Spring 2017

Adaptive Strategies in a Slow-Motion Apocalypse

Allana Ross

Follow this and additional works at: http://openscholarship.wustl.edu/samfox_art_etds

Part of the Art and Design Commons, and the Biosecurity Commons

Recommended Citation

Ross, Allana, "Adaptive Strategies in a Slow-Motion Apocalypse" (2017). Graduate School of Art Theses. ETD 91. https://doi.org/10.7936/K7V1237G.

This Thesis is brought to you for free and open access by the Graduate School of Art at Washington University Open Scholarship. It has been accepted for inclusion in Graduate School of Art Theses by an authorized administrator of Washington University Open Scholarship. For more information, please contact digital@wumail.wustl.edu.
Adaptive Strategies in a Slow-Motion Apocalypse

Allana Ross

A thesis presented to the Sam Fox School of Design and Visual Arts of Washington University in St. Louis in partial fulfillment of the requirements for the degree of Master of Fine Arts

Graduate Committee
Richard Krueger  |  Thesis Advisor
Buzz Spector  |  Studio Advisor
Cheryl Wassenaar  |  Studio Advisor
Linda C. Samuels  |  Committee Member
Stanton Braude  |  Committee Member

May 8th, 2017
Contents

Abstract ........................................................................................................................................... 2

Introduction ....................................................................................................................................... 3

I. Toward a New Culture of Nature ............................................................................................... 4

II. Art as Adaptation: From the Museum to the Garden .............................................................. 18

Conclusion ....................................................................................................................................... 42
Abstract

Nature is a construct inherited from Enlightenment thought. Our culture of nature—the way we construct, teach, communicate and perpetuate our concept of nature—has furthered the false dichotomy of an untamed nature versus a resource-consuming culture. This dualistic thinking has facilitated the current environmental crisis. We thus need a new culture of nature and a system of re-education that enables a symbiotic relationship between ourselves and our environment. A re-negotiation of this relationship is imperative to our continued survival on this planet; thus a reformation of the culture of nature can be viewed as an adaptive strategy. Systems-focused ecological art practice provides a platform for the process of re-education. A hyper-local focus integrating didactic display and community engagement is an effective strategy to re-cast environmental issues as social issues.
Introduction

The independence of humanity from its environment has informed our culture of nature—the way in which we construct, teach, communicate, and perpetuate our concept of nature. The erroneous notion of humanity’s independence from nature creates a false dichotomy of resource-consuming civilization versus sublime wilderness. We are living in the anthropocene, the geologic era in which environmental change is driven by human intervention in the natural environment. We are in the midst of a slowly unfolding environmental catastrophe, yet we have done little to mitigate it. Our dualistic thinking casts this gradual disaster as an environmental rather than social issue. But because the concept of nature is a construct, it is mutable. In order to ensure our survival in a changing environment, our definition of nature must be revised to include ourselves and our cultures. How can we re-educate ourselves and re-invent our culture of nature in order to establish a symbiotic relationship with the natural environment? Systems-driven ecological art practice provides a radical form of adaptation and re-education, addressing social concerns in order to catalyze systemic change beginning at the smallest local level. My regionally-focused work seeks to inform viewers, prompt questions, and generate action through re-educative processes.
I. Toward a New Culture of Nature

Tracing the origins of humanity’s spurious separation from nature leads one back as far as the beginnings of written communication. The elevation of “man” above the physical world is rooted the creation of man in the image of God in Genesis. Adam exists in the Garden, but is not of it. Thus the notion of the human as isolated from the natural environment has permeated western thought since its inception. Enlightenment philosophy solidified the Cartesian dualism of man as subject versus environment as object in the formation of modern Baconian science. In the pursuit of human health and prosperity, Descartes insisted that through knowledge, one could come to master the elements of nature as one can master a craft. We can thus “render ourselves the lords and possessors of nature.” Similarily, Francis Bacon postulated that the goal of the study of nature is the amelioration of the human condition. Scientific enquiry served to subdue the natural environment for our gain. Bacon asserted that the true end of knowledge was power over the natural world for the benefit of humankind.

The idea of humanity as independent from nature was, in the case of Enlightenment thought, deployed in the name of science for humanity’s benefit. Two centuries later, however, this reductionist dichotomy has enabled unmitigated environmental destruction with little thought of consequences. When the natural world is understood as a place apart, its consumption goes unnoticed until resources are
exhausted. Even then, because nature is a mystery disconnected from the social, the connections between society’s choices and the state of the natural environment are obscured.

This is not to say that other thinkers have not inferred the relation between society and the natural environment. Rousseau and Diderot saw humanity as born of the natural world. While Diderot pushed for an alliance between humans and our natural animalistic tendencies in order to better the arts, Rousseau expounded upon “la crie de la nature” as the point of language’s origin, the birth of culture. “La crie de la nature” can be thought of as the natural desire to express—a deep, guttural utterance that gradually formed into logical syllables in order to fulfill the entirely natural need to communicate. Diderot’s philosophizing of the pantomime is analogous to Rousseau’s “crie.” The physicality of the body, its animalistic nature, inextricably ties us to our origins. The arts and culture are thus born of nature. Linking culture and nature was logical to the two philosophers; they viewed humans as natural creatures and culture as an extension of our natural tendencies. Their aims were not environmental so much as artistic, nevertheless their philosophies served to subvert dominant Baconian thought.

Perhaps the first philosopher to recognize and articulate the dangers dualistic thinking poses to the natural world was George Perkins Marsh, whose 1864 *Man and
Nature excoriated common environmental practices throughout Western history—from the Romans to private corporations. While influential, Marsh’s text did not upend reductivist thinking—especially in America, where wilderness was still understood as infinite. Marsh witnessed the industrial revolution in America, and postulated that intervention in the landscape for capitalist gains could have unforeseen consequences.⁶

One such casualty was the passenger pigeon. Even after two decades of its decline, the species’ extinction in 1914 astonished Americans. We hunted the bird into extinction, and then were surprised at the results. Environmental historian Jennifer Price points out that “convenience makes it doubly hard to navigate our ties to nature.”⁷ Our lack of connection to the physical environment facilitates irresponsible consumption.⁸ Pigeons were hunted far from the places they were consumed, urban expansion and industrialization necessitated that the act of hunting become a sport more than a survival skill. Thus the meaning of the pigeon became dissipated, lost in its many miles of rail travel—carcasses preserved on ice—between the plains and the city. Price remarks that we “use nature to tell meaningful stories” but often “lose track of nature in the process.”⁹ We moralize the extinction of the passenger pigeon with admonitions of over-consumption—but what facilitates this over-consumption? Perhaps the solution is more complicated than encouraging responsible hunting practices.
Examples of over-consumption and its consequences abound throughout the age of industrialization. By the time Marsh was writing *Man and Nature*, steamboat travel had enabled the colonization of the West. Steamboats brought European settlers to colonial villages along the Mississippi; ironically, steamboats also brought about the destruction of these settlements. The river’s banklines were destabilized due to erosion, a result of extreme deforestation. Most of the wood cut from the Mississippi floodplain was used to power steamboats. Without riparian vegetation, the river became increasingly wide, shallow, and muddy. The lateral movement of the Mississippi resulted in destruction and significant damage to all but one of the colonial settlements in the central Mississippi Valley. When Charles Dickens toured the Mississippi Valley he called it a “dismal swamp…a hotbed of disease, an ugly sepulchre, a grave by any gleam of promise: a place without one single quality, in earth, air, or water, to commend it.” Due to environmental exploitation, the Mississippi floodplain had become an anti-landscape, inhospitable to settlement and human life.

Today’s post-industrial environment of the American Bottom is a place rife with “anti-landscapes,” a legacy of the dichotomy that casts nature as separate from humanity. An anti-landscape is a place that does not sustain life—while anti-landscapes can occur naturally, in the American Bottom, they are a consequence of human industry. David Nye defines landscapes as “humanly modified places where
people live.” He posits that an anti-landscape is landscape’s inversion: “An anti-landscape is a man-modified space that once served as infrastructure for collective existence but that has ceased to do so.” An anti-landscape gives expression to a new sense of environment. It is the echo of a productive, exploited place, an abandoned history.

As the twentieth century progressed, post-war optimism solidified the terms of the relationship between humans and the natural environment. Wartime technology began to be adopted for domestic use. Nuclear energy, mined from the Congo and developed for weaponry during WWII and beyond, was repurposed for production of electricity. The by-products of weapons production were disposed of in various sites around the country; two notable local cases are Weldon Spring and Times Beach. Weldon Spring was the site of a munitions plant, the construction of which displaced communities when the government bought the land during World War II. During the Cold War, once Mallinckrodt’s downtown St. Louis site became too contaminated, the uranium-processing operation moved out to Weldon Spring. The Weldon Spring plant was referred to as “the clean one,” but workers still suffered illnesses consistent with exposure to radioactivity. Every morning, employees would scan their badges with geiger counters. If anyone’s came up “too hot,” they would be sent off-site for one week. The site was abandoned in 1967, left to deteriorate and contaminate the
drinking water of St. Charles County. Decades later, after consistent pressure from concerned and poisoned citizens, the superfund site was cleaned up.\textsuperscript{16} The radioactive waste was scraped into a mound and capped with layers of concrete, clay and limestone. The site now features a museum, a bike trail, and a nature preserve. The anti-landscape has been rehabilitated through modern-day mound-building, converted into a site where visitors are encouraged to commune with the landscape.

Times Beach—now Route 66 State Park—is the embodiment of the anti-landscape as abandoned history. The town began in 1925 as a working-class vacation destination in the cool, shady Meramec floodplain and soon became an incorporated municipality. The town was evacuated in 1983 due to contamination from dioxin—a by-product of agent orange, a chemical defoliant used during the Vietnam War. Agent orange was manufactured across the river in Illinois, and dioxin was sprayed on the gravel roads of Times Beach in order to keep dust down. After animals started dying and several children grew ill, residents conducted investigations and discovered the source of the contamination. Once again, war waste was claiming victims on the home front. It was only after mandatory evacuation following the flooding of the Meramec that the government stepped in, barring residents from returning home. A buyout and re-location campaign followed as the town was disincorporated. The remains of the town—citizens’ homes and businesses—were partially incinerated, then the detritus
was dragged into a pile and interred in a mound. The mound is now called “the town mound” and is just another physical feature of Route 66 State Park.

Other chemical weapons were converted to fertilizers and pesticides in order to facilitate monocrop agriculture in the American Midwest. Nitrogen used in TNT was found to be an excellent fertilizer, and munitions plants were converted to fertilizer factories. DDT was commonly used among military forces during the war and was later adapted for civilian use. Its synthesis in 1939 led to chemical development of other synthetic herbicides and pesticides. Crop dusting, first attempted in Ohio in 1921, appropriated flight technology from wartime pilots for widespread chemical application. Monocrop farmers in the Midwest have so readily applied glyphosate (Monsanto’s RoundUp) and synthetic nitrogen-based fertilizers that a 6000 square mile hypoxic dead zone has formed at the Mississippi delta—an oceanic anti-landscape.

Flight technology wasn’t limited to agriculture. Airplane manufacturing techniques and materials were applied to production of domestic dwellings, leading to mass-produced single-family housing units. Post-war optimism changed the face of the American suburb. A sharp increase in housing demand led to standardized industrial building and planning methods embodied in the most famous of American suburbs—Levittown, New York. The Levittown vision focused on the nucleus of the prescribed
American ideal—the two-parent, heterosexual household in which the male was the wage-earner. Levittown was divided into lots calculated to consider the minimum amount of activity space required for a family. The Levitt house was 750 square feet, with one bathroom and two bedrooms, and there were four exterior appearances to choose from.\textsuperscript{17} A restructuring of FHA loans specifically for returning veterans made it much easier for a family to achieve the dream of home ownership and buy a piece of paradise, unattached to others’ properties, wholly independent, beholden to no one, and on the frontier between wilderness and the capitalist opportunities of the city. This “distinctive American mentality,” cultural theorist David Brooks argues, “explains the westward crossing as much as the suburban sprawl.” He quotes Emerson: “Here is man in the garden of Eden; here, the Genesis and the Exodus,” lending a biblical dramatism to never-ending (often westward) expansion. “Emerson was expressing the eschatological longing that is the essence of the American identity: the assumption that some culminating happiness is possible here, that history can be brought to a close here.”\textsuperscript{18}

The birth of the suburbs pre-dates the post war era. They are mentioned as early as Chaucer’s \textit{Canterbury Tales}, and even some Cahokian citizens lived on the outskirts of the city where they farmed small plots. Post-war suburbs, however, marked a shift in the structure of American urbanism. The demographics of suburbia changed: people of
means were choosing to live far from the city center. The development of post-war
suburbia echoed the earlier pioneering era. Young families left dense urban enclaves to
pursue peaceful sequestration in bucolic settings, occupying a liminal landscape
between the wilderness and the city. This established a demarcation between the
productive, urban workplace and the domestic, private space nestled in nature, as well
as necessitated a means of transportation between these two worlds. While suburbia
had previously been served by streetcars, prosperous post-war families demanded more
convenience and privacy. Car culture was born, and America’s infrastructure followed
suit with alacrity, from streets lacking sidewalks to drive-through fast food joints.
Agribusiness practices ensured that the last remaining vestige of contact with the
natural world withered, as food became a chemically-produced commodity. Nature
truly was a place apart now, even as we tamed it in our suburban landscaping; in the
regular mowings of lawns, application of pesticides, and pruning of exotic imported
plants.

The contradictory drives to immerse oneself in nature while conquering and
exploiting it is unique to the American character. Thoreau speaks of nature as an
essential tonic, a kind of antidote. Wilderness, to thinkers such as Muir, Thoreau, and
Emerson, was fundamental to American identity. In 1893, historian Frederick Jackson
Turner announced that “the American character did not spring full-blown from the
Mayflower,” but that “it came out of the forests and gained new strength each time it touched a frontier.” The draw to wilderness is elemental, an essential facet of the American character. Westward expansion, however, was a pursuit of resources—more arable land, more timber, a Northwest passage for ease of trade. Nature—to an American mind—has always signified opportunity for a better life. The flight to the suburbs, then, is a reverberation of this pursuit.

The 1960s marked a shift in common perceptions of the boundlessness of nature. Rachel Carson’s seminal *Silent Spring*, published in 1962, galvanized the modern environmentalist movement. The book’s opening chapter “A Fable for Tomorrow” uses iconic American nature imagery to describe a bucolic town whose sing-song idyll is disrupted—silenced—by toxins. “The people had done it themselves,” Carson states, implicating all the townspeople in their complicity, not just those who actually apply pesticides. This focus on interconnectedness emphasizes the web-like nature of an ecosystem of which humans are just one part—damage to the system is damage to ourselves. The notion of humanity as a part of the natural environment was not new; Marsh had laid the foundation for systems ecology a century earlier: “All Nature is linked together by invisible bonds and every organic creature, however low, however feeble, however dependent, is necessary to the well-being of some other among the myriad forms of life.” Only when tangible effects were felt by citizens did the notion
of interconnectedness gain popularity. Carson’s research catalyzed movements in systems ecology and other fields of environmental studies, yet her warnings remain largely unheeded. Our patterns of land use continue and our practices of consumption remain unchecked despite the moralistic admonitions of “A Fable for Tomorrow.”

At the same time that mainstream America was cementing the terms of its relationship with the natural environment—terms embodied in the anti-landscapes of Weldon Spring and Times Beach—a strident environmental critique was fomenting in the counterculture. The back-to-the-land movement of the ‘60s and ‘70s was considerable enough to affect the urban population. The year 1968 saw multiple student uprisings, massive anti-war protests, and other manifestations of general discontent and dissatisfaction with the status-quo. The period of post-war American optimism had come to an end, but the mainstreaming of environmentalist movements galvanized by *Silent Spring* did little to reframe conventional environmental rhetoric as a social issue rather than a simple issue of resource management.

The fact that the past three years have been the warmest on record suggests that irresponsible land use is not the underlying issue, and that the moralization of environmental woes is far from sufficient. Because of Carson and the environmentalist movements she inspired, we are aware of the environmental impact of
our actions. Despite warnings of drinking water contamination, we continue to install pipelines under rivers. Despite documented evidence of community health crises, we continue to mine using mountain top-removal. Despite the long-term consequences of radiation exposure, we continue to invest in nuclear power and weapons.

It’s not that we don’t love nature. In 2015, the centennial anniversary year of American National Parks system, record numbers of visitors were recorded. A desire to experience nature is part of American heritage and identity. Yet nature tourism and outdoor recreation do not address the fundamental issue of our perceived independence from our physical environment. In fact, appreciation of nature as a pastoral retreat only reinforces the reductivist dichotomy of man versus nature.

The private automobile turned average American families into wilderness explorers. The culture of nature readily adapted to car culture; National Parks were designed as drive-through experiences with their main attractions easily accessible by automobile. Landscape theorist Alexander Wilson notes that nature parkways “instruct drivers about how best to appreciate the scenery out the window.” The car serves as another point of mediation between the viewer and the landscape, positioning the audience as receptive, passive, and apart from the managed landscape of the park. The result of nature tourism is somewhat ironic. The rise of car culture not only wreaked
environmental havoc through carbon emissions, it served to aggrandize the separation of humanity from its surrounding environment through revitalized pastoralism, a position easing further environmental degradation.

Today, a typical national park visitor enjoys the vistas from the campground while an outdoor recreation enthusiast hauls freeze-dried foods to the top of a mountain inhospitable to habitation. We have come to admire the virgin wilderness while battling against it, to gaze upon it like the early colonists as they fought their way out west. “By and large the Western pastoral tradition has been compatible with the idea of nature as a resource to manipulated by human enterprise,” states Alexander Wilson. Nature tourism is just another mode of consumption, one that feels rejuvenating, like a shower in clean, fresh water diverted from pristine rivers through a series of underground pipes to arrive—as if by magic—in our bathrooms.

Wilson argues that dualism permeates our culture of nature. UNESCO documents state:

The goal of environmental education is to develop a population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones.
The phrasing of “the environment and its associated problems” implies that these problems exist strictly in the realm of the physical environment, and not the social. Wilson contests that the technological fixes that this language implies “do no more than reinforce the boundaries between a natural world understood to be pure and irrational and an urban-industrial civilization bent on domination.”

We need a new culture of nature. The changing climate, toxic waste sites, and the Great Pacific Garbage Patch indicate that the Enlightenment doctrine of dualism no longer serves the greater good. Our perceived separation from the natural world has led to unchecked exploitation, endangering our long-term survival on this planet. While many of us in wealthier nations have greatly benefited from the false dichotomy of civilized man versus untamed wilderness, the vast majority of humanity is already suffering the consequences. Climate refugees and victims of industrial waste and pollution are casualties of Enlightenment thought, which positions humanity above and outside of an infinite, virgin natural world. Solutions lie not within this old paradigm, but in a complete shift in the way we conceive of “nature.” As long as we perceive ourselves as the “lords and possessors of nature” and not an integral part of the ecosystem, we threaten to be our own undoing. Under capitalism, it is easy and convenient—even necessary—to deplete that which is not considered a part of you, that which is abundant and there for the taking.
II. *Art as Adaptation: From the Museum to the Garden*

Our modern age is commonly called the Anthropocene: the Age of Man. The driving force of devastating environmental change is no longer geological, it is anthropogenic. In our ever-unfolding, slow-motion apocalypse, we—like all animals—must adapt in order to survive. The United Nations Framework Convention on Climate Change defines adaptation as a process of adjustment to actual or expected changes. Their literature outlines five distinct phases in adaptation: observation, assessment, planning, implementation, and monitoring/evaluation. Contemporary art practice can fit into any one of or straddle several of these adaptive steps. The interdisciplinary work I will discuss re-negotiates, re-educates, and re-invents our culture of nature in an attempt to enable crucial adaptation.

Much contemporary eco-art is grounded in ideas of systems ecology. Systems ecology seeks to undermine the false dichotomy of culture versus nature by acknowledging that humanity is a part of nature—both affecting and affected by its processes. This philosophy emphasizes interconnectedness over separation, interdependence over independence, and participation over spectatorship. Artist and author Suzi Gablik calls for art that reflects this new understanding of systems: “As we begin to move toward a new ecology of consciousness, and the world becomes understood as a place of interaction and interconnection, the challenge will be to break
through the Cartesian illusions that have generated the impression of separation and detachment.” The art practices discussed here implicate viewers, exhorting their education, action, and adaptation. This art is instrumentalist—its value is in its effectiveness as an instrument of change.

Systems-focused ecological art exposes and explores the locus of our interaction with the natural world: land use. Our culture of nature has constructed the concept of nature, and because nature is a construct, it is mutable and can be revised. Artists like the Harrisons, the LA Urban Rangers, and the Center for Land Use Interpretation use the language of the culture of nature to subvert the false dichotomy of nature versus civilization. My own work uses similar tactics with a regional focus. We are all attempting to re-establish lost connections by acknowledging the interdependence of humanity and nature. Through mapping, alternative tourism, and agricultural projects, we investigate ways of understanding and interacting with the physical environment. Our survival on this planet hinges on awareness and understanding of the natural environment and our place within it. A systems-driven ecological practice functions as an adaptive strategy that revives our relationship with the physical environment and the natural world. This art prompts questions about land use and generates action that re-negotiates the terms of our relationship with the natural environment.
Newton and Helen Mayer Harrison’s work employs the concepts of systems ecology, including humanity within natural systems. Their work covers the entire spectrum of adaptive processes, from observation to monitoring/evaluation. *Sacramento Meditations* (1977) is an investigative piece that embodies the process of observation and assessment while posing critical questions about the sustainability of farming practices in California’s central valley region. The piece is largely a collection of data observed and poetically reported through mapping. The presentation is informative, delicately rendered, and pedagogical. The work details anthropogenic interventions in the landscape and their consequences. The Harrisons thus place human intervention in the context of the larger scope of the physical environment and our place within it. Not only do the artists take an educational tack in the gallery setting, but they pursue solution-based projects in the field as well. The *Survival Pieces* of 1970-1972 and *Full Farm* (1974) tackle the challenges of small-space agriculture, bringing issues of survival into the museum. Their experiments include a hog pasture, a fish farm, a portable orchard, and various vertical gardens. Again, the work had instructional intent: the pieces functioned as educational opportunities not only for the gallery-going public, but for regional youth as well. The artists employed the fifth step of adaptation—implementation and monitoring—in the execution of these projects.
My project, *Postcards for the Apocalypse*, is an interactive, instructive installation of seemingly disparate fragments that are in fact intimately connected. Bounded by struggling plants dangling from the rafters in macrame hangers on one side and a patchwork of postcards on the other, a colorful wall mural confronts the viewer. In the corner, large bur oak acorn caps filled with dirt sit in formation, waiting for viewers to pick them up. A spinning display rack reading “take one, make one” features postcards which the audience is invited to decorate and send.

The plants (hanging in cotton macrame dyed with plant material foraged in St. Louis City) aren’t houseplants but weeds. Lambsquarters are sold as “wild-foraged” edibles in upscale restaurants and are prominent denizens of vacant lots throughout the city. Their seeds sprout in the bur oak acorn caps across the room, there for the taking. These weeds were a staple of the Cahokian mound-builders and are now easily foraged...
in our urban environment, but here, in St. Louis, urban foraging—which, under different circumstances, could be part of a solution to the food desert crisis—is a potentially deadly pastime. Our soil is contaminated with industrial and nuclear waste. That nuclear legacy—a triumph of modern science—has left behind victims at home as well as abroad: a wall mural of bright dots and blue swathes maps incidences of disease consistent with long-term, low-level radiation exposure in the Coldwater Creek Floodplain, a dumping ground for nuclear waste from the Manhattan Project. The Missouri and Mississippi Rivers absorb the creek, carrying radioactive contaminants into St. Louis City’s drinking water source and, eventually, into the Mississippi delta 700 miles downstream. Here, like the Harrisons, I am using mapping as a way of interpreting and illustrating human intervention in the landscape and its consequences.

Fig. 2: Allana Ross, *Postcards for the Apocalypse* (2016)
This mural is miniaturized on one of the five “Postcards for the Apocalypse” that adorn the gallery’s South wall. The cards are laid out in a pattern reminiscent of suburban development, the neighborhoods nestled against the meandering Coldwater Creek, perhaps. Blank postcards are distributed to the viewers, who are encouraged to send them to their friends and family in the inevitable event of environmental disaster. This activity, along with the planting of the bur oak acorns, elicits complicity from the audience, an acknowledgement of the current environmental catastrophe constantly unfolding. In order to survive impending disaster, awareness of and agency within the physical environment is imperative. This renegotiation begins at a strictly local level but can be extrapolated to the global situation. Perhaps, had we not perpetuated the myth of humanity’s independence from the natural world, we wouldn’t have gotten into this situation in the first place. We can tell the story of nuclear war and its fallout at home—the scientific achievements of a culture ultimately leading to its own downfall—as a fable, a warning, a microcosmic situation representative of a larger belief system. Re-education is imperative to our adaptation, and it can begin with the simple reclassification of a weed.

Re-defining the space between the wild (a weed) and the domestic (a comestible) is an essential adaptive strategy. Evolution and adaptation have been occurring on the fringes of society as environmental awareness has developed over previous decades. An
The irony of the counter-culture movement is its adoption of methods of craft and domesticity frequently used by the society it was rejecting. Both factions of society—whether in newly-constructed suburbs or intentional communities—were pioneering, home-making by navigating and re-working the gap between the wild and the domestic. These efforts at sufficiency in the counter culture are adaptive strategies that not only ensure survival on a practical level—reclassifying abundant plants as edibles fulfills a very basic need—but provides a model for re-thinking the classifications that underpin our relationship with the physical environment and its position as “a place apart.”

Fig. 3: Allana Ross, *Postcards for the Apocalypse* (2016)
Many artists are using the model of environmental education to disrupt the notion of nature as “a place apart.” The primary work of the Los Angeles Urban Rangers is not in the gallery setting, but outside, in the built (and unbuilt) environment. The group appropriates the language, customs, and apparel of the National Park Service, guiding participants on outings exploring the urban environment. Within the museum or gallery space, the collective may hold campfire talks or set up a mobile ranger station, but their essential work actively negotiates the public’s relationship to the physical environment. Viewers become active agents in their re-education through participation. The ranger persona in an urban setting effectively disrupts the false dichotomy of nature/culture by bringing a character associated with pristine, pastoral wilderness into a man-made environment. Guided hikes through downtown Los Angeles’ canyons formed by skyscrapers, Art Center’s wind tunnel, and Malibu’s public beaches encourage the integration of the natural and the built environments as well as the public’s informed use of spaces that rightfully belong to everyone. LAUR’s Los Angeles River Ramble (2010-present) project exemplifies the tactics used to draw attention to and rectify the nature/culture divide. Maps of the L.A. River were produced using National Park Service-style graphics and language and hikers were issued backcountry permits in order to explore the L.A. River’s concrete-capped basin near downtown Los Angeles. The project addresses water issues by mapping the river’s tributaries and the city’s drinking water sources. A companion piece, Water Bar (2010-
already available and familiar? And what better way to re-create our culture of nature than by using graphic language with the physical environment, the Urban Rangers are implementing adaptive strategy. And what better way to re-create our culture of nature than by using graphic language already available and familiar?

Fig. 4: Los Angeles Urban Rangers, LA River Ramble Map (2010)
A second group operating similarly, representing human intervention in the landscape from a position of fact-based neutrality, is the Center for Land Use Interpretation. Their work, like that of the LAUR, is “an experience that defies the tidy categorization of research, art, education, or tourism.” A tour with the CLUI is all of these combined. Their mission, “the increase and diffusion of knowledge about how the nation’s lands are apportioned, utilized, and perceived,” is an educational mission that aims to re-invent the culture of nature through straightforward, humorless, unromantic investigation. CLUI’s Los Angeles Headquarters functions as an exhibition space and information center. The most recent exhibition, *Hollowed Earth: The World of Underground Business Parks*, features photographs, videos, and touchscreen maps. An accompanying text informs the viewer about the business parks, their locations, and their origins. This is a museum-style display educating viewers on little-known land-use practices. CLUI’s website functions similarly. One of its features, the *Land Use Database*, allows users to zoom in on specific locations across the country and examine land use patterns. Representations of specific sites include hyperlinks to more information. Dates of CLUI excursions and exhibits are posted and past exhibitions are meticulously archived. The mission of information dissemination is clear. CLUI provides guided tours, and the inclusion of interpretive text is essential. Artist and theorist Sarah Kanouse argues that the presence of the text insists that “information and cognition are necessary for interpretation or understanding to occur.” Thus, the collectives of the Center for Land
Use Interpretation and the Los Angeles Urban Rangers have appropriated the institutional language of the culture of nature in order to undermine the culture/nature divide. Viewers are activated not only by physical encounters with the modified landscape on a tour, but accompanying dissemination of information and knowledge of place.

Radical adaptation requires a knowledge of place and an understanding of humanity’s relationship to a specific physical environment. The history of land use shapes a region’s future, while its natural environment informs language and culture.
Awareness of this past is an indispensable tool in formulating adaptive strategies for the future. Environmental history animates my research-based practice—historical maps, tools, and artifacts lend a specificity to my investigations of particular sites. This localization is a form of regionalism; addressing issues at a local scale immediately establishes an entry point for local audiences and personalizes the urgency of adaptation. The most effective way to re-negotiate the terms of our relationship with the physical world is to encourage interaction and engagement with the environment.

*Shelter In Place* is a project that questions the classifications of toxic anti-landscapes and the transformative process of the “clean-up” that facilitates their re-classification as recreational spaces. One corner of the gallery is painted with two abutting wall murals—two historical maps of the Mississippi from two very different perspectives. The map on the left is a pre-Columbian map found at the Thebes Gap in Southern Missouri. I have added a symbol representing the location of Monk’s Mound, the largest extant mound at Cahokia, built by the cartographer’s contemporaries. Near the maps, on the floor, is a to-scale topographic representation of Monk’s Mound, a larger version of the symbol that appears on the map. This colorful re-interpretation of a landscape intervention highlights the history of human interaction with landscape.

Cahokia was the first example of urban planning in North America. The mounds were
structures built by early landscape architects manipulating the earth to the desire of humans.

The map on the right is Lewis and Clark’s map of the Mississippi, dated from the early 19th century. This map uses lettering and symbols to evoke exploration, conquest, and manifest destiny—a foreign European culture with the idea of nature as resource driving exploitative Westward expansion. On this map I have marked the location of three modern-day toxic waste sites. Two were once listed as superfund sites by the EPA and are now cleaned up and have been re-developed as tourist attractions, and one—the West Lake Landfill in North St. Louis County—is a toxic anti-landscape currently generating controversy. The sites are marked by colored dots, and each corresponds to a display against the backdrop of a large color-corresponding painted circle on the gallery walls. Each display references a specific site using the language of the culture of nature.
—particularly that of nature tourism—in order to re-brand the site as an attractive destination. A postcard accompanies each site’s display, and viewers are instructed to take one. Each display also includes a map and online reviews from Tripadvisor and Google.

Weldon Spring site is a bizarre, otherworldly popular attraction. Its display features a layered, drawn map of the extent of the contamination, three photographs, and a geiger counter. Bright colors unite the disparate artifacts; the vivid chartreuse of the geiger counter especially recalls the site’s nuclear history. The display reads as a classroom history lesson; the photos are unframed, the wall pieces are mounted with bulldog clips as if they were in a classroom. The three photographs feature the site’s

![Image of Weldon Spring display](image.jpg)

Fig. 7: Allana Ross, *Shelter in Place* (2017)

Weldon Spring site is a bizarre, otherworldly popular attraction. Its display features a layered, drawn map of the extent of the contamination, three photographs, and a geiger counter. Bright colors unite the disparate artifacts; the vivid chartreuse of the geiger counter especially recalls the site’s nuclear history. The display reads as a classroom history lesson; the photos are unframed, the wall pieces are mounted with bulldog clips as if they were in a classroom. The three photographs feature the site’s
moonscape-like mound of limestone, stairs leading up to the top of the construction. One portrays the act of measuring the radioactivity of the site with the geiger counter and another displays the vast nature preserve surrounding the mound. The photo of the staircase leading to the top of the mound highlights the eerie similarities this site shares with Monk’s Mound in Cahokia. Both mounds feature such a staircase; and both are frequently climbed by tourists, local nature and history enthusiasts, and school children (yes, this nuclear waste site is a popular field trip destination). Both are entrenched in a history of land-use practices that speak to the way humanity interacts with the physical environment.

Fig. 8: Allana Ross, Shelter in Place (2017)
The geiger counter sits atop a small mound of limestone exactly the same as the limestone at Weldon Spring. Perched below the wall display, these remnants of the site, removed from their context and brought into the space of the gallery, serve as a reminder of the physical imposition of the actual mound. Weldon Spring’s mound is forty-seven acres and seven stories tall, towering above the prairie that surrounds it. As the superfund site was cleaned up (only after years of relentless activism of beleaguered citizens) the toxic remnants of the uranium processing plant were hauled into a pit, then capped with layers of clay, concrete, and finally, limestone boulders.

A similar process occurred at the former town of Times Beach, Missouri. The history of the town mound is explored in the Times Beach display. A layered hand-drawn map depicts the site as the land itself—a topographical map marks the landforms unchanged by our intervention in the landscape. Beneath this map lies another, one that depicts human intervention—the settlement, its neat plots and streets. Accompanying photographs show me, in a Haz-mat suit and gas mask, exploring the town mound nestled in river bottom forest. The mound is equipped with monitors that track dioxin levels—the levels are acceptable for visitation purposes but not for permanent human habitation. These two sites, Weldon Spring and Route 66 State Park, are former EPA superfund sites that have undergone the process of “clean-up.” The transformative process is essentially mound-building, burying the waste products of
violence to re-classify the site as “safe.” At Cahokia, several mounds contain the ancient bodies of presumed participants in sacrificial rituals, and here, we have buried the remnants of our toxic legacy only after it has claimed its victims, at home and abroad.35 The Cahokians apparently died as a tribute to uphold the rigidly stratified social order; how greatly do our modern-day mounds really differ?

Fig. 9: Allana Ross, Shelter in Place (2017)

The third site, the West Lake Landfill, is a superfund site that has not yet been transformed. A “subsurface smoldering event” is encroaching on nuclear waste illegally
dumped (by Mallinckrodt) in 1973. The waste is dispersed in topsoil, uncovered and open to the elements. The landfill, like Times Beach, is in a floodplain. The waste is less than a mile from the Missouri River, St. Louis’ source for drinking water. The “subsurface smoldering event”—an underground fire, not an entirely uncommon occurrence in a landfill—is managed through a system of valves that noisily and noxiously release methane into the air. The symphonic, alien anti-landscape is near residences, schools, shopping malls, and recreation areas. Residents of Hazelwood, Bridgeton, St. Ann, Spanish Lake, and Maryland Heights report not just noxious odors but high rates of unexplained illnesses. While the philosophical and spatial implications of an anti-landscape are complex, its place in quotidian domestic life is a powerful impetus for unlikely activism. The onus of this landfill’s legacy falls largely on stay-at-home suburban mothers who previously had no interest in anything other than the promise of raising a family in the safe idyll of suburban America. These women, often ill themselves, are now forced to fight for their children’s futures against policy makers and corporate executives. The false promise of suburbia has come undone for them, as it did for the counter-culture decades prior.

In re-branding a tragic situation as a tourist attraction, I am navigating delicate territory, balancing the theoretical, cerebral space of landscape theory and the reality of interrupted domestic lives. Maintaining critical distance while personalizing the issue
before an audience re-animates the Cartesian dualism of object versus beholder. Part of the West Lake Landfill presentation within *Shelter in Place* is a display of the letters sent home with school children who happen to live near the landfill. These letters are printed on Tyvek, detailing an evacuation plan on emergency-ready material. The letters are accompanied by a to-scale map of the contamination and fire on layered, translucent paper. I have also included photos of the otherworldly site and its methane vents as I stand before them, waving in a gas mask; a postcard advertising the attraction of the “World Famous Subsurface Smoldering Event”; my gas mask; and a litany of Google reviews by visitors and residents. The reviews engage the irony of my project as well as the bitterness of the community. One reads “this place is explosively fun, just drive down highway 70 for a sinus-clearing aroma.” Another commenter (notable username: “please get out of my home”) states “I love this place, take my dog there every day of the weekend for his morning coffee. The salads are great too.” The community is already using the language of tourism—the culture of nature—in order to
critically engage with their environment. In a similar incident, archival footage of a Times Beach residents’ Christmas party shows carolers altering traditional songs to tell the tale of their inundated, contaminated homes using humor as a coping mechanism.

The next step in the project, now that tourist literature has been produced, is a public tour of the mounds, a method of activating the viewer outside of the gallery setting as a participant in the re-invention of the culture of nature. The tour is a project that extends my practice beyond the gallery setting. The gallery/museum setting is in fact a problematic one as the locus of instrumentalist art. Gallery attendees are not the only audience I wish to engage. Because I am trying to catalyze radical adaptation in the anthropocene, education in a museum setting is a very useful place to begin but the
ultimate goal lies in establishing interconnections between people, communities, and the physical environment.

Mapping sites of disposal and consumption functions as observation and assessment. These sites of contamination illustrate our formulation of nature as a place detached from our lived experiences, exemplified in the belief that we can dispose of uranium near drinking water sources without risking public health. When cancer rates and infant mortality rates inexplicably skyrocket in these areas, after much public ado, the EPA steps in to “clean up” these superfund sites. After the transformative process of mound-building, we are presented with nature, once again packaged as “a place apart,” in the form of recreational sites deemed safe to visit, but not safe for habitation. The absence of human residences surrounding areas of contamination encourages the flourishing of “wildlife”—in reality, these areas are intensively managed—further reinforcing our prior beliefs. By inviting the audience to consider the history of these sites in a safe space far removed from their threats—to peruse a brochure, to grab a postcard, to plan a visit—I am asking them to reconsider their consumption of nature. I am questioning our relationship to nature itself—the culture of nature that we teach to each other through museum dioramas, through titillating landscape calendars and all-expenses-paid eco-adventures. Gallery and museum settings provide an excellent
platform for the first half of the adaptation process—but are they the most effective way to reach my intended audience?

An example of post-gallery agricultural activities as instrumentalist art can be found in one of the Harrison’s more recent projects. In *The Endangered Meadows of Europe* (1994), the artists transplanted a meadow threatened by urban development to the rooftop of The Kunst- und Ausstellungshalle, in Bonn, Germany. Didactic signs were included in the rooftop installation narrating the meadow’s story. After the exhibition, the meadow was again successfully transplanted—in seeds and structure—to a river-adjacent field. Oddly, these meadows are not a natural phenomenon in Europe, but are the result of deforestation followed by repeated hay cutting and grazing. Again, the Harrisons view this agricultural collaboration with the natural world as more than an artistic endeavor; it is a model for future survival. The artists want the viewer to see the meadow as an exemplar of symbiosis between culture and nature: in fact, as the meadow demonstrates, culture is couched within nature. By embracing our role within a natural system, our cycles of (agri)culture benefit the natural cycles of the meadow’s complex ecosystem. In this project, the artists are engaging the last three stages of adaptation—planning, implementation, and monitoring/evaluation.
In *Gardens for the Apocalypse* I address the reality of climate change and the urgency of revising the conditions of our relationship with the natural world. The gardens are dye-gardens—gardens whose plants provide natural pigment. I have chosen perennial native plants or plants that easily naturalize without being invasive. In selecting plants that are useful in the endeavors of a colorist, I am acknowledging that our main interaction with the natural environment is one of consumption. However, in order to ensure continued use of the dye plants, forager’s ethics must be respected. Some of the plants must be left to re-seed. Through consumption and use, the gardens function as a public education project. They exist in public places, next to sidewalks in high pedestrian traffic areas. They include didactic signs labeling the plants, their uses, and their appropriate plant-hardiness zones. By choosing plants that have already adapted to the climate of USDA plant hardiness zone 8—plants that will thrive as our climate changes—I embrace the necessity of adaptation.

The educational mission of the gardens is cultivation of awareness. If a passerby learns to identify goldenrod in the dye garden, maybe he will recognize it in the vacant lots next to his morning bus stop. Awareness of urban nature re-integrates the natural world into our daily lives, while knowledge of a plant’s use in human endeavors cultivates an awareness of—and curiosity about—local environmental history. Dye workshops will educate the public, re-engaging people—primarily youth—in
responsible consumption of nature while refuting the concept of nature as “a place apart.”

Gardens for the Apocalypse has led to agricultural side-projects involving the cultivation of indigo in toxic soils. The post-industrial landscape of the American Bottom precludes agricultural production of food in many areas. But the anti-landscape is an opportunity to engage with the environmental history of the site. In Granite City,

![Fig. 10: Allana Ross, Atomic Garden (Indigo and Dyer’s Coreopsis) (2017)]
on the site of a former lead-smelting plant, I am growing indigo, protecting the plants from harsh winds with piles of debris from nearby demolished buildings. Instead of covering the contaminated soil with mounds, I am using it in for the growth of alternative agriculture. Agriculture isn’t limited to food production; as Gardens for the Apocalypse demonstrates, plants have historically been used for other purposes.

Engagement with the anti-landscape is remediative on many levels: responsible agriculture re-invigorates the soil, the population of pollinators returns, and human engagement with the landscape is rejuvenated.
Conclusion

The strategies of instrumentalist art have evolved as ecological crisis has become a quotidian presence. New forms of systems-focused ecological art disrupt the Cartesian dialectic of beholder and art object, moving into realms of experimental geography and human interaction in order to confront the false dichotomy of culture versus nature. Art has become a critical arena of solution-building within shifting environmental discourse. These are the new “ground rules” Suzi Gablik has argued for, rules “that no longer bear the mark of the consumerist imperatives of this culture,” but instead use the model of systems ecology to re-negotiate, re-educate, and re-invent our culture of nature in order to encourage radical adaptation.\(^\text{36}\)

I am using systems-focused ecological art practice to redefine the nature of our relationship with the physical environment. My installation projects use the language of the museum display in an attempt to re-shape our culture of nature, while outdoor and social projects aim to engage with the landscape and community at large. The flexible, shifting discourses of art practice facilitate a freedom not viable in other disciplines. An artist is able to pose questions without providing answers and to posit solutions that don’t fit tidily into established frameworks. In the current situation of slow-motion environmental collapse, radical thought is imperative to our long-term survival—the open-ended nature of systems-focused ecological art practice provides an ideal platform
for re-education. Knowledge of local environmental history is necessary to reshape our present. These gardens are the anti-mounds. I am not burying the past, I am using it to grow for the future.
The natural environment is the physical environment without the built environment. While unmanaged nature no longer exists, the natural environment is the remnants of such unmitigated wilderness. The natural environment can be found everywhere, not just in National Parks and nature preserves—it is also found in the weeds that crack concrete. The borders of this concept are undefined and open ended—is a garden of exotic plants part of the natural environment? Are street trees of native species part of the natural environment?

According to the United Nations Framework Convention on Climate Change, an adaptation is a survival strategy—a process of adjustment to actual or expected changes that can be described in five stages: 1. Observation of the problem that necessitates the development of survival strategies, 2. Assessment of the situation in order to develop a plan, 3. Planning a survival strategy to mitigate or escape the problem, 4. Implementation of the planned strategy, and 5. Monitoring and Evaluation of the strategy’s effectiveness.


Landscape, for the purposes of this paper, is an idealistic term applied to the concept of pure, unmitigated wilderness without human intervention.


The physical environment includes all that is tangible and outside of the human body. It is the combination of built environment and the natural environment.

Ibid., 54.


Ibid., 85.
An anti-landscape is formed due to catastrophic or sustained intervention—whether by anthropogenic or natural means. It is the inverse of landscape: a place that cannot sustain life.

The American Bottom is a region of approximately 175 square miles of the Mississippi floodplain extending from Alton, Illinois, to the Kaskaskia River. It is the site of the pre-Columbian civilization of Cahokia.


Superfund is the official EPA designation of toxic waste disposal sites in need of remediation.


Turner, Frederick Jackson, "The Significance of the Frontier in American History," 1893.


NOAA, [noaa.gov](http://www.noaa.gov)

NIH, 2011. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3226519/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3226519/)


Ibid., 86.

Ibid., 63.
The Great Pacific Garbage Patch, or the Pacific Trash Vortex, is the largest concentration of debris in any ocean on Earth. It is composed mostly of plastics. Its size is variable, but it took its discoverer one week to cross it.


http://clui.org/


Selected Bibliography


