



From environmental to climate justice: climate change and the discourse of environmental justice

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Environmental justice is a major movement and organizing discourse in the environmental politics arena, and both the movement and the idea have had a large influence on the way that climate justice has been conceptualized. While most discussions of climate justice in the academic literature focus on ideal conceptions and normative arguments of justice theory, or on the pragmatic policy of the more elite environmental nongovernmental organizations (NGOs), a distinct discourse has developed out of the grassroots. In these movement articulations of climate justice, the concerns and principles of environmental justice are clear and consistent. Here, climate justice focuses on local impacts and experience, inequitable vulnerabilities, the importance of community voice, and demands for community sovereignty and functioning. This review traces the discourse of environmental justice from its development, through the range of principles and demands of grassroots climate justice movements, to more recent articulations of ideas for just adaptation to climate change. © 2014 John Wiley & Sons, Ltd.

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INTRODUCTION

This review provides an overview of the influence of movements and concepts of environmental justice on the development of the discourse of climate justice. We begin with a history of environmental justice, and explore the important discursive shifts the movement brought to definitions of the terms ‘environment’ and ‘justice’ in its title. Next, while it is commonly thought that environmental justice activists and organizations only turned to address issues of climate change after Hurricane Katrina, we show that a concern with the impacts of climate change has long been present in the environmental justice movement. In summing up this history, we discuss the impact of climate change on the understanding of the relationship between environment and justice.

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We then turn to three different articulations of climate justice—those embodied in academic discourse, elite nongovernmental organizations (NGOs), and grassroots movements. We discuss the clear distinctions between these approaches, from ideal theory, to pragmatic policy, to social movement concerns. While all three approaches developed simultaneously, only the discourse of grassroots climate justice movements is clearly tied to the history, principles, and demands of the environmental justice movement. Finally, we review how some recent approaches to climate adaptation are also informed by environmental justice ideals, and highlight again the direct influences of the environmental justice movement on conceptions of just adaptation to climate change.

THE GROWTH OF THE ENVIRONMENTAL JUSTICE FRAME

A Short History of Environmental Justice

Before getting to the relationship between environmental justice and climate change, it is crucial to review the background of environmental justice itself,

in terms of its history, definition, and scope. With such an understanding, the eventual flow of concern from environmental justice to climate change and climate justice is made clear.

Many academics and activists trace the beginning of the environmental justice movement to the 1982 protests of the disposal of PCB-tainted soil at a new landfill in Warren County, North Carolina. The resistance to dumping highly toxic waste in a poor, majority African-American community brought together civil rights activists and black political leaders, along with environmentalists, and was the first major action joining civil rights and white campaigners since the 1960s. Some saw the event as the beginning of a 'merger of the environmental and civil rights movements',¹ and publicization of the unlikely coalition helped to spur the development of a national movement.

The events in Warren County prompted the kind of scientific study that may sound familiar to those interested in the distribution of climate-induced vulnerability. The US General Accounting Office produced the first major study of the relationship between race and the distribution of toxic waste sites in 1983, noting that three of the four hazardous waste landfills in the southeastern United States were in minority communities.² Four years later, the United Church of Christ Commission for Racial Justice produced the landmark study on 'Toxic Waste and Race in the United States', and illustrated this same distribution of environmental bads in communities of color on a national scale.³ A national academic conference on 'Race and the Incidence of Environmental Hazards' followed in Michigan in 1990, and produced yet another landmark overview of the issues.⁴ There were, of course, uncertainties and issues of the science and methodology of environmental justice research, but the vast majority of research on the relationship between race, poverty, and environmental risk has demonstrated some form of link.^{5–7}

It is important to note that while Warren County is often seen as the start of a movement, it certainly was not the beginning of environmental concerns among African-Americans, other minority populations, or the poor. Taylor has comprehensively demonstrated a long history of environmental and environmental justice concerns in race-based movements, and argued that urban environmental concerns have been a major issue for the poor in industrializing cities.^{8,9} Such concerns were apparent in activist circles before Warren County; the Urban Environment Conference (UEC) began in Michigan in 1971, with a goal of linking environmental and social justice concerns through a coalition of

labor, environmental, urban reform, and civil rights groups.

Faber and McCarthy note that the environmental justice movement was more than simply a merger between civil rights and environmental groups—it included the occupational health and safety movement, the indigenous land rights movement, the public health and safety movements, and various social and economic justice movements¹⁰ (and we should add urban environmental groups as well). In 1991, a diverse group of African-American, Asian-American, Latino, and Indigenous community activists and leaders from across the United States gathered in Washington DC for the First National People of Color Environmental Leadership Summit. Given its broad background, and with central concerns around health, human and civil rights, and the environmental conditions of everyday life, the eventual evolution of the movement's concerns toward community vulnerability to climate change make sense.

Challenges to Definitions of Environment and Justice

The environmental justice movement presented thorough challenges to the definitions of both of the terms—environment and justice—that make up its name. In defining 'environment', the movement insisted on a move away from a traditional conception of environment as wilderness, or a nature detached from everyday life. This was a key focus of the conventional—richer and almost exclusively white—environmental organizations. As Wright notes, 'environmental justice movements criticized mainstream environmental organizations, which they perceived as caring only for wilderness (where people were not), as having in their power positions few people of color, and in disagreeing with them on the very definition of environment'.¹¹ Instead, the environmental justice movement demanded that environment be understood as where people 'live, work, and play'¹²—and that environmental movements focus on the way environmental risks threaten everyday life.

But while the central concern was not with the 'big outside', the focus on an environmentalism of everyday life did not exclude the nonhuman realm. Environmental justice movements were also very concerned with green spaces, parks, and other more traditional environmental amenities; indeed, the range of environmental discourses in the movement has been acknowledged from very early days.¹³ Most importantly, the movement engaged indigenous conceptions of the relationship between human beings and nonhuman nature. This influence is

seen in the very first principle of environmental justice, developed at the 1991 summit, affirming the ‘sacredness of Mother Earth, ecological unity, and the interdependence of all species’. The relationship between cultural practices, sovereignty rights, and lives immersed in diverse and threatened ecosystems has been at the heart of indigenous environmental justice organizing—and indigenous movements have been central to the environmental justice movement.¹⁴

The movement’s idea of environmental justice combined notions of environmental sustainability and everyday environments with demands for social justice. Agyeman labeled this conception ‘just sustainability’, and argued that it brought together interests in quality of life, present and future generations, justice and equity in resource allocation, and living within ecological limits.^{15,16} This background in the expansive conceptualization of environment, and the concern for the relationship between the conditions of everyday life and the natural world, illustrates how a move from environmental justice to a concern with climate change should not be unexpected.

In addition to the definition of environment, the conception of justice in the movement was also quite diverse and pluralistic.^{17,18} Clearly, the initial focus of environmental justice was about the inequitable distribution of environmental risks and governmental protection.^{19,20} Simply put, poor communities and communities of color were exposed to more vulnerability than richer and whiter communities, and the reality and experience of such inequity spurred much environmental justice organizing. Environmental conditions were seen as yet another indicator, another symptom, of the larger reality of social and economic inequity many communities lived with every day. In this sense environmental justice is aimed at remedying existing and imminent injustice in the distribution of environmental costs, benefits, and conditions on the grounds that all are equal and have equal rights.^{21–23}

However, the environmental justice movement has never been about equity alone; environmental justice has always focused on how injustice is constructed—why those already exposed to other forms of disadvantage are also subject to environmental bads. So concerns about ‘environmental racism’^{24,24} have been vital to organizing communities of color from the beginning of the movement. The reasons for such discrimination—stereotypes, disrespect, and devaluation—are part of an environmental justice frame. In addition, demands for participation and procedural justice have always been present in movement discourse and analysis, as it is exclusion from

decision-making that has enabled inequitable distribution and exemplified the broader context of injustice in vulnerable communities.^{21,25,26} Taylor’s exploration of the ‘environmental justice frame’ notes the linkage of concerns of ‘self-determination, sovereignty, human rights, social inequality, access to natural resources, and disproportionate impacts of environmental hazards.’²⁷ All of these concerns are apparent in the original set of 17 principles of environmental justice²⁸; those principles cover protection from contamination from toxins, and call for policies based on mutual respect, the right to participate, and self-determination. Overall, the definitions of justice used by movement organizations address distributive inequity, lack of recognition, disenfranchisement and exclusion, and, more broadly, an undermining of the basic needs, capabilities, and functioning of individuals and communities.¹⁸ The wide variety of experiences and conceptualizations of environmental injustice has been one of the key aspects of research on the movement in the past few years.^{29–31}

All of these aspects of the definition of environmental justice are reflected in approaches to climate justice—hence, the importance of an environmental justice frame for understanding the development of climate justice.

Expanding Conceptions of Environmental Justice

The environmental justice frame has also been expanding topically and geographically over the years. While the movement originally focused on the United States, the concept very quickly spread—horizontally to a range of new topics and countries and vertically to a number of global issues.

In the United States, one of the pioneers of environmental injustice, Robert Bullard, applied the concept to a growing number of topics, from transportation³² to urban planning³³ to environmental health³⁴ to disaster management after Katrina.³⁵ Also in the United States, environmental justice scholars have examined water quality and distribution,^{36,37} energy development and jobs,³⁸ brownfields,³⁹ food justice,⁴⁰ the role of scientific expertise,⁴¹ and a range of indigenous issues.^{14,42}

That topical expansion has coincided with geographical broadening of the application of the environmental justice frame, from climate change in South Africa, to gold mining in Bulgaria, to oil politics in China, to NGO politics in Ecuador.^{43,44} Whole collections have been edited on environmental justice in Latin America,⁴⁵ Russia,⁴⁶ and South Africa.⁴⁷ And the environmental justice frame has grown not only

horizontally to this range of new issues and countries, but also vertically to an application to broad-based global issues, from the global toxics trade,⁴⁸ to food sovereignty, to of course, climate justice.^{18,49}

Given this expansion of the definition of environmental justice, and the ever-broadening scope of its application, it is not surprising that environmental justice has been used by a wide range of scholars—and movement organizations—as an analytical frame to explore a range of implications of climate change^{18,31,35,50}

From Environmental to Climate Justice

While Hurricane Katrina in 2005 is generally understood as influential in the development of the intersection of environmental and climate justice, it is important to note that there was a relationship emerging before that particular storm. The Environmental Justice and Climate Change Initiative was founded in 2001, as a direct result of the first Climate Justice Summit at The Hague during the COP6 meeting of the UNFCCC. The initiative straddled this global focus and its US emphasis; its membership included a diverse group of ‘environmental justice, climate justice, religious, policy, and advocacy groups that represent hundreds of communities’ that laid out 10 principles of climate justice in 2002.⁵¹

This is crucial: an environmental justice organization, before Katrina, defined key principles of climate justice based in the experience of environmental justice communities in the United States. These principles focused on slowing emissions and the use of fossil fuels, protecting vulnerable communities, ensuring just transition to renewable energy, including community participation, acting in the face of uncertainty, assuring intergenerational justice, and demanding US leadership on the global issue of climate change.⁵¹ This demonstrates the broad remit of environmental justice at the time—and in retrospect shows the remarkable consistency and resilience of these particular demands.

Soon thereafter, the Black Congressional Caucus released a report on the potential injustice of climate change.⁵² *African Americans and Climate Change: An Unequal Burden* clearly focused on the claim that the impacts of climate change would fall disproportionately on already vulnerable populations; the report discussed three basic findings. First, African-Americans were already seen as *disproportionately burdened* by the health effects of climate change, including deaths during heat waves and from increased air pollution. Unemployment and economic hardship associated with climate change would also fall

most heavily on the African-American community. Second, the report focused on the fact that African-Americans are *less responsible* for climate change than other Americans; historically, they emitted fewer greenhouse gases than the national average. Finally, the report warned that policies intended to mitigate climate change could either generate large health and economic benefits or unequal costs for African-Americans, depending on how they are structured. Increased energy prices due to a carbon price, for example, could be problematic for poorer populations, unless they were structured in a way to address the inequitable impact. On the other hand, policies requiring industries to lower emissions, and to develop new energy technologies, could bring both jobs and less pollution to African-American communities. This very early report made an argument for the ‘co-benefits’ of the reduction of fossil fuel use; it would not only mitigate climate change, but also address key health impacts of the burning of fossil fuels in vulnerable communities—an argument that continues in recent policy suggestions.⁵³ Overall, the report argued that unless appropriate actions are taken to mitigate or adapt, climate change would worsen existing equity issues within the United States. Again, this crucial report on the environmental justice impacts of climate change was released before Katrina physically embodied many of its concerns.

In 2005 Hurricane Katrina solidified the confluence of the environmental justice framework and the issue of climate change. Bullard and Wright³⁵ start their important reflections on Katrina by laying out the preexisting injustices in the city of New Orleans—including the segregation, poverty, failing education system, and substandard housing. The community was underprepared, in the sense that infrastructure and living standards of minority populations were already vulnerable before the storm. And they were underserved after the storm in that they received less information, less government relief, fewer loans, and continued discrimination. Responses to Katrina from the environmental justice community also went beyond these crucial issues; they laid the groundwork for expanding concerns about climate vulnerability and disaster relief, and helped environmental justice activists make connections with other communities threatened by climate change.

Katrina helped to expand the consideration of the climate-changing environment in the environmental justice movement. Environmental justice scholars and advocates began to see climate change as another environmental condition that demonstrates the broader social injustice of poor and minority communities. The unjust impacts of climate change—not

only the inequity of impact, but also other forms of injustice such as a lack of recognition and inclusion in political decision-making—represent another example, or symptom, of social injustice.

But Katrina also led to a rethinking of the role of the natural world in a conception of justice. Before Katrina, most of the focus on environmental justice in New Orleans was with regard to the corridor between it and Baton Rouge—dubbed ‘Cancer Alley’ due to the number of oil refineries, chemical plants, and other toxin-producing industries. The emphasis was on what came out of the stacks and fell on the local fenceline communities. But after Katrina, some environmental justice activists began to think about the other impacts of the emissions coming out of those same community-threatening smokestacks—they did not just fall on the local peoples, but went into the atmosphere, added to greenhouse emissions, caused the warming of the Gulf that added to the strength of Katrina, and so came back to impact the community in a new way. And it was not just about the human impacts of climate change; post-Katrina, many reflections also address the ecological damage done to surrounding ecosystems that have led to greater vulnerabilities for both human communities and the nonhuman environment.⁵⁴ There is a growing recognition, post-Katrina, that the environment is no longer simply another symptom of existing social injustice, along with poverty, health issues, and substandard housing. Instead, many in the environmental justice community are starting to look at the relationship between environment and justice in a different way—that the environment and climate system are not simply symptoms of existing injustice, but instead the necessary conditions for the achievement of social justice. The connection between environmental damage and the continued vulnerability of communities brought more energy and significance to the issue of climate change.⁵⁵

After Katrina, numerous environmental justice scholars and organizations began to turn more earnestly toward the issue of climate change, and to climate justice in particular. This was nowhere more obvious than in California, where environmental justice movements had significant influence on the development of the single best piece of climate change legislation in the country, The California Global Warming Solutions Act of 2006. From the start, mainstream groups included environmental justice organizations in the mobilization for the bill.⁵⁰ Environmental justice groups had expressed strong opposition to a cap-and-trade program, given experience in the previous case of the RECLAIM (Regional Clean Air Incentives Market) trading

program in Los Angeles, which was accused of not paying attention to how it exacerbated the distribution of environmental pollution and risk. Environmental justice advocates were also insistent on a participatory mechanism in the proposed act, and so it included an environmental justice advisory committee ‘comprised of representatives from communities in the state with the most significant exposure to air pollution, including, but not limited to, communities with minority populations or low-income populations, or both’.⁵⁶ And after the passage of the law, environmental justice groups continued to put pressure on the state to mind the ‘climate gap’ between well-off and vulnerable communities.⁵⁷

Other environmental justice organizations saw a focus on carbon mitigation as a way to address a range of other environmental justice issues. In Trenton, NJ, for example, the organization Isles had been campaigning to address lead poisoning in public housing for years, with little success. As lead dust is primarily produced by the opening and closing of doors and windows, the organization shifted its approach, and began arguing for the replacement of windows and doors based on energy efficiency. Replacements not only addressed the lead question, but also helped lower-income residents save on energy costs as well. Isles also trained local residents specifically in ‘lead safe weatherization’, creating local jobs.⁵⁸ Likewise Van Jones used a ‘green jobs’ approach to address a range of issues important to the environmental justice community, from education to employment, and lead poisoning to climate change.^{38,59}

Indeed, climate change has become central to environmental justice organizing and discourse in the United States. The Environmental Justice Leadership Forum on Climate Change (EJLFCC), made up of numerous local and regional environmental justice organizations, was established in 2008. The focus, from the start, has been on addressing both vulnerable communities and the environmental drivers of climate change. The principles of climate justice developed by the EJLFCC⁶⁰ begin with a demand to establish a zero carbon economy before moving on to address equal protection and the use of transition to provide economic development to the least well-off.

West Harlem Environmental Action (WEACT) exemplifies the way many environmental justice organizations have taken on the climate issue. One of the most active and successful environmental justice groups on the ground—WEACT helped force the shift away from dirty diesel buses in New York City—the group held a major conference on climate justice in 2009. Policy suggestions coming out of

that conference included a focus on public health issues related to climate change, green jobs training, and protection of low-income families from the volatility, cost, and profit opportunism of carbon trading permits.⁶¹ It is also important to note that the environmental and climate justice focus is not simply in the grassroots. The NAACP—the leading civil rights organization in the United States—has a major initiative on environmental and climate justice,⁶² with the same range of concerns as local grassroots organizations, including the health impacts of fossil fuel burning.⁶³ This mainstream NGO focus clearly illustrates the strength of the environmental and climate justice discourse in the United States.

Tensions in the Movement

There are, however, some tensions in this shift to a focus on climate justice, especially in the engagement with more mainstream environmental groups and the legislative arena. There is concern that some climate policy-focused groups disparage the community-based work of the environmental justice movement. One activist notes: ‘We frame climate change in terms of impacted communities—what the facilities look like, health impacts, access to health or water or jobs. Reflected back to us, we are told that all we care about is local impacts and since carbon is global, our focus is misplaced, at best, or irrelevant, at worst.’⁶⁴ However, the more mainstream groups, with media attention and significant funding, need the assistance and integration of the environmental justice movement in order to have an impact on many communities. And so the tension between the major environmental groups and the climate justice community continues.

The tension is not simply in focus or organizational style, but discourse as well, especially in terms of different responses to using a market logic to frame policy. In an environmental justice approach, carbon markets are generally seen as giveaways to polluters at the expense of poor communities.⁶⁵ A simple cap-and-trade system, where the original credits are given to polluters, is contrasted with preferred cap-and-dividend or fee-and-dividend policy, where permits would be auctioned to polluters and the revenue returned to poor and vulnerable communities.^{66,67} One activist explains the differing positions: ‘Traditional climate activists espouse ‘our economy works, except for the carbon thing. How do we simply make our economy less carbon-intensive?’ But EJ folks see climate as a symptom of a whole system, so we need to rethink our economics.’⁶⁴ In any climate policy debate, environmental justice

activists are suspicious of corporate or consumerist responses to climate change; they see such approaches as catering to those with wealth, rather than the already vulnerable. As we will explore below, the climate justice movement began with a critique of the carbon economy as a symptom of larger inequities created and exploited by global capital.

More specifically, there has been tension around the key policy suggested by mainstream environmental organizations—to raise the price and/or limit the supply of carbon-based energy. The concern is that any policy to reduce carbon emissions—whether a cap-and-permit system, a carbon tax, or even just keeping fossil fuels in the ground—will inevitably raise the price of energy. That, of course, hurts the poor most. The environmental justice focus is not only on the emissions, but also on the impact of those emissions and the cost of energy; policies must address the inevitable inequitable impact with some type of compensation and relief. Environmental justice approaches widen the concerns to be addressed in constructing climate policy; this has the potential to put them at odds with the more mainstream and elite environmental NGOs.

This discussion of the US environmental justice movement has attempted to lay out the internal evolution and expansion of its concerns. We now turn to the way that environmental justice as an idea has impacted other movement groups as they have developed conceptions of, and demands for, climate justice.

THREE MOMENTS OF CLIMATE JUSTICE

Like environmental justice, there are many and varied definitions of climate justice. Clearly, this diversity of conceptions is based on both the wide range of possible approaches to justice itself, as well as the complexity of climate change and the breadth of movements arrayed in response. Climate justice has at least three broad conceptualizations: ideal theories from the academic community, a fairly elite NGO perspective on policy, and grassroots movement perspectives. The influence of theories and practices of environmental justice can be seen in each, but perhaps—not surprisingly—most thoroughly and authentically in the latter.

Academic Theories of Climate Justice

It seems the term ‘climate justice’ was first used in the academic literature by Weiss in 1989, in a book on intergenerational justice,⁶⁸ with more references to the intersection of justice and climate change increasing

in the 1990s.^{69,70} Other WIRE reviews cover the range of approaches, from a demand for historical responsibility, to a per-capita equity approach, to development, human, and environmental rights-based arguments.^{71,72} This face of climate justice is an attempt at applied philosophy—the use of more or less ideal notions of justice to provide a normative justification for global climate change policy. The discussions are most often about the substance and clarity of academic arguments. But they are also focused, in part, on the pragmatic question of their applicability to the current dilemmas of both climate change and the limitations of global governance. While these approaches are mostly disconnected from the concept or practice of environmental justice as embodied in movement organizations and literature, there are some key areas of overlap.

For example, the central argument of a historical responsibility approach^{73–75} is that there are specific states that have brought us to our current, climate changing dilemma; those parties should now bear the primary responsibility for the results of their actions, and should pay the costs caused by these past transgressions. The idea is a basic polluter-pays principle, which ties responsibility for addressing the issue with those that have produced the problem (and who can afford to right the wrong). Ultimately, this approach is a way to operationalize the ‘common but differentiated responsibilities and respective capacities’ agreed to by the UNFCCC in 1992. The idea is supported by less developed nations that see only vulnerability in their future—while the industrialized countries continue to enrich themselves with destructive practices. A historical responsibility approach is also a common argument of communities in the environmental justice movement, where the issue of the cleanup of, and compensation for, environmental damage is a recurring theme. One of the key original rights of environmental justice is ‘full compensation and reparations for damage’.⁷⁶ In the climate justice movement, this approach is articulated as a response to the ‘climate debt’ of the developed nations (for example, as articulated in the Bali principles). This overlap seems more like a confluence of concerns about compensatory justice, rather than an example of the influence of environmental justice on the development of the historical responsibility approach.

Rights-based approaches to climate justice also share concerns with environmental justice movements. A development rights approach argues that all people and nations should have a right to develop out of poverty before gaining any responsibility to mitigate climate change.⁷⁷ This echoes the historical

responsibility approach articulated by many in the south; it also reiterates the UNFCCC’s ‘common but differentiated responsibilities’ language. But it is perhaps the human rights approach to climate justice that most clearly embodies environmental justice concerns. Caney has argued most succinctly that climate change violates basic human rights of life, health, and subsistence. For Caney, the ‘current consumption of fossil fuels is unjust because it generates outcomes in which people’s fundamental interests are unprotected and, as such, undermines key rights’.⁷⁸ Climate change is simply a new way to violate basic human rights, and climate justice means providing for those rights to which we have already agreed. This approach mirrors concerns of the movements, where principles of environmental and climate justice are made up largely of assertions of various rights—including the basic ‘right to be free from climate change, its related impacts and other forms of ecological destruction’.⁷⁹

There is, however, an obvious disconnect between assertions of ideal theories of climate justice—or even pragmatic attempts at applied theory—and the more grassroots articulations of environmental and climate justice movements. As much as their interests and ideas may overlap, these theorists rarely cite movements, and movements do not commonly refer to academic journal articles to clarify their positions.

Climate Justice and Elite Organizations

More surprisingly, there is another important disconnect in the translation of environmental and climate justice arguments into the public arena. O’Neill has argued that transnational climate activism, rather than beginning and developing out of the grassroots, actually began as a fairly elite activity, focused on having an influence on policy makers and processes.⁸⁰ Only later did such climate activism begin to scale down to encompass grassroots movements. While O’Neill makes an argument about a unidirectional development in climate justice movements, from the elite NGOs out to the grassroots, another way of understanding this relationship is that there were both elite-focused NGOs and grassroots movements for environmental and climate justice developing and acting simultaneously.

Bond makes an argument that focuses on the differences in scale of the two approaches. He argues that there are five climate justice positions of elite NGOs that are not oriented to movement building; these include the development rights approach, a related right or need to industrialize, a negotiated

north/south approach, a human rights approach, and a commitment to carbon markets. While many grassroots groups do focus on some of these, in particular the rights-based arguments, Bond's point is that the key difference is apparent at the level of the political focus. As he argues, it is not surprising that these 'five approaches to climate justice are at times advanced directly at odds with grassroots forces which tired of the futility of global-scale reform'.⁶⁵ A common example is the Mary Robinson Foundation; while focused on important conceptions of climate justice and human rights, the Foundation is most well known for working with market actors, proposing a 'moral economy' in economic practice. Movement groups are more likely to critique economic practice; they do not often promote a purely voluntary or market-based approach to meeting ethical demands.

And some groups occupied both typologies and political spaces. For example, the development rights approach is most closely associated with the NGO EcoEquity. As they describe themselves, 'EcoEquity is a small, activist think tank that has had an outsized impact on the international climate justice debate'.⁷⁷ The organization does important consultant work as an elite NGO, making the case for the development rights approach to various governments and major environmental organizations. And yet they have always had a foot in the activist community, from a role as key organizers of the Bali summit on climate justice to participation in a number of environmental and climate justice events. While their own work appeals to the elite realm of environmental NGOs and policy advisors, they remain a sort of conduit to, and reflection of interests of, the grassroots.

The Evolution of Climate Justice Principles Out of Environmental Justice

But what are those grassroots demands for climate justice, and how do they relate to environmental justice? Earlier, we laid out how the environmental justice movement in the United States came to focus on climate change and climate justice. Here, we examine the influence of grassroots ideas of environmental justice on the organization and principles of the climate justice movement.

It is difficult to pinpoint exactly the origin story of the concept of climate justice in grassroots movements. Broadly put, the movement idea of climate justice originated with a focus on removing the causes of climate change, as well as addressing the inequitable impacts of the oil industry at all stages (from production and distribution through to climate impacts). But it also addressed fostering

a 'just transition' to a post-carbon economy and providing assistance to vulnerable communities. The organization CorpWatch began using the idea of climate justice in 1999, in an article on 'Greenhouse Gangsters and Climate Justice'.⁸¹ That article focused on an oil industry and capitalist economic model that profits from climate change while undermining democracy and 'fostering human rights violations and environmental disasters across the Earth'. Following from the historical responsibility approach, CorpWatch understood climate justice as demanding that industrialized nations act first, and insisting fossil fuel companies be held accountable for their impacts. The concern with the injustices of climate change did not focus solely on individuals, but also on 'the health and well being of local communities and ecosystems.' Importantly, this very early conceptualization of climate justice made explicit connections with the environmental justice movement and its battles with the fossil fuel industry. Climate change, the CorpWatch authors noted, 'may well be the largest environmental justice issue of all time'.

This early article may be seen as an obscure piece by a small NGO, but the connection is important. CorpWatch helped organize the first known Climate Justice Summit in The Hague, around the 6th COP meeting in 2000. The idea expressed at that summit was still rather simple: fossil fuel companies were responsible for climate change, and the already vulnerable—poor communities in urban, rural, and coastal areas, as well as indigenous communities and communities already impacted by fossil fuel extraction—would be made even worse off. Interestingly, as the recent climate movement has focused on keeping fossil fuels in the ground,⁸² organizers of this summit claimed that keeping carbon dioxide in the ground was a basic demand of climate justice.⁸³ Two years later, in 2002, a broad coalition of groups came together as the International Climate Justice Network and produced the Bali Principles of Climate Justice,⁷⁹ seen as the first major movement statement of the idea of climate justice on the international stage.

In the Bali Principles, one clearly sees the influence of, and connection to, the American environmental justice movement. The text of the principles states explicitly that they were modeled on the US movement's 1991 Principles of Environmental Justice.²⁸ For example, like the 1991 environmental justice list, the Bali Principles start with acknowledging the sacredness of mother earth, as recognition of the concerns of indigenous peoples. Following on that focus, the rights of indigenous peoples to speak for themselves, and the demand for self-determination

for all peoples, are explicitly noted in both sets of principles. In addition, the requirement that victims should receive compensation for environmental damages is in both lists. In substance and in the creation of a shared history, the Bali Principles make a key link between environmental and climate justice.

In 2004, the Durban Group for Climate Justice further developed the concept of climate justice, with a focus more specifically on the growing policy discourse on carbon trading, in the Durban Declaration on Carbon Trading.⁸⁴ Three years later, in 2007, a broad NGO focus on climate justice came together in one of the major movement network organizations, Climate Justice Now!, at the UNFCCC COP13 meetings in Bali. It is important to note here that while a primary emphasis was a concern with carbon trading, this major network included a number of organizations that had been fully immersed in environmental justice organizing, including Oilwatch and the Indigenous Environmental Network. The founding press release of the network notes its focus on 'social, ecological, and gender justice' and the demand for 'policies and practices that protect livelihoods and the environment'.⁸⁵

The networking of organizations focused on climate justice solidified with the development of the Climate Justice Action network in the lead up to the 2009 events in Copenhagen; that network was responsible for the alternative 'Klimaforum', and the next major statement of the movement, the Declaration of the Klimaforum.⁸⁶ Clearly, one of the major goals of these particular actions and statements was to have influence on the UNFCCC process—and outcomes—at the COP meetings in Bali and Copenhagen. The two major networks illustrate a consistency in the basic arguments with regard to climate justice, and move away from the more extensive list of principles of climate justice laid out in the 2002 Bali Principles. Rather, they focus on four basic issues: abandoning fossil fuels and leaving them in the ground, financial transfers from north to south for payment of ecological debt based on historical responsibility, food and land sovereignty for vulnerable communities including a transition to renewable and sustainable practices, and a critique of purely market-based policies to address climate change. Other definitions of climate justice offered in the broad movement focused similarly on historical responsibility, reparations, and a variety of individual and collective rights including participation, the rights of Indigenous peoples, labor, women, and nature.⁸⁷ More broadly but succinctly—and acknowledging the variety of concerns and different emphases of

specific groups—climate justice meant moving to a post-carbon energy system, paying for the ecological and social damage of climate change, and protecting the voice and sovereignty of the most vulnerable. These themes, which focus on changing the nature of a production system that is creating risks, compensating for those risks, and providing for procedural justice and autonomy, reflect and reiterate the concerns of earlier environmental justice groups.

The most recent set of declarations of the climate justice movement go a step further in terms of concerns and demands. The broadly networked movement's statements of environmental and climate justice principles came to an apex—and developed a new focus—at the World People's Conference on Climate Change and the Rights of Mother Earth, in Cochabamba, Bolivia in 2010. The Cochabamba meeting came out of frustration with events in Copenhagen, and two forms of exclusion—the social movement exclusion from the formal processes, and a more conceptual closure embodied in the supremacy of the market-oriented policy ideas of the dominant countries.

The essence of the Cochabamba conference was that the dominant growth-based model of social and economic organization that has brought us to climate change 'is based on the submission and destruction of human beings and nature'.⁸⁸ In response, the Cochabamba statements thoroughly assert a focus on the functioning of ecological systems. The 'Universal Declaration of the Rights of Mother Earth' demands a set of legal rights—along the lines of human rights—for species and ecological systems. Climate justice, in this iteration, is every bit as much about the disruption of ecosystems as it is about the inequity and other injustices experienced by vulnerable human communities.

But most of the analysis and demands continued past environmental and climate justice arguments. Common throughout the Cochabamba documents is an analysis that attributes blame for climate change and environmental injustices to the abuses of multinational energy companies and the governments dependent on them. While perhaps more explicitly anticapitalist than previous principles, these arguments reflect and enhance longstanding climate justice principles critical of current economic models and norms. In addition, a number of concerns noted in earlier grassroots principles of climate justice are repeated in the Cochabamba statements; these include a focus on the protection of indigenous peoples, notions of respect and recognition, the maintenance of identity and integrity, the right to be free of pollution, the role of historical responsibility and restorative

justice, and more transparent and open participatory governance processes.

What we see in the grassroots movement for climate justice are a variety of interrelated concerns—for the inequitable impact fossil fuel production has on a range of already vulnerable communities, for participation and procedural justice, for the basic functioning and provision of needs in vulnerable communities, including ecological communities. As with environmental justice, key concerns of the movement revolve around inclusion, autonomy, transparency, compensation, and sustainability.

In these, the pluralistic conceptions of justice present in environmental justice are replicated and extended.

On the other hand, it is important to note differences that appear in this evolutionary process—or at least differing emphases. For example, demands for climate justice have accentuated the interest in restorative justice. While this was less of a demand in environmental justice movements, the transfer of resources from those responsible for the injustice of climate change to those most vulnerable to it has been a key demand from the start. In addition, while environmental justice activists have often talked about stopping the flow of toxins into communities, climate justice, again, has been much more assertive about this point, insisting on leaving the fossil fuels responsible for greenhouse gases in the ground. Still, as these issues have always been apparent in the environmental justice movement, they are more points of differential accentuation, rather than definition.

ENVIRONMENTAL JUSTICE APPROACHES TO CLIMATE ADAPTATION

While more theoretical considerations of climate justice initially focused exclusively on prevention and mitigation, environmental justice advocates have from the very early days been concerned about the inequitable impacts of climate change on vulnerable communities. Generally, the turn to a concern with climate justice in the US environmental justice movement included both prevention and adaptation.^{52,89}

One of the main focus areas of environmental justice advocates has been the potential of a broad range of inequities created or exacerbated by climate change. These inequities can be seen at the level of the individual (health, for example), community (livelihoods, culture), and political structure (governance transparency).⁴⁴ All of these concerns are articulated repeatedly, as environmental justice advocates and

organizations have turned to climate justice and adaptation, illustrating the broadening of the central concerns of the movement. Adaptation has been framed in a way to bridge environmental justice, climate justice, and social justice for the vulnerable more generally.

Looking Both Ways

As noted earlier in the discussion of tensions in the climate movement, environmental justice concerns often face stereotypes of nimbyism. Early on in the climate debates, environmental justice was seen by larger and more mainstream environmental groups as a potential source of opposition to a focus on global climate change. The assumption was that the movement and its interests were entirely local.

Clearly, the idea that all environmental justice advocates care about is the local is demonstrably mistaken—environmental justice movement groups have long had interests in global processes and policies, and often have connections with similarly impacted groups across the globe.^{48,90} Still, the concern with the local makes sense with a turn toward the impacts of climate change and adaptation policy. Di Chiro suggests that environmental justice movements that address climate change offer examples of ‘looking both ways’.⁹¹ In addressing adaptation, environmental justice may offer a route for the development of potential alliances with more mainstream groups focused on national or global policy.

Adaptation is also seen as an opportunity to address a broad range of issues of social justice more generally. Increasingly, the idea of building adaptive capacity to develop more just communities is common across environmental justice groups engaged in climate issues.^{92–94} At the international level, there are calls for development aid to concentrate on adaptive capacity in order to alleviate the worst of the inevitable vulnerabilities to climate change.^{95,96} Likewise, some of Adger’s⁹⁷ extensive work on adaptation, and Barnett’s⁹⁸ on human security, call for building local social capital for more just adaptation. The focus on actually building capacity, and on development out of poverty and injustice as the groundwork for adaptation, may explain some of the suspicion of the notion of ‘resilience’.^{99,100} In this critical view, resilience is seen as an insistence on simply adjusting to the new reality of vulnerability—a shift away from a focus on development out of poverty and the building of adaptive capacity. An environmental justice approach to adaptation, on the contrary, keeps the focus on building adaptive capacity by alleviating poverty and reducing vulnerability.

Adaptation and Multiple Notions of Justice

As with environmental justice in general, a climate justice-based conception of just adaptation means looking beyond distributive conceptions of justice. While inequity is central, the environmental justice focus on adaptation is thoroughly engaged with particular issues of participation, impacts on culture, and the capabilities communities need to function.

A demand for procedural justice, for example, remains constant in the turn from prevention at the international level to adaptation at the local. Every set of climate justice principles mirrors the call in environmental justice movements for participatory justice, and this insistence on inclusion is no less in the case of adaptation. Post-Katrina, for example, a key demand of the environmental justice community has been participation of the impacted communities in the redesign and rebuilding of the city of New Orleans.³⁵ Likewise, after Sandy hit New York City, procedural justice was key to recommendations on rebuilding, resilience, and adaptation offered by the Sandy Regional Assembly, formed by more than 200 environmental justice advocates from across all of the five boroughs and neighboring New Jersey to develop community responses to the storm. The overall plan is comprehensive,¹⁰¹ but the key, according to one of the participants in the effort, is making sure 'community-based organizations are working to make their neighborhoods part of the conversations about how to build resiliency, and strengthen community oversight, and making sure projects really get implemented'.¹⁰² This oversight is seen as necessary in both the generation and actualization of the policies of adaptation. Movement groups clearly understand this component; in addition, academic literature lays out the value of deliberative participation as a key way to address and build adaptive capacity.¹⁰³ While just adaptation processes have not been at the top of the international agenda, there are examples of inclusive and even deliberative adaptation planning processes, including in many parts of Australia.^{103–105} And a recent study of climate justice and global cities demonstrates the importance of procedural justice in adaptation planning, especially in the global south.¹⁰⁶

Culture and Justice

In addition to the consistency of the place of participation in adaptation, environmental and climate justice activists have made the role and preservation of culture, including its ties to the functioning of ecological systems, central to responses to climate-changed environments. Adger and colleagues have recently addressed the cultural dimensions of climate impacts

and adaptation¹⁰⁷—citing examples such as pastoral practices, fishing and hunting, the place of snow in cultural identity, and the loss of culturally iconic and significant habitats or landforms. These climate impacts on cultural practice limit adaptive pathways, as they undermine the most familiar and shared experiences, as well as the social capital that comes with them, that could otherwise be the basis of adaptive capacity.

Indigenous groups, in particular, note the importance of 'caring for country' or 'living well' in adapting to climate change. In Cochabamba, a distinct declaration was developed by indigenous groups, insisting on 'principles and mechanisms that assure the respect, harmony, and balance between people and nature'.⁸⁸ Strengthening ties to the land is seen as a way to contribute to adaptation and climate change solutions. A link is often made between restoring cultural connections to the land, adaptation to climate change, and the improved health of disadvantaged indigenous people. A study on Aboriginal communities concludes that caring for country has a dual benefit in adaptation, as it results in climate change adaptation and better health for indigenous people.¹⁰⁸

Connecting these two concerns, indigenous insistence on the importance of culture in just adaptation is clearly tied to procedural justice. Again, the Cochabamba Indigenous Peoples' declaration demands 'the application of consultations, participation, and the Free, Prior and Informed Consent of Indigenous Peoples and affected populations in the design and implementation of climate change adaptation' measures. Studies in Australia have illustrated that projects must be Aboriginal-led to help overcome a general sense of disempowerment, and ensure a focus on local conditions.^{108,109}

Again, a capabilities approach may offer a way to encompass the full range of concerns and concepts of justice in a more pluralistic or holistic conception of climate justice.⁴² In discussions of vulnerability to climate change and just adaptation strategies, such as the Sandy Regional Assembly or the Cochabamba demands, we can see a range of basic needs and capabilities—health, housing, food security, culture, and social cohesion. There is also a concern for the environmental conditions that provide for the full range of human capabilities.¹¹⁰ Drastic changes in ecological conditions, from superstorms to droughts to increased risk of fire, have influenced this linkage of human needs with environmental functioning.

Transformative Adaptation and Nonhuman Nature

The broad set of justice concerns around adaptation is, importantly, not only reactive, but also reconstructive.

In one of the few comprehensive studies of the adaptive strategies of climate justice movements, Pelling¹¹¹ argues that there is a potential in thinking about adaptation as transformative.¹¹² Such an approach to adaptation would see changes to a society's conception of risk, the social contract, and security. The picture is of a social system that is based on the protection of sustainable socio-ecological systems, governmental accountability to all those impacted by climate change, and a notion of security built on basic human needs.¹¹¹ We see this approach manifest in a number of terms and movements—in particular in relation to transition towns¹¹³ and the post-carbon/energy descent literature.¹¹⁴

This kind of transformative adaptation is also apparent in a variety of movements and practices that have environmental justice at their core—for example, in food justice and energy autonomy. Environmental justice has had a longstanding interest in food; that has increased in a transformative way in response to a range of experiences, from food deserts to anticipated climate change.^{40,115} 'Food justice' movements respond to the lack of decent food and economic opportunities on the one hand, but also the idea of autonomy and security on the other. If climate change can, potentially, disrupt the flow of the industrialized food system (which is also dependent on a carbon-based economy, and so part of the problem), adaptation means creating new flows of locally provided agriculture.

This focus on food justice as an integral element of climate justice is not only apparent in the northern developed countries. Also central to climate justice arguments out of the south is an emphasis on food sovereignty, for both mitigation and adaptation. The preservation of peasant food production methods, for example, are integral to the demands in the Cochabamba statement, as well as the articulations of major environmental and social justice networks such as Via Campesino.¹¹⁶ The call is to learn from small-scale farmers and indigenous communities, whose practices are both sustainable and 'cooling'.⁹¹ Traditional and localized agricultural practices, then, tie together critiques of industrialized agriculture, adaptation, and broader concerns for social, environmental, and climate justice.¹¹⁷

On energy, a number of environmental justice organizations and networks have focused on the development of community-based local generation of power, in particular solar and wind.¹¹⁸ The idea of just energy transition, like food justice, addresses a range of concerns—the impacts of the carbon-based energy industry on communities and the planet, and

the environmental, political, and economic potential of local and sustainable energy production. This focus—the just transition to locally produced food and energy—appear in a range of adaptation plans produced by cities. From the post-Sandy discussions of the environmental justice movement in New York, though the broader C40 Cities movement,¹¹⁹ ideas of sustainable design, climate adaptation, and justice are being integrated into urban planning.

These efforts also embody a new or revised approach to nonhuman nature as well, and on a functioning and sustainable relationship between human and nonhuman systems. As illustrated by the Cochabamba statements and these developments, environmental justice advocates, north and south, see a transformation of this relationship as integral for adaptive strategies and justice. Environmental and climate vulnerability are not only symptoms of social inequity; they exemplify a relationship to the nonhuman environment that produces both social injustice and ecological damage. This is one of the major shifts in the environmental justice discourse itself—climate change has helped move the understanding of environmental justice from one where environmental risk is seen as a symptom of social justice, to one where functioning environment is seen as necessary for any form of justice—environmental, climate, or social.⁵⁵ The movement here is looking both ways again, this time in terms of the human and nonhuman divide.

CONCLUSION

A recent discussion of the climate justice movement notes that it is based on principles of social justice, democratic accountability and participation, and ecological sustainability.¹²⁰ What we have tried to demonstrate in this review is that these kinds of ideas, demands, and principles can also be seen in the environmental justice movement, which has had a direct influence on the conceptualization of climate justice. The two thriving grassroots movements have influenced each other, and even fused in many ways. Both are at once international and local, and demand attention—and challenges—to the existing relationships between human communities and the environments that sustain them. Ultimately, neither academics nor policymakers can comprehend the meaning of climate justice without understanding the long and pluralistic history of the social movements that have developed the concept over the past decades.

Crucially, this is just the story so far. Given the long-term impacts of climate change, the ever-present

demands for justice in its wake, and the dynamic and continuing evolution of environmental and climate justice movements, we will be examining the

idea, movement, and, hopefully, the realization of environmental and climate justice much more in the coming years.

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