The Quest for Environmental Justice
Human Rights and the Politics of Pollution

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Antiracial attitudes, covert and institutionalized or normalized racism, and conscious ignorance can undo efforts to resolve nearly any contemporary environmental problem. Cities are where waste streams meet and accumulate. Cities are also becoming increasingly brown and black in their demographic composition. And cities are where the voters necessary for changing governmental policies are located. The profoundly antiracial messages of many U.S. environmentalists and their grounding in racist ideology; parochial land use practices; and the resistance of scientific elites to confronting the phenomenon of multiple, chronic, cumulative, and bioaccumulative toxins in the risk decisions they make, all threaten human health and living systems on which we depend.

Largely without support from the mainstream environmental groups and scientific elites, environmental justice communities are struggling against these barriers to build the framework for a reparative, restorative environmental policy based on justice first, then sustainability. Antiracial and racist values have left critical gaps in our approaches to environmental justice, protection, and sustainability. This antiracial attitude within mainstream environmentalism masks an unconscious racism that threatens to replicate racist outcomes even without conscious intent.
All environmental problems are local in some sense. They can be local in terms of the cause, source, or impact of the waste stream, including all emissions, discharges, and pollution. As waste streams increase and accumulate, environmental problems have begun to affect areas outside of the immediate locations where waste streams are created. This is particularly true of urban environments. Urban environments are complex. They became the sites of industrialism years before any governmental regulation, and the main sites for human habitat years before knowledge about the human health risks of industrialism. They are also important aspects of ecosystems and bioregions. As wastes, emissions, discharges, and pollution have accumulated in our cities, they have begun to affect air sheds and watersheds of ecosystems near and far from the sources of the pollution. As both wastes and human population increase, they are brought closer together, increasing conflict over environmental decisions. This conflict can take many different forms, such as land use disputes, industrial permitting decisions, court cases, or conflicts over public mass transit projects.

In addition, urban dwellers increasingly are people of color who define environment and environmental concern much more holistically than the general population does. This broader approach to environmentalism is at odds with the approaches of mainstream environmental groups, which evolved out of a wilderness-conservation political agenda.¹ The U.S. environmental movement has operated to exclude the concerns of urban dwellers and people of color from the environmental movement and to exclude urban dwellers and people of color from the traditional posts within government devoted to environmental concerns.² The exclusion of people of color is repeated over and over again, as government and environmentalists react to social concerns about the deteriorating environment.

Urban environments in particular have been ignored in the U.S. environmental movement and in governmental policies developed to address the environment.³ Traditionally, mainstream environmental activists, public policy officials, and researchers have narrowly conceptualized environmental concerns. Their vision tends to be limited to the media of pollution—air, water, and land—and it ignores public health indicators. This vision shaped the form of current environmental protection agencies, creating artificial barriers to protection with racist and antiurban consequences. According to Robert Bullard, “When we restrict the boundary conditions of ‘environmental concern’ to include only environmental impacts related to air, water, land, . . . we tend to ignore critical impacts to sociocultural and cultural systems.”⁴
Further, assigning public health and the various environmental indicators to different federal, state, and local agencies decreases our ability to look at the picture of environmental and community health indicators together. It introduces turf battles between agencies into the basic activities of gathering data and making risk management decisions regarding this fragmented data. This disconnection between public health and environmental indicators is repeated at all levels of government.

Environmentalists themselves have not seriously examined their own negative attitudes toward cities generally and toward African Americans specifically. From the very beginning of our history in the United States, our political leaders thought of cities as having negative effects on people and as having a corrupting force on democracy. Thomas Jefferson thought of cities as "pestilential to the morals, the health and the liberties of man." He went on to write,

The mobs of great cities add just so much to the support of pure government, as sores do to the strength of the human body. It is the manner and spirit of a people which preserve a republic in vigor. A degeneracy in these [cities] is a canker which so eats to the heart of its laws and constitution.

In the early 1900s, people began to refer to cities as "jungles" and "wilderness." Later, whites were called "urban pioneers" when they moved back into the cities they had abandoned for suburbs. This potent metaphor of the city as frontier or jungle reveals a certain attitude toward African Americans. It implies that cities can become civilized only when whites are the majority population. This attitude pervades the contemporary environmental movement in countless unexamined ways. Waste sites called "brownfields" are the domain of brown and black city dwellers, while "greenfields" remain predominantly white, suburban, nonindustrialized spaces. Zero population activists and anti-immigration environmental policies continue to promote a vision of land dominated by white culture as the standard and as worthy of having environmental protection. In their discourses, most advocates of sustainability segregate communities of color and ignore them, making exceptions only for token references to Native Americans as the only people of color possessing an authentic environmental ethic. Sustainable policies must be the first exception to the normative rule of exclusionary environmental decision making.

Racism is real and has consequences for the environment. Nature may not countenance race or racism, but we do. At the turn of the twentieth century, William E. B. DuBois observed that the color line in America
establishes the standard for acceptance. The power of skin color over the psyche and behavior of Americans influences all public policy, program planning, and implementation. Environmentalists must consider what happens when racist attitudes form the basis of contemporary environmental policy and programs, whether sustainability or "green urbanism" or "smart growth." After six hundred years of colonization, removals, industrialization, slavery, and segregation, tremendous disparities in economic, physical, and environmental well-being remain in places where African Americans and Native Americans have been concentrated by governmental policies and programs. As long as these disparities remained in the cities, where they were portrayed as "black" problems, or on reservations, where they were invisible, they were an acceptable price of industrial development. But environmental policy must now engage and embrace burdened people and places in order to repair and restore whole living systems that have been sacrificed to toxins and neglected. This is especially true of any environmental policy that embraces "sustainability." It will be difficult because "racism poisons all United States urban and social planning." Communities of color are speaking for themselves in order to protect themselves from accumulated wastes, emissions, and discharges. They are changing land use planning processes and introducing environmental criteria.

There is no "separate but equal" in nature, no "separate but equal" way to solve the issue of sustainability. There are no allowable sacrifice zones, human or otherwise, in our ecological interconnectedness, and there is no exit. Racist views and practices, both individually and institutionally, produce at least two outcomes in the environmental movement. First, whites ignore or discount the distinctively different orientations of people of color to nature and the environment as less important than those presented by whites. For example, when asked to define environment and nature, people of color across many ranges of ethnicity include a broad range of phenomena: the creations of nature, living and dead, contemporary and future, flora and fauna, where we live, work, learn, and play. The conservation-based environmental movement focuses instead on so-called wilderness, wild places, and wild things. Second, there is unproductive racial confrontation as marginalized urban communities and communities of color are forced to challenge the predominantly white, male, upper-class elite who dominate the environmental movement and government regulators.

Illusory political constructs such as race, land as exclusively private property, and profit as a proxy for social good deny the ecological
physics of our natural universe. These concepts were constructed for political ends and deny that we are part of one closed system that makes what we put into it return to us. Pollution loading in communities results in pollution loading in the land. The places where our waste has accumulated now have a human face on them, and when we reject that human face, we cannot restore the land. Privilege preserves illusions that support an unsustainable mode of living, working, and thinking.

The illusion of racial differences, which we now know scientifically to be false, allows the privileged to feel unconnected to the consequences that their conduct has for other people, whom they do not have to encounter or engage. Feeling unconnected enables a full range of irresponsible, dangerous, and foolish conduct toward people and our living systems, as revealed in a spectrum of human rights violations ranging from lynching to genocide.¹⁰ The illusion of private ownership of land allows the privileged to feel unconnected to the consequences of their conduct toward the living systems of which those lands are a part. As the gap grows between rich and poor, between people of color and others, the greater grows the separation between environmentally privileged communities and those on the receiving end of pollution and racism.

Privileged societies and persons who are disenfranchised, especially societies based upon natural resource consumption, will view any attempt at regulation as an intrusion on their property and freedom. But land as private property, like other natural resources, may have to be subordinated to the common good. For example, land use law evolved to recognize that a property owner cannot do as she pleases with the built environment regardless of the consequences. Similarly, under contemporary environmental law, a landowner cannot simply allow illegal pollution. These rules of land and environment have limited individuals’ real property rights in favor of the common good. The challenge now facing us is whether we will revisit past infringements on basic liberty, which were visited upon oppressed and marginalized people. These infringements are being questioned by the contemporary descendants of slaves as part of the nascent reparations movement. These infringements were also visited upon nature: the extinction of species, loss of the long views from our national parks, migratory disruptions, and ecosystem destruction, to name a few. When we make environmental decisions about the commons, we must, in order to achieve true sustainability, consider past, present, and future stakeholders not currently represented in the decision making processes.

We must embrace the city. As government seeks to prevent pollution
and clean up the environment, government is inescapably being brought back into urban environments, because that is where the pollution streams converge. Urban environments are politically and environmentally more volatile. Communities whose majorities are made up of people of color and poor people are saturated with the ubiquitous, "normal" by-products of the industrial and chemical boom. Multiple pathways of chemical and toxic exposure, and possible synergistic interactions between substances, have not been studied by scientific elites, who are only now trying to accommodate popular demand by communities for information and analysis. Urban communities can be quickly organized and mobilized around environmental and public health concerns, and they demand meaningful participation in the environmental decisions that affect them.

**CUMULATIVE RISK: A BASELINE FOR JUSTICE AND SUSTAINABILITY**

People with the greatest exposures suffer the most when risk assessment does not take into account all the effects of exposure. Minorities and some low-income communities face greater exposure to environmental contaminants, and the failure of past and current risk assessments to account for multiple and cumulative exposures affects these populations most immediately. Although narrowly defined risk assessment paradigms might not be intentionally biased against people of color or low-income groups, the failure to account for the higher exposures experienced by these communities results in a lower level of environmental and human health protection, precaution, and remediation.

Scientific understanding of human and species vulnerability, response variability, and susceptibility to environmental agents is woefully incomplete. People are exposed to myriad pollutants from many sources, but scientific methodologies for environmental risks currently assume single pathways of exposure. These methodologies fail entirely to account for possible synergistic interactions. Moreover, the actual frequency of multiple chemical exposures is unstudied. Less than 2 percent of chemicals in commerce have been fully tested for health effects, and no data whatsoever is available for 70 percent of commercial chemicals. About 79,120 chemicals are listed on the Toxic Substances Control Act Inventory, and about 19,533 of these are pesticide products currently on the market. The U.S. Environmental Protection Agency’s Toxic Release Inventory covers about 660 chemicals commonly released into the environment. Increasing the Toxic Release Inventory to include information about
additional synthetic chemicals, and enacting additional local laws concerning the local right to know, like that enacted in Eugene, Oregon, will enable a better measurement of cumulative and synergistic impacts by communities with the capacity to speak for themselves.

Communities have been rankled by the fact that science, industry, and government have ignored their concerns and allowed toxic chemicals to escape into the environment and accumulate. As conflict increases, affected stakeholders arm themselves with knowledge about these decisions and accumulating impacts, including quality-of-life indicators where they live, work, play, and learn. They seek solutions for their protection. Many environmental justice representatives distrust science and scientists as a political constituency. This distrust of science is deeply embedded in our environmental law. According to one observer:

Science has been the thorn in the side of environmental policymakers since the dawn of environmental law. Sound environmental policy cannot be developed without some kind of scientific basis; yet attempts to incorporate science into environmental regulations have met with failure. Reduced public participation, excessive regulatory delays, and the incomplete and inaccurate incorporation of science have plagued science-based environmental regulations for nearly three decades.¹¹

Many community residents view the delegation of decisions about whether to protect their health to scientists as a betrayal of their fundamental right to participate in the decisions that most affect them and their families.

Communities, especially urban communities populated with people of color, face the inevitability of accumulated risk through environmental exposure. Cumulative risk assessment is becoming important to communities considering environmental issues. Cumulative risk entails the combined risks from aggregate exposures to multiple agents or stressors.

Assessments involving a single chemical or stressor are simply not cumulative risk assessments. Agents and stressors can be chemicals, but they also can be biological and physical agents. A proper assessment of risk caused by multiple agents must consider them when they are combined and then accumulated. The interaction of the chemicals, whether synergistic or antagonistic, must be studied. As of this writing, most risks from exposures to chemicals are simply added together. These are not cumulative risk assessments. Aggregate assessments of risk are better than nothing, but they are only the beginning of a cumulative risk assessment. In the transition from traditional risk assessment to cumulative risk assessment, the principle of additivity must be clearly stated as a
default position. This principle adds the risks of chemicals together when they are combined; many chemicals increase the risk of other chemicals in a compound by means of synergy. When community stakeholders become aware of the potential for synergistic and bioaccumulative effects, they may want to take precautions, especially if they are uncertain about the level of public risk and danger. Here precaution simply means making decisions to pursue economic development more slowly when the risk to human health and living systems is unknown. Although our focus here is the United States, it is important to note that other countries have more experience with cumulative risk assessment and management and the implementation of the Precautionary Principle.\(^{12}\)

The EPA is just beginning to combine aspects of ecological risk assessment with human health risk assessment. Cumulative risk assessment is becoming population driven and human focused. In this way, the EPA is grappling with concepts of vulnerability. It is including both qualitative approaches—community-based environmental planning—and traditional quantitative approaches. The Superfund program, used to clean up our cities, issued new guidance on risk assessment. Recent, positive developments in the program include new policies that actually examine cumulative and ecological risk when dealing with polluted sites.

The EPA’s Office of Pesticide Programs has developed guidelines for conducting cumulative risk assessments for pesticides. It has also prepared a preliminary risk assessment for organophosphorous pesticides. Other federal and state agencies are beginning to study the unavoidable issue of accumulating impacts and their consequences for all environmental programs, especially those focused on sustainability. However, because of the limitations of current science, cumulative risk assessments will not be able to answer all questions concerning risks to community residents. The growth of ecological epidemiology and an increased use of biomarkers—chemicals that accumulate in organisms—and public health data are also necessary to measure the true state of health of people and their ecology.

Meaningful community involvement is absolutely necessary in determining the social, economic, and cultural parameters of any cumulative risk assessment. The factors that we must include if we are to improve cumulative risk assessment are also the factors necessary for sustainable urban planning.\(^ {13}\) Communities point to the need for certain kinds of data and may also identify which chemicals and exposure pathways should be monitored. Cumulative risk assessments can answer some questions, they can help us pose better questions, and they can help
establish the environmental baselines necessary for the development of a policy of sustainability. They can help to define areas of uncertainty where social values should be explicitly considered in decision making. Nonetheless, we will still need to make environmental decisions when our social values are in gridlock. If the values of the nation as a whole include environmental sustainability, then we must embrace the city to prevent further irreparable harm to all of us. What we are losing, and will continue to lose, by following an unexamined trajectory of urban development is irreplaceable. We can’t make water or fabricate air. We can’t replace the services these natural systems provide.

THE CASE FOR ENVIRONMENTAL SUSTAINABILITY AND JUSTICE REPARATIONS

The general argument that the country owes reparations to African Americans is well developed.\textsuperscript{14} The shocking gaps in health, income, education, justice, and housing that remain between African Americans and whites are linked explicitly to slavery. The fact that these gaps have remained constant over time—and that they are pervasive, predictable, and lethal, despite the expressed good intentions of individuals within the health, income, education, justice, and housing systems—is evidence that the cause of these gaps is structural racism, so pervasive that it has become normal regardless of professed values.

We engage in political and legal debates about intentionality, racism, and public policy, and in scientific debates about accumulating toxic exposures. Meanwhile, the reality of burdened land and burdened people is rapidly overwhelming the flimsy barriers of privilege and private property. Centuries of racist, exploitive public policy have confined the detritus of industrial development to places defined by the race and income of the people living there. But nature is not interested in the politics of externalities or deceived by the rhetoric of intentions. The exposures and injuries are reflected in the watersheds, air sheds, and lands that connect entire bioregions. They are reflected in the mothers’ milk and babies’ bones of all humanity now.

The urgency of the need to repair the most impacted places on earth is based not simply on claims for justice, but on recognition of the common dependence of all living things on heavily affected living systems. It would be right to do what is just and then to find ways to make that sustainable. But it is now critical that we do what is just if we truly want to be sustainable. Whether the urgently needed environmental reparations in urban communities of color should be accompanied by an apology, or
by acknowledgment of harm done, is an issue that demands attention, but the urgency itself is not debatable. The benefits of environmental reparations to these areas would have the effect of revitalizing the living systems on which all living things in the bioregions encompassing them depend.

Environmental justice reparations may take many forms: the uncompromised cleanup of air, water, and land poisoned by industrial users. Reparations might entail making a commitment to monitor certain toxins and exposure pathways. They might entail making a commitment to convert polluting industries to industries that use clean production technologies. Environmental reparations to some communities might encompass an entire bioregion. For example, in an African American community with a history of exposure to hazardous chemicals emanating from industrial sites, the location of those sites may be of key importance to a regional water quality testing program and a water quality improvement program, especially if the wastes have migrated into the water table. Who better to include when tracking the migration of wastes than the local community? Underground storage tanks, either never regulated or conveniently forgotten, are remembered by both the environment and the people who have lived, worked, played, and learned there. Moreover, making environmental reparations to that African American community by locating waste sites and cleaning them up, by adaptive reuse, and by instituting environmental monitoring in the area will benefit the water quality of the entire region.\textsuperscript{15} The safety of American drinking water is declining, its use is increasing, and waiting for improvement could have irreparable consequences, especially for vulnerable populations like children.

By reparations, we do not mean parks. "Parks" are separate land uses, often banked as land to develop later, and, therefore, inadequate as reparations. We propose the designation of environmental preservation districts as reparations.\textsuperscript{16} The allocation of land, and not capital, as reparations is not a new idea, as former colonies have already reasserted land claims at the World Conference against Racism in 2002.\textsuperscript{17} Preservation districts themselves are not a radical concept; already, an entire legal and policy framework at the local, state, and federal levels exists to implement historic preservation districts. As noted earlier, environmental preservation districts could be modeled on current historic district land use ordinances.

There are over thirty-five hundred historic listings in the U.S. National Register of Historic Places. Federal law requires federal agencies to take
historic resources into account in environmental impact statements. Historic district programs are widespread at the state and local level. The Fifth Amendment to the U.S. Constitution allows for the exercise of the power of eminent domain by the state if done for a public purpose and if fair compensation is paid to the property owner. Most cities prefer not to pay for these takings of private property, and they develop land use regulations to avoid such takings. Historic districts highlight the edge of land use actions that are not quite takings, but that nonetheless greatly restrict the use of private property. For the common cultural good, historic districts create rigid criteria for the built environment.

Environmental preservation districts are as legally defensible as historic preservation districts, which are well grounded in urban law and policy. Like historic preservation districts, environmental preservation districts would not allow a property owner to demolish her property in order to put it to more profitable use, would require her to restore the ecosystem if damaged, and would require her to go through a hearing before an environmental review board, similar to the hearings conducted by architectural review boards to address properties in historic districts. The concept of average reciprocity of value could be incorporated by measuring environmental benefits and burdens, instead of, or together with, property value preservation. Environmental preservation districts would still increase wealth over time for private property owners.

Health has intrinsic value at the community level, no matter how the word "health" is defined. The environmental benefits and burdens of a land use regulation would raise questions about the carrying capacity of the land. Just as in a land use plan in which build-out occurs when every zone reaches its maximum allowed density, carrying-capacity analyses would examine the "build-out" of an ecosystem. While it is probably a good policy to know ecosystem capacity, to plan to grow to the point of capacity may violate the Precautionary Principle, which would call for slowing development when environmental impacts are unknown and potentially threatening. This will become a pointed and inescapable policy issue when cumulative risk assessments are developed and implemented. Environmental preservation districts would help establish urban environmental baselines, which are sorely missing from U.S. cities. These districts would be especially effective and appropriate in communities already engaged in land use decisions by introducing environmental criteria. Reparations to oppressed people in ravaged land will help the nation become sustainable.

The basic constitutional underpinning of historic districts is the con-
cept of average reciprocity of property value. All landowners in a given historic district are burdened by the restrictive nature of the historic district, but all also benefit from the protection of property values that the historic district ordinance provides. This is also a foundation of zoning and allows for the creation of wealth for private property owners over time. Again, the purposes and goals that animate the land use planning processes help preserve the value of private property. Environmental preservation districts would ecologically and culturally restore ecosystems and communities, and the purposes and goals that would animate the restoration process would be community inclusion and precautionary development.

This is not an idealistic pipe dream. Land is actually becoming available in our dense urban areas that have large populations of people of color, like Detroit, New York City, and Boston. For example, when the world’s largest municipal garbage dump closed in New York City, it contained twenty-five hundred acres of urban public land. Boston covered over a landfill in the West Roxbury community to create a park bigger than the Boston Common and Boston Public Garden combined, which it named Millennium Park. These landfills are expected to settle a few feet per year and will continue to ooze leachate and emit gases for years. Unlike industrial brownfields and Superfund sites, however, these former municipal dumps have not been cleaned so much as contained while the trash rots.

Both New York and Boston are noted for their neighborhood planning processes, which are much more inclusive than most in the United States. Neighborhoods in these communities have organized and mobilized to address a variety of issues and are effective stakeholders in processes of equal decision making—that is, they are allowed to speak for themselves, have adequate resources and capacity, and otherwise meaningfully participate. We propose that the newly available urban lands—the sixty to seventy municipal landfills in urban areas that are closing, predominantly in East Coast cities—be designated as environmental preservation districts and not simply as more parks, golf courses, subdivisions, schools, roads, airports, warehouses, or prisons.

Some communities will need additional capacity building to become effective participants in these processes. This additional community capacity-building work is an intrinsic part of environmental justice reparations to land and people. Communities must be prepared to participate in decision making, and so they will require environmental education and education about the basic processes of democracy.19 Government
must embrace citizen involvement in its processes. It must take on the task of environmental citizenship building, in part to compensate for the historical exclusion of people of color from environmental policy and decision making.

Environmental reparations represent a bridge to sustainability and equity. Even if environmental reparations are limited to monitoring and measuring environmental impacts and their accumulation, at least we can begin the process of establishing an environmental baseline in our urban areas and begin to manage some of the current uncertainty that bedevils environmental decisions. In this way, we can begin to repair the worst damage that has been bequeathed to us and future generations. Reparations are both spiritual and environmental medicine for healing and reconciliation. They are legally possible, and they form the path to both justice and restoration of living systems on which we all depend. Even talking about environmental reparations is a first step toward a fair transition to a sustainable future, a necessary first step in preparing ourselves for more meaningful and inclusive dialogue.