**PROGRESS REPORT**

# DEFINING ENVIRONMENTAL JUSTICE AND ENVIRONMENTAL RACISM[1]

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Scholars often contend that we need to establish precise definitions of the terms *environmental equity*, *environmental justice*, and *environmental racism*. Although in academic literature the terms usually refer to geographic associations between pollution or waste sites and low-income or minority communities, researchers continue to disagree about whether the patterns they observe constitute evidence of inequity, injustice, or racism. Some suggest that we can move beyond this disagreement if we can reach consensus about what the terms mean. The growing number of statistical and historical case studies of such patterns in cities and metropolitan areas suggests that understanding the terms has become increasingly important for urban scholarship.

Nonetheless, in spite of our best efforts to pin down the definitions of these terms, activists, government agencies, and other political interests continue to interpret them differently. For example, many grassroots activists insist that environmental justice demands the prevention of all toxic pollution. In contrast, President Clinton's (1994) Executive Order 12898 to United States federal agencies promotes a conception of environmental justice that leaves room for the continued production of toxic waste, as long as its negative effects do not fall disproportionately on disadvantaged communities. Does progress in urban environmental justice research demand that we pronounce one of these interpretations of the term to be closer to some "true" definition?

In the first section of this paper, I argue that the pursuit of stable, consensual definitions of such terms as *environmental justice* and *environmental racism* is misguided. We must accept that people in different geographic, historical, political, and institutional contexts understand the terms differently. Instead of regarding the lack of universal definitions as a barrier to progress, however, we need to treat the breadth and multiplicity of interpretations as guides to more relevant and useful new research. In addition, we must acknowledge that interpretations of the terms have inevitable political implications. Our research should make our assumptions about the nature of racism and justice explicit.

In the second section, I review some of the prevailing trends in empirical environmental justice research and suggest that the recent emergence of governmental environmental justice programs in the United States provides a fruitful starting point for new lines of



*Urban Geography*, 2001, **22**, 1, pp. 78–90.

inquiry. What began as a loosely organized social movement has led during the past decade to the establishment of a variety of federal and state policies and bureaucracies. As a result of this development, the historical context in which people make claims about environmental justice has changed. I contend that this institutionalization of environmental justice has made some kinds of quantitative analyses more pertinent than others. In addition, I suggest that the adoption of a concept of environmental justice by government agencies raises important new questions for historical investigations and case studies. Urban scholars need to investigate how governmental environmental justice programs themselves have begun to influence the geographies of industrial development, environmental risk, and grassroots activism. Progress in urban environmental justice research demands that we engage with the variety of ways in which government agencies—along with activists, industries, and academics—interpret the meanings of *environmental justice* and *environmental racism* in different times and places.

## CONTESTED TERMS

### *The Environment and Environmentalism*

The terms *environment* and *environmentalism* are themselves notoriously ambiguous. Although we commonly restrict environmental issues to a widely accepted set of concerns about human health and activity, ecology, and natural resources, the "environment" can mean literally everything there is (Harvey, 1996). The wide variety of popular definitions led Schlosberg (1999, p. 3) to conclude that "There is no such thing as environmentalism." As he went on to point out, the grassroots environmental justice movement itself embraces plural definitions of the term *environment*. Some scholars contend that the movement challenges conventional thinking about the environment by broadening the term's definition (DeLuca, 1999), while others have argued that the movement's apparent emphasis on human justice over ecological preservation in fact narrows the scope of environmentalism (Dobson, 1998). In any case, by bringing issues of race, class, culture, and gender into the realm of environmentalism, grassroots environmental justice activists challenge the focus of traditional environmentalists on resource conservation, wilderness preservation, population growth, or similar issues. Importantly for urban scholars, activists have drawn on the legacy of the civil rights and social justice movements to reunite environmentalism with the spiritual and cultural traditions of people of color and the problems of the inner city (Harvey, 1996; Pulido, 1998; Taylor, 2000).

While the inclusion of inner-city problems among environmental issues presents opportunities for urban scholars, it also presents challenges. Should we expand the realms of environmental policy and scholarship to include other urban problems, such as crime and blight (Greenberg and Schneider, 1996)? Or should we keep the definition of *environment* limited to traditional domains (Schnaiberg, 1980)? Empirical investigations of environmental justice have typically followed the latter suggestion, focusing on the geography of industrial pollution or the locations of landfills and waste sites. While the investigation of "traditional" environmental issues remains important, I suggest that broader conceptions of the environment open up promising possibilities for future research. Instead of attempting to impose limits on what constitutes environmental issues, we should ask how residents and officials in particular contexts understand and delimit

the environment. Even if local citizens and authorities disagree, their conceptions will provide the most meaningful and relevant topics for our empirical research.

*Environmental Equity*

Several years ago, most grassroots activists and the U.S. Environmental Protection Agency (EPA) abandoned the term *environmental equity* in favor of *environmental justice* (Foreman, 1998; Taylor, 2000). When activists concerned about disproportionate impacts of toxic pollution first gained the attention of federal policy-makers in the early 1990s, the EPA preferred to call the problem one of "equity" instead of "racism" or "justice." According to a 1990 EPA report, only environmental "equity" lent itself to measurement using methods of scientific risk analysis (U.S. Environmental Protection Agency, Office of Policy, Planning, and Evaluation, 1990; Sandweiss, 1998). From the perspective of grassroots activists, however, characterizing the problem as a matter of achieving an "equitable" redistribution of pollution represented a distortion of their agenda. Not only did they insist that their goal was to prevent pollution rather than redistribute it, but many activists also criticized the EPA's reliance on flawed risk analysis models. Under pressure from these activists, the EPA soon followed their lead and adopted the broader and more inclusive term *environmental justice* (Foreman, 1998). President Clinton's (1994) Executive Order 12898 ensured that *environmental justice* would become the favored term in other United States federal agencies as well.

Despite the symbolic importance of this shift in terminology, a number of academics and local and state agencies continue to use the term *environmental equity*. Scholars have proposed numerous subdivisions of environmental equity, including "procedural equity," "geographic equity," "social equity," "distributional equity," and "generational equity" (Zimmerman, 1993; Bullard, 1994; Cutter, 1995). The distinction that Cutter made between "outcome equity" and "process equity" has been useful for distinguishing analyses of geographic distributions, or outcomes, from longitudinal and historical analyses of the processes underlying present-day patterns. However, since federal agencies and many grassroots activists now avoid the term *environmental equity*, scholars must ask whether scientific analyses using the concept remain appropriate. While using the term may have little effect on the substantive results of a research project, I suggest that we investigate environmental equity only when both activists and agencies in our study areas use the term and agree on its meaning. At the very least, we need to recognize and acknowledge the political implications of the term's history.

*Environmental Justice*

Nonetheless, when the EPA adopted the term *environmental justice*, it developed an official definition of the new term that differs little from its definition of *environmental equity*. According to the EPA Office of Environmental Justice, environmental justice remains subject to scientific measurement:

> The goal of environmental justice is to ensure that all people, regardless of race, national origin or income, are protected from disproportionate impacts of environmental hazards. To be classified as an environmental justice community, residents

> must be a minority and/or low income group; excluded from the environmental policy setting and/or decision-making process; subject to a disproportionate impact from one or more environmental hazards; and experience a disparate implementation of environmental regulations, requirements, practices and activities in their communities. (U.S. Environmental Protection Agency, Office of Environmental Justice, 2000)

Determining "environmental justice communities" becomes a matter for scientific analysis. In some EPA regions, for instance, administrators have developed protocol for using Geographic Information Systems (GIS) to demarcate such communities (e.g., U.S. Environmental Protection Agency, Region IV, 2000).

Still, in accordance with the directives of Executive Order 12898, interpretations of *environmental justice* within government agencies promote diverse conceptions of environmental issues. All federal environmental justice programs include provisions for both *distributive justice*, referring to the distribution of environmental quality among different communities, and *procedural justice*, referring to the access of citizens to decision-making processes that affect their environments. While the EPA's environmental justice policies focus primarily on areas facing hazardous waste and pollution concerns, the program of the U.S. Department of Housing and Urban Development (HUD, 1996) addresses such problems as lead-based paint in inner-city public housing projects and the lack of basic infrastructural needs in many Native American reservations, migrant farm worker camps, and *colonias* along the United States–Mexico border. In the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), environmental justice also means ensuring that minority and low-income populations benefit proportionately from transportation projects (U.S. Department of Transportation, 2000). In addition, in the policy of the FHWA and FTA, adverse impacts of concern extend beyond conventional health and environmental effects to such issues as aesthetic values, traffic congestion, and community isolation or displacement. In spite of this variety of environmental justice issues recognized by government agencies, empirical investigations have typically failed to look beyond sites and chemical releases documented in EPA databases.

As diverse as they are, government definitions of *environmental justice* do not match the breadth and variety of interests that characterize what Szasz (1994) called "radical environmental populism." The term emerged in the 1980s within the grassroots antitoxics movement, which began after national media coverage of the activism of residents living on an abandoned hazardous waste dump in Love Canal, New York. It quickly became popular among minority communities, who initiated their own overlapping movement against environmental racism after a struggle to prevent the siting of a hazardous waste landfill in Warren County, North Carolina in 1982 (McGurty, 2000; Taylor, 2000). Although many activists continue to focus on hazardous waste issues, grassroots delegates who assembled at the First National People of Color Leadership Summit in 1991 articulated a much wider range of concerns in the *Principles of Environmental Justice* (1991; reprinted in Foreman, 1998, and Taylor, 2000). In addition to demanding "the cessation of the production of all toxins, hazardous wastes, and radioactive materials," the document addressed numerous issues not traditionally associated with the environment, such as opposition to military occupation and support for Native American self-determination. Perhaps because grassroots definitions of *environmental justice* often resist scien-

tific analysis, social scientists have largely ignored the spectrum of concerns expressed in the *Principles* and other grassroots documents.

Indeed, the absence of limits on the kinds of issues that the term *environmental justice* can address gives the term much of its rhetorical power. Several social constructionist analyses explore how activists have successfully mobilized communities with diverse grievances by using environmental justice conceptual frames, which provide rhetorical links between contemporary environmental activism and historical movements for civil rights and social justice (Capek, 1993; Cable and Shriver, 1995; Salazar and Moulds, 1996; Sandweiss, 1998; McGurty, 2000; Taylor, 2000; Towers, 2000). Foreman (1998) contended that the lack of boundaries to environmental justice concerns makes the concept dubious as a guide to federal policy, but he agreed that the term's vagueness helps make it extremely effective as populist political rhetoric. Harvey (1996) praised the movement for using a term that unabashedly appeals to morality instead of economic rationality. However, while he asserted that appeals to a vision of environmental justice may be essential to inspire political action for social change, he cautioned that the lack of a universal standard of justice confounds efforts to privilege grassroots claims over those of other political interests.

The quest for a universal standard of justice drives an ongoing debate in political philosophy. Several recent essays have explored connections between competing theories of justice and environmental discourses. Harvey (1996) suggested rough correspondences between contemporary environmental agendas and traditional conceptions of justice: establishment free-market capitalism and utilitarian theories of justice; ecological modernization and the social contract theory of John Rawls; the "Wise Use" movement and libertarian conceptions of justice; the grassroots environmental justice movement and a blend of communitarian and egalitarian notions of justice. Low and Gleeson (1997, 1998) examined similar connections in their search for a universal dialectical conception of "environmental" and "ecological" justice. While Low and Gleeson held out hope for a democratic world government that can safeguard justice both "in and to the environment," Dobson (1998) argued that theories of environmental sustainability and social justice may ultimately be incompatible. Perhac (1999) even rejected the idea that minority group designation should have anything to do with environmental justice. Others have cited Young's (1990) skepticism about *universal* conceptions of justice, calling instead for *situated* conceptions of environmental justice that emphasize underlying power relations and structures of decision-making over distributive patterns (Lake, 1996; Warren, 1999).

As urban scholars, we must engage both with this debate over the nature of *justice* and with the breadth and malleability of the term *environmental justice*. We must acknowledge that *environmental justice* will never refer unproblematically to a single set of measurable conditions, such as the association between distributions of pollution and demographic characteristics. Grassroots activists and government agencies use the term to apply to a wide variety of distributive and procedural concerns, and academics must not impose artificial limits on the term's scope. Instead of assuming that claims about environmental justice refer to a universal, monolithic agenda, we should ask what the term means in different contexts. *Environmental justice* might have one meaning for a community fighting for cleanup of a Superfund site and another meaning for one struggling to have a wastewater treatment plant built. On the other hand, if we choose to frame our

research as investigations of whether geographic patterns or processes are "just," we should situate our work with respect to the broader philosophical debate about justice, make our assumptions about the nature of justice explicit, and acknowledge that our conceptions of justice are inevitably political.

### *Environmental Racism*

Scholars, policy makers, lawyers, and activists also continue to debate the meaning of *environmental racism*. Although federal government agencies never adopted the term as a guide to policy, it has served as another powerful rhetorical tool for grassroots activists (Foreman, 1998). Benjamin Chavis, former head of the United Church of Christ's Commission on Racial Justice, usually receives credit for introducing the term after he participated in the 1982 protests against the siting of a hazardous waste landfill in Warren County, North Carolina:

> Environmental racism is racial discrimination in environmental policy-making and enforcement of regulations and laws, the deliberate targeting of communities of color for toxic waste facilities, the official sanctioning of the presence of life threatening poisons and pollutants for communities of color, and the history of excluding people of color from leadership of the environmental movement. (Chavis, 1994, p. xii)

The ongoing debate about the term's definition focuses on the question of intent. While the language of Chavis's statement ("deliberate targeting") suggests to some that accusations of environmental racism demand proof of intentional discrimination (e.g., Boerner and Lambert, 1995), others emphasized the statement's suggestion that the presence of poisons in minority communities constitutes racism and argued that establishing discriminatory intent should be irrelevant (e.g., Bullard, 1994). According to the latter interpretation, any decision-making processes and distributive patterns that burden minority groups disproportionately provide sufficient evidence of environmental racism.

Pulido (1996, 2000) has issued the most thorough and forceful challenges to prevailing scholarly interpretations of *environmental racism*. Just as Harvey (1996) and others have noted the contested meanings of *justice*, so too has Pulido identified multiple discourses of "race" and "racism" within academic and policy circles. She has criticized interpretations that reduce environmental racism to acts of intentional discrimination, identifying such definitions as regressive "racial projects" (Omi and Winant, 1994). In order to replace these reductive definitions, she has argued that studies of environmental racism should consider historical processes of racial formation, acknowledge the diverse forms of racism that emerge in different places, and incorporate more sophisticated theories of space and scale. While Pulido (2000) herself asserted that empirical studies of geographic patterns have "proven" environmental racism in Los Angeles, she has also situated her arguments within an explicitly antiracist "racial project" and has made no secret of her own assumptions and political commitments. Urban scholars of environmental racism would do well to follow her lead.

## RECENT EMPIRICAL RESEARCH AND DIRECTIONS FOR THE FUTURE

Empirical environmental justice and racism research has focused increasingly on geographic patterns and historical processes in urban areas. During the past few years, researchers have examined the cities and surrounding counties of Boston (Krieg, 1995); Cleveland (Bowen et al., 1995); Denver (Shaikh and Loomis, 1999); Des Moines, Iowa (Chakraborty and Armstrong, 1997); Gary, Indiana (Hurley, 1995); Houston (Liu, 1997); Los Angeles and nearby municipalities (Pulido et al., 1996; Boer et al., 1997; Boone and Modarres, 1999; Sadd et al., 1999a); Minneapolis (McMaster et al., 1997; Sheppard et al., 1999a; Sheppard et al., 1999b); Portland, Oregon (Stroud, 1999); San Jose (Szasz and Meuser, 2000); St. Louis (Hurley, 1997); and Tampa Bay (Stretesky and Lynch, 1999), among others. While this research continues to improve our understanding of urban geography, empirical investigations have shed little light so far on the implications and effects of environmental justice programs in government agencies.

### *Quantitative Research*

Statistical and GIS-based studies of demographic patterns and toxic sites, which helped activists convince federal agencies to adopt an environmental justice agenda in the first place (Foreman, 1998), remain prominent within the field (useful reviews in McMaster et al., 1997; Szasz and Meuser, 1997; Daniels and Friedman, 1999). Although a few scholars continue to frame their research as tests for the existence of environmental injustice, inequity, or racism, others explicitly or implicitly conceive their research as tests of claims that some populations bear environmental burdens disproportionately at a certain scale or multiple scales of analysis (e.g., Anderton et al., 1997; Boer et al., 1997; Daniels and Friedman, 1999; Sadd et al., 1999a; Tiefenbacher and Hagelman, 1999). In addition, a few have challenged the traditional domains of environmental justice research by venturing beyond EPA databases, such as Tarrant and Cordell (1999) in their exploration of outdoor recreation sites. Numerous well-documented methodological difficulties plague this body of work, including spatially autocorrelated data and the modifiable areal unit problem, inaccurate and incomplete data sources, inconsistent variable selection, and uncertainty about whether proximity to hazards provides a reliable estimate of risk (Zimmerman, 1993; Anderton, 1996; Cutter et al., 1996; McMaster et al., 1997; Krieg, 1998; Weinberg, 1998; Bowen, 1999; Sadd et al., 1999b; Williams, 1999a). Because such problems have led to conflicting results, critics and sympathizers of the environmental justice movement have each accused the other side of using questionable methodologies (e.g., Boerner and Lambert, 1995; Goldman, 1996; Foreman, 1998; Taylor, 2000).

The institutionalization of environmental justice in federal policy should lead researchers using quantitative approaches to think carefully about the relevance of their research questions. Testing claims of inequity on a national scale was arguably pertinent to the debate over whether the United States needed to address the distribution of pollution and waste sites at the federal level. But now that federal agencies have established policies, built bureaucracies, and earmarked funds devoted to environmental justice, traditional "environmental equity" analyses may no longer be appropriate. Instead of asking whether patterns of disproportionate exposure to environmental risks exist, federal agencies in the United States now typically ask which communities face higher risks. Within

this institutional discourse, to ask whether environmental injustice exists now means to ask, in effect, "Are disproportionately burdened minority and low-income communities receiving appropriate attention and resources?" Instead of continuing to analyze distributions of EPA-regulated facilities at the state or national scale, we should apply our skills to helping empower these "environmental justice communities" to develop and analyze their own neighborhood environmental inventories (McMaster et al., 1997).

Although longitudinal studies of "process equity" ostensibly represent progress over static "outcome equity" studies, the former have drawn pointed criticism. In order to determine whether minority communities or toxic facilities occupied an area first, longitudinal analyses have compared demographic patterns and toxic site locations at multiple points in time (e.g., Been, 1994; Oakes et al., 1996; Yandle and Burton, 1996; Stretesky and Hogan, 1998; Graham et al., 1999; Mitchell et al., 1999). As Pulido (1996) observed, such studies assume that if minority populations moved into neighborhoods after the siting of toxic facilities or waste dumps, they can rule out discriminatory intent in siting and thus cast doubt on the possibility of environmental racism. While some of these studies recognize that discrimination in housing and job markets might also contribute to environmental inequalities, several critics contend that limiting environmental racism to discrimination in its various forms neglects deeper, more complex processes and contexts (Pulido, 1996, 2000; Downey, 1998; Boone and Modarres, 1999; Szasz and Meuser, 2000). In addition, reductionist definitions fail to engage with recent theoretical insights into the social production of geographic scale (Williams, 1999b; Pulido, 2000).

Nonetheless, longitudinal studies remain pertinent to some litigation. Plaintiffs appealing to the equal protection clause of the United States Constitution in lawsuits to prevent facility sitings must usually prove that defendants had discriminatory intent. However, more minority communities are turning to Title VI of the Civil Rights Act of 1964, which typically does not demand proof of discriminatory intent (Foreman, 1998). Scholars who conduct longitudinal studies should watch this trend closely and take special care to distinguish testing for discriminatory intent from investigations of the much broader, more ambiguous, and more contested concept of environmental racism.

### *Historical Research*

Historical case studies have been more successful than longitudinal studies in exposing the complex geographic processes that generate patterns of inequality. While a few scholars have combined statistical or GIS-based analyses with historical investigations (Krieg, 1995; Sheppard et al., 1999b; Szasz and Meuser, 2000), most historical case studies have used primarily qualitative methods. The case studies of Torrance and East Los Angeles/Vernon, California by Pulido et al. (1996) cast doubt on the simplistic assumptions behind the question of "who came first," demonstrating how planning practices, racialized divisions of labor, and other processes generated present-day environmental inequalities. Other recent historical studies have explored how land-use zoning (Boone and Modarres, 1999), real estate dynamics (Hurley, 1997), and other aspects of industrial development, city planning, and demographic change (Sheppard et al., 1999b; Stroud, 1999; Szasz and Meuser, 2000) contribute to current patterns of environmental inequality in United States cities.

Although several of these studies show how the policies and actions of federal, state, and local government institutions contributed to patterns of inequality, none have delved deeply into the effects of recent government environmental justice programs themselves. Have environmental justice grants, policies, and lawsuits begun to change the landscape of urban development? Have they expanded or constrained the possibilities for grassroots environmental justice activism? With its emphasis on the actions of multiple stakeholders and interests, Pellow's (2000) concept of "environmental inequality formation" provides a potentially useful theoretical framework for incorporating government environmental justice programs in case study analyses. Quantitative and qualitative methods alike would have important roles in this new research agenda.

## CONCLUDING REMARKS

*Environmental justice* and *environmental racism* have never been simple descriptive terms, and we must stop treating them as though they ever will be. Urban scholars must look beyond distributive patterns of pollution and address the diversity of issues that grassroots activists and federal agencies include within their interpretations of environmental justice. In addition, whether we use quantitative analyses or qualitative case studies, we must also explore how urban environmental justice issues vary across space and time. How might notions of environmental justice in communities and agencies in Rust Belt cities differ from those of their counterparts in cities along the United States–Mexico border? How might environmental justice assumptions and concerns have changed during the past decade, as federal and state agencies have integrated the concept into their policies? Such questions open up a rich variety of new possibilities for progress in urban environmental justice research. Finally, regardless of the research directions we choose, we must acknowledge the political implications of our own suppositions and definitions. In the wider social debates over environmental justice and environmental racism, urban scholarship is no innocent bystander.

## NOTE

[1]I would like to thank Steve Holloway and Kristin Sziarto for their encouragement and helpful comments and the three anonymous reviewers for their insightful critiques of an earlier draft of this paper. Any shortcomings are my own responsibility. This material is based on work supported under a National Science Foundation Graduate Research Fellowship.

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