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## Environmental justice: a criminological perspective

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## Environmental Research Letters



## LETTER

## Environmental justice: a criminological perspective

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### Abstract

This article examines studies related to environmental justice in the criminological literature and from a criminological perspective. Criminologists have long been concerned with injustices in the criminal justice system related to the enforcement of criminal law. In the 1990s, following the emergence of green criminology, a handful of criminologists have drawn attention to environmental justice as an extension of more traditional criminological studies of justice and injustice. Relevant criminological studies of environmental justice are reviewed, and suggestions for future environmental justice research are offered.

This article examines research on environmental justice from a criminological perspective. Environmental justice is a criminological concern for two primary reasons. First, criminologists have long addressed issues of justice and injustice, but have largely confined those studies to examinations of criminal justice processes. Such criminal justice studies examine whether the application of law produces 'just' or 'fair' outcomes, and has relevance to examinations of the distribution of environmental harms and differentials in the enforcement of environmental regulations with respect to the effect community class, race and ethnic composition may have on those decisions. In addition, environmental justice encompasses a broader notion of social justice relevant to some types of criminological research and theories that deal with the philosophy of justice. Second, as a form of injustice, differential exposure to environmental toxins across communities is also relevant to criminological research on state crime, corporate crime and state-corporate crime. State crime research can be employed to explore the ways in which state regulations are unequal in design or implementation and can be related to content of legal rules concerning the distribution and control of toxic and hazardous waste, the siting of waste storage and production facilities, and the enforcement of toxic and hazardous waste laws and differentials in enforcement across communities of color and in relation to community class composition. Corporate crime research examines

not only the illegal but also the socially injurious behaviors of corporations, and can therefore include studies related to the creation of environmental injustice by corporations. State-corporate crime research explores how corporate and state behavior intersects to produce the crimes of the powerful, and can be employed to examine environmental justice concerns (Barrett 2013).

Below, we begin with a discussion of background issues related to the study of justice within criminology. Next, we review the small universe of criminological studies on environmental justice issues and discuss the contributions that literature has made to the larger environmental justice literature. We make three arguments about criminology and environmental justice. First, criminologists have tended to ignore environmental justice as an important dimension of its broader definition of justice. Second, the handful of existing criminological studies contributes to knowledge of environmental justice. Third, much work remains for criminologists to undertake to more fully incorporate the concept of environmental justice within the criminological literature.

### Background

A core area of research within the field of criminology is the examination of the process of justice and whether criminal justice processes mete out justice

fairly. Generally such studies include examinations of justice processes, their efficiency and outcomes. One of the important subfields within that literature (also referred to as criminal justice) is whether criminal justice processes display signs of class, racial, ethnic and gender inequality. Numerous books and articles have been written on these topics. Rarely, however, does that literature consider the association between class, race, ethnicity and environmental justice, or whether justice processes exhibit class, racial and ethnic biases related to the control of environmental pollution/destruction or in the application of punishments and other social control responses designed to contain environmental crime and injustice. The latter issues have been incorporated into the criminological literature as an extension of 'green criminology' (Lynch 1990). Despite growing interest in green criminology over the past decade, little green criminological literature addresses environmental justice issues (Zilney *et al* 2006), and environmental justice studies have yet to penetrate into more traditional or orthodox forms of criminological/criminal justice research.

Why should criminologists be concerned with environmental justice? Traditionally, the scope of criminology and criminal justice is quite narrowly defined by the criminal law and the specific kinds of criminal justice processes designed to enforce the criminal law and assign criminal law penalties. Criminologists have criticized this narrow view of crime and justice dating to the early 1900s (Lynch and Michalowski 2006), highlighted by Edwin Sutherland's proposal for expanding the scope of criminology to white-collar and corporate crime in the 1930s and 1940s. As Sutherland noted, the criminal law was often constructed in ways that focused attention on the behavior of the powerless. As a result the vast majority of offenders found in the criminal justice system were low-income defendants. Sutherland, however, noted that the upper class also committed crimes, but that their crimes were not defined in the criminal law proper and were instead often included in non-criminal mechanisms such as civil, regulatory and administrative law. Sutherland argued that the difference between these 'white collar'/corporate crimes' and the street crimes criminologists were much more likely to study was not their nature, but was merely a matter of the specific kinds of laws that were applied to those behaviors. Sutherland's argument gave rise to decades of research on corporate and white-collar crime. Those arguments were expanded upon by radical criminologists beginning in the late 1960s and early 1970s, but it would be decades before criminologists suggested that special attention ought to be directed toward environmental crime and (in) justice, or what criminologists now call green crime and justice issues.

In short, orthodox criminology had limited the discussion of crime and justice to the criminal law, and

created a limited concept of justice defined by the criminal law alone. Omitted from that definition were larger questions about justice, including social justice issues raised by radical criminologists beginning in the late 1960s. The concept of social justice led radical criminologists to rely on an alternative concept of crime as a social harm, one that violated basic human rights (Schwendinger and Schwendinger 1970, 1972, 1977). Building on that social justice or harms based approach, it was the late 1990s before criminologists suggested that one of the social justice issues that had been neglected even among radical criminologists was the problem of environmental justice and the unequal distribution of pollution and variability in the social control of pollution across communities with varying racial, ethnic and class compositions.

### Criminology and environmental justice

Lynch and Stretesky (1998; see also Lynch and Stretesky 1999) carried out the first discussion of environmental justice within the criminology literature. Building on environmental justice research by sociologists such as Bullard (1983, 1990) and legal scholars such as Lavelle and Coyle (1992), Lynch and Stretesky provide the groundwork for undertaking criminological studies of environmental justice. In brief, they argue that the study of environmental justice illustrates contentions set out concerning race and class bias in the law and criminal justice processes that had been proposed by radical/Marxist criminologists (e.g., see Lynch and Michalowski 2006). Lynch and Stretesky argued, therefore, that the study of environmental justice issues provided furthered evidence of the claims made by radical criminologists and also illustrated how radical and green criminology overlapped.

Shortly thereafter Stretesky and Lynch (1998) published an expanded discussion espousing a criminological view of environmental justice related to the production of corporate environmental violence (CEV). In that argument, Stretesky and Lynch suggested that the deleterious effects of corporate pollution that unequally impacted minority communities should also be treated as a form of CEV. Here, the theoretical (rather than the legal) point was that pollution could be identified as a form of assault (violence) that occurs when corporations pollute the environment, and that the problem of CEV was particularly detrimental to minority communities since this is where environmental pollution was concentrated. They illustrated that contention with an empirical analysis of the characteristics of communities where accidental chemical releases (ACRs) occurred in Hillsborough County, Florida, finding statistical evidence of a race effect.

Stretesky and Lynch (1999) expanded on their earlier work on environmental justice adding one of the

earliest studies of the association between ACRs and environmental justice to the literature. Here, the argument centered on two issues. First, Stretesky and Lynch argued that if ACRs could be demonstrated to have a pattern, then those kinds of releases had a structural dimension, and ACRs were not really ‘accidental’ or random. Second, they hypothesized that the pattern of ACRs would be similar to the pattern of pollution. The empirical analysis associated with that work demonstrated that ACRs in Hillsborough County, Florida indeed had a pattern, and that the pattern was associated with the concentration of minorities, but particularly the proportion of a community that was African American.

At about the same time, Stretesky and Hogan (1998) published a study on the siting of polluting facilities using census-tract time-series data on NPL sites in Florida. They found that Blacks and Hispanics were more likely to reside near Superfund sites than whites—indicating that Florida was also the location of environmental injustice. An important feature of Stretesky and Hogan’s research is that they examined the changing demography around Superfund sites over time. They discovered that the association between race, ethnicity and proximity to Superfund sites increased over time. The researchers also found that when controlling for race and ethnicity, income was not related to the geographic distribution of Superfund sites.

Stretesky and Lynch (2002) expanded the criminological discussion of environmental justice in an empirical assessment of the proximity of public schools to environmental hazards in Hillsborough County, Florida. In this analysis they discovered that schools with a higher proportion of African Americans and Hispanics were closer to environmental hazards. On a broader level, Stretesky (2003) found that air lead levels were unevenly distributed across the US and were higher in African American communities. That study has criminological relevance with respect to studies which indicate that communities with high levels of air-lead pollution also had higher rates of crime (Stretesky and Lynch 2001, 2004), and were later replicated in Hillsborough County, Florida by Lersch and Hart (2014) with similar findings. In another series of studies, Lynch *et al* (2004a, 2004b) and later Jarrell and Ozymy (2010) examined the distribution of environment violations in the petroleum industry. Those studies also found evidence of environmental injustice. Lynch, Stretesky and Burns found evidence of unequal punishments for corporations that violated environmental laws related to community race and class characteristics. Jarrell and Ozymy’s study draws particular attention to environmental justice issues related to air pollution upset events—unplanned emissions above legally allowable limits that occur during ‘maintenance, startup, or shutdown activities ...’ (Texas Commission on Environmental Quality 2014). As the authors note, upset events receive little attention from

the US EPA or state regulators, and the health and environmental justice consequences such events pose for minority and low-income communities have been largely ignored. Finally, in a recent study, Kosmicki and Long (2015) examined environmental inequality in areas surrounding coal-fired and nuclear power plants in the United States. The empirical results revealed that higher percentages of minorities and people living in poverty resided closer to coal-fired power plants compared with areas containing nuclear power plants or no power plants at all.

In an effort to illustrate a closer connection between criminal justice research and the study of environmental justice, Lynch and Stretesky (2013) examined the distribution of community water monitoring organizations across the US. In the US, community water monitoring organizations are considered to be informal forms of social control, and employ community monitors to provide water pollution data to the US Environmental Protection Agency, which the EPA uses to help enforce environmental regulations. The US EPA also provides resources to communities to help establish these programs. Lynch and Stretesky found that race and ethnicity of a community were negatively associated with the presence of a community water monitoring organization, and that conversely, median community income was positively associated with the presence of a community water monitoring organization. Thus, race, ethnicity and class appear to affect whether communities become engaged in informal water monitoring, and may be impacting how the EPA funds and selects communities for inclusion in those types of monitoring programs.

These few studies comprise nearly the entire empirical criminological literature on environmental justice (see also, Stretesky *et al* 2010, Stretesky and Knight 2013). Green criminologists have drawn attention to the issue of environmental justice in other works that are often theoretical (e.g. Brisman 2008), and in those that focus on nonhuman animal justice issues (e.g. Beirne 1999, 2002, 2007, 2009). To be sure, these studies find results similar to those discovered in environmental justice studies performed by sociologists, geographers, political scientists and public health researchers (e.g., Brulle and Pellow 2006, Mohai *et al* 2009).

In light of the focus of this special issue, the next section addresses environmental justice issues toward which criminologists ought to direct attention to make substantial contributions to the environmental justice literature and toward exploring environmental justice policies. Criminologists often study policies and are trained to do so. Yet, most have not applied their considerable talents to examinations of the effectiveness of environmental justice policy or more global research on environmental justice issues.

## Future concerns, criminology and environmental justice

As illustrated above, the criminological literature on environmental justice is rather small and has yet to address a wide array of issues. In this section we explore some issues that criminologists as well as environmental justice researchers in other disciplines can examine. Some of these issues have received limited attention in the literature in different disciplines, but much more work on these issues is needed to fully understand and appreciate the scope of environmental justice issues and the ways they can be addressed.

### Capitalism and environmental justice

Across disciplines an increasing number of studies have devoted some attention to the connection between political economic theory and environmental problems. As Deutz (2012) recently argued, studies of environmental justice tend to overlook framing the analysis within political economic theory and in particular with respect to Marx's theory of class conflict (see also, Ash and Boyce 2011, Banzhaf 2012, Ash *et al* 2013, Martin *et al* 2013). Green criminology, originally proposed as an extension of radical/Marxist criminology and its focus on political economic analysis, has also taken up the connection between capitalism, environmental destruction and environmental justice issues (Lynch *et al* 2013, Stretesky *et al* 2013). Central to that analysis is how the treadmill of production (Schnaiberg 1980) intersects with the world system of capitalism to structure ecological inequality across and within the nations of the world (Stretesky *et al* 2013). More traditional analyses concerning the international manifestations of environmental justice tend to frame environmental justice issues within the context of theories of development, overlooking the important theoretical and practical connection between economic development, capitalism, the treadmill of production and the global world system of capitalism, on the one hand and the international production of environmental justice particularly for peoples in developing/under-developed regions. While there has been empirical support for political economic explanations of international patterns of ecological destruction (e.g., Jorgenson and Clark 2011, Jorgenson *et al* 2011) that argument has not been extended to the study of international environmental justice. At issue in such an approach is explaining the connection between various forms of environmental injustice experienced by people within different nations and their shared position within the global capitalist system. Criminologists can contribute to this work by examining how laws facilitate ecological withdrawals and additions both between and within countries.

### Social movements and environmental justice

This issue has received attention outside of criminology, but within criminology, little effort has been made to address the relevance and importance of the connection between social movements and environmental justice (Stretesky *et al* 2011, 2012, Canales *et al* 2012, Jarrell *et al* 2013), and conceptualizing social movements as part of the solution to social/environmental injustice. As Canales, Ozyimy and Jarrell note, social movements play an important role in establishing conditions conducive toward remedying environmental injustice. Generally, however, criminologists tend to overlook social movements as an important source of social change and instead concentrate their efforts on promoting change from within the criminal justice process. Such views overlook the role that community-based social movements can and have played in promoting justice, and that informal social movements that begin in communities may have a greater impact than social change strategies that emerge within state/institutional settings. Moreover, attention to social movements and community concerns should play an important role in identifying the needs of communities and how formal institutions can be reconfigured to help meet those needs. The more general history of the environmental justice movement is an illustration of that point, one that has been glossed over by criminologists because of the typically narrow concept of justice they employ. In short, criminologists can learn much about the definition of justice and implementing programs of change by studying environmental justice and environmental justice social movements.

### Social justice dilemma

Social justice movements tend to seek solutions to unequally distributed environmental hazards and unequal social control responses to environmental hazards promoted by governments. Those responses often involve community clean-up activities, but fail to include community responses that members of affected communities may also need. For example, people in communities impacted by environmental injustice may require other forms of social aid, an issue social work literature has addressed in recent years (Dominelli 2012). Social workers have been involved in helping communities recover from large-scale environmental disruptions as well as severe instances of environmental justice (Dominelli 2012). Generally, however, there is lack of public funding to provide support services for victims of environmental injustice. As a discipline, social work is only beginning to establish plans for this type of service delivery. Outside of social work, there is a need to recognize that the services social workers can provide to community members impacted by environmental injustice can make important differences in peoples' lives, and there is a need for those in other disciplines to address the way in which access to social workers can

help mitigate the deleterious impacts that stem from community situations defined by a context of environmental injustice.

Moreover, one can imagine that other forms of help are required by those in affected communities. These interventions may include not only those provided by the community social worker, but the mental health professional as well. To be sure, these are ambitious ideas and projects, but such interventions are likely needed by people in affected communities to help them address illness, loss of loved ones, or community relocation.

### The corporate dilemma

Corporations generate significant volumes of pollution, particularly toxic pollution. Those pollutants are, as numerous environmental justice studies indicate, unequally distributed and have greater adverse impacts for African-America, Hispanic and low income communities (e.g., Morello-Frosch and Jesdale 2006, Downey and Hawkins 2008, Chakraborty 2009, Crowder and Downey 2010, see also Dobbie and Green 2015). Much of the pollution produced by corporations is legally emitted under current laws, but that does not mean that corporations should not seek to improve their environmental records by minimizing the ecological and social harms they generate. The dilemma here is one related to meeting legal requirements, which corporations often have a hand in shaping through various lobbying efforts, versus the idea of corporate social responsibility and enhanced efforts to constrain corporate pollution for the social good. This is, many would argue, a largely philosophical debate that involves allegiance to free-market economic thinking against public health studies that illustrate the harms corporations produce through environmental pollution. This debate is not easily solved, and unfortunately in the criminology literature, little criticism is directed toward corporations and the roles they play in facilitating environmental injustice. Generally, even studies that discover environmental injustice do little to suggest that corporate behavior must be changed to solve the problem of unequal exposure to environmental toxins and hazards. Green criminologists in particular, however, have taken up this type of argument, which is one we suggest other environmental justice researchers might adopt.

Criminologists may also be interested in studying the way corporate organizations deny claims about the environmental harm. In criminology, the denial of harm is one type of technique that offenders use to neutralize social values and commit harmful acts (Sykes and Matza 1957). Criminologists could examine the way neutralization techniques are used to promote environmental problems that lead to environmental injustice. For example, criminologists could apply techniques of neutralization used by corporations to deny harm

caused by chemical releases, including carbon emissions that lead to climate change.

### Conclusion

Criminologists have made rather modest contributions to the study of environmental justice. This is, in our view, unfortunate since a significant issue in the criminological literature centers around concepts of justice and whether state responses to offenders and victims are 'just.' Given their knowledge of theories of justice, one would expect that criminologists might be able to contribute more to the study of environmental justice than they have. Within criminology, green criminologists primarily study environmental justice issues, a rather recent new area of criminological research.

While criminological contributions to the study of environmental justice have been modest at best, there is a wide-range of environmental justice studies that ought to be of concern to criminologists. Whether or not criminologists take up the challenge of expanding their research on environmental justice issues is an open question. We hope some take up the challenge.

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