The Justice of Ecological Restoration: Environmental History, Health, Ecology, and Justice in the United States

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Abstract

Although environmental problems continue to worsen, the mainstream environmental movement seems to be losing strength. Part of this declination rests on the movement's historical roots in and elevation of conservation, preservation, and wilderness protection as the headlining goals of environmentalism. These goals were promoted at the expense of other, perhaps more popular, motivators such as health ecology and environmental justice. In addition, such goals have not taken seriously the deleterious effects of environmental contamination on women, the poor, people of color, and residents of urban areas. Despite a somewhat diverse history, the mainstream environmental movement chose to most vigorously promote the protection of wild species and places, utilized a very limited understanding of the term 'environment' and has not promulgated a way of dealing with environmental destruction's concomitant shame. Taken together, these failings could be part of the movement's waning social significance. Beginning with an historical investigation of health ecology and environmental justice, this paper argues that the mainstream movement could be reinvigorated by contemporaneous attention to health ecology, environmental justice, and ecological restoration, all of which remain on the borders of the movement, and all of which have ample precedent within the sidelined history of American environmentalism.

Keywords: *environmental justice, environmental movement, health ecology, environmental history, women*

Introduction

Although environmental problems continue to worsen, the mainstream American environmental movement seems to be losing steam. The Bush administration has decreased environmental standards, cut funding for environmental programs, denied American involvement in the Kyoto Protocol, and once again based an energy plan on oil drilling in the Arctic National Wildlife Refuge. These setbacks are not minor ones for the movement, and they indicate a waning of the movement's political and social power. While legislative advancements have improved air and water in the United States over the past 30 years, the environmental movement has fallen short of motivating the mass of the American public. In part, this inability to generate a serious groundswell of motivation in recent years rests in the movement's lackluster embrace of health and justice as fundamental pillars of positive environmental reform. Because health and justice can be such strong motivating factors in creating positive change, they present a rich ground out of which the contemporary mainstream environmental movement (MEM) can grow. Indeed, if the MEM hopes to find relevance in the coming decades, it simply must find popular ways to address the confluence of threats to environmental health and justice — in and out of the urban environment. Furthermore, it must also build a sense of hope, rather than hopelessness, into its very structure; ecological restoration, along with authentic foci on health and justice, can assist in building hope inside the environmental movement. This paper will investigate the roots and major principles of health ecology and the environmental justice movement, the necessity of an expansion of the term 'environment' to refer to natural and social environments, and how ecological restoration can be a valuable tool for combining an expanded definition of environment while focusing on justice within individual, community, and ecological health. Ultimately, I argue that this focus on health ecology, along with an expanded understanding of what we mean by the term 'environment,' and an emphasis on ecological restoration has the potential to reinvigorate the environmental movement for the 21st century — and beyond.

Modern Mainstream Environmentalism and the Absence of Health and Justice

The multiplicities within the American environmental movement make it nearly impossible to provide a precise definition for the so-called "mainstream environmental movement." However, as I use it in this paper, the mainstream environmental movement, or MEM, refers to the popularized, often media-made, public conception of the environmental movement. This portion of the larger American environmen-

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tal movement (AEM) is what most people (outside of the AEM) think of when they think of "environment" or "environmentalist." It's the nature of greeting cards, Sierra Club and Audubon magazines, and the "environment" pitted against human survival in development issues such as the spotted owl in the Pacific Northwest, the snail darter, or preservation of the National Arctic Wildlife Refuge. The media-friendly issues embraced by the MEM have often (and unfortunately) eclipsed the work being done by other branches of the AEM. There is significant scholarship, especially within the field of environmental sociology, illustrating the AEM's roots in activism and attention to health and justice (Mitchell et al. 1992, 11-26). However, this history, while important, occurred relatively late (after World War II and largely within 10 years of the publication of Rachel Carson's *Silent Spring* in 1962) and simply did not capture the popular focus of the MEM. My intent here is not to locate blame for the decline of public interest in environmental issues. Indeed, this is a complicated issue involving many interrelated factors such as (but not limited to) changes in the modern regulatory state, the ascendancy of political conservatism, and the shifting global economy. Instead, I hope to suggest that any conception of the environmental movement in the U.S. may be bolstered by a prominent and media-rich inclusion of health ecology.

The MEM in the U.S. has, historically, focused primarily (although not exclusively) on ecology and the protection of wild landscapes. Beginning with John Muir's preservationist emphasis on the spiritual and restorative value of wild nature, the MEM promoted the protection of wild nature as its primary concern. This emphasis was further bolstered by the development of more sophisticated ecological sciences in the 1940s. The big environmental players such as the Sierra Club, the Audubon Society, the Wilderness Society, and the Nature Conservancy have all worked hardest at protecting wild landscapes, which they (quite rightfully) see as necessary for the long-term sustainability of human life on earth. Environmental historian Roderick Nash highlights this emphasis on wilderness as part of the American environmental experience,

> *The reality, but especially the idea, of wilderness played an important role in the new ecology-oriented environmentalism. It was a pointed reminder of man's [sic] biological origins, his kinship with all life and his continued membership in and dependence on the biotic community. We need wilderness...to get away from the technology that gives us the illusion of mastering rather than belonging to the environment* (Nash 1967, 255).

Attentiveness to wilderness protection, while important culturally, intellectually, and ecologically, belies adherents who are not subject to the ravages of environmental pollution. Indeed, wilderness preservation — from John Muir through Howard Zanhiser, David Brower, and even to Ulysses S. Grant — was seen as a way for average people to reconnect to nature in spite of ever-increasing urbanization and industrialization (Nash 1967, 213).

But the average people for whom the wilderness was being protected were not the poor. They were not people of color living in marginalized urban environments. They were not women giving birth to deformed infants, or the poverty-stricken rural folks in the Appalachian Mountains. They were, quite specifically, white, educated, middle-class folks who could afford to vacation in these new American playgrounds, and who lived protectively distanced from the hotspots of industrial pollution. The wilderness protectionists, as Nash describes them, insisted that many people who could not travel to the wilderness preserves found value in the simple fact that they existed at all. Yet, even this perspective implies an ability to distance oneself from one's environment far enough to be able to appreciate nature as something that is out-there, beyond one's immediate life and concerns. Unlike many underprivileged groups in the U.S., individuals with economic, racial, or gender privilege have largely escaped the brunt of environmental destruction and contamination — although as the pervasiveness of chemical contamination grows, fewer and fewer of us will be able to escape its inevitable health effects. Embodied, then, in the most publicized environmental issues and groups, and represented now as some of the major American environmental victories, wilderness protection became, in Nash's words, "the American cult of wilderness" (Nash 1967, 160).

Mark Dowie, environmental historian and author of *Losing Ground*, argues that the homogeneity of the movement has resulted in a unique politic that tends to focus more on endangered species and wilderness protection than on the health of the human beings who are most effected by environmental contaminants. He ultimately suggests that the homogeneity of this group has led, in part, to the stagnation of the environmental movement. Because of its inability or unwillingness to seriously address the environmental concerns of urban residents and its situation of human health as outside of the environmental equation, the mainstream environmental movement in the U.S. has failed to gain significant environmental ground. Furthermore, it has failed to energize a majority sector of American culture and failed to prevent environmentally destructive behaviors. Levying this critique is not to denounce the tremendous strides the MEM has spurred in our culture — such as the development of serious legislation regarding water and air pollution, wilderness protection, toxics releases, and the right of communities to know what

contaminants are being released in their midst. Indeed, we need individuals whose environmental focus is on the preservation of wild lands and wild species. Nor does this critique "blame" the environmental movement for every ecological problem or every failure to move toward environmental sustainability. However, it does show that even with such a tremendously motivating cause (environmental protection), somehow the movement has not been able to gain much ground past that which was secured during the heyday of environmental protection and legislation in the late 1960s and through the 1970s. William Jordan III, in his book *The Sunflower Forest*, sees this inability to activate American culture as related to its failure to engage the dark side of our imaginations. He argues that the environmental movement has not given humans a way to process the shame they feel because of their complicity in environmental destruction. In his view, through the process of restoring natural and social communities, we can embrace the destructive parts of human-nature interactions and begin to make active reparations.

The inability to see beyond its own rather homogenous identity, to recognize the necessity of popularly promoting the protection of environmental health and urban environments, and to reconcile destructive human tendencies with its concomitant shame has prevented the MEM from taking a more productive, socially engaged, and proactive role toward environmental problems (Dowie 1995; Jordan 2003; Gottleib 1993). Thus, a popularized emphasis on health ecology (as a way to bring diversity and justice to the fore) and on ecological restoration (as a way of processing our shame and beginning reparations) may be necessary to grow the American environmental movement.

Roots of Health Ecology in the Mainstream Environmental Movement

Despite the fact that it still often remains marginalized, an emphasis on health ecology is not new to American environmentalism. Indeed, health ecology has deep roots in the MEM. The focus on human health as an important part of environmental issues has a long, if understated, history within the mainstream environmental movement in the U.S. (Breton 1998, 64-71; Rome 2006; Mitman 2005; Nash 2003; Mitman et al. 2004). The move to consider health ecology as a fundamental aspect of American environmentalism is clearly seen in the attention to environmental health and justice found in the works of the "early municipal housekeepers," such as Caroline Bartlett, Mary Eliza McDowell, Alice Hamilton, Florence Kelley, and Ellen Swallow Richards. It is seen in the Clean Air and Water Acts and Amendments, and in the development of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Environmental Protection Agency (EPA; whose explicit mission was to protect human health and the environment), and the Toxic Releases Inventory (TRI). An emphasis on health ecology can also be seen in scholarship and activism undertaken by American women. For example, the work of Rachel Carson, the activism of pioneering women such as Lois Gibbs and the much more recent work on motherhood and environmental health, led by women such as Sandra Steingraber, all speak to a growing recognition of the importance of human health as a legitimate — and publicly exciting — aspect of the MEM.

The Early Municipal Housekeepers

Caroline Bartlett, Mary Eliza McDowell, Alice Hamilton, and Ellen Swallow Richards all saw the degradation of the urban environment as a distinct threat to human life. Their concern pushed at the borders of what counts as 'environment' and demanded that legislators consider the negative effects of industrialization on the urban environment. Each of these women was active in the early 1900s, during a time of very rapid industrialization and urbanization. As the population density of urban areas grew and the fervor and rate of industrialization increased, environmental problems emerged in urgent ways. Despite the importance of what they accomplished, their work is often overlooked in favor of emphases on the history of CERCLA, the EPA, and the TRI. Thus, my intent here is two-fold. First, a detailed discussion of the early municipal housekeepers serves to elevate an aspect of American environmental history that is not lauded often or loud enough. Second, their works represent some of the earliest American foci on the importance of environmental health and illustrate the deep roots of health ecology within the American environmental movement, even if their concerns never became popularized within the mainstream.

Bartlett and McDowell both focused on the increasing prevalence of garbage — first in their hometowns, and then beyond. They spoke out about unsanitary conditions and caused significant reforms in the way waste products were handled. Bartlett, for example, drafted a bill regarding sanitation in the meat packing industry (it was passed in 1903), demonstrated street-cleaning techniques that were later adopted by the city council of Kalamazoo, Michigan, and performed sanitation surveys for more than 60 cities throughout the U.S. McDowell was, arguably, the first person to speak out about the unjust environmental burdens poor communities and communities of color were facing in the U.S. Known as the "Angel of the Stockyards" McDowell lived in a tiny tenement apartment on Chicago's South Side, an area known as "Back of the Yards" because of its proximity to the stockyards and meat packing plants. She saw first hand the radical overabundance of garbage, garbage dumps, and otherwise unsanitary conditions scarring the neighborhood and

causing greater than normal incidences of sickness and death. After a long period of interacting with locals and earning their trust, McDowell convinced several women to join her in a conversation with Chicago's commissioner of public works. They were told that nothing could be done, but that they should mount a public awareness campaign to alert the public to the horrendous conditions. The campaign was successful, and promises of change were made. Eventually, in 1914, the city adopted recommendations that came out of McDowell's research and activism. These changes led to better health and fewer deaths for the occupants of this small working class neighborhood (Breton 1998, 64-71). Thus, Bartlett and McDowell's work showcases where roots of the environmental justice movement may begin inside of the American environmental movement, although there is some debate about whether this movement arose from the environmental or civil rights struggles. In addition, their work considers the 'environment' to include the social and physical environments in which we reside. Although these elements did not become major motivating factors for the popular environmental movement, it is important to recognize their historical precedent. This precedent shows how and why justice, environmental health, and an expansion of popular understandings of the term 'environment' could motivate the future of the popularized, mainstream American environmental movement. Hamilton and Richards add an additional dimension to these historic roots of American environmentalism.

Hamilton and Richards were both highly educated professional women who used their immersion in the domestic world and their proximity to other women as a springboard for the issues they championed. Each working from her training, these women led fights against chemical contamination both in and out of the workplace. Hamilton was trained as a physician, and she used this background to conduct research in industrial toxicology. Her work toward workplace safety, especially her written contributions, eventually caused significant changes in workplace conditions (Hamilton and Hardy 1949; Hamilton 1925). The use of masks, gloves, body armor, as well as detailed methodologies for preventing exposure to industrial contaminants became commonplace. Indeed, the vast architecture of protection afforded to many of today's workers is a direct offshoot of Hamilton's leadership and expertise. An advocate of safety in the workplace and of the right to a non-toxic environment, Hamilton's work eventually culminated in the passage of the Occupational Safety and Health Act, which drew national attention to issues of health and safety in the workplace. Richard's work was similarly influential and perhaps even more revolutionary. Richards brought the term "ecology," which was coined in 1873 by German biologist Ernst Haeckel, into wide-scale use. Interestingly, and rather different from common usage of the word today, she used the term to refer not only to the great expanses of the natural world, but also to the urban environment. Richards noticed the declination in health of the nation's poor and lamented the small stature of children living in impoverished conditions. She saw direct connections between health and the cleanliness of one's environment — whether at work, in the local neighborhood, or within the home. Indicative of her well-developed understanding of the interconnectedness of these spheres of life, Richards (1907, v-viii) wrote, "What touches my neighbor, touches me. For my sake, and for his [sic], the city inspector and the city garbage cart visit us, and I keep my premises in such a condition as I expect him [sic] to strive for." She also began to articulate an understanding of the social environment as an additional, but equally fundamental, part of ecological studies. Biographer Robert Clarke (1973, 193) writes, "Social environment...was a term she often used to describe human behavior occurring in physical space. But if she allowed herself to distinguish between these two environmental forces, she knew the environments themselves were inseparable. They were interactive, interrelative to one another." This understanding infused all of her work, including the pioneering water quality study she conducted for the Massachusetts State Board of Health. Her 1887 study involved over 20,000 water samples and was the first of its kind in the U.S. As a direct result of this work, the Massachusetts State Legislature approved the first water quality standards and the first modern sewage treatment plant. Richards' leadership, as well as the leadership of the State of Massachusetts, set the stage for a cascade of water quality efforts in the U.S. (Magoc 2002, 113-116, 142-144; Richards 1907, v-viii; Clarke 1973).

Thus, Richards' work added to the work of Hamilton, Bartlett, and McDowell, and continued to define a specifically American understanding of ecology, environmental justice, environmental health, and 'environment' as more than just trees, fish, and mountains. Once again, although these sentiments did not function as the raison d'etre of the popular environmental movement, they did contribute to a public understanding of public health and safety in a variety of circumstances. Despite being largely sublimated by the mainstream environmental movement, the ideas represented in the work of the early municipal housekeepers is the basis for the more contemporaneous rise of activists such as Rachel Carson, Lois Gibbs, and Sandra Steingraber.

Modern Day Eco-Women

The historical achievements of the early municipal housekeepers eventually gave rise to a legacy of modern-day (that is, after 1950) eco-women such as Rachel Carson, Lois Gibbs, and Sandra Steingraber. Rachel Carson, for example, is widely credited with launching the modern-day environ-

mental movement, and is the best known of the eco-women. Despite her importance to the AEM, Carson's work has not gained a prominent place within the MEM. Thus, my intent here is to, again, elevate the historical contributions of these women, and to illustrate the deep roots of health ecology inside the AEM, even if the modern day eco-women never became popularized within the mainstream.

The publication of Rachel Carson's book *Silent Spring* in 1962 propelled her to the fore of the environmental movement, and brought a new focus on the health effects of environmental contamination. Trained as a scientist and first alarmed by the way toxins were effecting birds, Carson made direct connections between human and non-human health (Carson 1962). Through solid science and impassioned writing, Carson challenged her readers to consider whether access to an unpolluted environment is a fundamental human right. Carson was amazed that so many individuals, including public officials, failed to see the violation implicit in widespread chemical contamination. She wrote: "If the Bill of Rights contains no guarantee that a citizen shall be secure against lethal poisons distributed either by private individuals or by public officials, it is surely only because our forefathers, despite their considerable wisdom and foresight, could conceive of no such problem" (Carson 1962, 12-13).

The realization that human health could be dramatically impacted by industrial contaminants marked a significant turn in environmental attitudes in the U.S. While the early municipal housekeepers focused on garbage, sewage, poverty, and occupational health and safety, they did not investigate the impacts of effluents from manufacturing processes on the public. Rachel Carson was one of the first individuals to question the safety of chemical products (such as pesticides) for human and non-human health. While the MEM moved toward wilderness protection, others within the American public sought cleaner air and water, and urged legislators to pass what have become key pieces of environmental legislation, such as The National Environmental Policy Act, the Clean Air Act, and the Clean Water Act. Rachel Carson's *Silent Spring* marks the first time that the benefits of industrialization were widely seen as pale in comparison with the escalating costs to human and environmental health (Lear 1997; Freeman 1995).

Despite Carson's warnings, and despite the environmental awareness and legislation that followed her call to action, environmental contamination continued (and continues) to worsen. Again, women led the way in demanding that we investigate the presence and health effects of by-products of the industrial lifestyle. Mothers, because of their role as child-bearers and child-rearers, often had (and have) intimate knowledge of environmental contaminants as their presence manifested in miscarriages and childhood illnesses. Perhaps the most outspoken of these women is Lois Gibbs, the young stay-at-home-mom who blew the whistle on swales of chemical contamination below the middle class town of Love Canal in New York. Built on top of an old chemical dump, and sold by Hooker Chemical to the Niagara Falls School Board for a single dollar, the site turned out to be egregiously contaminated with dioxin and other industrial chemicals. The women living in Love Canal discovered the contamination as they compared childhood illnesses and miscarriages amongst themselves. Eventually found to have miscarriage rates as high as 45%, the contaminated area was evacuated and the houses were condemned, but only after a long and protracted battle (Layzer 2006).

This experience set Lois Gibbs in motion. Gibbs realized that what happened in her community could happen anywhere in the U.S. — even anywhere in the world. As a result, she founded the Citizen's Clearing House for Hazardous Wastes in 1981. This organization, now called the Center for Health, Environment, and Justice functions as a resource and support center for individuals from other communities who are also suffering because of environmental contamination. Because of their proximity to children, child bearing and child rearing, women are in a unique position to recognize and suffer directly from the effect of industrial contamination (Gibbs 1982). Their voices have helped raise national awareness of the health effects of environmental contamination — and helped to bring volume to this (often pale) strand within the mainstream environmental movement.

Another prominent eco-woman, Sandra Steingraber, was trained as a biologist, and has spent her life researching and writing about the health effects of environmental contamination. Her unique ability to understand complex scientific materials and express them to a lay audience in provocative ways has allowed her to publicize some of the ways industrial contamination is related to cancer, as well as the specific ways it effects neonates and infants who breastfeed. Her book *Having Faith: An Ecologist's Journey to Motherhood* explores the deleterious effects of environmental contamination. She explains in detail how human infants are at the very pinnacle of the food chain, how contaminants are magnified as they pass through the placental barrier, and how they are delivered to infants in breast milk. She notes that many mothers' breast milk is so contaminated that it exceeds the Food and Drug Administration's safety levels for numerous contaminants. Ultimately, her work has clarified the horrifying contradiction between giving life (through pregnancy, birth, and breast feeding) and the unwitting poisoning of one's own children. It seems to Steingraber, as it did to Carson and to Hamilton, Richards, Bartlett, and McDowell before her, that humans have a right to a clean environment, women have a right to bear and feed their children without

poisoning them, and infants have a right to unpolluted breast milk. As industrialization continues unabated, these issues expand in severity and scope, people become more aware of toxic intrusions into their lives, and the issues move toward the forefront of American environmentalism (Steingraber 1997, 2003).

These modern-day eco-women illustrate some of the most recent and widely received attention to environmental health within the AEM. Their work is important because it illustrates the importance and centrality of health concerns, as well as the potential for human health to function as a strong motivator toward sustainability. Continued environmental pollution demands an ever-greater focus on health ecology; as long as we continue to pollute the world in which we live, health ecology will remain an essential aspect of environmental issues and solutions. Yet, despite its importance, and despite some historical emphasis on health ecology, health has not emerged as a major grounding ethos for the MEM; unlike wilderness protection, health ecology has not captured our romantic imagination. But it simply must become a central part of our grounding environmental philosophy if we hope to protect human health and if we hope to generate greater support for the environmental movement. The need for an increased emphasis on heath ecology is made apparent by the environmental justice movement, which continually pushes for greater attention to the (often disproportionate) human health effects of environmental contamination.

Roots of Health Ecology in the Environmental Justice Movement

The recently emerged environmental justice movement (EJM) developed on a track largely parallel to the mainstream movement discussed above, originating as an outgrowth of the Civil Rights struggles in the 1960s. The movement was sparked by protests in the late 1970s and early 1980s in Warren County, North Carolina.

The initial wave of protests emerged as a collaborative, multi-racial action effort against North Carolina officials' plans to dump more than 600 truckloads of polychlorinated biphenyl (PCB) contaminated topsoil into a landfill in Warren County. At the time, Warren County was the poorest county in North Carolina, with an annual per capita income hovering around $5000. Its population was more than 65% black. Despite these disadvantages, the community mobilized against the landfill siting and disposal of the contaminated soil. Although protests failed to stop the dumping, they spurred a growing awareness of how collaborative civil action can educate and empower citizens. The protests also created further investigation into the classist and racist patterns evident in siting toxic waste landfills and incinerators. Finally, the protests headlined a renewed focus on the justice of human health, ultimately leading to vociferous insistence that politically and economically under-empowered communities were being exploited; they were bearing the weight of industrial contamination while sharing in precious few of the benefits. A landmark study by the Commission for Racial Justice, and further research by sociologist Robert Bullard and others provided compendiums of evidence supporting the claim that race, not class, was the single best predictor of environmental disadvantage. The Warren County protests marked just the beginning of a flood of actions by underprivileged individuals who have historically been (and continue to be) overburdened with the effluents of our affluent industrial culture (Bullard 1994, 3-22; Markowitz and Rosner 2002; Hurley 1995; Melosi 2000; Tarr 1996; Gottlieb 1993; Cruikshank and Bouchier 2004; Merchant 2003).

Despite the fact that the Warren County protests are seen as the headline event in the environmental justice movement, the history of environmental justice in the U.S. can be traced back to at least two other key events: one in 1967, and then another in 1968. First, in 1967, a small group of African American students gathered to express their outrage that an eight-year-old girl had drowned in a residentially located garbage dump in Houston. This protest underscored the careless way white bureaucrats allowed solid waste facilities, especially in poor and minority communities, to be constructed and maintained. Although this event was not nearly as publicized as the Warren County protests, it spoke of a growing emphasis on the importance of health ecology and environmental justice.

In 1968, Martin Luther King made health ecology a focus of civil rights in general when he lent his support to striking garbage workers in Memphis, Tennessee. King's support in this instance joined labor issues with health issues, as workers began to recognize the safety and equity disparities between their work in the solid waste industry and the work lives of their white, middle-class counterparts. With increasing frequency, such issues began to enter public attention around the nation. Kettleman City, California; Love Canal, New York; Chester, Pennsylvania; Buttonwillow, California; Dilkon, Arizona; Hyde Park, Georgia; Point Hope, Alaska; and Convent, Louisiana are just a spattering of the poor and minority neighborhoods in the U.S. that have borne — and continue to bear — the brunt of our industrial development. Guided largely by grassroots citizen groups, organized by their churches, informed by Robert Bullard's academic work, and empowered by their outrage, people in these communities slowly began to rebel against the unjust harms to which they and their children were being subjected. Instead of accepting those harms, collective work empowered these communities to speak out on their own behalves even in

the face of inhospitable governmental organization at most every level (Checker 2005; Cole and Foster 2001; Stein 2004; Melosi 2006; Hofricheter 2002; Jenkins et al. 2006; Figueroa 2006; Hurley 1995; Adamson et al. 2002).

Consider Kettleman City, California, for example. It is a small farming community in southern California, more than 95% of its residents are Latino, and most work in the farm fields engulfing the city. Kettleman City is also home to the largest toxic waste dump (owned by Chemical Waste Management, Inc.) west of the Mississippi. Built in the 1970s without the citizens' knowledge or consent, residents were alerted to the facility's presence in the early 1980s after local media reported on recent fines levied against the facility for environmental violations.

Then, in 1988, Chem Waste proposed building a toxic waste incinerator on the dumpsite. Again, residents were left in the dark, finding out about the proposal only when Bradley Angel, Greenpeace's Southwest Toxics campaigner brought the proposal to their attention. But this alert came late — in the morning of the very day the public hearings regarding the new incinerator were scheduled to be held. Despite this late notification, residents rushed together and attended the hearing and protested the continued plunder of their health and safety. Elected officials never once sought to protect the interests or even notify the residents of Kettleman City of the risks they may be facing. The hearings were only announced in a tiny ad in the local paper; subtle efforts were made to obscure the proposal, its health effects, and the public hearing.

In fact, in the course of their research, residents found a shocking government-sponsored report advocating the exploitation of disadvantaged communities. Sponsored by California tax dollars, and known widely as the Cerrell Report, the document suggested that companies and localities seeking sites for garbage dumps and incinerators will find the least resistance from small (under 25,000 people), rural, poor, under-educated, minority communities whose jobs are primarily located in resource extraction and development industries (such as mining, agriculture, or timber). In other words, they would find the least resistance from (and be most successful in locating in) poor, minority communities like Kettleman City (Cole and Foster 2001, 1-33; Cerrell 1984, 17-30; Bullard 1990; Moore and Head 1994; Kay 1994). Empowered and angered, residents of Kettleman City formed a citizen's group called El Pueblo para el Aire y Agua Limpio (People for Clean Air and Water).

Once unified, this community group researched, fought, and eventually stopped Chem Waste from building an incinerator on the site. It also uncovered and publicized disturbing patterns of injustice in the company's choice of toxic waste disposal sites; all three of Chem Waste's other incinerators were located in poor, minority communities that lacked (or were seen as lacking) the time, knowledge, and other resources required to mount significant resistance to the presence of these facilities. In fact, the patterns of injustice uncovered by El Pueblo were confirmed and re-confirmed by scholars and activists from all over the U.S. Quite simply, some groups are paying a much higher price for industrial development than others.

Situations such as those in Kettleman City and Warren County (and many other areas) raise serious issues about human health ecology. These situations demand that we consider the health effects of pollution, even as we document the harms to ecosystemic functioning. The emphasis on health ecology that grows from the environmental justice movement demands focus on the long and short-term effects of environmental contamination, from decreases in water and air quality, to increases in birth defects, childhood illnesses, cancers, genetic deformities, and endocrine disruptions. Human and ecological health intertwine in cases of environmental injustice; health ecology issues fall squarely within the purview of the MEM. Despite many recent movements in this direction (as discussed above), discussions regarding human health and justice are still not among the central focal points of the MEM (Dowie 1995). The EJM shows us that while emphases on ecosystem health are essential, equity demands a concomitant investigation into the human health effects of environmental contamination.

The mainstream movement's unwillingness or inability to embrace human health ecology as a major driver has hindered its relevance for communities of color, for urban dwellers, and for much of the rest of the American public. And while the EJM is, clearly, doing excellent and important work on its own, neither the EJM nor the MEM has the potential to garner as much widespread public support for their goals as they might as a united force. With such similar objectives (equitable preservation of human and nonhuman lives), they could join forces and move all of us, more quickly, toward an equable and healthy ecology.

A Conclusory Look at Health Ecology in the Mainstream and Justice Movements

All of these individuals, the early municipal housekeepers, the modern-day eco-women, and the environmental justice fighters share major concerns for human health and environmental justice. Whether their work focused on the poor, on people of color, on women, or on humanity as a whole, the work of each of these groups sought to underscore the problems occurring when human beings, regardless of an urban, suburban, or rural lifestyle, regardless of gender, race, class, no longer have access to a clean, safe environment.

While they do not (usually) disparage the efforts of other environmentalists to protect wild lands, these groups see the protection of human health as the central pillar of what an environmental movement should address. Because many of these individuals are women, and much of their work focuses on problems in the urban environment, on health effects of pollutants, they have not, traditionally, been seen as instrumental leaders in American environmental history. However, several books note them as important (Clark and Cortner 2002, 121-125, 133-139; Magoc 2002, 103-129, 142-144, 172-177; Breton 1998, 64-71; Gottlieb 1993). Furthermore, the focus upon human health could be argued to be anthropocentric in the strongest of terms; the disdain for anthropocentric thinking in American environmentalism has led to a marginalization of explorations that take human health effects as central. That is, interest in and focus upon human health can be read as a kind of human-chauvinism, where the rights of non-human creatures pale in comparison with the protection of human interests. With its focus on endangered species and wild land preservation, mainstream environmentalism has not embraced the human dimension of environmental degradation — especially when those humans are underprivileged. However, the claim that a focus on environmental health is strongly anthropocentric in the worst sense of the term overlooks the fact that such an emphasis on human health often (at least as illustrated in the work of these groups) takes social justice — not callous self-serving interest — as one of its major guiding principles. Through the work of these pioneering individuals and organizations, questions regarding whose choices are harming whom are rising to the forefront of the domestic environmental conversation. Individuals like Bullard, Hamilton, Carson, Gibbs, and Steingraber, and groups such as the Center for Health, Environment, and Justice and El Pueblo para el Aire y Agua Limpio have helped poise health, justice, and equity as instrumental parts of the environmental movement in the U.S. However, the American MEM has suffered because it has not, in the past, and despite rumblings from within its own ranks, taken health ecology and environmental justice as seriously as it could and should. Given the deep-seated passion and motivation driving health ecology and environmental justice, if the mainstream movement can re-center itself on human health and justice it will likely gain popularity by resonating with the lives of many, many more people. In addition, if the movement can successfully explain the importance of environmental protection in terms of human health and justice, environmentalists can begin to deconstruct their often-elitist image. Such an embrace could allow a re-prioritization away from protecting beautiful playgrounds for the rich to protecting health and jobs in *all* communities. Making a commitment to health ecology and environmental justice can, thereby, help the movement reinvent itself as fundamentally interested in health, equity, and the central civil rights (life, liberty and the pursuit of happiness) that served as the very foundation of this country.

Expanding Environments

This reinvention of American environmentalism demands more than just embracing human health ecology and environmental justice. It also demands a fundamental adjustment in the rhetoric and understanding of what we mean when we talk about environmental issues. Historically, and within the movement itself, the term 'environment' was understood as equivalent to 'nature,' and defined in opposition to humanity, culture, and industry. Of course, some areas of environmental scholarship (most notably environmental geographers, philosophers, and sociologists) have used 'environment' in a more encompassing way, this intellectual usage of the word has not translated into mainstream rhetoric. For example, some critics of mainstream American environmentalism, like Dowie, believe the limited use of 'environment' as a relative synonym for 'nature' illustrates the distance many environmental leaders have had from the direct effects of industrial pollution. The historic limitation bound in using 'environment' to refer only to so-called natural areas has isolated large numbers of human beings from the environmental debate, despite the disproportionate burden they suffered from environmental destruction, contamination, and industrialization (Layzer 2006). Because 'environment' implied 'wilderness,' environmental issues that arose in urban and suburban settings tended to fall outside the focus of most environmental activists. And because the poor and people of color have tended to live in urban areas, they have often been shortchanged by the focus of the environmental movement. Emphasis on equitable health ecology, however, demands that we look carefully at urban, suburban, rural, and wild areas with a critical environmental eye. In fact, when we look at the various places where health ecology has been a central focus, we see a shift in the use of the term 'environment.' Historically and contemporaneously, we see that the term is broadened to include the multiplicity of environments that our actions affect. In fact, one of the key elements joining the early municipal housekeepers, the modern-day ecowomen, and the environmental justice movement is a radical expansion of the term 'environment' to refer to urban, suburban, rural, and wild land habitats. Such an expansive shift in terminology is necessary for the AEM to reinvent itself as a movement that is interested in human health and justice as fundamentally as it is interested in the protection of wild land habitats. Furthermore, an emphasis on justice within environmental discourse seems to demand a further expansion to include social as well as physical environments.

The Social Environment

The inequity implicit in the common (historical) usage of 'environment' demands that environmentalists in and out of the mainstream reconsider what problems and consequential actions are fundamentally a part of environmental discourse — even going so far as to think about issues in the social environment as part of "environmental issues." While it is true that the justice-orientation of the environmental justice movement belies a sense of the social environment as an important part of healthy communities, such an orientation is not explicit, nor is it well developed theoretically in literature about the movement. Furthermore, while the work of the municipal housekeepers did provide some focus on the social environment, this aspect, too, was not well developed, and was certainly not widely accepted. Indeed, Ellen Swallow Richards was well ahead of her time in her attentiveness to the social environment. And while Steingraber's focus on the mother's role and lack of status in society draws us close to thinking about the social environment as a distinctly environmental issue, her work, too, does not develop this connection fully. And, while some environmental philosophers, such as deep ecologists, social ecologists, and ecological feminists, have begun an even deeper re-conceptualization of 'environment,' an understanding of the social environment as an essential key to environmental health remains nascent.

For example, true to their roots in the wilderness cult, deep ecologists eschew an embrace of the urban environment, promoting human connections with a 'nature' that is clearly out-there (Devall and Sessions 1985; Light and Roslton 2003). Furthermore, social ecologists, despite the implications inherent in their name, also shrink back from an embrace of urban environments. Their emphasis on 'social' has more to do with means of production and the economic idealities of environmental sustainability than with protecting human communities as vigilantly as we protect the natural world (Lowy 2005; Bookchin 1990; O'Connor 1986; Zimmerman et al. 1993). Finally, ecofeminist theorists such as Karen Warren and Chris Cuomo have, perhaps uniquely, begun to expand our understanding of 'environment.' They begin to move away from a meaning that (based in the MEM) refers mainly to rivers, rocks, and wild places toward one that refers to the myriad environments of our contemporary world — including urban and, even more radically, social environments (Warren 1990, 1994, 1996, 2000; Cuomo 1996).

Warren and Cuomo, along with a selection of other ecofeminists, argue specifically that ecological feminism demands we work to eliminate all forms of oppression as a way of generating a greater consistency between ecological feminist ideals and the world in which we live. Ecofeminist ideals move us beyond other sympathetic ideologies (such as bioregionalism and social ecology) because they highlight the deep-seated conceptual connections that form the backbone of unsustainable ways of thinking. Thus, not only do ecofeminists embrace the pragmatic questions of re-visioning economies and geo-political organizations, they also touch upon the logics used to support these unsustainable systems. For example, Warren uses the logic of domination (difference breeds superiority; superiority justifies domination) to make this connection, and Cuomo's work underscores the same point. Both theorists argue that differences have been used to maintain patterns of superiority and inferiority and to justify dominating relationships. Because they identify and undermine this logic as it relates to the man/woman and culture/nature hierarchies, they were able to see that this argumentative structure underlies — and attempts to justify — all sorts of dominations. As a result, this version of ecological feminist philosophy dismantles the logic of domination and undermines the logic when it is used as a justification of classism, racism, and any other 'ism' on which dominating relationships thrive. Ecofeminist attention to the interconnectivity of social oppressions with the oppression of nature hints at their understanding of how the environmental issues necessarily include attention to the social environment.

Yet, neither Cuomo nor Warren deliberately and precisely articulates a wider and more encompassing understanding of "environment" as something that includes urban, suburban, rural, wild, *and* social aspects. But, such an expansion of the term 'environment' is essential for at least three reasons. First, as mentioned above, one's location in a relative position of privilege with respect to environmental contamination and pollution allows a conception of environment to mean only the far-away, wild, out-there. For those of us who have lived with the dirty and toxic underbelly of industrial development, environmental issues are much more immediate, much darker, and much closer to home. Through illness, this contamination, and thus environmental issues themselves are literally *in the family*. They are not just familiar, but they are *familial*. The *familiality* of environmental issues increases as we live closer to the sources of contamination. And as Steingraber and Bullard have shown, it is women, the poor, and people of color who bear the greatest percentage of harms from such contamination. Thus, in order to have a truly just environmentalism, we simply must embrace this expanded definition.

Second, such an expansion is necessary if we are to avoid making the same category mistake as those who ecological feminists react against. That is, it is no better to privilege the natural environment over the social environment than it is to privilege culture over nature. Logically and practically, an equitable solution to environmental problems demands that we take seriously and undermine the privileging

of any one environment over the other, at least in broadly construed terms.

Finally, and perhaps most importantly, such an expansion holds the potential to reinvigorate environmentalism because it allows the American (and the planetary) public to see how environmental concerns are not just about cute, fuzzy animals and breathtaking national parks, but are about the very quality and safety of their everyday lives.

Restoring Health and Ecology in the Expanded Environment

Although the two movements, the MEM and the EJM, arose somewhat separately and although their primary foci lie in different places, each seeks to address pressing environmental problems, and each focuses at least in part on health ecology. However, neither movement openly utilizes an expansive understanding of 'environment' (although the EJM comes close), and therefore, neither movement alone is able to fully comprehend or deconstruct the multitude of essential elements to what we call the environmental crisis. Furthermore, while the mainstream movement proposes legislation, protects wild lands, and educates people, and while the EJM uncovers injustice and attempts to rectify situations of disproportionate harm by beginning with community empowerment, neither movement presents a way to work spiritually, psychologically, and philosophically through the shame surrounding the drastic changes humans inflict upon our environment. Therefore, neither movement escapes the veil of negativity and blame that dampens the environmental movement. It is very difficult to continually face environmental pollution and destruction without becoming depressed — or worse — without refusing to engage with the issues because the environmental guilt is too much to bear. When the problem is so big that individuals cannot see where to begin, often the only thing left to do is ignore the problem, hoping that its associated horrors don't strike too close to home. The depressive aspect of environmentalism — the sense that we are defeated before we even begin — drives people away from engagement, and this leaves environmental movements weakened, tired, and unable to motivate the ever-busy American mainstream. While environmentalism would benefit from an expanded definition of environment as well as a renewed and re-emphasized focus on environmental health and justice, even this broadened re-focus does not provide ways to process the psychological and emotional harms wrought by our deliberate and unwitting complicities in environmental destruction. While both movements look at the necessity of preventing environmental damage and contamination, they both imply that such harms should be sublimated and removed from the human repertoire of action. While this is indeed an admirable utopian goal, the current society in which we find ourselves will not allow us to simply step away from creating such harms. That is, opting out of environmentally destructive actions is simply not viable in the contemporary Western world. We must use resources, and this use will have an impact on the world in which we live. We can mitigate this impact, and we can become better designers such that these impacts are no longer as devastating as they are currently (McDonough and Braungart 1992), but we cannot simply extricate ourselves from the natural world in order to save it.

The failure of contemporary environmental movements to provide for protection of human and non-human communities and health, their limited understanding of 'environment,' and their failure to focus upon the healthy restoration of both social communities and ecological stability is, in part, responsible for their inability to manifest as powerful social movements. Furthermore, because these movements have demonized human destructiveness without providing a way to grapple meaningfully with the grief and shame associated with the degradation of human and non-human communities and health, they have not developed a wide enough repertoire of tools with which we can restore the communities our actions have degraded. Current iterations of the environmental movement (even including the EJM) do not answer our need to grapple with the issues arising from the destruction we necessarily cause. Therefore, contemporary environmental movements, despite some historic precedent for attention to public health, justice, and environmental stability, and despite a growing acceptance of an expanded 'environment,' still have not articulated an evocative and realistic vision of public and ecological sustainability that includes attentiveness to and understanding of our shame regarding the destruction we cause. Thus, the environmental movement also needs a meaningful way for the public to recognize, process, and remediate the overwhelming hopelessness, guilt, and shame that accompany our awareness of environmental destruction.

The Future of Environmental History: Ecology, Health, Justice, and Community Restoration

In his 2003 book *The Sunflower Forest: Ecological Restoration and the New Communion with Nature*, restoration pioneer William R. Jordan III develops a concept and practice of ecological restoration that takes seriously an expanded notion of 'environment' and embraces the creation of human communities as a necessary facet — and a fortunate side effect — of ecological restoration practices. He develops a vision of restoration that is ritualized, thereby allowing

us to take ownership of our sometimes unavoidably destructive use of natural lands.

More specifically, restoration as Jordan develops it can happen on the expanse of rural prairie lands, in the context of the suburban parkland, and in community gardens and highway right-of-ways in and around intensively used urban environments. Restoration can restore ecological functioning, improve ecological diversity, remediate brownfields, and mend the human-nature relationship. But perhaps most importantly, and rather unlike the protectionist strategies of the MEM, ecological restoration helps us restore our relationships with each other. The emphasis on community within the practice of ecological restoration has been well documented. In his discussion of the ways ecological restoration practices can mend human and natural communities, Jordan is uniquely careful not to romanticize community as a space of open and loving goodness; instead, he recognizes that community is difficult, challenging, and often requires continued hard work. Necessarily a community activity, ecological restoration calls people together around their relationship with place and with the earth. Working together and making the necessary decisions that arise in the context of restoration projects is not easy, but this challenge helps participants rebuild their connections with each other and with nature. During restoration events and activities, people come together creatively, instead of in opposition to some aspect of degradation. They join in collective efforts as productive individuals who seek to actively mend the fragmented human and natural communities in which they live (Jordan 2003; Gobster and Barro 2000; Schroeder 2000; Grese et al. 2000).

Ecological restoration, as Jordan portrays it in *The Sunflower Forest*, is a promising way to combine an expanded definition of environment, a drive to achieve environmental justice, a better-developed attentiveness to health ecology (including its psychological aspects), restoration of human community, and the long-standing mission of ecosystemic preservation. Jordan claims that the practice of ecological restoration offers us an opportunity to deal with the shame we feel because of our environmental destructiveness. By actively ritualizing creative, community responses to environmental degradation, we take responsibility for our role in ecological destruction. We recognize the harms we cause, and join together to remediate aspects of that harm. Thus, instead of being paralyzed by shame, we use that shame as one of many motivators for creative and community based solutions to local environmental degradation. Restoration, therefore, begins to help us re-process a healthier relationship with the natural world. This re-processing allows for a resultant reconceptualization of human and natural communities. So conceived, ecological restoration can form a bridge between the sometimes separate and even competing interests of the environmental justice and mainstream environmental movements. With a focus on health ecology that includes the social environment and a serious attentiveness to social restoration as an essential part of a broader ecological restoration, a new and much more significantly viable environmental movement could arise. Particularly since a ritualized, performative ecological restoration provides the means through which we can psychologically deal with the harm we cause nature in our everyday lives, such restorative practices have the potential to remediate environmental harm as well as the fragmented relationships (human-human and human-nature) that make environmental destruction possible, economically beneficial and invisible. Together, these areas could join to form a politically viable movement with the power to generate support from all ends of the political spectrum. As Dowie shows in *Losing Ground*, environmentalists have thus far been unable to generate wide-based support successfully. A focus on restoration of environments broadly conceived allows concerns about justice, labor issues, human health, and ecosystems to be addressed at the same time. Through this new focus, if held simultaneously as we actively re-define the human-nature relationship to more realistically reflect and respect human imperfections, we may be able to embrace the variety of environments in which we find our imperfect selves as part and parcel of the human experience.

As discussed above, these ideas are not wholly new to American environmentalism. Indeed, we see the roots of health ecology and environmental justice in the early municipal housekeepers, the modern-day eco-women, and in the environmental justice movement itself. Ecological restoration, as a facet of the American environmental movement has been gaining success and prestige over the past 30 years and is now poised to become a driving force in the ascension of American environmentalism. Ecological restoration emphasizes active and positive human involvement in the landscape, a focus on environmental *and* human health, and a broad understanding of 'environment' as including wild and urban, social and ecological communities. Thus, it presents the potential to guide a popular, widely motivating, and change-producing American environmental movement.

Conclusion

Throughout the course of this paper, assembled evidence illustrates some problems with the American MEM, some historical roots for potential solutions to those problems, and a proposal that ecological restoration become a central factor in American environmentalism in the 21st century. In summary, there are four factors, which together, could elevate the environmental movement into a social movement with the potential to evoke significant and large-scale changes in

American culture. First, the environmental movement must embrace the central importance of justly distributed and maintained human health ecologies. Second, it must develop and implement an expanded definition of 'environment' to include urban, suburban, rural, wild, and social habitats. Similarly, activism collected under the term 'environmental' must seriously address this multifarious definition. Next, the movement must become more adept at using the ritualization of ecological restoration practices as a way of coping with the shame of environmental destruction. Finally, the movement must evidence an understanding of the restorative dimensions of community as it is developed through ecological restoration practices. Combining these four aspects re-conceives the environmental movement and develops a tangible opportunity for the movement to become a significant and diverse motivator for positive social and environmental change. If the environmental movement embraced such notions, its potential as a broad-based social movement would expand exponentially. Those who have been left behind in the environmental conversation would finally be given a voice, human health would be used as a significant indicator of environmental health, and restoration would be seen as a way to process shame and to develop stronger relationships between humans and between humans and the land.

Restoration is a natural offshoot of the intersections between the environmental justice movement and the mainstream environmental movement. Both of these movements have historically focused on some aspect of what an enlarged notion of ecological remediation allows us to address. But neither one alone contributes all of the necessary factors for an inclusive environmentalism with the potential to motivate the major mass of American culture. Environmentalism has been too far removed from people's experiences for too long. By returning to the environments in which we live (as the municipal housekeepers did), by embracing environmental equity between races, genders, ages, and classes of humans, and by allowing us room to engage with our shame about the environmental contamination and inequities we have caused, enlightened ecological restoration provides an exciting springboard with the potential to propel a successful environmental movement as we move through the first decade in the 21st century.

Endnote

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