Chapter 1

A Brief on Environmental Justice

John Byrne, Cecilia Martinez, and Leigh Glover

Introduction

Contemporary usage of the term 'environmental justice' arose from resistance movements organized to expose the socially unequal environmental risks and effects of industrialization. While 'at-risk' communities had experienced the problem for much of the 20th century, documentation of environmental injustice as a legacy of industrialization has only occurred in the last 25 years through the pioneering studies of Bullard (1983, 1990, 1993, and 1994a), Gibbs (1982), Goldman (1991, 1993), Lee (1987, 1993), and others. As a result, Bullard could draw on empirical evidence when stating (1993: 15):

> Communities are not all created equal. In the United States, for example, some communities are routinely poisoned while the government looks the other way. Environmental regulations have not uniformly benefited all segments of society. People of color (African Americans, Latinos, Asians, Pacific Islanders, and Native Americans) are disproportionately harmed by industrial toxins on their jobs and in their neighborhoods.

Inquiries into the causes and distribution of environmental injustice in the U.S. ranged from historical critiques of capitalism (Foster, 1994) to analyses of inequality founded in race, culture, and gender. A hallmark of this research is that explanations moved beyond an exclusive focus on the class structure of industrial capitalism (Bullard, 1993: 22-24). The exchange of ideas on sources of environmental injustice prompted new questions that opened fresh avenues of inquiry into political economy.

By the late 1980s, structures of environmental injustice had been identified across the world. A globalized phenomenon of unequal risks and effects was revealed by

writers such as Agarwal and Narain (1991), Bryant (1995), Esteva (1992), Hofrichter (1993), and the Khor (1993). Their critiques pointed to a pattern of 'environmental colonialism' as an explanation for a worldwide condition of ecological injustice. Additional analyses by Crosby (1988), Alvares (1991 and 1995), Shiva (1991, 1994a, 1994b, and 1994c), Escobar (1995), and others suggested that unequal patterns extended biologically as well as socially, with the advance of modernization. Their critiques of 'ecological imperialism' suggested that threats to human livelihoods were coincident with threats to ecosystems. An important insight of this work is that it raised the prospect of altered biologies supporting a less diverse specie structure *and* a less diverse social structure.

Learning from the environmental justice debate, the discourse of political economy is presently searching for an appropriate understanding of national and global structures of ecological injustice. Below we review the evolution of the discourse on environmental justice in international political economy for the purpose of offering a context for the contributions to this volume.

Birth and Growth of a Social Movement

Conceptually, environmental justice has its roots in theories of social and political power and social movements. The priority placed on race, gender, and culture as explanations of environmental damage distinguish this movement from the more traditional political economy critiques of capitalism. The latter predicted patterns of environmental risk as outcomes of the logic of capital and explained demands for environmental justice as phenomena of class struggle. By contrast, the new theories of environmental in emphasize social and political power, in addition to class, as explanations of unequal environmental risk.

This turn in theoretical strategy recognized that the toll of industrial life has continued to mount disproportionately, not only for workers and the poor, but also for women, indigenous cultures, and communities of color. Long-standing dominance of the American environmental movement by affluent, white, and middle-class communities with an agenda shaped largely by self-interest and symbolic ecological issues, would now be challenged. Increased local protest in the 1960s and 1970s by communities of color, highlighted the awareness in these communities of the unequal hazards of industrialization. Through the studies of Bryant and Mohai (1993), Bullard (1983, 1990, 1993, 1994a, and 1995), Goldman (1991, 1993, Goldman and Fitton,

1994), Lee (1987, 1993), Pulido (1996), Wright (Wright, 1995; Wright and Bullard, 1990; and Bullard and Wright, 1987), and others, the racial geography of environmental hazards in the U.S. was exposed.

A breakthrough study by the United Church of Christ Commission for Racial Justice, entitled *Toxic Wastes and Race in the United States* (Lee, 1987), connected what had previously been largely isolated stories of risk into a racially identifiable pattern of injustice. While this pattern was of no surprise to communities of color, it was a revelation to policy-makers and mainstream researchers. Of the many factors that might influence a community's risk of exposure to toxic wastes, the study found race to be the most significant predictor. Those communities with the highest composition of residents of color were revealed to have the highest concentration of hazardous facilities. Every three of five African and Hispanic American communities had uncontrolled toxic waste sites in their midst, meaning that over 15 million African Americans and over 8 million Hispanic Americans live in the vicinity of such sites (Lee, 1987). A 1994 study by Goldman and Fitton (1994) updated these results and revealed that the percentage of people of color living in areas with commercial hazardous waste facilities had increased between 1980 and 1993, so that by 1993 people of color were 47% more likely to live near such a facility than in 1980.

As Gottlieb (1993), Faber (1998), Szasz (1994), and others noted, protests of this condition by grassroots groups composed of workers, minorities, and women differed from those of mainstream environmentalism. Their interests were in correcting industrial causes that fouled the air and water, and which created extreme health risks through the spread of lead and radioactivity, pesticides, waste, and hazardous material. Unlike mainstream environmentalism, this movement located nature in the workplace, in the places we live, in the air we breathe, and the water we drink. For too long, many environmental groups had ignored this nature in favor of the protection of untouched wilderness and endangered species.

Women were prominent in the rise of the new environmentalism as leaders and spokespersons (Hamilton, 1993; Krause, 1993, 1994). As Krause describes: "For women of color, it is the link between race and environment, rather than between class and environment, that characterizes definition of environmental justice." (1994: 270). Community and family health were directly affected by environmental injustice and some in the women's movement sought to address the threat as part of a general effort to

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counter women's historic exclusion from decision-making. Working class women had gone outside the traditional mechanisms in the past and used protests and other means to prompt action on behalf of community needs, thereby drawing attention to the inadequacies of traditional political processes. Women-led environmental activism would similarly go beyond convention to challenge linkages of color, gender, culture, and risk.

Another important dimension to this social movement has concerned worker's risks. Research highlighted the dangers of working in industrial societies, especially in its factories and mills. Through the efforts of César Chávez and others seeking to organize agricultural labor, the effects of pesticides on farm workers became a central concern (e.g., Moses, 1993). Workers and their organizations could not rely on government and corporate action, instead having to gather knowledge of the risks of the industrial process directly, and using their own political power, in seeking corporate compliance with existing health and safety regulations, and in lobbying for workforce protection. For workers, therefore, "[e]nvironmental justice is not merely a battle against pollution, but a kind of politics that demands popular control of corporate decision making for workers and communities" (Mann, 1993: 177).

A key insight of this work has been to show that the patterns of inequality that marked economic and social relations in industrialized nations carried forward an expression in environmental conditions as well. Studies of race, class, and gender characteristics of at-risk communities have revealed undeniably unequal environmental threats of those most marginalized by the American political economy. Although limited in scope, studies by U.S. government agencies (notably EPA, 1992; GAO, 1983) have confirmed the general association of communities of color with contaminated areas. Failure to enforce existing anti-discriminatory policies has further added to the evidence of environmental racism. As Bullard has commented: "There is a growing movement to turn the current model of environmental protection on its head. It just does not work for many vulnerable populations . . . Government has been too slow in adopting a prevention framework for these groups." (1994b: xvi).

One of the more damaging revelations from investigations into U.S. environmental injustice was the widespread non-enforcement of laws and regulations (e.g., GAO, 1983; Kratch et al, 1995; and Lavelle and Coyle, 1992). This failure of governance amounted to a political sanctioning of environmental injustice. Race was shown to

be a particularly accurate indicator of enforcement failure; with communities of color found to endure disproportionately higher non-enforcement of laws intended to control industrial pollution. Clearly, the explanation lay within the routine practice of social institutions: "Racism plays a key factor in environmental planning and decisionmaking. Indeed, environmental racism is reinforced by government, legal, economic, political, and military institutions." (Bullard, 1993: 17). As Bullard (1993) described, environmental racism is a consequence of people of color being excluded from decision-making by a system of state-corporate relations that extends from boardrooms of multinational corporations to local zoning boards. Accordingly, the affected communities who responded to these problems were motivated to seek political solutions: "What do grass-roots leaders want? These leaders are demanding a shared role in the decision-making processes that affect their communities. They want participatory democracy to work for them." (Bullard, 1994b: xvii).

However, of all the social groups concerned with environmental justice, indigenous peoples may have the most at stake. Unless solutions to conflicts involving 'commons' resources of land, air, and water use explicitly address their needs, indigenous ways of life are irrevocably harmed. North American resource politics, for example, involves decisions over sovereignty and control of Indian lands, therewith, cultural survival of Indian peoples. As Churchill (1993; Churchill and LaDuke, 1992), Deloria (1997), and others describe, the U.S. political economy depends on American Indian tribal lands for mining uranium and coal, testing nuclear weapons, and impounding rivers for hydroelectric power. The expropriation of their lands and resources has left a trail of toxic threats to Indian communities. But most significantly, it has blocked Indian self-determination.

Grassroots environmental protests have forced American society to recognize the conjunction of race, gender, indigenous culture, and class in contesting the landscapes and workscapes of environmental inequality. From this point onward, political economy has been focused on this conjunction in order to explain the unequal pattern of environmental harm and risk. In this way, the critique of 'environmental justice' has emerged as a potent challenge for political economy.

Environment – Globalization Nexus

As the environmental justice movement gathered momentum and support in the industrial world, there was

growing recognition that environmental inequality and racism was advancing around the world. Injustices could not be relegated to local failures in wealthy nations, but were symptomatic of systemic tendencies of globalization. The demand for environmental justice at an international scale became a concurrent concern of those interested in environmental dimensions of the global political economy.

Examination of the international patterns of environmental injustice was propelled by activists and scholars from the Third World, in particular, Bello (1992, 2000; Bello et al, 1982; and Bello and Rosenfeld, 1990), Escobar (1988, 1995, and 1996), Khor (1993), and Shiva (1991, 1994a, b, c, and 1998). This work revealed the roles of multinational corporations and international financial institutions in a sustained process of shifting environmental pollution from industrial to Third World countries. This has affected the fate of indigenous peoples in the exploitation of vast pools of commons resources in the Third World, and has reinforced imperialist tendencies of modern science and technology (e.g., Alvares, 1991; Nandy, 1992). Women and families have been shown to be particularly disadvantaged by environmental injustices in the developing world, despite much-heralded reforms of the sustainable development movement (Shiva, 1991, 1994a, 1998). Agarwal (1991) and Jain (1991), for example, have respectively described the ways in which women are affected by changes in fuel wood systems in rural south Asia. The famous "Chipko" protest movement, led by Indian women, to protect the traditional uses and ecological values of their forests is a prominent example of a women-led environmental justice struggle.

Established environmental organizations became prominent in environmental justice issues and were particularly important in highlighting international themes. NGOs, such as Greenpeace, No-Nukes Asia Forum, Friends of the Earth, and the Third World Network, brought attention to nuclear energy risks, international waste trade, and the activities of multinational corporations in the developing world, and other issues.

A key concern in this new phase of inquiry has been the impacts of economic globalization on Third World communities and environments. Global production and consumption has been found to lengthen commodity chains, with the developing world supplying much of the raw materials. Globalization has also fostered greater capital mobility with multinational corporations shifting manu-

facturing locations to reduce production costs. For example, destruction and social crisis in Central America have been linked to that area's relationship with foreign economic interests, as shown by Faber (1993). As an integrated feature of globalization, smokestack industries with histories of heavy pollution and rapid resource depletion have migrated to the Third World, along with trails of industrial wastes sent on journeys to the South for disposal.

Environmental problems such as stratospheric ozone loss, climate change, and declining biodiversity have also underscored the international dimension of issues of environmental justice. While global environmental degradation has been the result of historic patterns of exploitative practices by the industrial elite, in most instances the consequences are or will be borne most heavily by poorer communities. Developing countries are especially vulnerable to environmental change because they have fewer resources to respond to these problems. But more importantly, community livelihoods in the South depend to a greater extent on the health of natural environments than the technological enclaves of the North. Environmental degradation for these communities is not subject to repair in the manner of Northern solutions to remediate pollution problems.

Evidence on all these fronts point to the need to cast environmental justice in a global context, in addition to the community and national contexts that have already been established. International structures of social and environmental exploitation are now to be investigated for systemic linkages.

Environmental Colonialism

Research in political economy has long demonstrated the interrelation of the social and economic conditions of developing nations with the operations of the global economy. The Third World largely receives foreign investment when it can furnish cost advantages of cheap labor, land and raw materials. Corporate investment in the developing world is largely directed towards imitative industrialization, which can serve Northern needs for lucrative export markets. Carried with these patterns of development, however, has been a set of environmental structures that favor certain ecologies over others. While less investigated before the 1970s than the social effects of globalization, the *nature* of international political economy is

nevertheless a core attribute of expanding networks of technology and markets.

Particularly affected by the industrialization of the developing nations are indigenous peoples, whose lives are closely tied to access to commons resources. Development activities, such as converting indigenous ecologies to pasture and crops, timber lands and mineral mines, and privatizing water, land and other ubiquitous resources, have dramatically shrunk available commons areas. In turn, this has greatly compromised the capacities for self-determination and independence of indigenous peoples.

Industrial development in developing countries has also mirrored the production of hazardous environments that occurred in the industrial world. Modernization in the Third World has frequently brought forward threats to workers, communities, and the urban environment that were widespread in industrial nations throughout much of the 20th century.

Degradation and even disappearance of global commons resources is one of the forecasted effects of expanding modernization. Global environmental crises nearly always concern global commons resources such as the atmosphere, biodiversity, the water cycle, etc. Yet, their resolution often invokes global management regimes based on an appropriation of these resources. Such a project also carries forward the broader agenda of 'development,' as Sachs (1999: 55) observes: "Certainly, interpreting the sate of the world chiefly in terms of 'resources,' 'management' and 'efficiency' may appeal to planners and economists. But it continues to promote development as a cultural mission and to shape the world in the image of the West." Environmental agreements have been, and are being, developed to transform commons areas into international properties subject to the principles of modern organization and business management. Developing nations are at risk in many of these international negotiations of losing autonomy still further to the interests of the North, as ecosystems in and beyond the political borders of the South are secured for long-term 'protection' (see e.g., Sachs 1993, 1994, and 1996; and Byrne and Glover, 2000).

Several researchers identify a consistent thread of environmental injustice in the manner in which nations and peoples are being treated over these issues. For example, Agarwal and Narian (1991, 1996) have drawn a parallel between exploitation of societies under colonial regimes and the contemporary environmental relationships between

industrial and developing nations, charging that the latter are now being subjugated by forms of 'environmental colonialism.' In this expansion of the original idea of environmental justice, global economic development is seen as attempting to colonize not only the labor and resources of societies, but whole cultures and ways of life through an appropriation of the environmental conditions upon which communities depend.

Ecological Imperialism

Modification of the natural landscape is clearly evident throughout human history. However, human modification of ecology prior to the industrial era appears to have differed in geographical and temporal scale, with pre-industrial ecological transformation limited to local areas and cumulative effects evolving slowly and taking long stretches of time to be realized. By contrast, ecological change in the industrial era appears to affect much larger geographical scales and cumulative effects are surfacing in very short periods of time (e.g., the thinning of the atmosphere in 40 years due to the use of chlorofluorocarbons).

With the advent of worldwide exploration by the European powers and the accompanying era of global colonialism, the planet's ecology underwent a series of profound changes. Human modification of ecology resulted in continent-wide transformations, and human impacts on evolution were unprecedented. Much of this change occurred in the New World, where indigenous peoples and ecosystems were frequently devastated.

Colonization is typically considered as the appropriation of a people, nation, or region by another for the purposes of economic exploitation. It imposes an external culture, social structure, laws and institutions, technology, systems of production, and even social relations on the colonized society. In the era of European colonization, an ecological transformation also took place, so that the ecology of colonized places was altered by the introduction of new species, land uses and land management—unleashing an 'ecological imperialism' (Crosby 1988). Deliberate ecological changes included clearing of native forests to create pastures and plantations, damming of watercourses, planting of crops and gardens, opening mines, building towns, homes, roads and other infrastructure, systematic harvesting of native species, the introduction of exotic species to shape the landscape according to European preferences, and so on. Much of what resulted from the

introductions of exotic species into the New World was unexpected. Yet of all the effects, the most pernicious were those resulting from diseases and pests introduced by Europeans, which cumulatively caused enormous loss of indigenous human life and the extinction of entire plant and animal species.

New frontiers of ecological imperialism are now being forged through modern science with the advent of genetic research and genetically modified organisms (Shiva, 1997). The ecological consequences of this wok are not only unknown, but by definition, unprecedented. Because of the commercial value to agricultural and pharmaceutical corporations of genetic resources from developing nations, especially those with diverse flora, a new era of trade involving 'biopiracy' has appeared (Shiva, 1997; Martínez-Alier, 2000a).

Not only are these ecological initiatives made in order to allow Western colonizers to undertake modern forms of production, but often they are a part of deliberate strategies to dispossess, displace, or eliminate indigenous occupants. An example of one such intervention into the fabric of existing society-ecology relations by scientific 'advances' is the Green Revolution, in which a rationale of development and progress has covered the imposition of a system that is ecologically unsustainable, socially destructive, and economically exploitative of traditional land users (Shiva, 1991).

In this regard, society *and* ecology have been and continue to be fundamentally altered in the drive to industrialize social relations. Ecological imperialism offers a deconstructed picture of the biological implications of international industrialization that underscores the linkage between structures of social inequality and ecological transformation. In brief, contemporary political economy requires not only attention to particular structures of social relations, but to changes in ecological structure as well. Together, these structures produce evolving patterns of social and environmental inequality.

The Rise of Ecological Justice

Insights from ecological imperialism and environmental colonialism add a critical dimension to the issues raised by the movement to address issues of environmental injustice. Outlines of a systemic relation between society and ecology are evident with the theoretical innovations underlying the eco-imperialist and colonialist critiques. These approaches suggest that society-ecology relations are at once local and global/systemic in their formation and evolution. On the

question of action, environmental justice can likewise be conceived as requiring direct action at the grassroots level and in need of cooperative civil action on larger scales (e.g., see Martínez-Alier, 2000b). In this emerging framework, local efforts to resolve unequal environmental and social risk can be gauged by immediate results *and* systemic reactions. Because one community can 'win' by shifting their hazard onto others, and today's hazards can be transferred into risks for future generations, we need a a framework cognizant of eco-imperialist tendencies. Such a framework can provide a more thoughtful understanding of the challenges of environmental justice.

As Low and Gleeson (1998) expound in *Justice, Society, and Nature*, ecological justice applies not only to the living generations and general environmental values, but also embraces future generations, non-human species, and ecosystem processes. Environmentalism becomes, therefore, a framework that can critically assess the local and systematic expressions of social and natural processes. Awareness that social and ecological structures are mutually determined in some degree likewise promotes an understanding of our challenge as engaging the 'ethics' of immediate conditions while also being mindful of the systemic implications for cultures embedded in nature, for the diversity of cultures and species and environments, and for the viability of nature and society 'in common' (the idea of a *lifeworld*, a *commons of life*).

Global environmental problems underscore our need to understand the political economy of society-ecology relations. Human activity is shaping local and global ecologies in definable ways that likewise structure social and environmental justice. Thus, the world's ecological future will almost certainly reflect processes of economic and cultural globalization. At the same time, local environmental and social conditions will continue to reflect the economic and political axes of power that typically organize and manage localities. It is at the intersection of society, ecology and geography that we can examine and act on the challenges of *ecological justice* (taken to include social *and* environmental expressions).

Conclusion

Too often, political economy has conceived its concerns in sociocentric rhetoric that ignored or ineffectively addressed ecological justice. That time is past. Political economy now must grapple with the implications of modernity and industrialization for society and for ecology at

all scales. The fate of indigenous peoples and traditional cultures, and the viability of natural commons areas and their associated institutions are being decided in contests with the forces of globalization. These struggles for political influence, self-determination, and restitution center on the quest for justice. In this way, justice is becoming a central concept for environmentalism and vice versa.

The variety of discourses on ecological justice and the different theoretical frameworks that enlighten them offer hope for a political economy that is better grounded in the full range of conflicts embedded in the contemporary era. Contests for justice across geographies and timescales will define the core problems of society, ecology, and, finally, political economy. Ecological justice has become a palimpsest on which contemporary struggles for understanding and change are being written.

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