulted in new ideas about moral and ethical relationships and human interrelationship. The new ideas in environmental aesthetics (Berleant, 1992; Carlson, 2000) and relational and dialogic aesthetics (Bourriaud, 2002; Kester, 2004) hold incredible potential for artists and designers who decide to engage with these theories and experiment with applying elements of each.

Freedom or Emancipation?

The intent in this thesis was to analyze and synthesize a range of existent knowledge and focus upon a contribution of practical theory that was to be tested through practice. Gablik has argued that dominant ideas about artistic autonomy actually constrain social impact. The institutions and culture of art maintain a cultural infrastructure that portends freedom in practice—while constraining impact and action. In effect, the artworld has become a placebo for freedom, a shadow world where the ideology of freedom can be performed but never enacted. This critique is in complete opposition to the Althusserian argument that validates all forms of cultural resistance to 'ideological state apparatus' (Althusser, 1971, pp. 123-164). The alternative to the artworld is the life world as enacted within the public realm, a primarily discursive space where we vie for access, use and control of spatial, conceptual and material commons. It is a transient or phantom space that is approached from various points on the theoretical continuum defined by conflict and antagonism at one end or through ideas of conviviality and consensus at the other. The contemporary public realm operates with a tension between dominant voices that speak for themselves, representative voices that speak for others, and surrogate voices that speak for things that have no voice. Emancipation demands the opportunity to give voice, and a platform from which to speak. This is a facultative understanding of the opportunity to speak as well as the conviction to say what must be heard. Wherever possible things (such as living plants, animals, water courses and minerals) have been subsumed as possessions; as a result things such as nature can also benefit from emancipatory models² (Merchant, 1983; Midgley 1983; Plumwood 1993). The project of freedom is not about autonomous individuality and

Art Ecology and Planning: Conclusion self-expression; it is about a moral responsibility for an ever-expanding sense of ecological and social informed ideas of freedom. This can best be achieved through responsible experimentation with ideas and practices that are defined by emancipatory intent.

All struggles against oppression in the modern world begin by redefining what had previously been considered 'private', non-public and non-political issues as matters of public concern, as issues of justice, as sites of power which need discursive legitimation.

(Benhabib, 1992, p 100)

Gablik also argued for the need to transcend the aesthetic mode (Gablik, 1991, p. 151). The idea was to move aesthetics beyond the focus on galleries and museums and back into the world with moral and ethical intent. In the arts, aesthetics are widely understood to be a subject response to the sensual, somatic and intellectual³ experience of objects, installations or performances that result in a transformative experience.

It is through this process that judgements of value (about the work) are made and the desire for aesthetic experience is established. Grant Kester (2004) provides us with an argument for an aesthetic that extends this focus from material output to the actual process of human inter-relationship (art-based, subject-subject relationship.) He ascribes value through attention to the inter-subjective ethics and empathy that lead to transformative experience. This valuation manages to retain a sense of plurality

Art Ecology and Planning: Conclusion through a rigorous yet undidactic approach to his subject. The inter-relational aesthetic composed of human subject to subject relationship is a radical shift in what we understand as a traditional subject-object oriented discipline. But this idea is extended further in the phenomenological environmental aesthetics of Berleant (1992) who has devised an aesthetic based upon interaction between the human subject and its environment. In this case, his aesthetic takes into account the idea that the separation of the subject and the object of contemplation are no longer relevant. The subject, the thinking agent, the mind or ego can not be separated from the body or the environment that sustains that body. Nature and humanity are linked through the life force, but we are also linked through object-object inter-relationship. Marcuse (1972) and Bookchin (1982) argue that it is through the emancipation of nature that we will emancipate ourselves. Marcuse has said, "Things [nature] have their 'inherent measure': this measure is in them, it is the potential enclosed in them; only man can free it and in doing so, free his own human potential" (Marcuse, 1972, p. 261). It is only when the human mind recognizes its fundamental somatic and intellectual commonality with the ecology of living things that the senses integrate with the sciences and finally recognize the moral impetus of the life we hold in common. By acting through empathic inter-relationship there is the potential to radically redefine the project of freedom and what we understand as moral and ethical acts. Where the enlightenment focus was upon the legitimation of subject-status through possession of property; we may discover real limits on that concept of possession through exploration of our own shared object-status. As an object amongst objects, we share the condition of climate change and the impacts of industrialism on health.

This evolution of thinking has the potential to initiate a reconsideration of rightful

Art Ecology and Planning: Conclusion possession and dominion over nature and other living things, as well as initiate a discourse about radical new forms of scientifically informed awareness, empathy and political equity.

The foundation of this thesis is carried within this idea of freedom defined as activist responsibility (an emancipatory role) in the expanding sense of collective autonomy. And the extension of those freedoms through a theory informed practice that is primarily based in subject to subject relationships and integrated subject-object ideals.

Comparative Practices

Throughout the last thirty years artists such as Suzanne Lacy in California, David Harding in Scotland, and WochenKlausur in Austria have had an affect on how public art is understood, practiced and/or supported. Others, such as the Artists Placement Group in the UK and Critical Art Ensemble in the US, have provided us with a critical view of public art context, practice and intentions. Some artists have worked to directly affect urban policy and development, usually embracing critical theory in relationship to either activist resistance style campaigning or some form of consensus based transformative practice.

The first two projects are consensual by intent. Alan Sonfist's "Time Landscape" was planned in 1965 as the first of a series of parks that would restore native forests throughout Manhattan; in 1978, one park was created. Joseph Beuys' 1982 plan for 7000 oaks and basalt pillars to be planted throughout Kassel was completed by 1987.

In Sonfist's case, the attempt to replicate his 'urban forest' work was undermined by politics. He did create a unique urban model that restored a forest typology, much as you might restore a historic building. In this he was successful. Beuys, in counterpoint, was focused on trees; he did not set policy per se but rather set in motion a relational public space where a pile of stone columns challenged the people of Kassel to participate in the reforestation of their own city. Both of these artists have made a material impact on the cities in which they were working. They have diversified the material content of cities towards nature, although they have had no direct on affect policy and development.

'Park Fiction', a current example of resistance style campaigning that evolved into a transformative project, took open space and social assembly as the focus. 'Park Fiction' is a project (named after a rave) in the waterfront area of Hamburg Germany that "...stressed the importance of imagination in social change." (Basualdo and Laddaga, 2004) The project began to coalesce in 1995, developing within and across highly politicized local communities, which included activists, artists, itinerant musicians and squatters—many of whom had been involved in the notorious public battles over the Hafenstraße squat a decade earlier. They sought to stop the city from blocking the view of the harbour, and specifically from giving an informal and regularly used open space over to private development interests. Christoph Shafir describes a decision to "...organize a parallel planning process and a collective production of desires for the park—without being commissioned by authorities to do so" (Shafir, 2005). The project recognized the limits of the 'official' process of participation and worked across various (music, art, squatting) cultural networks to publicize and

Art Ecology and Planning: Conclusion validate the developing plan for a unique urban park. This extended socio-political network developed and maintained a creative yet critical tension with authorities (who sold the land under the park to developers) and amongst the various planning interests. The artists were acting as radical planners (working outside the municipal/development context in the communities interest) and staying 'out in front' and responsible to the local interests on the rapidly changing context of the parks development. The project received a significant political boost when it was presented in Documenta 11; yet the work in 2005 was still incomplete. In the end, the local authorities are not swayed by artworld validation and, as the design is becoming more compromised, the project team is considering that they may need to back out of the project in a final act of political protest. The project has had an effect on development, although its affect on policy remain unclear.

In 1992 Barbara Matilsky developed an exhibition and catalogue titled 'Fragile Ecologies: Contemporary Artists' Interpretations and Solutions', intended to illustrate the range of approaches artists had developed to "...actually restore or re-create natural ecosystems." (Matilskly, 1992, p 4) Both the curatorial effort and the artists' work was at the cusp of new ideas in environmental responsibility and ecological restoration.⁴ Although the full scope and scale of the environmental issues these artists were facing was not entirely clear at that time. Unfortunately, the larger land and waste projects dissipated (Holt, Ukeles) and the major river restoration project (Harrisons) languished for different reasons. The large scale undersea habitat project diminished in subsequent analysis (Beaumont). To be fair, most (if not all) were operating within artworld budgets and support systems better suited to the

development of public artefacts. So it should come as no surprise to discover that Holt's project was undermined by the complications of an unstable and poorly capped landfill (New Jersey Meadowlands Commission, 2004). Eukeles project⁵ was undermined by changes to environmental regulation and a loss of NEA funding during the culture wars over the National Endowment for the Arts (Ukeles, 1995, 2002). The Harrison's project on the Sava River in Yugoslavia was undermined by the changing politics of Eastern Europe during the collapse of the Soviet Union and the ensuing conflict in the area that was Yugoslavia. The success of Betty Beaumont's 'Ocean Landmark' project was complicated by conditions after completion. First, the project is all but inaccessible—it is underwater. Second, even for those that access it underwater, it seems to have lost its material integrity. Shifts in politics, policy and regulation have had a detrimental impact on each of these projects. It is a matter fact that changes to environmental regulation during the early 1990's changed both the intent and method of land reclamation affecting the waste projects. In counterpoint, a lack of regulation and the continuation of a laissez faire attitude to ocean habitat construction undermined the undersea sculpture. Despite these facts, the work, the exhibition and the catalogue have had an important impact on the area of practice. The 'Fragile Ecologies' catalogue is an excellent overview of history, theory and practice at that time. All of the work discussed was exemplary experimental public work. The critical response to the projects was disappointing. It primarily focused upon the exhibition as if it were a series of paintings or photographs. The critic Patricia Phillips claimed that the "...ideas are challenging--even abundant--but the images are eviscerated" (Phillips, 1993). The critical focus upon the imagery was also reflected in Michael Kimmelman's (1992) review in the New York Times. This brief

Art Ecology and Planning: Conclusion and specific history gives us a sense of the challenges artists face when attempting to make work that competes with, or makes a material impact upon urban places and ecosystems. The critical response to the exhibition also reveals the struggle to validate this work for what it is, rather than as a series of images. This provides further proof to support the claim that visual evidence should not be the sole focal

point of critical engagement with transformative practice. The work is simply too

complex in authorship, process and outcome to be represented in singular images.

The 2005 'Groundworks' exhibition, curated by Grant Kester, provides an overview of artists that have made it their intention to affect the form and function of urban places and ecosystems. Comparing 'Groundworks' to 'Fragile Ecologies', there are a number of notable differences not the least of which is the move away from a singular set of US artists to a more international review of work with some attempt to understand the differences in social, political and environmental context. In general, we can say that the artwork in 'Fragile Ecologies' addressed ecological problems, with the material output primarily referencing individual bodies of work in sculpture, installation or site work. Where there was collaboration, it was primarily in service to the artist. The artists in "Groundworks' address a broader range of social and environmental issues. The work references conceptual art and radical planning practices in process and product. Collaboration in these projects is more integral to the intent and outcome of the work; the sense of authorship is often shared rather than singular. Knowing many of these practitioners across the two exhibitions, I would argue that the level of artistic, social and ecological sophistication is similar.

The question of artists impact on policy and development is implicit in the work of many of the artists involved in the 'Groundworks' exhibition. Ala Plastica of Argentina, the Harrison's of California, and WochenKlausur of Austria are without a doubt the most significant examples of artists that sustain an interest in planning scale activities and have had an impact on policy and development. Part of the intention of the Groundworks exhibition was to network the best local practitioners with national and internationally recognized experts and increase local capacity for this kind of creative work in Allegheny County. The resident artist teams⁸ had been asked to work within their current methods and means of practice to create 'art, design and action plans' that were relevant to specific public places. They initiated work in McKeesport, Braddock, and Hays Woods, all areas along the Monongahela River in Allegheny County, Pennsylvania. The projects had a relatively minimal scope of funding for travel, residency and preparation for the 'Groundworks' exhibition. As a result, the plans, designs and creative outputs were initially no more than a social and environmental provocation.

There was a considerable amount of creative talent working within the historic Braddock Library with the support of City Council and the Mayor at that time. Helen and Newton Harrison developed a project called "Fecal Matters," addressing open space, stormwater management and sewage release into the Monongahela River. They were linked with Three Rivers Wet Weather, who where initially interested in supporting their innovative approach to storm water and sewage. Landscape architects Walter Hood and Alma Dusolier developed a proposal for a series of experimental or informal linear parks along the river and the abandoned railway right-

Art Ecology and Planning: Conclusion of-way that is being held as a vacant wasteland in support of a twenty year old plan for a six-lane highway. Despite attempts to link these internationally recognized designers with various local and regional planning or foundation interests, nothing seemed to stick. Ground Zero Action Network members Jonathan Kline and Christine Brill developed a project that would 'act out' the highway footprint and promote a radical planning discourse about the highway and its impact. Walter and Alma, John and Christine all developed a working relationship with the future mayor John Fetterline¹⁰. Mayor Fetterline has developed his own website, 'braddocc,' which provides a sense of the young Mayor's interests and his understanding of the tensions that exists, as well as his unique vision and adamant belief in the potential for change (Fetterline, 2007). The Ground Zero Action Network continues to support the Braddock Mayor's efforts. They have recently secured funding through the 3 Rivers Art Festival to support a 'FLUX' event, a large spectacle of a party where artists, musicians and performers from Pittsburgh's diverse cultural communities come together. This programme is intended to support Fetterline's mission of publicizing Braddock as a place for urban pioneers and artists. Braddock is a particularly challenging community to work within. It is economically disadvantaged, with a future highway hanging over the main street which constrains any public or private interest in investment. It is defined by a hospital at one end of the town and one of the regions last steel mills at the other. Gangs and dilapidated second hand stores occupy the middle ground—if there ever was a place that demanded responsible interaction and distributed outcome, it is this place. Unfortunately, it was not our most successful site.

Art Ecology and Planning: Conclusion Another project residency focused upon developing a trail plan for the City of McKeesport by artists Jackie Brookner, Stephanie Flom and Ann Rosenthal. This project was established with the support of Hannah Hardy, President of the Steel Valley Trails Council. The artists worked within a city building, with support from the Mayor and his planning staff. The project seemed to have all the right attention and support, including a local foundation head who attended to the artists work. However, the planned site of the trail remained complicated by the fact that the essential piece of the trail was on land controlled by the Regional Industrial Development Corporation, an NGO that promotes the re-use of industrial properties. This proved to be an intolerable situation for those considering further investment in the project. Ann Rosenthal reports that life has recently returned to the project with the attention of Peggy Pings of the Rivers, Trails and Conservation Assistance Program of the National Park Service¹¹. In Spring 2007, a news article focused upon an announcement by the McKeesport City redevelopment officer concerning property deals that have resolved the blockage to the McKeesport trail hub (the focal point of Brookner, Flom and Rosenthal's work). The article claims a bicycle trail that will link the Youghiogheny River Valley to Pittsburgh will be complete by November 2008. The exact relationship with the project artists remains unclear at this time (Vertullo, 2007).

The Hays woods project, developed by Tom and Connie Merriman, working closely with Heather Sage of Citizens for Pennsylvania's Future and Peter Wray of the Sierra Club of Allegheny County, has evolved into a coalition with a range of community and activists groups. Despite a raft of disappointing political actions the project, which seeks to preserve the 600-acre urban forest, creeps forward. As this author

Art Ecology and Planning: Conclusion understands it, the State of Pennsylvania has denied the permit for strip mining in December 2006 (Roddy, 2006). As of Spring 2007, the developer is now appealing that decision. The land preservation group has reportedly expanded to include powerful friends who have are trying to find a way to buy the site. There is some potential that a local electrical utility will consider investing a significant amount of money to buy the property, which is traversed by high voltage power lines. The utility would keep their overhead lines in place (which would have to move if the site were developed) and deed the property in perpetuity to an NGO Land Trust that will manage the land as open space and forest.

In this last case, the artists are part of a coalition that has taken on cooperative advocacy for a 600-acre forest. The intent was not to create an authored work of art but rather to utilize images, metaphor and narrative to help clarify the value and meaning of the last significant tract of forested land in the City of Pittsburgh. The hope is that this land can be transformed from its proposed function as raw material for industrial extraction leading to its use as a site for development to some semblance of intrinsic value, where the land is put aside for what it is and what it means to save it as open space for the future.

In each of these projects the research team did our best to develop the relationships which would allow the visiting artists to succeed through inter-relational practices and distributed outcomes. We have had some small success but mostly there is a sense of disappointment in the process: the difficult pace of the outcome and the critical response to the work in the exhibition. 'Groundworks' was exhibited the same year as

Beyond Green: Toward a Sustainable Art,' curated by Stephanie Smith. It is interesting to note that both exhibitions featured significant international artists who had never exhibited in the U.S., as well as some of the best of the first and second generation of American practitioners. Despite excellent local criticism, neither exhibition received national print coverage. Both exhibitions received significant critical notice through a range of internet publications. The critics grappling with 'Fragile Ecologies' worried about the quality of the images. In contrast, the critics that engaged 'Groundworks' focused upon the challenges inherent to the process of the work itself and how it might be understood by a gallery audience (Thomas, 2005a, and 2005b) (Robinson, 2005). This is also true of the review of 'Beyond Green' by Julia Bryan-Wilson in Frieze Magazine (2006, issue 99, p. 89). If nothing else, the internet has diversified the range of critical venues, if not the authority of the dominant institutions and publications.

Evidence, Responsibility and Outcome

Nine Mile Run was a deep dialogue, occurring over three years, with artists working consistently onsite in the Nine Mile Run Valley and in intellectual, experiential and creative dialogue with four or more distinct place-based communities. On 3 Rivers 2nd Nature, we were working at a different scale along three main rivers. The challenge was to discover, network and then sustain a fellowship of geographically dispersed river advocates—this was a shallow dialogue. Both projects also conducted dialogues at the level of planning which spanned citizens and decision makers. The 3 Rivers 2nd Nature project conducted dialogue at the level of policy as well. It is now clear to this author that public realm action and advocacy can not be achieved through an

Art Ecology and Planning: Conclusion idealistic (or simplistic) approach to discursive relationships, nor can it be accomplished without fundamental attention to the struggle for power, as well as the potential for rational discussion. As a result work that embraces the intent of agency, or emancipation, must be informed by discourse and agonistic theory, post structural theory and the politics of power and diversity. This work cannot be accomplished through rigid assignation of any of these intellectual positions. This is the fundamental crux between theory and practice. The realm of ideas is an ideal world. The realm of the everyday is a world of unexpected and consistent complication. To do this work well, it was important to embrace the real potential for failure and make a commitment to learn from those failures. The first Monongahela Conference and subsequent work in Braddock PA was fraught with failure. The 3R2N Water programme was an area of the project that was very important to this author, yet its conclusion was wholly unsatisfactory. Failure informs the potential to get it right or more right the next time around. In this, the work is something that must be learned over time and allowed to mature through serious analysis of each success and each failure. Likewise, the critical literature needs to engage the work over the long term, considering its development, process and outcome over years in some cases. It is only through significant temporal engagement that we will truly understand where this work is going. Finally, good practices can not be achieved without attention to and capacity for both conviviality and conflict. Conviviality assures our return, our passion and our willingness to fight. All forms of change create conflict. Conflict is the form by which the potential for conviviality is recovered.

Can artists initiate verifiable social change? The answer to this question is simply yes and no. This thesis documents the record of evolution and response to the work of the Nine Mile Run and 3 Rivers 2nd Nature teams. Both were formed with the specific intent to forge a public discourse about the post-industrial public realm. The means of verification can be defined in terms of intention, sustained social and political interaction and analysis of impact after the fact. The statement of intent is recognized as an essential method for process based practice by Lacy (1995, p. 34). When working with collaborative intent, it is essential to clarify the common ground and the edges where differences (and expertise) provide alternative value. A statement of intent then becomes the focal point for any ensuing critical methodology. In process based work, a statement of intent is essential to gage the cause and effect, the value and validation of the work after the fact. This also means that the art critic is no longer an autonomous authority. The artist initiates the dialogue as an essential element of the work itself. If attended to with care (the outlandish claims of artists are discussed in chapter 2), the statement of intent has important consequences for the development of the work and its subsequent critical dialogue.

In the case of the projects presented in chapters eight and nine, the author remains part of a network that continues to reflect those interests in that place. And as a result continues to be a recipient of personal notes, news articles and letters from friends and colleagues who continue the work we share an interest in. The thesis documents that record, in analysis the author has pulled out the bits that reflect a record of contribution. At the same time, it is maintained that this work is fundamentally collaborative and ultimately unsuccessful if authorship and ownership of the ideas

Art Ecology and Planning: Conclusion were constrained to the project team and/or the author alone. The goal of social change demands dialogue and creative collaboration and agency on a number of levels; in turn, that interaction demands critical analysis as well. Without multiple points of interest and creative advocacy, there is no potential for social change. We can have an impact when we act as singular agents, but the process of change demands many hands if it is to be both affective and sustained.

Ultimately it is impossible to verify social change without a social science methodology and analysis. The reality of this work is that most of what passes for efficacy and impact is couched in hearsay and assumption. Complicating this further is the simple reality that the artworld has little interest in anything deemed instrumental or verifiable. In the artworld an outrageous claim is simply part of the radical content of the work. It is clear in the body of the thesis that we must learn to validate ourselves, as this work does not attract the dominant critical interests that support mainstream art practices. Indeed, the response to 'Groundworks' and 'Beyond Green' suggest that the artworld that dominates at a national level is less open to these ideas in 2005 than they were in 1992 when 'Fragile Ecologies' was exhibited.

Nicholas Bourriaud has said, "When the aesthetic discussion evolves, the status of form evolves along with it and through it" (Bourriaud, 2002, p. 21). He is drawing our attention to the symbiotic relationship between ideas and perception, and how they interact to reveal form against what can be a confusing background of sensual and somatic information. Aesthetic philosophy, once a study in the shared perception and

Art Ecology and Planning: Conclusion understanding of beauty, has changed into theories of expanding perception that reveal an evolution of value. Reading Berleant and Kester, one sees commonalities and a shifting worldview that affects far more than form—it takes us into the realm of inter-subjective experience and subject transcendent experience. These are intoxicating ideas that can be experienced through the senses only after being understood by the intellect. Once we have it pointed out to us (so we see it) or we have it explained to us (so we understand it), we can integrate that experience as part of a pleasurable and intellectually rewarding life practice. Pleasure at this level has transcendent potential, as it calls our fundamental (our common) values into question. These shifts in our reality are an affect of the rapidly changing social and material condition of this new century.

In light of this, artists can work as cultural agents, engaged with these issues, and have an enormous social and political effect if they choose to do so. This is documented in the work presented in chapters eight and nine; it is extended by the record of the artist's included in the 'Groundworks' catalogue discussed in this conclusion. The 3 Rivers 2nd Nature project focused upon the revelation and defence of nature. We did little more than uncover and redefine emergent aspects of that place. Our process was built upon interdisciplinary site tours, reports, studies and dialogue. This is based upon the understanding that we can inform perception through ideas and, as a result, reconsider common experience within a new framework that provides the context in which new values can emerge.

A significant final question is – do the artists differ considerably from the environmentalists or planners working in this same area? The artist functions in the realm of images, ideas and values. Artwork (at its best) challenges what we know about the world; in some cases it provides us alternatives to what is known. The real work of material change is found within the areas of science and engineering. They are interested in assembling the world from the parts of what is known, or extending that knowledge from the centre outwards. The planner is responsible for the practical form of the networked social, political and material reality that is their purview. In the case of the artist's work described in chapters eight and nine and here in this conclusion, we share an interest and intent to effect material content, but the work is about critical provocation and intervention, not the distribution and management of resource. The problematic caveat here is that the best of the planners, scientists, engineers and environmentalists share more with artists than they do not.

An argument made in the thesis states that visual evidence can not be the sole focal point of critical engagement with transformative practice. Kester provides us with three focal points that inform an alternative critical analysis: the context, which includes the speech acts and process of the dialogue, the quality of the intersubjective exchange, and indications of empathic insight (Kester, 2004, pp. 107-115). These methods are applied by Kester to ascertain the validity and value of the speech acts that enable relationships between artists and citizens. Following Lacy (1995, p. 181) and Ukeles in (Gablik, 1991, p. 69) a complimentary set of questions can be stated that remain distanced from material product but raise issues of originality, and persuasion which can lead to dissemination and dialogic activation. Is

symbol, narrative or metaphor) in the dialogic exchange that attends the work? Does

there evidence of original thinking and unique language (visual, verbal, written text,

the work subvert the dominant consciousness and elicit a sense of creative social

connectivity amongst its collaborators, participants or viewers? The context frames

the inter-subjective exchange where indications of empathy and originality become

points of critical validation. But in the end, it is the dialogue that has the potential to

change us, and at the same time forge new bonds off social connectivity and

emancipatory desire which can lead to action.

What has been described is a critical approach to art, informed by new ideas in

aesthetics which can only be validated by communities of interest that deem it to be

worthy of attention. The basis of that worth is achieved through collective definition of

intrinsic properties that are deemed valid to interrogate. The author hopes the reader

finds this thesis to be a contribution to that discourse.

7 May 2007

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NOTES:

While there are some similarities in the intent to restore nature, it is important not to confuse the work of scientists with the work of artists. I would argue that the difference is that artists primarily work on restoration at the level of perception, conceptualization, experience and value; our colleagues in engineering and the natural sciences are working on restoration with knowledge developed through replicable experimentation. None the less, some of my artist colleagues in this area of practice claim expertise in the art and the science of ecological restoration.

¹ The catalogue makes an important contribution to what is known about the artists and area of practice that I refer to in this thesis. It is essential reading for anyone that wants to understand the current conditions in this field of practice.

² Grant Kester describes the evolution of enlightenment identity as being produced through acts of possession. In other words, we can own things; we can even purchase (own) the labour of others. It is interesting to note that Kester claims "Paradigmatically 'nature' is the name assigned to that category of objects [things] that resist man's will." (Kester, 2005, p. 27) These are the things that we can not tame and possess the increasingly constrained idea of 'wild' nature, which at this point is limited to dynamic natural phenomenon or protected and inaccessible ecosystems; or unnamed or unclaimed DNA typologies and mineral commons.

³ The question of aesthetics and intellectual experience is more widely debated outside the arts. Areas such as environmental aesthetics continue the debate in terms of cognitive and non-cognitive forces aligned around areas of analytic, rational discursive and phenomenological philosophy.

⁴ Matilsky made an assumption that was right at that time, but it was only true for a limited time period. It is important to remember that the Society for Ecological Restoration was first founded in 1987. Right through the 1990's restoration was being mandated in state and federal projects although there were neither standards defining what the term meant nor were there rigorous methods to define ecological success. Artists, philosophers, ecologists, planners and landscape architects were all involved in early projects.

⁵ Later work on the Fresh Kills Landfill sites seems to also have fallen to the need for greater interdisciplinary expertise, mandated by the engineering based regulation of landfill closures. The Landscape Architect James Corner's firm "Field Operations" won the contract for the design of the site and, despite claims to changes in her contract in 2002, Ukeles name has not been connected to the project since (Cabinet, 2002).

⁶ In a conversation with Helen and Newton Harrison on 24 April, 2007 in Manchester, UK, they described the impact of the work once the politics settled down in the region. A young planner that had worked with them continued with the ideas they had initiated. At this point in time, the Sava River is the focus of a number of national and international programmes to restore its ecological function and water quality, which was the intention of the Harrison's work.

⁷ Various diving websites identify this as: the "Fire Island Artificial Reef" located approximately 2.0 nautical miles South of Fire Island Lighthouse. **Size:** 744 acres; 3,000 yards by 1,200 yards. **Depth:** 62-73 feet. Listing the material as: 1,500 tires, 10 barges, 2 boat hulls, 2 dry-docks, 16 armoured vehicles, coal waste blocks (experimental), rock, concrete rubble, and cesspool rings." (Long Island Diving, 2007)

⁸ With funding from the Warhol Foundation.

⁹ The 'letter of agreement' with Carnegie Mellon University made the following specific requests.

The Role of Artists: We believe that there are social-ecological and political situations where an artist's unorthodox approach can open doors and minds. The artists' chosen for this program have shown capabilities in working with complex social, ecological and political issues in the past. Research and Production relies upon a mix of process, research and product that is dependant upon the specific context and opportunity. Attached is a specific example of the artists' recent work, which serves a guideline for the type of research that will be conducted during the period covered by this agreement. What: The Monongahela Conference Residencies will introduce restorative art and ecological design practitioners into post-industrial river towns. We have engaged you to work within these communities to reveal restorative metaphors that [have the potential to] result in bold public-space art, design and action plans. All work will be developed in dialogue with citizens and decisions makers in western Pennsylvania. We understand that your product will reflect but not repeat your current body of work. Where: Your participation in the Monongahela Conference Project will place you in an ongoing relationship within the area of Homestead, PA where you will work with non-profit institutions, citizens and planners. Weekdays you will work out of a facility in Homestead with other artists and designers. Once or twice a week the entire group will gather to discuss progress, process and program development.

<u>How:</u> We will prepare specific information packets for about each artist and arrange tours and discussions with citizens, scientists, activists and planners in the targeted communities. Each work group will be supported by the material and human resources of the Monongahela Conference Project

¹⁰ The Mayor is an amazing personality. He is Harvard trained, youth oriented, wilful and driven to succeed. He continues to make waves in Braddock.

¹¹ Pings has been a region wide champion of arts led regeneration.

¹² [http://www.savehayswoods.org] [http://www.pennfuture.org/content.aspx?SectionID=137&MenuID=] [http://www.alleghenysc.org/article.html?itemid=200702081541230.536917]

¹³ Political actions include a December 2005 change to the local zoning code by the City of Pittsburgh to remove a parks and open space zoning and enable a 'special development zone' on the site, and a series of disappointing federal regulatory responses to the plan to destroy streams and wetlands under a plan to strip mine coal at the site.

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ART ECOLOGY AND PLANNING:

Strategic Concepts and Creativity within the Post Industrial Public Realm

Collins, T. M.

A thesis submitted to the University of Plymouth in partial fulfilment for the degree of DOCTOR OF PHILOSOPHY

July, 2007

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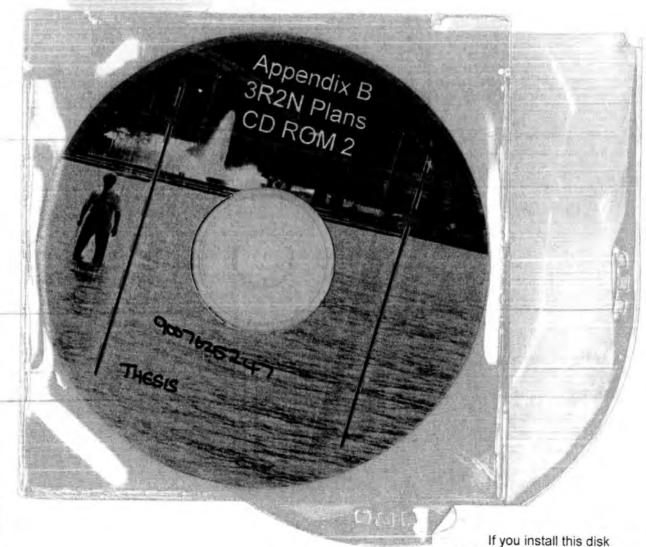
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Collins, T. (2003) Postindustielle Landschaft - Nine Mile Run: Intervention in the Rust Belt, The art and ecology of post-industrial public space. In Genske, D. and Hauser, S. (Eds.) *Die Brache als Chance*. Berlin, Heidelberg, New York, Hong Kong, London, Mailand, Paris, and Tokyo: Springer.

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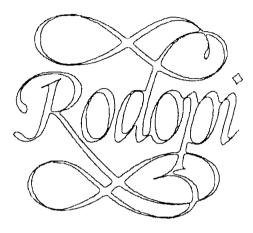
Appendix D Supplemental Donation to Library

Kester, G. (Ed.) (2005) Groundworks: Environmental Collaboration in Contemporary Art. Pittsburgh (PA): the Regina Gouger Miller Gallery, Carnegie Mellon University.

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Tim Collins

Conversations in the Rust Belt

Set in the context of Pittsburgh Pennsylvania, the former steel capital of the United States, this paper explores the potential for a renewed civic or democratic dialogue on a specific brownfield development site. This case study, illustrates a three-part philosophy of discursive democracy, restoration ecology and reconstructive post-modernism and its experimental application by an interdisciplinary group of artists and academics working from a research facility in the college of fine arts at Carnegie Mellon University. The project goal was to create a program of community engagement in the research, design and development of a new greenway, on an abandoned slag heap. The project team intent was to transcend the role of primary authorship, instead initiating a citizen discourse, and a creative engagement in the definition, form and function of post-industrial public space. The paper outlines the process and its means of empowerment. It then concludes with an exploration of diversity, as a synthesizing value essential to the discussion of post-modern nature, culture and the public space of cities.

We are artists. We are inquiry based practitioners. We act as agents of change, rather than primary authors.

With the end of the industrial era, cities and their citizens are becoming aware of the vast estates of empty lands (abandoned by industry) known as brownfields. Many of these properties have lain vacant for 30 years or more, and are commonly perceived (from a distance) as a dilapidated mix of industrial-culture detritus and "junk" nature. They function as a symbolic monument to what was lost, the nature of their opportunity, missing unless we change the way we see them. If we can change our point of view, this negative perception, these abandoned landscapes become the spatial impetus for a renewed urban-public life, with important spatial and discursive components.

The question of a renewed public life is directly connected to an emerging tension between expert knowledge and common or community knowledge in the context of democratic society. Recently, authors as diverse as sociologist Daniel Yankelovich (1999) and biologist Michael

Soule (1998) have pointed out the differences between the way experts and citizens learn and decide the major questions of the day. Each author argues that the experts marshal vast quantities of information prior to a careful, often quantitative analysis. The citizen process is more dialogic, based on prior history, personal ethics, and readily available information discussed within the context of family, friends and acquaintances. The expert relies on facts and inductive or deductive reasoning to make a decision. The public on the other hand "takes into account the facts as they understand them and process these within a framework of personal goals, moral values, and their sense of what is best for others as well as themselves"

In the context of these preceding observations, I would like to present a brief outline of the fundamental guidelines which emerged as a team of artists, a lawyer, scientists, and designers set out to develop an experiment in post-industrial public space. As our project team honed their philosophy, process and skills, it became clear that there was a set of basics which would guide our experiment in public dialogue, and its broader intent of renewing post-industrial public life. The philosophy of our approach is pulled from philosophers, Habermas, Benhabib and artists and theorists, Beuys, Lacy, and Gablik. They emerged in discussions with the author, theorist and historian Kirk Savage:

- Create images and stories, reveal both the cause and effect of the industrial legacy.
- Create works that illuminate and explicate conflict and points of dynamic change.
- Produce new forms of critical discourse, provide access, voice and context.

In the following pages, I will outline the three-point philosophy of the project, provide an overview of the three-year program, then in conclusion discuss diversity as an aesthetic value, and the potential of brownfields to transform culture.

Perhaps the most striking opportunity noted for a large park is the valley of Nine Mile Run. Its long meadows of varying width would make ideal playfields; the stream, when it is freed from sewage, will be an attractive and interesting element in

Conversations in the Rust Belt

the landscape; the wooded slopes on either side give ample opportunity for enjoyment of the forest, for shaded walks and cool resting places. Frederick Law Olmsted Jr. (64)

INTRODUCTION

In 1997 a team of artists and an attorney gathered in the STUDIO for Creative Inquiry, a research facility in the College of Fine Arts at Carnegie Mellon. After a series of discussions and site-tours, we decided to propose to local economic development officials that a team of academics and design professionals become developers of the open space of a 240 acre brownfield. It was the only proposal that separated public space from private space. It was the only proposal that saw the site as an environmental asset. It was the only proposal that arrived without suitable financial backing.

The Context

Nine Mile Run is a place named for a stream, in the former steelindustry city of Pittsburgh, Pennsylvania. The Mile Run watershed and stream drains five municipalities, flowing through the wooded Frick park and then into an urban brownfield which dominates the bottom of the watershed. Nine Mile Run drains into the Monongahela river. It is nine miles from the Point in downtown Pittsburgh where the Monongahela and Allegheny Rivers join to form the Ohio River. A mountain of slag as much as 20 stories high surrounds and overshadows the creek. This flood plain, identified by Frederick Law Olmsted Jr., for a new city park in 1910, was instead purchased by the steel industry, roughly 240 acres were covered by slag dumped over a fifty year period. In 1993, Pittsburgh City Planning developed a conceptual plan for houses and open space on this mound of industrial by-product. The initial proposal called for a flat development site which would be achieved by burying what was left of the stream under 150 feet of slag. Plans to obliterate the stream and the valley were an outrage, even the steel industry couldn't legally accomplish.

The Nine Mile Run Greenway Project (NMR-GP) engaged cultural and aesthetic issues of post-industrial public space and ecology. The project team, directed by three artists, included a diverse group of professionals from academia and industry. The project had a partnership with local government, but retained its autonomy through external funding. Over the past three years, the STUDIO team endeavored to generate an informed public conversation regarding Nine Mile Run, a brownfield site in Pittsburgh, Pennsylvania being developed into a mix of housing and public greenway. Brownfield development is routinely the domain of engineers, economists, and public policy analysts who work to solve isolated brownfield 'problems.' Alternatively, this artist-led team has defined the NMR brownfield development as a public space opportunity rather than a problem. Viewing brownfields as the legacy of the industrial revolution, a cultural event that effectively privatized America's urban rivers, streams and estuaries, the team approaches the work as the cultural reclamation of public use, value and aesthetics. Our project, focused on 100 acres of public open space - ran in parallel (and at times crossed purposes) with a traditional development project. Up to 1000 new-urbanism style homes will emerge on the 140 acres of slag plateau above Nine Mile Run in the next ten years.

A THREE-POINT PHILOSOPHY

Henri LeFevbre has said, "Each society and its related means of production creates a specific kind of physical space" (30). As Pittsburgh searches for a postindustrial vision, the question which begged to be asked was how would the spatial and discursive forms of post-industrial public space – be manifest in Pittsburgh? The NMR-GP conversation was primarily constructed around issues of public space, specifically public space within the context of a specific urban brownfield (Nine Mile Run) which is about to be developed by private interests. It has been our contention from the beginning of this process that urban brownfields or post-industrial sites are an important public space opportunity, particularly for rust belt cities like Pittsburgh. The question is can we view these properties in the context of a pre-industrial legacy of public access and natural value? Can we integrate economic benefit with public use and ecosystem function? Will we continue to accept the dichotomy of wilderness or zoo as the primary 'spaces' of natural

experience? Or, is there something new to consider at the place where the land meets the river and the soot of industry still stains the soil?

Integrated Ecosystem Restoration

The unifying theory of the NMR-GP is reclamation as an integrated ecosystem restoration that embraces the complex goal of 'nature' in the context of contemporary urban culture. A recent issue of the Society for Restoration reflects interdisciplinary complexity. this "Restoration practices which hold firm to ecological fidelity and embrace social and cultural goals are much more likely to prosper and endure" (Higgs), A.D. Bradshaw, a noted restoration biologist, comments, "The primary goal of restoration is an aesthetic one — to restore the visible environmental quality of the area" (105). Bradshaw also outlines specific scientific methods for ecological restoration: soil-chemical balance, initial vegetative stability and long-term biodiversity. It is quite clear from the preceding statements that these scientific methods are operating within a set of cultural options. Do we identify the 'original condition' and return our brownfields to that standard? At Nine Mile Run, the question of original condition is answered by millions of tons of slag dumped upon a broad floodplain. We need to work within the community to identify a socially acceptable solution that is economic, aesthetically rich, and ecologically sound. We must define what nature means within the context of our urban community.

Reconstructive Post-Modern Art

Another important theoretical foundation can be found in our artistic intent which is informed by evolving contemporary ideas of socially based art practice and the last 30 years of reclamation art. Our process is rooted in ideas of reconstructive postmodern practice. Gabelik states, "The attempt is to move the dominant model of humans in opposition to nature toward a more integrated aesthetic of interconnectedness, social responsibility, and ecological attunement" (22). This paradigm shift is also described in the context of evolving artistic media and expanding public practice, as newgenre, publicart. Suzanne Lacy clarifies this approach, "new-genre, publicart, is a visual art that uses both traditional and nontraditional media to

communicate and interact with a broad and diversified audience about issues directly relevant to their lives – is based on engagement" (19). The history of this work is rooted in some of the early ideas of 'social sculpture' developed by the German artist Joseph Beuys (1921-1986). "He sets out from the premise that although great and definitive signals have emerged from the traditional concept of art, the great majority of human beings have remained untouched by this signal quality. Social art, or social sculpture, Beuys believed, is art that sets out to encompass more than just physical material" (Stachelhaus 66). We need a foundation of social art, on which every individual experiences and recognizes himself as a creative being and as a participant in shaping and defining the world. Everyone is an artist.

Reclamation Art, is a term used in an electronic document examining "artworks proposed or constructed by contemporary artists as a means to reclaim landscapes that have been damaged by human activities" (Frost-Kumpf). This type of artwork goes back as far as the '60s when a significant number of artists moved outside their studios and galleries in a movement known as Earthwork. Initial work in the field, relative to reclamation art practice, was done by Robert Smithson who actively searched out industrial land users for collaboration on his projects which explored formal/sculptural reclamation solutions to strip mine sites, slag piles, etc. Another important artist with a more ecologically integrated approach would be Allan Sonfist, who actively 'reclaimed' the native vegetation of New York City in a public park/art work begun in 1965. This "Time Landscape," as it is known, is still flourishing at Houston and La Guardia Place in New York City. Numerous artists have followed this path of contemporary practice. Common names in the field include: Helen and Newton Harrison, Agnes Denes, Donna Henes, Hermann Prigan and Buster Simpson.

Democratic Discourse

The final theoretical approach is defined as 'Community Dialogue.' Our process is based on the philosophy and ideals of democratic empowerment through discourse. We are a culture that has fractured the complex experiences and understanding of life into specific disciplines and independent specialties. (In other words, the quantitative evaluation of experts has taken precedence over the layman's ability to use

experience and general qualitative analysis as a method of making decisions.) We have learned to leave our decisions in the hands of experts, yet at the same time we have learned to mistrust those experts depending on who is paying for their opinion. The NMR-GP team would argue that brownfield sites provide an ideal environment to 'reclaim' the individual's role in the discursive public sphere. We need to reclaim our relationship to complex public issues.

Jürgen Habermas, author of a groundbreaking work on the historic evolution of the public sphere, suggests the autonomous self emerges and democracy is enabled by participation in the discursive context (public discussion). "Participation develops an individual's capacities for practical reasoning, as well as the kind of mutual respect ... entailed in the very possibility of discourse" (Warren 172). This notion of autonomous self or 'public man' has been suggested by some theorists to be a psychological function of humanity increasingly lost to modern culture (Sennet). We developed a program that would provide context, method, and opportunity to explore the function of public discourse in relationship to Nine Mile Run. We saw this public discussion as an important precursor to the spatial development of a greenway and its goal of sustainable stewardship. To accomplish this, we needed to reorient the position of the expert in relationship to the community. Our process was to enable interdisciplinary discussion, by which we clarified the issues and language that permeate the 'expert' discipline specific discussions. With this new public language (freed of jargon) we then devised a series of workshops, tours, and public discussions in which we manipulated the normal client-expert relationship. We tried to provide the information tools to help the public understand the complexity of the issues and then devised events where the experts and the public could interact on a design basis of shared interests.

I have outlined the nature of the urban brownfield opportunity. I have provided an overview of the theoretical foundation addressing the reclamation and development of sustainable public space through: restoration ecology, reconstructive postmodern art and finally, discursive public space. In this final section I will explore the challenges we faced as we began to apply the theories in a multi-year effort.

THE PROGRAM

Our program addressed the perception and values of the Nine Mile Run brownfield property. Our goals were simple.

- Create opportunity for experience.
- Expand the intellectual content of the public realm, and the discourse on public space.
- Enable an alternative dialogue which provides access and a context in which to speak.
- Develop a community consensus-concept design as a result of that dialogue.
- Infuse the results of that consensus-design with sufficient power to move forward.

Nine Mile Run is a post-industrial landscape abandoned 25 years ago by the slag disposal industry. The experience of a dump is not an intimate one for the vast majority of the public. It is knowledge by proxy, a concept understood at a distance, a concept which maintains distance. Yet from a distance it was impossible to see the complex opportunity of the remnant stream channel, to see the diversity of plants which were starting to emerge from the slag. The process of restoration, begins with a walk – an intimate sensual experience, seeing the site with the eyes of an artist, a biologist, or an engineer begins the cultural process of restoration. Restoration will not occur in any landscape without care.

... the part of it looking different is that from a far away vista it looks real ugly to see the barren parts but when you get there and see the wildflowers coming up you think, 'WOW!' You know – those particular flowers are more valuable because they are so unusual. It is encouraging to see nature coming back despite what industry has done. (St. John 157)

The issue that brought the Nine Mile Run team together, was the early concept plan for the site which buried the stream and all vestiges of the valley. This proposal elicited a clear and concise reaction from each of the four initiating participants who had limited knowledge of the landscape in the area. My own reaction to this emerged from a personal-aesthetic interest in streams and intimate (though limited) knowledge of

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that place and its landscape. Our voice (personal and oppositional at this point) at the public meeting was clear, our perception and position – delineated a strategic alternative based on a philosophic or moral position, on the value of regional landscape forms, and remnant hydrologic systems. This impassioned response resulted in the beginning of a dialogue with city planners, fellow academics and local non-government agencies. The result was a series of funding opportunities to study the site further, and develop a public dialogue on the meaning form and function of post-industrial landscape. The project evolved over three years.

Everyone working on the project realized that the best ideas languish if there is no advocacy and expert knowledge behind them. The questions that we needed to answer if we were to develop an empowered response were: One, could a group of academic-artists build a program of postindustrial change built upon emerging reconstructivist aesthetic principals? Two, would it be possible to develop an objective research approach to these emerging issues of the public realm that would satisfy the demands of our academic positions? Our final approach, outlined earlier in the context of Joseph Beuys's and recent theories of reconstructive post-modernism, could also be defined from an urban planning point of view. Leonie Sandercock defines a social learning and communicative action approach to planning:

The emphasis is less on what planners know, and more on how they use and distribute their knowledge; less on their ability to solve problems and more on opening up debate about them. In this model planning is about talk, argument and shaping attention. (175)

Year One, Ample Opportunity: The Community Dialogue

With an understanding of the existing development program, we knew we had to have specific programmatic goals to engage the public in an alternative development dialogue, focusing on the potential form of this post-industrial public space, and its function within a social and ecological context.

- Create opportunity for experience.
- Expand the intellectual content of the public realm, and the discourse on public space.
- Enable an alternative dialogue which provides access and a context in which to speak.

To meet the stated goals, we developed a workshop program. Due to the conceptual complexity of the site, the workshops focused on four topics: history context and public policy, urban stream remediation, soil slag and habitat, and sustainable open space. Our audience was a diverse group of municipal officials, artists, architects, hikers, bikers, dog walkers, botanizers, birders, planners, environmentalists, community representatives and other stakeholders. The workshops followed a five step process:

- 1) Distribute a background document on the topic.
- 2) Conduct onsite tours with experts to explore the issues first hand.
- 3) Provide expert overviews of the issues and alternative approaches to the problem,
- 4) Conduct integrated professional/citizen community dialogues.
- 5) Analyze and represent citizen comment and expert comment with equal weight.

Each workshop was preceded by the publication of a short document identifying the opportunities, the issues and relevant stakeholder organizations. Presenters were prepared for the diversity of the audience and encouraged to keep professional jargon to a minimum. The workshops were convened onsite, on the slag heaps and in and along the stream. Shelter in the form of a trailer with sanitary facilities was provided as an onsite-classroom by Carnegie Mellon University. enabling us to accommodate groups of people at the site comfortably. Nearby, community centers were identified and ultimately utilized for more formal presentations and discussions after onsite events. A variety of experts, stakeholders and academics were engaged to expand the concepts which had defined and at the same time, confined the range of options for development of the site. National experts were engaged to delineate a wider scope of opportunities and describe innovative, stateof-the-art solutions that are functioning in other regions and nations. Local professionals and academics defined the historic values, emerging issues, options and alternatives for the site. Given this substantial investment in human intellect, it would be easy to ignore the power of the landscape, the stream and its corridor. First hand experience of the place had an enormous effect on people as we collectively considered the common perceptions of the site as a dump and nature devoid of value. The transformation of this site from dump to a potentially valuable public space, occurred within the dual realms of information and experience.

An event was arranged for each of the four topic areas, featuring tours of the site by four or five experts (academic, professional and community) with an intimate knowledge of both the site and the nature of its opportunity. After a 1-2 hour walking tour, refreshments were served either onsite or at a nearby community center. The community dialogue events began with a professional overview, to clarify the issues at the site. The group then broke-out into community dialogue working teams. A team facilitator was placed at each table to maximize involvement from each of the stakeholders and to guide the process toward key points of agreement. Typically three to four tables were filled with 10-20 people discussing a specific issue from that day's topic. For instance, the second topic: Stream Remediation broke out into tables on Water Quality Regulation and Reality, Stream Ecology and Aesthetics, and finally, Stream Banks and Floodplains. At the end of the process, specific values and opportunities had begun to emerge, a clean stream was foremost on the list, with the social and biological connectivity a near second. On a north-south axis the park was a node between the large scale Monongahela River Valley (at the mouth of the stream running through the brownfield) and the Historic 600 acre park to the north. On an east-west axis were three different urban communities who sought recreational, pedestrian and bicycle access through the site, as well as connectivity to the Monongahela river.

The dialogue was intended to complicate the discourse of development, and create a space which would nurture creative citizen voices. We developed, distributed and organized, 1. interdisciplinary white papers on specific issues and opportunities, 2. community tours with access to local and national experts, 3. community dialogues where citizens worked with non-partisan professionals to identify values and target research in years two and three. Each of the dialogues was

recorded and analyzed for institutional/citizen relationships, diversity of participation, audience expansion, rates of return and long term participation. A final report on the values and issues identified during the dialogue was widely distributed.

Year Two, Ample Opportunity: The Ecology of a Brownfield

The goals of the second year were specific, to build on the work of the first year, and follow through with expert studies to define the range of opportunities. We worked to develop an exhaustive biological and landscape ecology study. This study would provide: 1. a baseline upon which further work on the ecosystems and the infrastructure effecting them could be judged, and 2. the content for design alternatives in year three. These year's objectives, built upon the long term project goals, were:

- Expand the intellectual content of the public realm, and the discourse on public space.
- Enable an alternative dialogue which provides access and a context in which to speak.
- Develop a community consensus-concept design as a result of that dialogue.

A broad and diverse team was developed from Carnegic Mellon University, Pennsylvania State University, the University of Pittsburgh and the Carnegie Museum of Natural History. The team studied the site's social systems, history and infrastructure. Terrestrial systems such as landscape ecology, and biodiversity were studied. Aquatic systems from wetland function to stream geomorphology and an analysis of the water quality problems were conducted. The STUDIO artists who funded, developed the general scope of work and hired these academic specialists, worked to keep the team functioning in an interdisciplinary manner. The charge was simple, to generate a set of development alternatives which could be used by the community in subsequent years to make some final decisions on the conceptual design of the valley.

The period of expert analysis was not devoid of public process. Funding from the State Department of Conservation and Natural

Resources demanded an ongoing public program during the second year. As we studied the site, we set up mini-dialogue events. The core project team would begin these events with an overview of some of the decisions and direction provided in the first year. The experts from the various disciplines would then provide the latest findings and expert conclusions from the site. Community members helped the team weigh the value of the topics, sub-topics, and issues they were studying and identified the opportunities which held the most social import. Citizen comments were integrated into the report which resulted from this year's work. Each discipline had a chapter in the text, providing a rigorous overview of the nature and culture of this post-industrial landscape. Ecology and infrastructure were considered as components of the whole system. Community voice was primarily presented in a chapter on issues. concerns and constraints, then in a chapter on management options. This final chapter clearly stated a set of missions and goals, defined the range of meaning which accompanies an ecological restoration project and set some guiding principles for the last year's work. Community input was integrated throughout the text.

At the end of the second year, we had acted on the community consensus from the first year, providing expert studies which illustrated the exact nature of the opportunities and onsite constraints. The interdisciplinary design process with its focus on design alternatives proved stressful for the expert team. Language differences hampered the discussion, and design alternatives ran against the discipline specific best-solutions more common to expert culture and its practitioners. Each individual felt a need to define and control the discourse as we worked our way through the issues of each alternative. The fear, more explicit than implicit, was that, in their final presentation, the artists would not fully qualify the nature of each potential solution and the diverse issues which emerged from the competing disciplines. Ultimately, the discussions were good. They allowed each of us to work out our ideas in relationship to one another and begin to see the range of knowledge and the bias of each of these separate areas as we approached a final synthesis. More importantly, we all learned valuable communications skills which would serve the project team in its third and final year of work

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Year Three, Ample Opportunity: The Brownfield Transformation

In the final year of the Nine Mile Run project, we had to develop the expert alternative into a set of effective communication tools, to inform community decision making. We needed to produce a series of images, texts and experiences which would allow us to achieve the first of the two goals of the final program. Concurrently, we needed to develop an institutional and economic plan which placed our alternatives in a realistic light, and provided the program with the inertia and support to move forward. The final year's effort can be summed up by the following goals.

- Develop a community consensus-concept design as a result of that dialogue.
- Infuse the results of that consensus-design with sufficient power to move forward.

Sidebar: In the third year of the project, the City of Pittsburgh began a dialogue with the U.S. Army Corp of Engineers regarding a new federal aquatic habitat restoration program to develop its first regional project at Nine Mile Run. This is a new direction for the Army Corp of Engineers, who more typically build dams, straighten rivers, and transform ecosystems into infrastructure.

We needed to present design alternatives to the community, finalize a design guideline and develop an economic and institutional plan. The core project team made a transition in this year, moving away from the academic collaborators in the sciences and towards consultants in the areas of integrated ecological restoration (a firm employing a range of experts): an urban planner and a public policy expert, a non-profit administrator and a planner, as well as a landscape architect who was adept at information design. Each of these collaborators were chosen for their ability to fold our process into the complex realities of public culture. We clearly understood that in this final year, we had to communicate our options to the community for final design. We also realized that the final design was not going to be worth the paper it was printed upon if we couldn't weight the program with the recognition and support from decision-makers, the local foundation community and a range of regulatory and institutional interests. We chose a downtown

non-profit gallery as the site of our final presentation and community dialogue. To provide a clear sense of this stage of the project, I will separate the exhibition/final dialogue program from the concurrent institutional and economic plan and discuss each aspect of the final year's program separately.

I will provide the actual press release from the exhibition/final dialogue. It clearly defines the range of materials developed for this final community dialogue, a multi-media exhibition entitled 'Conversations in the Rust Belt: Brownfields into Greenways.' The project was presented at the Wood Street Galleries in downtown Pittsburgh. This event, and its gallery context, allowed us to surround our "working audience" [the community members who had worked with the project for three years] as well as our desired audience of decision makers with a full range of semiotic tools addressing the post-industrial opportunity, challenge and context. The exhibition was laid out conceptually over two floors to illustrate, 1) the industrial history, and 2) the post-industrial present.

The Exhibition and Final Dialogue Program

PITTSBURGH – The Nine Mile Run Greenway Project Team exhibited Conversations in the Rust Belt: Brownfields into Greenways at the Wood Street Galleries from July 10 through August 15, 1999. Funded by a grant from the Howard Heinz Endowment, the Nine Mile Run Greenway Project Team was formed in 1996 to research the cultural issues and ecological opportunities pertaining to the public space at the Nine Mile Run development site. The work is a project of the STUDIO for Creative Inquiry, an interdisciplinary center in the College of Fine Arts. The STUDIO was founded in 1989 to support experimental work in the arts, particularly work which engages complex systems. The project team has worked closely with the Pittsburgh City Planning Office and the Pittsburgh Urban Redevelopment Authority.

Conversations in the Rust Belt at the Wood Street Galleries reflected the issues facing all cities emerging from heavy-industrial histories. The exhibit integrated images and texts of the changing industrial landscape using the public venue of the gallery as a site of public discussion and collective

design. It utilized one of the two floors of the gallery to give insight into the former the historical industrial era which produced the slag-filled site, and the other floor to present the struggle to define the post-industrial present. The industrial presentation included images from public and private archives throughout Western Pennsylvania. The post-industrial floor featured a slaggarden and interactive video presentations designed to immerse the viewer in a community discussion. Complex ideas on the relationship of nature to culture and public to private were presented in multiple media. Multiple design options for the development of the greenway were also presented.

A final community workshop was held July 23-25 at Wood Street Galleries to develop consensus on the design guidelines for the greenway. Pittsburgh City Planning was a partner in the community workshop.

We knew that this final program had to follow our programmatic plan of integrating information and experience. The exhibition displayed factual materials which could be used for a reasoned analysis by the viewer alongside more experiential products whose intent was more emotional than factual. The pleasurable experience of large scale photographs, spoken site narratives and video illustrated the humanistic relationships to the site. The context of this final effort was a well respected gallery in downtown Pittsburgh. Our business and planning team helped us choose this physical location. They used it for breakfast briefings, tours and meetings with the decisions makers who could make or break the project. The project and its final dialogue at the end of the months exhibition was presented to a diverse group of decision makers who would accept the offer of a meeting and a tour. It provided the team with an expanded dialogue, providing access to the halls of power who would ultimately decide to either embrace or ignore the consensus plan which would emerge from this exhibition and final community dialogue. Many of the institutional and individual decision makers either attended or sent someone to participate in the final consensus-design dialogue. This event was the beginning of the public phase of the Nine Mile Run institutional and economic plan. Previously this "business planning team" (named so as to differentiate them from the core project team), had spent three months working out relative costs of our design alternatives, identifying the institutions who might support the soon to emerge final communityconsensus concept plan, and the various funding mechanisms which might support the final design and ecosystem restoration of the work.

The Institutional and Economic Plan

The purpose of the Institutional and Economic plan was to identify an implementation strategy for the Nine Mile Run Greenway Design Guidelines. The goal of the Nine Mile Run Greenway Project was the transformation of a distressed brownfield area centered below Frick Park into a green space with clean running streams. This project is an important model for addressing the decaying infrastructure and industrial waste that impact the ecological, economic and cultural viability of local communities. After three years of extensive community dialogue, intensive research by an interdisciplinary team of experts and the development of creative design alternatives, community participants reached consensus on the resultant Design Guidelines in December 1999. Recognizing that the Greenway serves both the human and biological communities of the watershed, the Guidelines reflect the range of functions that the Greenway currently serves or may serve in the future. These include:

- The Greenway carries storm water from the entire watershed to the Monongahela River
- The Greenway is the route of sewer pipes as well as combined sewer overflow.
- The Greenway has the potential of serving as a model for ecological restoration and transformation of an urban brownfield.
- The Greenway can serve as a place for enjoyment of a natural environment as well as a significant recreation, research and educational resource.
- The Greenway can provide content for a range of disciplines including ecology, biology and public policy.
- The greenway provides the East End of Pittsburgh with an important transportation linkage, eventually enabling a stream and riverside bicycle commute to downtown Pittsburgh.

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The primary goal of an institutional structure is to be responsible for an integrated and comprehensive management program dealing with all environmental influences and benefits within the area. A secondary goal is to participate in the implementation of the Conceptual Design Guidelines. Responsibilities and geographical scope need to be confirmed in concert with the appropriate city agencies, the Pittsburgh Parks Conservancy, and relevant community stakeholders. They can be initially outlined as:

- general administration
- integrated operation and maintenance
- research, education, cultural programming
- the installation of artworks which interpret natural systems.

Funds are needed for capital construction and management. Capital construction costs include engineering, design and construction. Management costs includes on-going administration, operation and maintenance of the Greenway and environmental education and cultural programming. It was recommended that a Watershed Alliance be formed immediately to keep the Design Guidelines in the forefront of the Frick Park planning agenda as well as the other parallel activities occurring in the area. It is also recommended that an ecological-corridor be managed as a unit. This area nominally contains: the 100 acre Nine Mile Run Greenway, the 150 acre Frick Woods Nature Reserve currently overseen by the Frick Environmental Center (FEC) and the stream corridor along Falls Ravine linking the two areas.

This process has begun:

- 1. On December 10, 1999 the Transition Committee was formed on a volunteer basis from the Nine Mile Run Greenway Steering Committee membership.
- Funding was secured by the STUDIO for the logistics and development of the Watershed Alliance, and its relationship to the Integrated Management Plan.
- 3. Funding was secured by the City of Pittsburgh for development of the Integrated Management Plan.

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Next steps in the process:

- 4. Develop a scope of work, which is agreeable to all parties.
- 5. Develop specific plans for a reconfigured Frick Environmental Center.

In this third year we faced the two fold task of developing a community consensus-concept design as well as the challenge of Infusing the results of that consensus-design with sufficient power to move forward. The project was one of four that swirled around the development site at the same time. Each has its own separate yet interconnected group of stakeholders and institutions.

- A Master Plan for four regional parks, which embraced Nine Mile Run
- The Aquatic Habitat Restoration of Nine Mile Run conducted by the U. S. Army Corps of Engineers
- The Summerset housing development, planned to take place on both sides of Nine Mile Run.
- Remediation of the sanitary sewer problems that result in sewage in Nine Mile Run.

We needed to keep our balance and focus on the post-industrial form and function of an ecologically restored brownfield site. We also needed to be sure that each of the concurrent development projects included some form of representation for what had to become a citizen driven plan, as the STUDIO for Creative Inquiry began to step away from the project.

CONCLUSION

Nine Mile Run has become a virus. It has instigated new ideas and concepts for everyone involved in the project and has led to new areas of inquiry for many members of the team. Our goal at Nine Mile Run was to enable an equitable public dialogue about brownfield nature and public space. We saw our work in terms of a community consensus process and a public policy discussion about the form and function of post-industrial public space, a discourse that was missing and continues to be an anomaly in the current program of local brownfield

development. To do this we had to seek support from the specific municipal agencies managing the current development program. At the same time, we needed to retain our objectivity as a separate autonomous entity, achieved through the support of the Heinz Endowments. As we began to clarify our role, we began to realize that we were revealing a complex aesthetic based on discourse, restoration ecology and sustainable landscape systems. As we thought these issues through it became clear that Nine Mile Run was a better site for experimentation and modeling new approaches to discourse and dialogue than we had originally expected. Nine Mile Run provided both the context and the subject for experimentation. Issues which arise from the reclamation. restoration or healing of this site (take your pick, each has its own relevance to brownfield development) enveloped diverse disciplines and areas of knowledge from engineering to ecology, social and political democracy as well as the arts. It was becoming increasingly clear through the examination of this single site, that our regional portfolio of vast-estates of land abandoned by industry had a curious potential to transform culture in unexpected ways.

I would like to suggest that the synthesizing value underpinning the potential of these artificial estates to transform culture (and in turn other like-properties) is diversity. Canadian Landscape Architect Michael Hough, makes an interesting statement about diversity in the context of abandoned urban properties.

If we make the not unreasonable assumption that diversity is ecologically and socially necessary to the health and quality of urban life, then we must question the values that have determined the image of nature in cities. A comparison between the plants and animals present in a regenerating vacant lot, and those present in a landscaped residential front yard, or city park, reveals that the vacant lot generally has far greater floral and faunal diversity than the lawn or city park, yet all efforts are directed toward nurturing the latter and suppressing the former. (8)

Hough's statement is line with what the artists on the Nine Mile Run team intuited and then discovered upon looking at the site carefully. It reinforces what the biologists working on the site learned through collection, analysis and comparison of the site. Indeed, Nine Mile Run

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was more bio-diverse, than our largest state wilderness parks! But where does this perception of nature take us?

To achieve a sustainable program of post-industrial public space development, it is important to consider the meaning of diversity in each area of knowledge relevant to the Nine Mile Run program. Diverse ecological systems are known for their ability to withstand catastrophic change, fire, storms even willful human destruction. It is through the multiplicity of species, each uniquely adapted to niches within a complex of landscape diversity that a diverse system can sustain itself, under the effects of sudden change. Diverse social systems have a competitive edge as well. Civilizations have always thrived on trade routes, port towns and now in new international cities, where diverse cultures create a complex social-political ecology. New economy researcher Richard Florida of Carnegie Mellon University's Heinz School has presented diversity as a key component of the new economy. Florida is trying to explore the source of new ideas and their social settings. He has developed a hypothesis that new products and industries don't start in established institutions. Furthermore, the more economically successful a city is, the more likely it is to have a high amount of social diversity. There is also a curious global relationship between bio-diversity and cultural diversity.

... most biodiversity remaining on earth today occurs in areas where cultural diversity also persists. Of the nine countries in which 60 percent of the world's remaining 6500 languages are spoken, six of them are also centers of megadiversity for flora and fauna: Mexico, Brazil, Indonesia, India, Zaire, and Australia. (Nabhan 105)

There would seem to be a thread connecting biodiversity, cultural diversity and economic diversity. This is the thread of a complex and dynamic system that few of us will ever be able to recognize in detail, but I think that many of us are beginning to sense in pattern.

As an artist, the question that I struggle with is the following: Is it possible to consider an aesthetic of diversity? Eaton offers a definition with which to begin the search for an answer.

Tim Collins

An aesthetic property is intrinsic; broadly speaking (by reference to what draws attention to an intrinsic property) anything aesthetically relevant can be construed as an aesthetic property. When one has an aesthetic experience, there are always intrinsic properties of the object of the experience that one can claim to be attending to and that one believes are at least a partial cause of the experiences. (Eaton 93)

The question of the formal element of a diverse system has not been widely addressed. Rachel and Stephen Kaplan are two of the most widely published experts on the psychology of human reactions to landscape. Their recent text With People in Mind: Design and Management of Everyday Nature, with landscape architect Robert L. Ryan, underlines the bias that managed landscapes have over what they deem 'wild' nature. Simply put, this is an issue of perceived control. Dense vegetation and obstructed views (a forest with a functioning understory) are perceived as obstructed landscapes, leading to fears of loss, confusion and in an urban setting potential hiding places for violent entities. The text clearly states the human preference for spaced trees and smooth grounds, for coherence and legibility with a hint of complexity and mystery. As I read this text, it is clear that an aesthetic of diversity is not immediately at hand. We are still on the Cartesian path, the public opinion of nature is defined by threat, discomfort and the need to control rather than nurture.

As I read my way through the various disciplines which attend restoration ecology, it seems clear to me that the role of the artist, as cultural worker (and a participant in the emerging scientific and cultural effort to restore and steward nature) is to seek new relationships to experience, to seek the properties which will define the perception of systems which provide the causal relationship in the experience of aesthetic diversity.

Systems theory evolved out of the enlightenment project of modernization, in which progress was defined through science and technology. Only a handful of writers have attempted to outline an aesthetic based on systems, fewer still have worked into the idea of diversity as a pattern, providing some indication as to relative systemic-

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aesthetic value. In the 60s, Jack Burnham was writing in response to the minimalist and conceptualist era of art. He provides some guidance as we step into this realm of diversity and its relationships to systems:

In evaluating systems the artist is a perspectivist considering goals, boundaries, structure, input, output, and related activity inside and outside the system. ... [F]or systems, information in whatever form conveyed, becomes a viable aesthetic consideration. ... The scope of a systems aesthetic presumes that problems cannot be solved by a single technical solution, but must be attacked on a multileveled interdisciplinary basis. ... [I]n a systems context, invisibility, or invisible parts, share equal importance with things scen. (17-22)

Eaton's statement on aesthetic properties is appropriately broad, and provides an umbrella in which information and invisible parts can be considered with an equanimity. Burnham outlines an aesthetic where the components of systems are as much intellectual as physical. The question that isn't addressed however is, what is it that we look for in the sum of a systems parts which indicates aesthetic values? Is there a synthesizing cultural concept which lets each of us recognize values in a system, and process it within a range of individual post-modern values? Understanding the potential pitfalls of any sort of essentialist concept. I'll return to Eaton, for direction once again. "One learns more about the invisible things that make particular ecosystems healthy, landscape begins to look more or less healthy" (94). The relative health of an organism, of a system, even of a technological construct, is a concept which begins to transcend the issues of essentialist critique. In general we share the zeitgeist of the meaning. Of course there are numerous points of specific conflict in the application of the term, a well defined and contextualized statement provides a clear communication of the conceptual continuum in which health is being communicated. I would argue that diversity defines a healthy system. It is an intrinsic property of a healthy system, it is also a property which often requires training to recognize. I believe that an aesthetics of diversity is emerging, it is a theoretical view that can be identified and pursued, but not defined by an individual author. I would argue that the dynamic emergence of a general theory of diversity is a key component of an emerging post-modern culture which integrates nature with culture.

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Art is not an arbitrary cultural complement to science but rather, stands in critical tension to it. When, for instance the cultural and human sciences are rightly accused of lack of spirit, this is almost always at the same time a lack of aesthetic discernment. (Adorno 231)

A Challenge

The theoretical, physical and design analysis of urban open spaces are the traditional realm of urban planners, architects and real estate professionals. Each of these disciplines are shackled to the private realm of commercial development by vested interests. Municipal design professionals - the traditional guardians of the public realm - are equally affected by vested interests and/or conflicted politics of municipal government. It is our hypothesis that the public realm is in need of interventionist care. The visual arts with a history of value based creative-cultural inquiry are well equipped to take on this role. Any role in an arena complicated by capital and politics must be met with a sustained autonomy through careful funding. We must enable an advocacy that is free to raise questions, paid to voice alternatives and be willing to embrace conflict as a tool in the support of the goals of an expanded public realm. This calls for an independent, citizenprofessional - a generalist with training in the techniques and concepts of creative inquiry, social-systems intervention and discursive democracy. The long term goal is to develop a cultural discourse which will

- expand the social and aesthetic interest in public space to the entire citizen body,
- re-awaken the skills and belief in empirical analysis and critical dialogue (versus professional analysis and pronouncement), and
- preach, teach and disseminate the notion that 'everyone is an artist,' thereby undermining the interim 'profession' which we must create to intervene and uncover the form and function of a post-industrial public realm.

Conversations in the Rust Belt

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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.

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



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

existing community interests, offering expertise and knowledge as support in local affairs. Others define their authenticity as internal members of bioregionally 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 aquaintances 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

In examining these matters, 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

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- Arts and the Environment
- Community Arts History
- Overview Essays

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 "I would argue and natural manifestations, is simply an extension of who we are. Nature and culture, like that artists and 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 something in the in the foreground. One does not exist without the background of 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 condition of life." that artists and scientists alike must learn to

scientists alike must learn to think about nature not as human culture but instead as an extension of humanity that is an essential

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, 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 postmodernism, 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



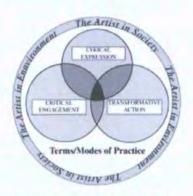
Jyoti Duwadi, Installation, Joshua Tree National Monument, Calif.

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 cite numerous examples of this type of work, 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.

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



A graphic representation of the artists' modes of practice within a social environmental setting. (Image by Goto and Collins)

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 tranformative 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 Veterans 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 [8] 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.

Herbert Bayer, Walter De Maria, Michael Heizer, Nancy Holt, Mary Miss, Isamuu 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

Aviva Rahmani, "Echo of the Islands,"

Vinalhaven, Maine 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

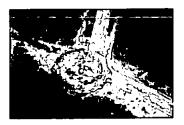
At the same time, another group of artists emerged with a focused interest in systems theory and ecology. Hans Haacke, Helen Mayer Harrison and Newton Harrison, Alan Sonfist and Agnes Denes were the original (and continuing) practitioners. They differed from the land-artists in their interest in dynamic 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 Balle 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:

New groups of artists are emerging who are committed to socialecological 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



Herman Prigann, Terra Nove, "Circle of Remembrance," on the former border between East and West Germany

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 (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, in terms of which has primarily a micro-biological relationship interdisciplinary to society. The eco-artists are informed by the radical ecologies of deep-ecology, ecofeminism, social ecology and environmental justice. The biogenetic artists are principally informed by a critical understanding of bio-technology and its equity relationship to society. The work is framed political return." by post-structuralist philosophy and its analysis

"This is an area of massive cultural flux, one where strategic energy arts practices can result in creative engagement with significant social-

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 listsery 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. I will conclude with my own thoughts on intention, efficacy and policy.

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.



Erica Fielder, "A Gesture Of Return": returning a bone to the Eel River, coastal northern California

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 a % Earth a % Stone = Slow decay a wining 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:

- 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)
- Systems Thinking: Visualizing patterns and relationships across disparate information and knowledge systems, and applying the lessons of ecosystems to our human communities. (Capra)
- 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)
- Social and Biological Diversity: Understanding that diversity among disciplines, cultures and species is a prerequisite for systems health and resilience.
- 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.
- Collaboration: Bridging the boundaries between disciplines, cultures, classes, genders, communities and species, respecting what each brings to designing solutions that work for everyone.
- 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



Ruth Wallen, Children's Forest Nature Walk, San Bernadino, California

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 inter-relationships. 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,



Jeroen van Westen "Fort on the Water"

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 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

"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." -Suzanne Lacy

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 commulty 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 socialcommunity 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, 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



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.

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 overvalues the cultural work of developed countries while undermining the cultural practices and arts of developing nations.

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 economyreinforcing measure for small farmers. They are also involved with Catholic and Protestant bus drivers in Northern Ireland, who, despite



vision for farming families. the countryside, and the rural economy, after foot and

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 coauthored significant policy reports with others on British Petroleum's Azerbaijan-Georgia-Turkey pipeline and the Baku-Tblisi-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.

In this essay, I have done my best to provide the reader with a sense of contemporary environmental practices. I have tried to integrate numerous artists

"There are

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 temerity to lay of works that go to environmental justice and issues of policy. I've included an artist's dialogue but few that 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

that have the claim to policy, actually have the power, ability and focus to see it through to conclusion."

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.

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.

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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.
- [7] 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.
- [6] Reiko Goto is my primary collaborator, project co-director of 3 Rivers 2nd Nature and lifepartner. 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.
- [7] The following historic framework has been used in various forms in the following published essays; Collins, T., (2003- Forthcoming) "Art Nature and Aesthetics in the Post Industrial Public Realm" in "Healing Nature, Repairing Relationships: Restoring Ecological Spaces and Consciousness," Editor Robert France, MIT Press, Boston, Mass. And Collins, T., (2003) "Art,

Landscape, Ecology and Change" in "Urban Futures," Hall, T., and Miles, M., (eds), Routledge,

- [8] A recent text on the subject, "Earthworks: Art and the Landscape of the Sixties," has just been published by the author Suzaan 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.
- [9] 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.
- [10] 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.
- [11] The list is primarily ecoferminist 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.
- [12] The Socratic dialogue uses patient questioning to reach some true conclusion. The method requires knowledge of both the questions and the answers.

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Communitas creates community. I facilitate Part-time language and cultural study at the communitas.

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