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# Trends and Directions in Environmental Justice: From Inequity to Everyday Life, Community, and Just Sustainabilities

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## Keywords

environmental justice, social movements, community, food systems, just sustainabilities

## Abstract

This article begins with a review and synthesis of some of the key theories, scholars, case examples, debates, methods, and (multiple) interpretations of environmental justice (EJ), as well as its expansion and globalization. We then look to some newly emerging themes, actions, and strategies for EJ and just sustainabilities. First, we look at the practices and materials of everyday life, illustrated by food and energy movements; second, the ongoing work on community and the importance of identity and attachment, informed by urban planning, food, and climate concerns; third, the growing interest in the relationship between human practices and communities and nonhuman nature. We also expand on the longstanding interest in just sustainabilities within this movement, illustrated by a wide range of concerns with food, energy, and climate justice. These new areas of work illustrate both recent developments and a set of paths forward for both the theory and practice of EJ.

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## INTRODUCTION AND OVERVIEW

In 2014, the city of Flint, Michigan, shifted the intake of its water supply from Lake Huron to the Flint River. Immediately, numerous residents complained about the smell and taste of the water coming out of the tap. Although *Escherichia coli* was found in the water and The City warned residents to boil water before use, the larger problem was that the water contained corrosives that ate away at the city's aging pipes, resulting in significant amounts of lead coming out of the tap. Residents and others brought attention to the issue, but the Michigan Department of Environmental Quality downplayed the danger, tested water in a way that minimized potential detection, and ridiculed employees and experts who insisted the danger was real (1). Over the course of the year and a half that the city sourced water from the Flint River, research shows that the percentage of children with elevated blood levels of lead increased from 2.4% to 4.9%, more than doubling at-risk exposure; in one ward, the rise was nearly 15%.

Flint's household income is half of the state's median, and 41.5% of residents are below the federal poverty level. Flint's population is also 56.6% African American, compared with 14.2% of the state as a whole (2). The event, and the ongoing inevitable impacts of lead poisoning on young people, has been thoroughly discussed through the lens of environmental injustice—the inequitable exposure of communities of color, and communities in poverty, to environmental risks due primarily to their lack of recognition and political power.

In late 2015, in Paris, there were sighs of relief when the Conference of Parties (COP) to the United Nations Framework Convention on Climate Change—at the twenty-first COP meeting—came to an agreement that addresses the mitigation of carbon emissions, development of adaptation pathways, process for dealing with loss and damage, financing of mitigation and adaptation, and necessity of both technology transfer to developing states and capacity building for those most vulnerable. Although some have cynically (and incorrectly) argued that concerns for climate justice have hampered progress toward agreement at past meetings (3), the reality in Paris was that conceptions of environmental equity and climate justice were key motivators. One could argue that the recognition in Paris of the importance of the concept of climate justice helped to bridge some gaps between rich and poor countries. Major actors in the process leading up to the COP, such as the Indian Prime Minister Narendra Modi, both demanded attention for climate justice and declared the outcome a victory (4).

The agreement reached notes the importance of impacts on the most vulnerable, on indigenous peoples, on small island states, and on future generations. Equity is a key principle throughout, and the importance of climate justice is explicitly noted. Clearly, much more needs to be done to attain anything resembling justice as we experience and respond to climate change, but the discourses of environmental justice (EJ) and climate justice have become central motivating factors for, and organizing themes of, the agreement.

The point of these two opening examples—major stories in late 2015 and early 2016—is to illustrate that the concept of EJ continues to be relevant to our everyday lives, reaching from tainted tap water in one city to the single most important international policy agreement of this young century. What we offer here is an update on the story of the theory and practice of EJ, following up on a previous review by Mohai et al. (5) from the 2009 volume of this journal. The authors reviewed works "on the quantitative complexity of documenting environmental injustice, on critical race theories that should be included in any broader conceptual discussion of this issue, on case studies, on the history and politics of environmental justice policy making in the United States and on international climate justice" (5, p. 408). Today, we have an additional seven years of research in these and new, fresh branches of EJ theory and practice.

This article begins with a review and synthesis that lays out some of the key theory, scholars, case examples, debates, methods, and (multiple) interpretations of EJ, such as just sustainabilities, as well as the expansion and globalization of EJ. The original themes and concerns of EJ activists and academics continue to be central to EJ discourses. We then look to some newly emerging themes, actions, and strategies for EJ and just sustainabilities. First, we focus on the practices and materials of everyday life, illustrated by food and energy movements. Second, we interrogate ongoing work on community and the importance of identity and attachment, informed by urban planning, food, and climate concerns. Third, we assess the growing interest in the relationship between human practices and communities, on the one hand, and nonhuman nature, on the other. We also expand on the longstanding interest in just sustainabilities within this movement, illustrated by a wide range of concerns with food, energy, and climate justice. These new areas of work illustrate both recent developments and a set of paths forward for both the theory and practice of EJ.

## FOUNDATIONS OF THE ENVIRONMENTAL JUSTICE MOVEMENT: ACTIONS, ACTIVISTS, AND ORGANIZATIONS

In 1982, activists in Warren County, North Carolina, catalyzed a powerful social movement when 414 demonstrators were arrested for protesting the siting of a toxic waste facility in the predominantly black and low-income community (6). It would be several years before the term "environmental racism" would offer a succinct label for the injustice they fought and before the term "environmental justice" would lend a name to the movement. However, the protests drew national attention, and following the arrests, members of the US House of Representatives requested an analysis of the correlation between hazardous waste landfill locations and the racial and socioeconomic demographics of the surrounding communities. The following year, the US General Accounting Office (GAO; now the US Government Accountability Office) published *Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities* (7). In 1987, the United Church of Christ (UCC) Commission for Racial Justice report *Toxic Wastes and Race in the United States* (8) introduced the terms environmental racism and environmental justice and joined the GAO report as one of the cornerstones of the early EJ canon. Both the GAO and UCC reports supported the claim that communities of color and low-income people were disproportionately exposed to environmental toxics through the siting of hazardous and toxic waste facilities in and near their communities.

**Table 1 How UCC recommendations translated into federal-level action**

| United Church of Christ recommendation | Federal-level action |
|---|---|
| Executive Order from the President of the United States mandating that federal agencies consider the impact of current policies and regulations on racial and ethnic communities | In 1994, President Clinton signs Executive Order 12898 mandating that "[E]ach Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations" |
| Formation of an Office of Hazardous Waste | In 1992, the EPA creates the Office of Environmental Equity (later renamed the Office of Environmental Justice) |
| Establishment of a National Advisory Council on Racial and Ethnic Concerns within the EPA | In 1993, the EPA establishes the National Environmental Justice Advisory Council |

Abbreviation: EPA, Environmental Protection Agency.

*Toxic Wastes* was fundamental to the demands, development, and profile of the environmental justice movement (EJM). Empowered by the data, impacted communities demanded more power and recognition, activists laid the foundation for the Principles of EJ, and the movement made recommendations for EJ integration into government agencies and environmental law. The authors of *Toxic Wastes* established a precedent for community empowerment and stated their intent that the report "better enable the victims of this insidious form of racism not only to become more aware of the problem, but also to participate in the formation of viable strategies" (8, p. x). The report's preface also foreshadows the fundamental Principles of EJ that would be codified by the 1991 First National People of Color Environmental Leadership Summit (8). The executive summary of *Toxic Wastes* reads as though the EJM of 1987 was well formed, coherent, and cohesive. In reality, the movement was far more nascent, but the document reads as deliberately aspirational. And so, unsurprisingly, many recommendations of *Toxic Wastes* set an agenda for the EJM of the late 1980s and early 1990s. When considered retrospectively, several EJM milestones originated as recommendations in this document (see **Table 1**).

This is not to suggest that all of the UCC's recommendations were adopted during that period, that all have been realized today, or even that these advancements have been protected and continue today; the point is simply to note the power and influence of this single UCC document on the history of EJ in the United States. In contrast, Bullard et al. (9) assert that during the 2000s the Environmental Protection Agency (EPA) undermined—or even attacked—the EJ Principles and policies established in the 1990s, including failing to implement President Clinton's Executive Order 12898 or apply Title VI of the Civil Rights Act. EJ lawyer and author Luke Cole, a major participant in the early years of the National Environmental Justice Advisory Council (NEJAC), later lamented that the EPA did not implement any of its formal recommendations (quoted in 10, p. 66). Moving beyond even symbolic action by federal agencies is an ongoing struggle for the EJM; it was not until July 2007 that the US Senate Subcommittee on Superfund and Environmental Health held the first ever Senate hearing on EJ (9). At the state level, and that of the regional EPA offices, there has been both very limited, if problematic, progress—for example, in California climate legislation (11)—and ingrained resistance to change (12).

In the late 1970s and throughout the 1980s and 1990s, African American communities mobilized and coalesced around anti-waste and antidumping campaigns, became experts on toxics, and successfully linked the issue to housing, transportation, air quality, and economic development (13). Native American, Latino, and Asian Pacific Islander communities concurrently fought

for EJ in their communities (14). Indigenous activists in the United States have confronted and continue to combat infringement and desecration of sacred sites; land appropriation and threats to sovereignty; as well as loss of traditional fishing, hunting, and gathering rights (15–17). These efforts were strengthened by the establishment of the Indigenous Environmental Network in 1990. Native American communities in the United States continue to battle environmental injustices as the construction of uranium mines, nuclear waste sites, military development and nuclear testing, and oil and gas pipelines are presented as economic development opportunities. US and Canadian First Nations also face disproportionate consequences of climate change (18). These issues showcase how the EJM is concerned not only with distributional equity with respect to disproportionate environmental "bads" but also with the lack of respect for, and basic recognition of, indigenous ways of life (19).

Chicano and Latino communities have also long pioneered EJ activism; much of the focus has been on health and occupational safety, especially the issue of farmworker and community exposure to pesticides (20, 21). Pesticides had been a concern of the mainstream environmental movement but had focused on protecting wildlife, wilderness, and consumers. By contrast, the (largely Chicano/Latino) United Farm Workers' Organizing Committee focused primarily on farmworker exposure (20). Latino and Chicano activists have made critical contributions to the EJM, including founding hundreds of local, regional, and multinational environmental justice organizations (EJOs); helping to draft the Principles of EJ at the First National People of Color Environmental Leadership Summit; campaigning against environmental racism in the EPA and the Group of Ten mainstream environmental organizations; advocating for Executive Order 12898; and representing Latino and Chicano concerns at NEJAC meetings (22). After several decades off the radar, farmworker justice is again a rising concern in the EJM as farmworker health, safety, and just compensation have experienced resurging attention by new advocates waving the banner of food justice (23–25). Latino and Chicano EJ activists also campaign to correct the environmental injustices experienced by industrial workers, heirs of land grant communities, *acequia* farmers, and residents of rural *colonias* along the US–Mexico border (22). Latino and Latina EJ activists are leaders in the shift to refocus the EJM from reactive protests against environmental injustices to advocacy for sustainable and just alternatives addressing the political, economic, and social injustices that perpetuate environmental racism (22).

It is essential to note—as do Chavis & Lee (8), Bullard (13), Taylor (26), and others—that early EJ activists (mostly people of color and low-income people) were not members of the so-called mainstream environmental organizations (whose membership is dominated by middle- and upper-class whites); rather, EJ illustrates a broad array of environmental interests, tactics, and discourses. In the seminal work *Dumping in Dixie*, Bullard (13) documented that environmental equity was becoming a major issue on the civil rights agenda. Taylor (26) further argues that, through collective identity formation in the civil rights movement, EJ not only became a major civil rights issue, but also became integral to the civil rights identity. EJ tactics more closely resembled civil rights actions—such as protests, rallies, sit-ins, and boycotts, often organized out of churches—than mainstream environmental movement activities—such as membership drives and lobbying campaigns (13).

Taylor (26) has meticulously constructed a narrative of the evolution of the environmental justice paradigm (EJP) and its antecedent paradigms or discourses. Although each paradigm departs significantly from its predecessor, no paradigm began tabula rasa. Therefore, the EJP bears imprints of what has been called the new environmental paradigm, which was built atop the earlier romantic environmental paradigm. Significantly, the EJP is the first environmental discourse constructed by people of color and is "framed around concepts like autonomy, self-determination, access to resources, fairness and justice, and civil and human rights," all of which had been absent

from mainstream (white, male, wealthy) environmental discourses (26, p. 534). The EJP explicitly links the environment to race, class, gender, and social justice, effectively reframing environmental issues as injustice issues. Crucially, the EJM did not insist on a singular paradigm, or a hierarchical mode of organizing; rather, the movement has been pluralist in its concepts, foci, strategies, and actions from the beginning (27). Consequently, the EJM recruited and resonated with a wide range of new constituencies, including people of color and working- and middle-class whites (26).

EJOs have long been multipurpose social justice organizations (13, 26, 28), often working in coalition to fight for both environmental sustainability and socioeconomic equality and justice (13). However, the emerging popular discourse of environmental sustainability, while gaining ground in policy and planning circles in the 1990s after the Earth Summit, was conspicuously absent from much of the EJ discourse, both community and academic. Indeed, one commentator noted "those in the environmental justice movement were suspicious even though what environmental justice folks were doing was very akin to or had strong elements of sustainability but to identify in that way was problematic for them" (29, p. 173). Yet, even though sustainability may have been a no-go within EJOs at that time, coalitions and collaborations between EJOs and religious, community, and green or sustainability groups lent strength of reputation, as well as community resources and social capital, and have been a significant factor in the successes of EJMs (26, 28, 29).

An excellent example of this broad coalition building is Clean Buses for Boston in the late 1990s (29). It was a coalition of EJOs with green/sustainability, religious, community, and other organizations that worked to force the Massachusetts Bay Transit Authority to get rid of dirty diesels and invest in 350 compressed natural gas buses. In many ways, the Clean Buses for Boston coalition exemplified the emerging concepts of just sustainabilities (30) and the later emergence of the just sustainabilities paradigm and just sustainabilities index (29). Just sustainabilities can be thought of as a counterbalance, an infusion of ideas of equity and justice into a discourse whose sole focus at that time was on environmental sustainability. The argument, put simply, was "sustainability cannot be simply a 'green', or 'environmental' concern, important though 'environmental' aspects of sustainability are. A truly sustainable society is one where wider questions of social needs and welfare, and economic opportunity are integrally related to environmental limits imposed by supporting ecosystems" (28, p. 2). As social movement organizations expanded their agendas to include EJ issues, their collective identity also subsumed these causes in such a way that "to maintain their credibility in communities of color, they had to adopt the environmental justice identity also" (26, p. 551).

## EVOLUTION OF ENVIRONMENTAL JUSTICE METHODOLOGY AND MULTIPLE INTERPRETATIONS OF ENVIRONMENTAL JUSTICE

Early EJ research is distinguished, in part, by the pursuit of and debate regarding a definition of EJ that could be measured objectively and compared across cases (18, 31). To substantiate the claims of EJ protesters and provide empirical evidence for the assertion that low-income people and people of color were disproportionately exposed to toxic and hazardous waste, researchers compared demographic census data of tracts with and without waste facilities (9). The spatial analytic methods employed by the first toxics studies (including the GAO and UCC reports) would form the core of EJ methodology and scholarship for years to come (5, 21). However, the findings of these early spatial analyses sparked intense debate as to methodology and the appropriate geographic unit of analysis (5, 32).

Advancements in analytical technologies (including geographic information systems) and research methods have allowed scholars to better assess and understand communities living near toxic waste facilities (9, 33). Contrary to the opposition to early spatial analyses, newer

distance-based methods not only corroborate the claims of *Toxic Wastes* but also indicate greater racial disparities in toxic exposure than earlier coincident methods had revealed (9, 33). Even though continued studies over two decades strengthened the pool of evidence of inequitable distribution of environmental hazards according to race, class, or both, ambiguity persisted as to the magnitude of racial and socioeconomic disparities as well as the underlying causes or mechanisms that perpetuate injustices (32–36).

In the mid-1990s, EJ research methods shifted from almost exclusively quantitative methods to a more qualitative and interdisciplinary approach (18), which is evidenced by the publication of EJ research in journals from a broader range of academic disciplines (35). This cross-disciplinary debate has expanded EJ as a discipline to explore more methodologies, explanatory social theories, epistemologies, and frameworks from social, economic, and historical disciplines (18, 21). In contrast to previous efforts to develop one definition of EJ and standardize one objective and comparable measure of injustice, more recent, critical EJ research addresses multiple meanings and interpretations of the term as a point of interest and inquiry (18, 37).

The broadening and globalization of EJ framing has both necessitated and driven the diversification of EJ methodologies. The first generation of simple spatial analyses—with its vocabulary of linear distance, zip codes, and census tracts—is insufficient and inadequate to assess EJ issues at multidimensional transnational scales (38). Walker (38, p. 615) asserts the need for "spatialities of different forms, of different things and working at different scales" to analyze three different conceptions of justice: distributive, procedural, and recognition-based (37). Schlosberg (37) has called for EJ methodology and theory to expand beyond the unequal distributions of impacts and/or responsibilities to include the processes of disrespect, devaluation, degradation, or insult of some people versus others; inclusion or exclusion in participation and procedure; and the provision and protection of the basic capabilities or needs of everyday life (see also 39, 40). The geography of distribution has been expanded to include "corporeogeographies" (38, p. 620). This enables consideration of the physiological and psychosocial impacts of environmental injustices in a way that responds to the appeal of Mohai et al. (5) for research into how environmental injustices relate to racial and socioeconomic disparities in health and mortality. Procedural justice is a form of spatial justice (41), in that a fair process allows for "a fluidity of movement of people, ideas and perspectives across the boundaries of institutions and between differentiated elite and lay spaces, creating open rather than constrained networks of interaction and deliberation" (38, p. 627).

Recognition is linked to spatial geographies through the stigmatization and devaluation of places and—through the often-inextricable connection between individual/community identity and place—to the people who inhabit those places (38). Some of this comes together as new approaches to citizen science and the inclusion of local knowledge—participation in analysis of the problem as well as in the political development of solutions (42, 43). And, as Ottinger (44) has argued, it is crucial that these efforts include supporting proactive knowledge production in affected communities. This, again, speaks to the implications of a broad EJ frame for what counts as EJ activism, policy, and practice. Moreover, the multiple spatialities of recent EJ research challenge and expand the original conception of distributive EJ and an objective, quantitative measure of injustice. In many ways, this internal epistemic, theoretical, and methodological pluralism is the catalyst for expansion of the EJ frame.

## EXPANSION AND GLOBALIZATION OF THE ENVIRONMENTAL JUSTICE MOVEMENT AND PARADIGM

Expansion of the EJ frame in practice has advanced more rapidly than its representation in EJ literature. So, academically speaking, the EJM appears to have remained loyal to the classic EJ

issues of disproportionate risk for toxic exposure well into and through the 1990s. However, the 1990s saw a broader range of issues in the EJM spotlight than is frequently acknowledged. Guided by the iconic phrase "where we live, work, and play" (credited to Dana Alston in her address to the first People of Color Environmental Leadership Summit in 1991), EJ issues continued to diversify (28, 37, 45). In 2000, Taylor (26) reported that EJOs whose leaders and members were people of color were focused on the built environment (facilities siting, housing, parks and recreation); worker health and safety; and waste, pollution, exposure, and toxics. Taylor (26) also criticized the narrow characterization of EJ as being limited to the toxics issue as a failure to capture the broader and more nuanced EJ themes of the 1990s. Additional critiques described EJ as largely reactive and focused on threats to communities (toxics, locally unwanted land uses, poor transit), rather than proactive and focused on policy and planning of desirable communities, e.g., sustainable communities, with adequate green spaces and play spaces (29). Nevertheless, the movement did expand its concerns.

By Benford's (6) estimation, in the five years since Taylor (26) reported on the 16 issues of EJOs for people of color, the list of EJM issues had grown to 52. Although climate change is conspicuously absent from Benford's list, the issues recorded reflect the global extension of the EJM (6). However, as Benford (6) argues, the EJM has not and cannot maintain constant momentum for all of its issues. The focus of EJM efforts and actions is fluid over time and geography; issues rise and fall in priority on the basis of local pressures, political situations, and community input. The movement has also linked justice with multiple issues, including environmental goods and bads, consumption, service provision, climate change, resource extraction, intergenerational justice, access to "white spaces" (46–48), and sustainability (28, 38).

Concurrent with—or perhaps impelling—this conceptual expansion of the EJ frame has been the globalization of the EJM as well as the literature addressing the movement (49–51). Schlosberg (52) distinguishes three expansions of EJ: horizontal to a broader range of issues, vertical to the global nature of environmental injustices, and conceptual to the human relationship to the nonhuman world. In the same period between publication of Taylor (26) and Benford (6), geographies and global EJ issues began to constitute a significant portion of EJ literature (38). Several authors have either found the EJ discourse in multiple movements in the developing world and/or employed it to analyze injustices within myriad environmental impacts (53–55). As with environmental racism in the United States (21), global environmental racism is not new; however, the adaptive EJP master frame has presented new opportunities to bridge environmental and social justice issues and has facilitated the global dispersal of the EJM (6, 26). International EJ issues have included human rights, slavery, genocide, deforestation, pollution and toxics, biopiracy/bioprospecting, globalization, land appropriation, immigrant rights, military testing, natural resource extraction, waste disposal, climate change, energy production, and free trade agreements, to name just a few (6, 21, 28, 56–60).

Whereas some of these global EJ issues concern injustices within particular countries, many others transcend international boundaries and address injustices between nations as well as globally (56, 60). Intralocal sustainabilities for some issues may be considered "just" simply because they transport the injustices to another locale (either nationally or internationally), thus creating a new injustice (18). Most frequently, developed nations outsource their externalities to developing nations in the forms of electronic waste, toxics, and other garbage; mineral, water, and natural resource extraction; manufacturing and occupational hazards; and greenhouse gas emissions. This points to another dimension of injustice between geographies: the "co- or dislocation of the consumption and production of environmental inequalities" (38, p. 624). Walker (38, p. 622) distinguishes between "situations in which distributional inequalities are the consequences of the

actions or informed choices made by the same people who are affected by them, and those where there is a dislocation between those benefiting from and suffering from patterns of distribution." Such dislocation arises in cases ranging from Warren County to Flint as well as in global EJ issues, most notably with waste trade and climate change.

A key issue for which the EJ discourse has had a large influence is climate change, notably in how social movements have organized around it and its impacts. Climate justice developed directly out of the history and conceptualization of the EJ discourse (61, 62). Schlosberg & Collins (62) trace the trajectory of climate justice out of the initial Principles of EJ, through to the development of principles of climate justice by international climate justice networks before, during, and after numerous COP meetings of the UN Framework Convention on Climate Change. Since 2005 and in the aftermath of Hurricane Katrina, greater attention has turned to racial inequalities related to natural disasters and climate change (63). Climate inequalities exist within and between nations with respect to responsibility, vulnerability, and ability to negotiate effectively in global forums (64). Across the globe, the communities most affected by climate change are poor coastal, island, farming, and pastoral, as well as developing nations generally, which are least responsible for the emissions that destabilize the climate (60, 64, 65). The urban poor also experience heightened vulnerability to extreme weather and environmental hazards resulting from climate change (64). As the impacts of climate change are more acutely felt around the world, climate justice has become a dominant thread of the EJM that interweaves many subthemes (40, 62, 66–68). Climate justice has become a major outlet for the EJ discourse around climate negotiations, as it helps to frame the inequity between north and south, developed and developing nations, major emitters and those most vulnerable to climate change (69); the idea was central to discussions at the 2015 Paris COP meeting.

The expansion of climate justice is one illustration of the growing global influence of the broader EJ discourse; we also see a growing concern with EJ in a wide range of national and global environmental organizations and, increasingly, in mainstream environmental nongovernmental organizations. In contrast to global mainstream environmental organizations, international EJOs tend to be multipurpose with an emphasis on human rights and social justice; EJ and climate justice have increasingly become central to their discourses. The global EJM operates on different scales to include local, regional, and national EJOs as well as transnational social movement organizations (57). The latter often have the highest profile and influence in international negotiations, stakeholder meetings, and congresses and parliaments. However, domestic local, regional, and national EJOs are the critical frontline fighters whose affiliations with transnational social movement organizations lend credibility and ground the latter organizations and their efforts in the experiences and issues of communities and activists on the ground (57). Many groups that use EJ as an organizing theme in the global realm are informed by not only the history of EJ in the United States but also a range of conceptions of what Martinez-Alier (70) has long called "environmentalism of the poor."

In addition, we have seen growing alliances between EJ and indigenous rights organizations, especially around the impacts of climate change; climate justice has long included attention to the particular impacts of climate change on indigenous communities and ways of life. Indigenous justice as a theme in the global EJM encompasses many of the original concerns of tribal EJ advocates in the United States and illustrates how their insistence on a broad indigenous voice has taken hold in the movement (71, 72). Native peoples around the world fight exploitation and/or displacement due to natural resource extraction as well as disproportionate consequences of global climate change. Unfortunately, these struggles are often invisible to or overlooked by the global community unless they grow into violent conflicts (16). Both the reality of the problems faced by indigenous peoples and this relative invisibility reflect the devaluing of native peoples and

their relationships with traditional lands (19, 58, 73). Growing inclusion of indigenous concerns in EJ and, especially, climate justice movements, actions, and demands illustrates the increased importance of such recognition within the broader movement.

The fact that primarily northern degrowth groups, as well as major northern environmental nongovernmental organizations such as Greenpeace, have adopted conceptions of EJ and climate justice from the south and indigenous advocates indicates both the resonance of the ideas and the increasing recognition of the importance and validity of these discourses. Globalization of the EJ discourse is not a one-way affair, from the United States and north outward. Instead, it is increasingly and interactively global (57, 74).

## EMERGING THEMES IN ENVIRONMENTAL JUSTICE

Given the conceptual, spatial, and international expansion of the EJ discourse, movements labeled with a justice appellation have proliferated (e.g., climate justice, indigenous justice, food justice, energy justice). Each of these movements unite under the umbrella of social justice and borrow from the wide range of conceptions of justice in the EJ framework (6). This proliferation speaks to the adaptability of the EJM, opportunities for it to respond to new environmental injustices (26), and the reality that EJ is a pluralistic discourse (37, 52). That said, as the recent case of negligent lead poisoning of the water system in Flint, Michigan, illustrates (see Introduction and Overview), the original concerns of EJ activists around the racial and class underpinnings of environmental contamination will continue to be a central focus of EJ organizing around the world.

Although the continuing and broadening focus of the EJ frame or discourse ties contemporary movements with the origins of the EJM, we see some key developments since the review of Mohai et al. (5). Three central theoretical and topical evolutions in recent EJ practice and scholarship include (*a*) focus on the materials and practices of everyday life, illustrated by food and energy movements; (*b*) ongoing work on community and the importance of attachment, informed by urban planning as well as food and climate concerns; and (*c*) growing interest in the relationship between human practices and communities and nonhuman nature, expanding on the longstanding interest in just sustainabilities within the EJM and illustrated by a wide range of concerns with food, energy, and climate justice. Each of these developments speaks to the expanding sphere of application of the EJ frame. Climate justice, indigenous justice, food justice, and the rise of community energy and energy justice, for example, offer opportunities to better articulate, and perhaps reform, the boundaries of EJ scholarship and praxis. Crucially, the EJ frame also continues to expand not only topically but also geographically and disciplinarily. More generally, as our environment is increasingly disrupted by a highly neoliberal and capitalized world marked by increasing inequality and vulnerability, we ask how EJ scholarship can be rearticulated and used to challenge, respond to, and rework the rapidly changing environmental, economic, social, and political contexts of our communities.

### Practice and Materiality

Two decades ago, Gottlieb & Fisher (75, p. 193) implored the EJM to "first feed the mouth" and identified opportunities for synergistic collaboration between the EJM and the community food security movement. Although both movements had been associated with the civil rights movement, they had been operating in parallel with separate issue-foci and constituencies. Since the publication of this vanguard argument, food justice has risen to prominence in EJ discourses, as evidenced by the suggested expansion of the EJ slogan to "where we live, work, play . . . and eat" (76). Food justice examines inequities and injustices along the entirety of the food supply

chain—inequalities that play out on local, national, and global scales and overlap with other major EJ themes such as toxics, health disparities, indigenous justice, and climate change (77–79). Key areas of inquiry include food access, food security, and food sovereignty, which connect to "health, globalization, worker rights and working conditions, disparities regarding access to environmental (or food) goods, land use and respect for the land, and, ultimately, how our production, transportation, distribution, and consumptions systems are organized" (76, p. 7). Locally, we have seen tremendous growth in the number of community gardens and urban farms, responses to food deserts, and economic development initiatives around food, such as Detroit's food movement (78, 80, 81). Internationally, Via Campesina (the International Peasants Movement) and Brazil's Landless Workers Movement embody the marriage of EJ, human rights, and food movements to combat environmental, social, and food injustices (82).

Food represents just one way that everyday practices are increasingly finding their way into the field, in both the EJM and theories about it. This is not to say that a food movement that focuses on a material practice of everyday life will always prioritize justice themes. Agyeman (83), for example, challenges the "reification of '*the local*'" (p. 59), that is, the notable absence of just sustainabilities concerns in much of the popular discourse surrounding local food systems. He argues that concerns relating to the ability of people of color, immigrants, and low-income populations to produce, access, and consume healthy and culturally appropriate foods are necessary if the food justice movement is to connect with ongoing EJ concerns. Building on this, Agyeman (83, p. 63) argues that "the framing of the local food movement in popular discourse has often confused the ends, which are a more sustainable and socially just food system, with the means: the localization of food production and consumption. In other words, the goal has sometimes become the creation of a local food system, rather than the creation of a more sustainable and just food system using localization as the means." Born & Purcell (84, pp. 195–96) term this situation "the local trap," noting that "no matter what its scale, the outcomes of a food system are contextual: they depend on the actors and agendas that are empowered by the social relations in a given food system."

And yet, we do see a discourse of justice, community, and resistance to power in such movements. Recently, Schlosberg & Coles (85, p. 161) argued that a whole range of recent environmental organizing is focused on "new materialism," or "a concern with power, politics, and sustainability represented in the materials and flows through both human and nonhuman communities." These movements, which include not only food movements but also community energy and maker/crafter movements, are focused on replacing unsustainable practices and forging alternative, productive, and sustainable institutions at local and regional levels to reconstruct everyday interactions with the rest of the natural world. It is a politics of the sustainability of everyday life in the way we provide for basic human needs, represented, for example, in the development of new institutions and flows around food and energy—thus, just sustainabilities based in everyday practice. Many food justice movements (see, in particular, 77, 86) are concerned not only about a range of conceptions and practices of EJ and just sustainabilities but also with restructuring the unsustainable material flows that contribute to those environmental injustices.

Focus on the materiality of everyday life is not new to EJ; many parts of the EJM have long focused on the circulation and infusion of toxins into the bodies of women, children, and people of color (87–89) and have been attentive to the fact that these groups remain disproportionately excluded from circulations of healthy food (78). Gabrielson & Parady (90) bring together EJ and feminist theorizing to reconceptualize the idea of environmental citizenship to draw attention specifically to the body and how we are embedded in different social and ecological contexts that condition our everyday lives. In this way, the material life of the body is seen as fully entangled with questions of social justice, providing a stronger foundation for an intersectional politics of

alliance building between environmental and EJ movements; between the global north and south; and across the racial, cultural, sexual, and gender boundaries that mark bodies.

The point here is that things, stuff, and our material lives have power and are invariably connected to the way that environmental injustice is produced, experienced, reproduced, and resisted. Rather than merely protest the injustice of existing flows of material and power (which remains crucial), movement groups are also increasingly stepping in to redesign and take control of the flow of food, energy, and the basic needs of everyday life. Politically, that means stepping outside of problematic and unjust flows—industrialized food systems that discriminate against poor communities or a fossil fuel industry that contaminates indigenous peoples' lands and communities and creates the vulnerabilities of climate change. Theoretically, such action insists that we shift away from traditional notions of environment—"the indifferent stuff of a world 'out there', articulated through notions of 'land', 'nature' or 'environment', to the intimate fabric of corporeality that includes and redistributes the 'in here' of human being" (91, p. 602). Accordingly, many EJM activists continue to problematize, expand, and push for a broader understanding of the relationship between environment and human practices (see Human and Nonhuman Assemblages and Just Sustainabilities, section below).

## Community, Identity, and Attachment

As noted above, the environment in EJ terms has come to mean where we live, work, play, and, more recently, eat. However, how we can or should conceptualize the "where" in that statement has received less attention from EJ scholars and activists. Is environment a place? A space? A human (or nonhuman) community? And how are we attached or connected to each other and that broader community? Questions like these have, for the most part, remained implicit in EJ scholarship over the past few decades. As early as 2001, Escobar (92) emphasized that culture (and environment) exists in situ and that people are attached to the places in which they live. Crucially, he argued that people mobilize around places because they are attached to them, through both individual and collective identities. Therefore, justice concerns are key in many place-based disputes (as discussed above), but these concerns are necessarily laden with attachment to local places and identities, which underlie, for example, objections expressed by residents to large-scale energy projects (93, 94).

More recent scholarship in just sustainabilities (83) has looked at the "where" question in relation to urban policy and planning issues at the intersections and interstices of space and place, including issues of place-making, urban design, and identities; the possibility of culturally inclusive spaces and practices; and broader challenges of planning for sustainability in increasingly intercultural cities, what Fincher & Jacobs (95) call "cities of difference," places where we are "in the presence of otherness" (96, p. 123). Utilizing the allied frame of spatial justice and the concept of "democratization of streets," Agyeman (83, p. 97) argues that "the US narratives of 'complete streets,' 'transit-oriented development,' and 'livable streets' frame the message that streets are ultimately public spaces, and that everyone in the community should have equal rights to space within them, irrespective of whether they are in a car. Implicit in this is the recognition that those who have fewer rights are often those with lower incomes who do not own cars." Developing this theme, Zavestoski & Agyeman (97, p. 306) argue that the ways "complete streets narratives, policies, plans, and efforts are envisioned and implemented might be systematically reproducing many of the urban spatial and social inequalities and injustices that have characterized cities for the last century or more."

This thinking about culture, attachment, identities, and rights in urban spaces and places in today's intercultural cities also extends to parks and other public spaces. As Byrne & Wolch (98,

p. 756) note, "the cultural landscape perspective shows us how landscapes can become racialized, shifting the scale of environmental injustice from the home, the factory or the neighborhood to entire landscapes." However, care must be taken when looking for design solutions to what are essentially human and structural problems. As Wood & Landry (99, p. 260) point out, "the intercultural city depends on more than a design challenge. It derives from a central notion that people are developing a shared future whereby each individual feels they have something to contribute in shaping, making and cocreating a joint endeavor. A thousand tiny transformations will create an atmosphere in public space that feels open and where all feel safe and valued."

The notion of sharing has recently been investigated by McLaren & Agyeman (100). They make a "case for moving beyond the bounded and ultimately limiting concept of the 'sharing economy' to both *understanding* whole cities as shared spaces, and *acting* to share them fairly" (100, p. 4). In this way, Agyeman et al. (101, p. 1) argue, "a reinvention and revival of sharing in our cities could enhance equity, rebuild community and dramatically cut resource use. With modern technologies the intersection of urban space and cyber-space provides an unsurpassed platform for more just, inclusive and environmentally efficient economies and societies rooted in a sharing culture." Although most of the sharing economy literature carefully sidesteps issues of equity and justice, the sharing cities concept "represents yet another powerful expression of 'just sustainabilities'—the idea that there is no universal 'green' pathway to sustainability, that sustainability is context-specific but justice is an intrinsic element in any coherent route" (100, p. 3).

We also see a powerful and growing critique of environmental improvements/renewal and its links to gentrification, displacement, and homelessness developing in EJ and just sustainabilities scholarship and activism. Via Twitter on December 21, 2015, Agyeman asked, "how do we decouple neighborhood sustainability measures like complete streets, cycling, walkability from gentrification, displacement?" There are many different responses to this, including Dooling (102, p. 630), who, in regard to homeless people in Seattle's public green spaces, observed that "ecological gentrification is a provocative term that highlights the contradictions that emerge between an ecological rationality and its associated environmental ethics, and the production of injustices for politically and economically vulnerable people." Curran & Hamilton (103, p. 1028), however, advocate for a "'just green enough' strategy [that] organises for cleanup and green space aimed at the existing working-class population and industrial land users, not at new development. Activists in Greenpoint want to achieve the cleanup of Newtown Creek while maintaining its industrial base, a strategy designed to put a stop to speculative development attracted to a neighbourhood experiencing environmental improvements."

Taking food establishments as her cue, Anguelovski (104, p. 1) argues that "data analysis shows that environmental goods in the forms of 'natural' healthy food stores are perceived by activists as new incarnations of environmental gentrification and 'environmental privilege'," that is, the exclusive access that whiter and wealthier residents have to prime environmental amenities (parks, woodland, etc.) and to exclusive green neighborhoods, thereby triggering heightened feelings of erasure and displacement.

We see the connection among EJ and identity, community, space, place, attachment, and, ultimately, displacement as a core, and ongoing, development in the literature. As Anguelovski (50, p. 198) notes, "place identity originates in people's relationship to the physical, political, and environmental world around them and is also shaped by the experiences and interactions with others." This statement has two key dimensions, both requiring examination. First, people are attached and connected to places, and these attachments form components of their identity. Second, these attachments are relational; that is, they exist through and in community. Anguelovski's notion of the "other" is human, but it need not be. The relational dimension of place attachment, in our view, can and should be expanded to include the nonhuman material world.

Recently, Groves (105) has taken these foundations and shown how the "colonization of attachment" to place can be conceptualized as an environmental injustice. According to his argument, if attachment is a constitutive part of how people inhabit particular environments, then disrupting those attachments can do damage to both individual and collective well-being. Harms to attachment erode "forms of agency embedded in attachments to place and collectives" (105, p. 870), resulting in people losing "a sense of themselves as doers and actors" (p. 858). This rupture of residents' identities has marked effects, essentially taking away their capacity to "negotiat[e] a future for themselves and their children" (106, p. 9). In thinking about climate change and relocation, Agyeman and colleagues (107, p. 509) argue that adaptation needs to look beyond the "ecological, technical, and economic [or] physical aspects of relocation" and examine place attachment, the "important psychological, symbolic, and particularly emotional aspects of healthy human habitat." Our argument here is that EJ and just sustainabilities scholarship is increasingly taking into account the importance of places, and place attachment, to understand the spatial and cultural dimensions of environmental injustices. Such attachment can be seen as a basic human need, a crucial element of well-being, or a capability; undermining it, then, constitutes an injustice.

These theoretical developments have important implications for EJ organizing. Rekindling attachment to place, place-making, and community development can be seen as a tactic for EJ activists. Anguelovski (50, 108) shows that environmental revitalization projects in Boston, Barcelona, and Havana are place-based EJ struggles. Moreover, she argues that government organizations should ensure that dimensions of the environment such as community, attachment, and identity are not relegated to the background of urban planning efforts. Her broader point is that EJ activists should think about their activism in terms of place—so, too, we argue, should EJ scholars and community planners. Put another way, "environmental justice has physical and psychosocial dimensions and . . . environmental recovery is achieved by overcoming environmental trauma" (50, p. 211). This trauma, in the words of Groves (105), should be called out for what it is: the "colonization of attachment."

However, some scholars, such as Nixon (109), for example, are skeptical of the political value of place attachment for advancing environmental concerns. He argues that the emotional power it generates can be a valuable resource, but it has no inherent politics. Regardless, the point remains that EJ scholarship is coming to interrogate the "where" in environment, expanding its definitional and theoretical boundaries to acknowledge that EJ is about addressing physical and psychosocial health and connecting that understanding to place-making, place attachment, and identity (community).

## Human and Nonhuman Assemblages and Just Sustainabilities

Finally, we highlight a third element in the evolution of EJ practice and discourse—an increasing attention to the relationship between human and nonhuman sustainability. In the most recent review of EJ published in this journal, Mohai et al. (5) pointed to just sustainabilities as a major thread for future EJ scholarship. The just sustainabilities paradigm highlights an "equity deficit" (29, p. 44) in environmental sustainability discourses and challenges these discourses to be accountable for justice and equity. Thus, Agyeman et al. (28, p. 2) (re)defined the goal of (just) sustainability: "to ensure a better quality of life for all, now, and into the future, in a just and equitable manner, while living within the limits of supporting ecosystems." Arising from this, the just sustainabilities paradigm, which was an emerging theme in EJ when Mohai et al. (5) wrote their review, has become an essential tool to interrogate sustainability and EJ discourses and to measure each against the charge that "unless society strives for a greater level of social and economic equity, both within and between nations, the long-term objective of a more sustainable world is unlikely to be secured" (28, p. 2).

Concerns with materiality, place, and EJ find themselves increasingly interconnected to broader concerns about environmental sustainability and the integrity of the nonhuman world. We see this most thoroughly in the growing body of work on climate justice, energy justice, and food justice. Hurricane Katrina solidified the confluence between the EJ framework and climate change: The hurricane and the EJ community's responses to it helped to expand consideration of a climate-changing environment within the EJM. EJ scholars and advocates began to see the impacts of climate change as yet another environmental condition that demonstrates the broader social injustice experienced by poor and minority communities. Once again, already vulnerable communities experienced an environmental bad in more damaging ways.

Yet, after Katrina, there was an important shift in perception. Before the hurricane, EJ organizing in New Orleans had focused on a large set of environmental and social indicators of discrimination and vulnerability (110), but afterward, EJ activists also addressed other impacts of the emissions emanating from the smokestacks of Cancer Alley. These emissions not only fell on local communities but also contributed to broader greenhouse emissions that had caused the Gulf to warm and that had strengthened the hurricane.

Many EJ groups also began to address the ecological damage done to ecosystems such as wetlands—damage that led to the increased vulnerability of both human and nonhuman communities. As Schlosberg & Collins (62) argue, there is a growing recognition in the EJM since Katrina that what happens to the environment is not merely another symptom of existing social injustice, along with poverty, health issues, and substandard housing. Instead, the relationship between environment and justice is more complex and interrelated: A poor environment is not only a symptom of existing injustice; rather, a functioning environment provides the necessary conditions to achieve social justice. This is another expression of the concept of just sustainabilities. Thus, from Detroit to Delhi, food justice advocates are simultaneously concerned with addressing food deserts, autonomy, and economic opportunities for communities, on the one hand, and sustainability and less ecologically damaging practices, on the other. Energy justice advocates are motivated by both community empowerment and the human impacts on global ecosystems (111, 112). And climate justice activists are focused on the impacts and vulnerabilities of communities to climate change as well as on ways that just adaptation policies can address both human and nonhuman elements in those communities.

Theoretically, the conceptions of justice at work in these newer elements and foci of EJ organizing continue to build on the pluralist foundations discussed by Schlosberg (27, 37), Walker (86), and others. For example, recent work by Bulkeley (67, 68) on urban climate justice applies and builds on work emphasizing that recognition, distribution, and participation are all key in actualizing a just, adaptable, and sustainable city. Whether focused on food, energy, or climate, our argument is that approaches must understand injustices in multiple and interconnected ways. Walker & Day (86, p. 74) explicitly take up this call, noting that "invoking the injustice of fuel poverty in multi-dimensional terms we should be fully aware of its location within an extended network of social and environmental justice concerns, connecting the local with the global."

More connections are also being made between these types of demands for justice and the recently updated United Nations (UN) Sustainable Development Goals (113), which read like an institutional agenda for just sustainabilities. Once again, this shows a connection between a broadly conceptualized capabilities approach to justice and a pluralistic definition of EJ (see also 114). As Walker (38, p. 205) claims, capabilities has "an internal pluralism, incorporates a diversity of necessary forms of justice, rather than privileging only one, and retains flexibility in how functionings and flourishings are to be secured." Although not all movement groups or issues address all these types of justice or all these concerns, the concepts and practices of EJ are open to, and encompass, varied notions of justice as they apply to given contexts and concerns. Tying

together the two themes of this section, we see this pluralist approach to EJ applied to both human communities and the nonhuman realm—in practical policy proposals around food, energy, and adaptation and in attempts to make theoretical connections between the two realms (115).

## CONCLUSION

Twenty five years ago—a year before the UN Conference on Environment and Development (The Rio, or Earth, Summit; see 8)—300 African Americans, Native Americans/First Nations people, Latinos, and Asian Americans from all 50 US states plus Puerto Rico, Canada, Central and South America, and the Marshall Islands attended the First National People of Color Environmental Leadership Summit in Washington, DC. Together, they developed the original Principles of Environmental Justice. At that time, they could not have imagined the power, impact, resilience, and theoretical, methodological, practical, and geographic range of their efforts. As they sowed the seeds of a new discourse and paradigm about the relationship between justice and where we live, work, and play, they could not have known the inspiration that they would afford future generations of researchers, policy makers, and activists worldwide.

From its beginning in analyzing the inequitable dumping on poor and minority communities in the United States, to its broad application across a range of issues, countries, and scales, EJ has thrived as a rallying cry, a motivator, and a powerful idea. We see a flourishing richness in the EJ paradigm and the allied concept of just sustainabilities, with branches into food, energy, climate, urban planning, gentrification, and displacement, among others. EJ is employed to analyze existing injustices that, unfortunately, continue to impact the lives of the most vulnerable—as in Flint, Michigan, and worldwide. The concept is also increasingly used to reframe new issues, concerns, and practices that can, we hope, help to bring attention to the crucial relationship between a functioning environment and the attainment of social justice for all.

## DISCLOSURE STATEMENT

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